DETERMINANTS OF DIGITAL TECHNOLOGY IN ACCOUNTING EDUCATION THROUGH THE LENS OF UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

IRENE WEE CHUI MAN

FACULTY OF BUSINESS AND ECONOMICS
UNIVERSITI MALAYA
KUALA LUMPUR

2023

DETERMINANTS OF DIGITAL TECHNOLOGY IN ACCOUNTING EDUCATION THROUGH THE LENS OF UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

IRENE WEE CHUI MAN

DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ACCOUNTING (REPORTING AND MANAGEMENT ACCOUNTABILITY)

FACULTY OF BUSINESS AND ECONOMICS
UNIVERSITI MALAYA
KUALA LUMPUR

2023

UNIVERSITY OF MALAYA

ORIGINAL LITERARY WORK DECLARATION

Name of Candidate: Irene Wee Chui Man

Matric No: 17219395

Name of Degree: Master of Accounting (Reporting and Management Accountability) (MAcc)

Title of Project Paper/Research Report/Dissertation/Thesis ("this Work"): Determinants of Digital Technology in Accounting Education through the Lens of Unified Theory of Acceptance and Use of Technology

Field of Study: Accounting

I do solemnly and sincerely declare that:

(1) I am the sole author/writer of this Work;
(2) This Work is original;
(3) Any use of any work in which copyright exists was done by way of fair dealing and for permitted purposes and any excerpt or extract from, or reference to or reproduction of any copyright work has been disclosed expressly and sufficiently and the title of the Work and its authorship have been acknowledged in this Work;
(4) I do not have any actual knowledge nor do I ought reasonably to know that themaking of this work constitutes an infringement of any copyright work;
(5) I hereby assign all and every rights in the copyright to this Work to the University of Malaya ("UM"), who henceforth shall be owner of the copyrightin this Work and that any reproduction or use in any form or by any means whatsoever is prohibited without the written consent of UM having been first had and obtained;
(6) I am fully aware that if in the course of making this Work I have infringed anycopyright whether intentionally or otherwise, I may be subject to legal action or any other action as may be determined by UM.

Candidate's Signature Date: 6 March 2023

Subscribed and solemnly declared before,

Witness's Signature Date: 6 March 2023

Name:

Designation:

DETERMINANTS OF DIGITAL TECHNOLOGY IN ACCOUNTING EDUCATION THROUGH THE LENS OF UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

ABSTRACT

Innovating teaching methods in accounting education by leveraging technology is central to support the goal line of converting accounting education to cater for the needs of today's accounting students. This study aims to find empirical evidence to explain accounting educators' behavioural intention and use behaviour of digital technology based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model. Using a quantitative approach, an online survey was administered to accounting educators working in either public or private universities in Malaysia. Partial least square (PLS), a variance-based latent variable structural equation modelling technique was used to analyse 156 valid survey and derive statistical results. The findings empirically attest the positive relation of performance expectancy, effort expectancy and social influence in enlightening the intention of accounting educators to use digital technology. Besides, behavioural intention also stands out as a critical influence on the actual use of digital technology. This study makes unique contributions to the research literature. It applies UTAUT in the accounting education context to help explicate the critical elementsof the integration of digital technology for accounting educators. It also delivers insightsinto how UTAUT can be employed in the accounting education setting and offers ideas for boost usage of digital technology.

Keywords: Digital technology, Unified Theory of Acceptance and Use of Technology (UTAUT), Accounting education

FAKTOR PENENTU TEKNOLOGI DIGITAL DALAM PENDIDIKAN PERAKAUNAN MELALUI KANTA UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

ABSTRAK

Menginovasi kaedah pengajaran dengan memanfaatkan teknologi adalah penting untuk menyokong matlamat transformasi pendidikan perakaunan dan memenuhi keperluan pelajar perakaunan pada masa kini. Kajian ini bertujuan untuk mencari bukti pendidikan untuk menjelaskan tingkah laku motivasi dan penggunaan sebenar pengajar perakaunan berasaskan model *Unified Theory of Acceptance and Use of Technology* (UTAUT). Kaedah kuantitatif, iaitu tinjauan dalam talian telah disasarkan kepada pengajar perakaunan yang bekerja sama ada di pendidikan awam ataupun swasta di Malaysia. Teknik *Partial Least Square* (PLS), digunakan untuk menganalisis 156 maklumbalas yang sah dan mendapatkan keputusan pendidikan. Dapatan secara pendidikan membuktikan peranan positif jangkaan prestasi, jangkaan usaha dan pengaruh sosial dalam meningkatkan penggunaan pengajar perakaunan untuk menggunakan teknologi digital. Selain itu, tingkah laku motivasi juga mampu memberi kesan terhadap penggunaan sebenar teknologi digital. Kajian ini memberikan sumbangan unik kepada penyelidikan pada masa depan. Ia menggunakan UTAUT dalam konteks pendidikan perakaunan untuk menjelaskan pendidikan kritikal ke atas penggunaan teknologi digital kepada pengajar perakaunan. Kajian ini juga memberikan pandangan bagaimana UTAUT boleh digunakan dalam pendidikan perakaunan dan menawarkan cadangan untuk meningkatkan penggunaan teknologi digital.

Kata kunci: Teknologi digital, Unified Theory of Acceptance and Use of Technology (UTAUT), Pendidikan perakaunan

Table of Content

			Pages
Title Page			i
Original Literary Work Declaration			ii
Abstract			iii
Abstrak			iv
Table of Contents			v
List of Figures			vii
List of Tables			viii
List of Abbreviations			ix
CHAPTER			
1	**INTRODUCTION**		
	1.0	Chapter overview	1
	1.1	Research background	1
	1.2	Problem statement	4
	1.3	Research question	6
	1.4	Research gap	7
	1.5	Research significant	10
	1.6	Organisation of dissertation	14
2	**LITERATURE REVIEW**		
	2.0	Chapter overview	15
	2.1	Digital technology	15
	2.2	The usage of digital technology in accounting education	16
		2.2.1 Big data	19
		2.2.2 Virtual reality	22
		2.2.3 Learning management system	25
		2.2.4 Cloud computing	29
		2.2.5 Blockchain	32
	2.3	The challenges of using digital technology in accounting education	34
		2.3.1 Resistance to change	34
		2.3.2 Heavy workload and stress	37
		2.3.3 Digital literacy and professional development	39
		2.3.4 Cybersecurity	42
		2.3.5 Costs	44
	2.4	Determinants of behavioural intention and use behavior	48
		2.4.1 Social Cognitive Theory	48
		2.4.2 Diffusion of Innovation Theory	50
		2.4.3 Theory of Reasoned Action	51
		2.4.4 Theory of Planned Behaviour	53
		2.4.5 Technology Acceptance Model	55
		2.4.6 Technology Acceptance Model 2	56
	2.5	Unified Theory of Acceptance and Use of Technology (UTAUT)	59

3 CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

3.0 Chapter overview 70
3.1 Conceptual framework 70
3.2 Hypothesis development 71

4 RESEARCH METHODOLOGY

4.0 Chapter overview 78
4.1 Research design 78
4.2 Data collection 79
4.3 Research instrument 80
4.4 Data analysis 81
4.5 Pre-test and result of pilot study 82

5 RESULTS

5.0 Chapter overview 84
5.1 Demographic profile 85
5.2 Descriptive analysis 86
5.3 Measurement model 87
5.4 Structural model 91

6 DISCUSSIONS OF FINDINGS AND CONCLUSION

6.0 Chapter overview 95
6.1 Discussion of findings 95
6.2 Theoretical and practical contribution 102
6.3 Limitation and future research 104
6.4 Conclusion 105

REFERENCES 109

APPENDIX

LIST OF FIGURES

2.1	UTAUT Model	59
3.1	Conceptual framework	70
5.4.2	Structural model	92

LIST OF TABLES

4.3	Research instrument	80
4.5	Reliability and validity test of pilot study (n=46)	83
5.1	Demographic profile	85
5.2	Descriptive statistics	87
5.3.1	Convergent validity	88
5.3.2	Discriminant validity according to Fornell-Larcker criterion	89
5.3.3	Discriminant validity according to Cross-Loading score	90
5.3.4	Discriminant validity according to HTMT criterion	91
5.4.1	Hypotheses testing results	92
5.4.3	R-square results	93

LIST OF SYMBOLS AND ABBREVIATIONS

AIS: Accounting Information Systems
BD: Big data
BI: Behavioural intention
CC: Cloud computing
CIMA: Chartered Institute of Management Accountants
DOI: Diffusion of Innovations Theory
ERP: Enterprise Resource Planning
FASB: Financial Accounting Standards Board
FCs: Facilitating conditions
ICAEW: Institute of Chartered Accountants in England and Wales
ICT: Information communication technology
LMS: Learning management system
PE: Performance expectancy
PEOU: Perceived ease of use
PLS: Partial least square
PU: Perceived usefulness
SEM: Structural equation modelling
SCT: Social Cognitive Theory
SI: Social influence
TAM: Technology Acceptance Model
TAM 2: Technology Acceptance Model 2
TRA: Theory of Reasoned Action
UB: Use behaviour
US GAAP: US Generally Accepted Accounting Principles
UTAUT: Unified Theory of Acceptance and Use of Technology
VR: Virtual reality
XBRL: Extensible Business Reporting Language

CHAPTER 1

INTRODUCTION

1.0 Chapter Overview

This dissertation first chapter opens with the study's background and rationale. It delivers an overview of accounting education and further clarifies the research area. Subsequently, it is followed by research questions and research objectives. The gap and contribution of such research are also discussed.

1.1 Research Background

Accounting education has faced substantial challenges and opportunities from rapidly evolving technology and digital disruption. Traditional accounting education previously stressed on technical aspects, memorization and clear-cut answer that is descriptive of surface learning (Turner and Baskerville, 2012). Today, accounting education is broadening and concentrated more on conceptual understanding rather than a technical focus (Braun, 2004). With the inclusion of digital technology in the accounting field, it catalyses significant reforms to educational structures and practices. Innovating teaching methods in accounting education by leveraging technology is central to support the goal line of converting accounting education to cater for the needs of today's accounting students. The learning process also has changed from passive and reactive to interactive. Digital technology stimulates technical literacy and serves as a substance for cultivating students' excitement and sharing. It not only creates a meaningful learning experience for the students, but also facilitates timely communication between students and educators and provides support for online groups. The effective use of digital technology help accounting students retain concept better and is a vital requisite for students' success and

lifelong learning. The postmillennial generation seeks quick learning using digital technology at the click of a button.

There are critics about the integration of digital technology in accounting education. Such concerns consist of cost including purchase of educational tools, cost for training and professional development of educators, the cost of maintaining and upgrading. In addition, the issue of access related to concern of security. Other problems include increased plagiarism, scattered attention by students, software, and devices advancing at a strenuousrate.

In addition, the increasing uncertainty, complexity and ambiguity in accounting education require accounting educators to consider innovative teaching techniques that abandon procedural tasks and memorizing of accounting standards through a more reflective form of learning that assists in the growth of students' capabilities. The core accounting subject and its associated supplementary subjects of auditing, taxation, financial accounting and management accounting currently educated at schools need to be revised to remain relevant. Continuous improvements in the accounting curriculum should be made to regain relevance.

Taking full use of digital technology for student learning appears fraught with difficulties for accounting educators. They are required to maintain the proliferation of regulatory standards; create innovative teaching methods to obtain high passing rate while in the meantime maintaining better teaching evaluation (O'Connell, et al., 2015). Schools, universities and accounting faculty need to grip the opportunity to tackle new technology that provides anywhere and anytime solution for students. Despite the digital technology offering benefits in the accounting educational sector, it is poorly rejected, adopted or discontinued by educators (Recker, 2016).

Furthermore, the coronavirus pandemic (Covid-19) has affected society in numerous ways, the most noteworthy was a huge change to the educational structure. Educational institution has to shut down to prevent spread of the virus. The occurrence of Covid-19 has forced and reshaped the accounting education landscape. Educational institutions are now speeding up the process of digitalisation and attain high student engagement and connecting the conventional classroom to an online setting (Rabah, 2015). The altered form of teaching brought by the pandemic has urged educational institutions over the countries torespond with a full move of educational materials and online teaching and learning environment.

The shift from face-to-face learning to technology-enhanced learning comes with a rising use of the internet. The learning process must keep up with technological innovation that happens amongst professional accountants. To counter this urgent issue, education institutions are currently looking at transforming processes and make use of digital technology as an educational tool for imparting knowledge to students.

Given the omnipresence of technology usage in accounting education, there is a prerequisite to understand the technology practices of accounting educators, with a view to rethinking approaches to technology-enhanced learning. Despite there are some anxieties about the integration of digital technology in accounting education, most of the research literature on this issue is positive about its use. Our intention in this study is not to resist the positive assessment of digital technology, but somehow to promote a detailed engagement with questions concerning the understanding and use of digital technology in accounting education.

The study goals contribute to the field of accounting education. Studies are lacking on how these digital technologies are being integrated with the growing trend of technology (Ng, 2015). The aim of this research is to identify how digital technology is being integrated and perceived by accounting educators. This is done in order to find a more

holistic approach of digital technology in accounting education. In order to trace an embodied understanding of technology, we must seek to understand the instrumentalist approaches toward the usage of digital technology in accounting education.

1.2 Problem Statement

Despite the need for accounting education to make changes in the curriculum is obvious, schools and universities have been slow to respond (Teeter, Madsen, Hughes, and Eagar, 2007). The curriculum is designed in a way that accounting students are trained to prepare traditional accounting transactions. The problems seem to be the practice of accounting is mutating and accounting education is not responding properly to the emergent changes. In addition, educational institutions are being challenged to preserve teaching quality, cater courses according to students' needs and keep the learning process smoother (Alqahtani and Rajkhan, 2020). Given the unfavourable pandemic situation, accounting faculty should facilitate digital technology integration into the core curriculum (DebSledgianowski, Ttan, and Gomaa, 2017). Also, accounting academics should revise curriculum's content, so that accounting and content will reconstitute each other.

The success of the digital transformation process in accounting education needs teaching (digital platforms, innovative teaching methodologies and technological skills), infrastructure (security, data, and software), curriculum (modernization and digital curriculum) and human resources. The digital transformation must combine with the qualifications of its professionals to reveal its power of revolution. It needs both technology and people. Therefore, the involvement of accounting educators in curriculum change is an important task for professional and teaching development. They are the main actor in imparting knowledge and skills to accounting students to cultivate a brilliant generation in the future. Fortunately, some accounting educators disagree about the depth and breadth of needed change in accounting education (Ainsworth, 2010). They refuse to

change their traditional teaching approach and rely on information from textbooks. It is a real challenge for accounting educators as they are expected to produce future accountants for the new requirement of the labour market. Specifically, they need to incorporate digital technology in accounting courses to retain the quality of education, motivate students to continue with the accounting programmes and eventually enter the profession.

Albrecht and Sack (2000) also opined that there is a need for innovative teaching approaches to deliver accounting subjects because of the fast-tracked development in the accounting field. Despite the decades of research on digital technology, there are only a few studies that specifically looked into how accounting educators perceive digital technology and how their perceptions are associated with user behaviour. Studies have stated that the prospects formed by the influence of technology in the educational background were not satisfactorily meet due to the attitude behaviour of educators in the integration of these tools. Therefore, it is important to ascertain accounting educators' attitudes, satisfaction and feedback on utilizing digital technology in the class. Learning objectives will be easy to attain when digital technology is put to good use as digital-age students are more familiar to use technology to find study materials compared to manual methods.

The rapid process of automation and digitalization are currently inviting a question mark for accounting education. It required schools, universities and accounting faculty to continue to adapt to change and be open to innovation. Preparation of technology infrastructure and facilities are urgently needed to solve this digital change momentum. The shortfall of resources and inadequate computer skills were barriers that distort educators from using digital technology in the teaching process (Ibrahima, et al., 2020). Lack of infrastructure, weak internet connection and poor technical skills have decreased accounting educators' intention to integrate digital technology in teaching activities. In addition, many accounting educators resist the use of technology due to poorly designed

software. The research explains that new technology requires digital skills and accounting educators are falling behind in professional growth. A.Inan and Lowtherb (2010) discovered that support and professional development from institution helped shape educator attitudes toward technology. Economic investments such as providing training to technical staff and accounting educators are required for the successful integration of digital technology. The opportunities that arise due to digital technology must be put to good use so that accounting educators can follow technological developments and bring students up to date.

The accounting educator's intention to integrate digital technology in education is an immense area to explore. Thus, it becomes crucial to understand their behaviour, which influences the incorporation of digital technology into the curriculum and learning. It is stimulating to study the rational factors that affect intentions and usage of digital technology of accounting educators working in higher institutions. The study purposes to understand the relation of the constructs which boost the integration of digital technology in accounting education on behavioural intention (BI) and use behaviour (UB).

Several models have been employed to determine the user's behavioural intention and usagebehaviour of technology. This study deploys an UTAUT model to examine salient factors affecting educators' BI and UB of digital technology. Precisely, this research investigates different individual factors; performance expectancy (PE), effort expectancy (EE) and social influence (SI) on accounting educators' behavioural intention (BI) and use behaviour (UB) of digital technology in accounting education. Moreover, this study also scrutinizes the impact of facilitating conditions (FC) on the use behaviour of digital technology. All these factors provide a better explication of the use of digital technology.

1.3 Research Question

The research questions indicate in this study are:

RQ1: Do performance expectancy (PE) positively influences behavioural intention (BI) touse digital technology in accounting education?

RQ2: Do effort expectancy (EE) positively influences behavioural intention (BI) to usedigital technology in accounting education?

RQ3: Do social influence (SI) positively influences behavioural intention (BI) to usedigital technology in accounting education?

RQ4: Do facilitating conditions (FCs) positively influence the use behaviour (UB) of digital technology in accounting education?

RQ5: Do behavioural intention (BI) positively influences the use behaviour (UB) of digital technology in accounting education?

The research objectives for this study are:

RO1: To examine whether PE positively influence BI to use digital technology in accounting education

RO2: To examine whether EE positively influence BI to use digital technology in accounting education

RO3: To examine whether SI positively influence BI to use digital technology in accounting education

RO4: To examine whether FCs positively influence UB of digital technology in accounting education

RQ5: To examine whether BI positively influence the UB of digital technology in accounting education

1.4 Research Gap

The rapid development in technology is revolutionising accounting, and Covid-19 lockdowns have intensified accounting educator focus by fostering the use of digital technology within accounting education. Research in the BI and UB of technology has

attracted many scholars from different disciplines since online education has become a drift in modern education (Liu, Geertshuis, and Grainger, 2020). Though emerging technology usage in education has increased in current years, technology usage continues to be challenging for educational institutions (Berrett, Murphy, and Sullivan, 2012). Moreover, research on BI and UB in the setting of emerging digital technology is scarce (Kar, Kar, and Gupta, 2021). In the literature, the inquiry is repeatedly put forward as to what variables determine the technology integration of accounting educators in accounting education. Measuring usage of technology is a way to determine the educator's intentions toward using digital technologies in their teaching practice.

Also, there has been an increasing need for broader perceptions and relevant curricula within accounting education. The existing accounting education is overly focused on the goal of passing examinations and students' ability to memorise facts. For instance, financial accounting subjects favoured students memorizing and replicating accounting techniques. The same comment is raised at management accounting courses where students learn and replicate normative structure such as risk management, internal control and target costing. The current accounting syllabus is criticized as failed to cultivate graduates with the skills required by employers (Bromwich and Scapens, 2016). Schools and universities are not following suit, though there is a significant change in the nature of accountants (Albrecht and Sack, 2000). Notwithstanding there are huge calls for the curriculum to reflect changes in the business environment, accounting education has been declared out of-date and unable to prepare graduates for the labour market. Clearly, a gap still occurs between what accounting educators teach and what accountants do.

Research by Sledgianowski, Tan, and Gomaa (2017) discovered very restricted instructional resources for financial accounting and taxation subjects. The level and intensity of digital technologies embedded in the teaching strategies as well as in the subject content in the accounting courses are relatively low. The accounting programmes

fail to include the knowledge of modern accounting packages like sage accounting, peach tree accounting and Microsoft access. This creates a gap in the quality of knowledge accounting graduates receive and the demands from the labour market. As a result, accounting educators in schools and universities are encouraged to facilitate digital technology relevant to big data in the accounting curriculum. They can arrange a roadmap to bridge the analytical gap and integrate the technological competency. Once the curriculum complied with big data elements, it will prepare accounting students for long-term career demands. Blau and Tamar (2017) claimed that the use of technology in lessons can enhance digital skills as well as technology competence for students and teachers. Henceforth, accounting students must be educated and prepared for digitalisation. They are expected to possess digital competency, problem-solving and critical thinking skills along with technical competency. The ability of data analysis and statistical knowledge is also needed to face the digital era. It is essential to ensure accounting students are equipped with the latest technology since they need to know the data analytics for analysing big data.

Next, studies that adopt informational technologies in accounting education are limited (Berikol and Killi, 2021). Limited research in this aspect of accounting education has beenreported. Bryant and Hunton (2000) also agreed that the accounting literature offers little research on the educators delivering instruction through the use of technology. The research in accounting education needs to be conducted pertinent to accounting educators'attitudes regarding digital technologies. Finally, Lane and Porch (2010) stated their concern over the lack of research to substantiate the opinions that digital technology specifically in accounting education enhances student learning.

Moreover, research involving this model in Malaysian accounting education is limited despite many types of research applying the UTAUT model in various fields (Merhi, 2015). Accounting curriculum has always been affected by the changes in the business

environment and the requirements of the profession. The contribution of this study is also important to collect feedback and determine whether academic changes will need to be made to ensure a quality level of accounting education.

1.5 Research Significant

There are multiples imperatives significant of this study. Firstly, it examines digital technologies acceptance and adoption among accounting educators in Malaysia universities. All respondents are working in either public or private universities in Malaysia. The existing research on the UTAUT model have primarily focused on settings others than higher education. This is one of the earlier study that assessess accounting educators' attitudes towards using digital technology in accounting education in higher educational institutions. Attitudes are the key factors in determining the role of digital technology in classrooms. Accounting educators have to decide whether to pull students away or motivate them by tapping into the digital world (Shelly, Cashman, Gunter, and Gunter, 2005). Some of accounting educators develop a negative attitude toward the use of technology due to the level of stress experienced (Siritongthawor, Krairi, Dimmitt, and Paul, 2016). They faced extra workload and an increase in time for the preparation of classes, due to prolonged use of a computer. Recommendations for changes are made to counter the accounting educator's attitude towards using digital technology in the workplace. Designing proper recommendations in accordance with these antecedent factors can lead to motivational teaching and learning for accounting educators. The result of this study creates a positive mindset through the use of digital technology for current and future teaching. The upshot of this study improves understanding of the usage of digital technologies in accounting education among educators in Malaysia. This study donate to the advancement of knowledge by discussing the use of digital technologies by accounting educators. Evolving of work environment in the digital age could alter jobs demand that calls for accounting educators to upskill their digital talent so that they are

prepared to adopt the digital technologies.

Moreover, the finding of this study is pertinent to a worldwide audience as accounting graduates need to be prepared for the future with regard to the need of the industry and technological demands of the business. Nwazor, Maduike, and Constance (2017) specified that accounting education is an education that offers students with skills and knowledge in accounting, computing and data processing for gaining employment in public and private companies. The education emphasizes the ability to determine accounting related information resources, the ability to find a solution to problems, develop communication skills as well as figure out answer and impact this knowledge and skills to the students. Also, the contemporary business and organisational environment require broader expertise and competence for accountants. However, there is an upsetting rate of unemployment among the accounting graduates. Accounting students should have skills such as analytical abilities, decision-making and accounting principles. This is due to the reason that young generation is going to work with companies that use innovative information technologies with continuous organisational changes. Therefore, it is reasonable that if accounting subjects deliver the student with appropriate knowledge utilisation skills and necessary abilities, the student will be able to adapt to changing environments. The accounting curriculum should be able to develop leaders and support board management competencies, so that graduates can survive and make a good long-term career. Thus, innovative teaching methods and assessment practices are essential in ensuring student engagement and helping them to learn which results in high-level thinking and problem-solving. Adjustments in accounting curriculum contents reflect the knowledge and skill sets required for an increasingly sophisticated business environment occurring in the wider economy.

Next, this study varies from earlier studies as it was conducted during a period of Covid-19. As such data collection had to be directed online due to the COVID-19 outbreak and

the movement control order (MCO). However, response rates and feedback received from the respondents are important as it reflect there is a need to innovate accounting curriculum. The incorporation of digital technology in accounting education is obligatory due to disruption caused by Covid-19. It changed teaching processes from initially teaching offline, accounting educators must also be able to teach online. The result reflects on the use of digital technologies in accounting education as a tactic to improve the learning and teaching processes of the accounting students. Therefore, accounting curriculum should focus on digital and technology skill development. To support this, the accounting education must be changed dynamically, and include digital material in the learning.

The weight of each study's conduct is vital for accounting faculty to track barriers and problems of integrating digital technology in accounting education and in the stabilization of Covid-19 global crisis management. If education institutions intend to educate accounting graduates to be professionally in directing future businesses in a continuous changing environment, they need to solve problems like connectivity, insufficient equipment, training and technical support to accounting educators. If a school or university does not possess adequate computers and internet connection, the integration would not feasible. Similarly, accounting educators will not be capable of using digital technology to its full potential if they are not provided with effective professional development of new technology. The study provides building blocks for future research in the accounting field and to build resilience in the accounting education community.

In addition, since the studies that adopt digital technology and UTAUT model in accounting education are limited, therefore this study contributes to explore UTAUT model to assess the behaviour intention of adoption and the use of digital technology. The study sought to find how higher education institutions and academicians could be given more effective training to student groups with diverse expectations in the digital world.

The conventional lecture approach is considered no longer attractive for the accounting students. A proper balance between traditional methods, by teaching accounting rules and management control techniques, on the one hand, and engaging new teaching approaches that could contribute to the growth of accountancy professionals, on the other hand. By integrating digital technology, accounting students could discover that learning is an exciting experience and they would be able to visualize the entire course content. As a result, the learning process will be more motivated. Therefore, accounting educators should innovate the way of imparting knowledge. The new methods must focus on the student's understanding, enthusiasm and involvement to enhance learning, with accounting educators mediating the learning process so that they cultivate their own knowledge. Adjustment in teaching approach with the current business practice, the learning process is believed more interesting.

For this purpose, this study examining and discussed how to adapt digital technology in higher education in Malaysia. The use of digital technology as teaching aid are recommended to provide accounting educators with the ability to better teach, interpret and analyse accounting contents. In essence, the accounting content could undergo updates in numerous ways. When teaching the accounting framework, assumptions and principles in financial accounting courses, the relation between recognition of revenue and big data can be formed since it will deliver more valuable info about future drifts of a specific item in the marketplace and estimate earnings. The introduction of big data in the accounting setting may improve the estimation of future earnings and going concern concept in accounting theory. Also, in management accounting courses, company budgeting can be enhanced through the implementation of big data when accessing more data linked to company operations based on market data. The course should be taught with an actual case example and apply analytical techniques and cognitive skills to analyse and interpret variances related to business data for calculation of cost. Meanwhile,

in auditing courses, big data is used as a source for analyse fraud activities and forensic accounting. Likewise, the blockchain and related concepts should be included as they can change the auditing profession's operations. Accounting graduates need to compete with graduates from all fields, making it even more important to have the knowledge and skills which allow them to compete effectively in the job marketplace.

1.6 Organisation of the Dissertation

The introduction chapter displays the research aim, question and objectives. The literature review chapter examines what is the current research highlight about this topic. The research methodology, results and discussion chapters deal with undertaking new research about this topic.

CHAPTER 2

LITERATURE REVIEW

2.0 Chapter Overview

Chapter 2 presents the definition of digital technology and relevant examples of digital technology in accounting education are provided. This section offers a wide-ranging overview of the existing literature and examines the contribution related to the proposed research topic. It also outlines the evolution of the problem based on the gap defined in the literature. Major challenges of using digital technology in accounting education are further discussed. A thorough review of the determinants of behaviour intention (BI) and use behaviour (UB) is explicated. The UTAUT theory is then proposed to provide a framework for an understanding of technology usage by accounting educators.

2.1 Digital Technology

In general, digital technology refers to engineering knowledge that deals with the practical use of computerised devices (Blair, 2021). Broadly, it comprises subdivisions of electronic technologies such as hardware and software. It includes (1) desktop computers; (2) mobile devices; (3) digital recording devices; (4) data logging equipment and associated probes; (5) interactive whiteboards; (6) Web 2.0 technologies, other online resources and storages spaces (Twining, et al., 2015). Digital technology enables immerse amount of information to be packed down on smaller storage devices that can be simply well-maintained. Further, the application quickens data transmission speeds. In another meaning, digital technology also refers to electronic tools, systems, and resources that help create, process, or save data (Victoria State Government Education and Training, 2019). It is used to transmit and display information in electronic form.

In education, digital technology has begun to change the roles of educators and students. The tools are perceived as transformative tools for teaching and learning. It enhances the level of creativity and distribution of information between educators and students. Digital technology is a digital processing system that encourages construction of knowledge and exploration on the side of the students. The use of digital technologies improves the quality of teaching and reduce costs. Educators can make the greatest use of digital technology by choosing which technologies is suitable for students and how these tools help in create an active learning for students.

2.2 The Usage of Digital Technology in Accounting Education

Previously, educators are using chalk to write on the blackboard to provide instruction to the students. They are the main source of information, and students passively receive it. Yet, this traditional method is not capable to fulfil the needs for employee growth (Roca and Gagne, 2008). Due to the fast pace of development, technology has profoundly changed education. It has been incorporated from nursery to university level. While computers were once viewed of as the powerful tools for education restructure, the technology itself has done little to modify the education structure to boost outcomes for students. Due to the access to information that technology has permitted, the educator's role changing as students hold more responsibility for their own self-learning using technology and to collect related information. Institutions over the world begin to redesign learning mode,foster more interaction and use technology as an enabler. With the worldwide reach of the internet and the uniqueness of digital devices that can connect to it, a new age of anytime anywhere education is dawning. It will be up to educators and digital technologies to make the most of the opportunities provided by tools, so that effective education is available to everyone everywhere.

The integration of technology from informal education into formal education provides educational solutions to help schools and universities meet the needs of society that seeks for a more flexible education and to locate the students at the centre of the teaching process. As a result, there are a rising number of cases with the use of digital technology as a bridge between informal and formal education. The educational application allows educators to conduct learning at anytime and anywhere. This situation weakens the blocks between formal and informal education and demanding the growth of new methodological tactics which contribute to opening up the schools to the outside world.

The rapid development and innovations at the hardware and software levels have opened a pave way for new teaching approaches. Accounting educators at all levels of education prepare themselves for lesson plans and assignments through digital technology. They use digital technology to develop course material, share content, and deliver presentations (Rumanyika and Galan, 2015). Moreover, the Covid-19 pandemic has forced accounting educators to use online digital tools or platforms to schedule lectures, conduct examinations tests and students' attendance. The educational tools share all kinds of information such as images, text, and video, so that accounting educators can distribute, study assignments, assess student learning assignments, and monitor the student's progress. They could check student work anytime and anywhere. Nevertheless, the effective use of such technologies rest on technology skills.

Meanwhile, digital technology reduces the burden of a bag of school-going students since even books will be available on online platforms. The application also combines social learning experiences into learning strategies for accounting students (Zheng, Wang, Doll, Deng, and Williams, 2018). It makes learning more accessible because, not only provides students with autonomous learning when it is appropriate for them, but they also have access to support. In other words, digital technology provides an experience more alike to a classroom, with educators located anywhere in the world. This technology tool is

rapidly becoming a crucial part of the learning and teaching process as it eases communication among students and educators more efficient. The use of digital technology has reduced absenteeism rates, increased students' enrolment, and thereby improved their grades (Underwood and Banyard, 2008). Digital tools such as interactive whiteboards and projectors in the classroom help students observe and understand content efficiently.

Digital technology has become a topic of considerable interest (Bhimani and Willcocks, 2014). Accounting education has changed through including digital technology in contrast to the threat of market obsolescence. Accounting educators and accounting students are increasingly need technology skills. Therefore, by delivering latest and effective education, accounting educators also need to develop e-content in accounting syllabus as a tool to help accounting students to retain concept better. With the increasing body of knowledge in accounting, emerging the curriculum for any accounting course can be both challenging and exciting. Accounting educators have been encouraged to implement new and innovative technology in their classrooms and curriculum in the last decade (Sugahara and Watty, 2016).

In a higher education environment where digitalization is having an impact on teaching and learning, the increased digital literacy among accounting faculty is of central importance. They play a supportive role in the learning process of accounting educators and students in accounting education. The use of digital technology in teaching open up more creative learning paths and joining more effective techniques to increase quality education (D'Aquila, Wang, and Mattia, 2019). Instead of using calculators and handwritten ledgers, accounting educators could now automate equations using a digital device. It allowed them to spend less time on tedious task and focus on tedious tasks and focus on quality teaching. Yet, few empirical in-depth studies have assessed how digital technologies influence the roles accounting educators.

To make the broad topic of digital technologies more tangible, this section explores how these technologies are contributing to digital transformation of accounting education. It also explains how digital technology has changed the field of accounting by provides some examples of application of digital technology. Undoubtedly, this section will improve the reader's understanding the role and usage of digital technology in accounting education.

2.2.1 Big Data (BD)

BD defines as the information systems and activities which store and scrutinize huge amounts of data. It is formed by people, tools and machines which produce bulk and different volumes of data. More specifically, Wamba, Akter, Edwards, Chopin, and Gnanzou (2015) characterized BD in 5 V's; volume, velocity, variety, value and veracity. Later, Chaudhari and Mulay (2018) further defined the concept of big data comprising variability and visualisation. Though it has many operational meanings, it is agreed that BD not only looks at traditional approach of accounting data but to take in a new world of communications that are driving decision-makers to alter their perspective (Setty and Bakhshi, 2013). The role of accounting curriculum is to prepare accounting students for the practice, along with the evolution of the profession. Nevertheless, BD is not encompassed in the syllabus in universities which has caused the graduates being incompetent at workplace as they do not possess sufficient skills (McKinney, 2017). Some professional bodies have contemplated to include BD in their syllabus such as Chartered Institute of Management Accountants (CIMA) included BD in its program in 2015. Failure to take in BD in the curriculum will lead to a large quantity of accounting students that are incapable to cope with BD.

The emergence of BD in curriculum equips accounting students to better understand how data converts info in the decision-making process. Combination of accounting education and training with digital technology helps students better understand how databases are constructed so they can be audited and edited in response to numerous requirements. Data-driven analysis assists students to make a professional judgment in statistical understanding of the relation and the impacts of change in the decision-making process. Asa result, there is a continuous call for extensive data integration in the accounting curriculum. Janvrin, Raschke, and Dillaa (2014) recommended accounting educators couldmake use of BD in financial accounting courses using interactive data visualisation. For instance, students can search a large volume of financial data and company filing in various electronic financial databases. They can freely download the data, perform financial ratio calculations, and determine the time series trend for companies. With analytic skills and tools, students can effectively analyse data and understand the way business decisions are made. The availability of comprehensive data increases the quality of the decision-making process since the information is better understood.

Additionally, Monterio (2013) provided another way of how BD exist in integrated reporting. Using Extensible Business Reporting Language (XBRL) technology platform, integrated reporting could be discussed in the setting of how to report data and info about a company's business model, strategy, risks, opportunities and governance. In short, XBRL makes probable the integration of BD analytics and technology into an accounting lesson. This mechanism exposes students to the accounting competency of external reportingand foundational competency of analytical and technology. BD also uses better in management accounting subject to improve the decision making process. Accounting students utilise BD to understand one company's customer analytic. This aids in identifying future trends and boost company marketing skills (Vasarhelyi, Kogan, and Tuttle, 2015).

Also, BD strengthen operational efficiency as it can be employed to foresee outcomes, which is suitable for costing purpose (Janvri and Watson, 2017). It helps accounting students to identify one company's tactical planning via data perspective which is driven efficiency in operations. Perceptions from customer analytics can be used to leverbusiness risk and predict demand trends which match inventory level.

BD management also reinforced the US Generally Accepted Accounting Principles (GAAP) research skills. This may be specifically pertinent to complex topics covered in advanced accounting courses like foreign currency transactions, business combination and derivative accounting. The electronic availability of the Financial Accounting Standards Board (FASB) Codification permits students to quickly search through the huge amount of authoritative literature to determine US GAAP requirements. They might explore different accounting policies applied by the company to see whether they comply with US GAAP. Next, they can use spreadsheet software to analyse financial data and understand the implication of the accounting policy select on company performance.

Besides, utilising case studies in the audit course aids accounting students better understand how technology can conduct an audit. Some auditing textbooks have begun to include BD analysis concept and techniques into the curriculum. Blix, Edmonds, and Sorensen (2021) examine six auditing textbooks to determine how much information and how many problems pertained to the data analytics concepts emphasized by authoritative bodies, like the Pathways Commission. Every textbook applied at least one data analysis software in its problems. The study indicates that data analysis concepts are beginning to be integrated into the accounting course content of textbooks, but integration is still developing. BD is potentially to identify fraudulent activities and apply safeguard's purpose. Since the data source is trust worthy, suspicious activities can be easily detected. Accounting students able to use BD to scrutinise suspicious transactions such as money laundering. Based on this, it complements traditional audit evidence to strengthen the

legitimacy of activities. Data analytics can be used in financial statement to plan future prospects and determine going concern status of a company. Moreover, BD can also be used to map out internal control procedures and risk assessment.

The application of BD in taxation subjects has taught accounting students to analyse tax information in accounting and calculate indirect tax. For instance, they use statistical software and pivot tables to analyse company tax data. The analysis is useful to detect high level of accuracy and income tax return fraud. Further, BD also integrate into the forensic accounting subject. Characteristics of BD for example reliability, accuracy and consistency are pivotal to forensic accounting practices. Data can be extracted from radio frequency identification transaction records which can quicken the processes in forensic accounting. Accounting students manage to detect risky activities thru company expense history and payment descriptions.

Accounting students should be able to retrieve useful data from numerous sources of info to perform data analysis. Also, they should be able to think logically and make choices with regard to BD. The basic concepts of BD should be imparted to accounting students for them to understand how to deploy expertly in analytics. Lastly, they should have interpersonal skills which will lead to proficiency in executing analysis.

2.2.2 Virtual Reality (VR)

At present, VR technology is closely combined with accounting teaching. It is a computer system that creates a virtual environment (Guo, 2019). The application uses a method of stimulation to generate a dimensional virtual time which reflects the change and interaction of objects at any time. Through the use of standard input devices like keyboard and mouse, or sensor devices such as wired gloves and special helmets, users will go into the virtual space. They can feel and manipulate a variety of stimulating objects in the

virtual environment. They also can communicate in the virtual environment using language and various gestures. VR technology includes computer graphics, image processing and sensor technology to vividly demonstrate various human sensory functions, so that users can get the similar experience as actual life in the virtual setting.

This application is increasingly applied in the accounting field. Students can learn accounting knowledge regardless of time and place which overcomes the practical teaching part of the current distance accounting teaching process. With VR technology, accounting students can combine their accounting knowledge as they can perform accounting simulation practice online whenever they like. Since accounting is a technical subject, VR teaching shows the company's financial process to students. In this way, they can intuitively understand the financial process of the company and apply financial knowledge using debit and credit accounting rules. Through VR operation, students also learn how to classify and recorded items in the Statements of Financial Position. The experience also educates them to differentiate between cash and accruals basis based on a real case scenario. Another situation is the use of VR when teaching taxation subject. It permits the accounting students to experience a real-life example by using google cardboard headsets with an app on their mobile phones, which allowed them to immerse themselves in the technology. For instance, accounting students can experience as an advisor role where VR stimulates the real-world visit to client’s premises. In the cases, the capital allowance scenario was set up by the accounting educators. Students need to assessthe type of asset that eligible for claiming capital allowances.

Under the traditional accounting teaching method, studies are mostly in a theoretical basis. This is because most of the time, educators are explaining accounting theory while students only listen. Such a theoretical course has become a time-consuming process, accounting educators and students are very tired, and the teaching effect cannot be imagined. Further, some accounting students may feel sleepy as the teaching time of

accounting principles is longer. Even accounting educators provide different examples to explain the conceptual principles, yet it is too abstract and dilute the effect of teaching. The application of three-dimensional stimulation technology in the course of accounting theory makes things dynamic, and present the structure accurately in all orders, which can greatly save the groundwork. Accounting educators only need to be supplemented by the application and the accounting students' understanding of knowledge will also be significantly enhanced. With the time saved by VR technology, accounting educators can arrange a scenario to evaluate student's results.

With the help of the technology, it accurately restores the whole process and details of company accounting work. Though the cost of using VR technology is higher, yet it brings potential payback to students learning and development. VR teaching significantly encourages students' enthusiasm and initiative in the learning process. From the prospective of teaching side, such a way makes accounting concepts simple to understand, and students have practical abilities to meet the wants of the communities. Moreover, with the introduction of this technology, students are able to experience the details of different positions in one company since the accounting positions are diversified. Therefore, they can choose their favourite roles and clearly outline their future work direction and objectives.

These days, we can not only rely on textbooks as for the teaching approach in the accounting education field. A new teaching mode with students as the central focus has been formed. The development of VR technology has made up for traditional accounting educator flaws. Through learning, discussion, understanding and application of knowledge between educators and students, make them involved themselves in classroom learning, effectively reduce students' cognitive burden and attain teaching goal line. If the real-life three-dimensional simulation animation is used in the teaching, the entire process can be clearly presented, the difficulties of the teaching can be easily overcome and the

teaching effect can be improved. The application highlights the key points of the accounting theory, visualize the complex theoretical knowledge and create the visual cognitive model. Therefore, the difficulty of changing teaching method is resolved, build a student's favourite theoretical class. Making full use of VR technology, the teaching content is clearly displayed and improves teaching quality. Coupled with audio visual aid effect like hypertext, image, figure, video and sound, it contributes to encourage students' board thinking ability and practical ability. Besides, students' ability in operational thinking is enhanced by the grouping of sound, shape and colour via virtual reality. VR also reinforce students' consciousness of collaboration.

The application of VR technology in accounting education tears off the malpractice of traditional oriented education, makes the teaching experience more innovative, and recognise the theory of accounting education combined with practice. Accounting educators should walk at the front line of technology, to better teach accounting students and expand their teaching ability. Cultivate students' enthusiasm in learning, let them think independently, take the initiative to discover solutions, and exercise their thinking ability in practice. Educational institutions need to pay attention to the practical ability of students in order to prepare them in the future employment and meet a high-standard of requirement by employers.

2.2.3 Learning Management System (LMS)

An LMS is a self-contained webpage equipped with command tools that allow the institution to organise curricula content and involve the students in the education process (Kim, Yoon, and Kim, 2021). LMS is suitable for schools and universities from any field. Typical users are educators, instructors, students and administrators. The LMS can be presented as a stand-alone product on the institution's server, or it can be a cloud-based

platform that is mastered by the software company. It is operating inside of a web-browser, behind a secure login process. It is a software application typically designed to register users, track courses, records data and provides reports to the institution. It ranges from systems for managing lesson records, to software for allocating courses via the internet with structures for online partnership. These data are used by educational institution to grow and improve themselves. LMS reporting enables users to analyse the data from each subject and tailor it according to what the reports indicate. Feedback and reviews on the subject can be easily interpreted by reporting tools to present a comprehensive picture of what materials students found engaging. Time logs can help determine what aspects of the subjects are perceived to be tough or most interesting. Educators can get to know how exactly their subject is being received and how well students are progressing in the subject. The educational institution is also able to identify which subjects are popular and improve enrolment in another subject. The LMS helps institutions to maintain the integrity of their educational programs. The information can be analysed to detect patterns and disparity in learning to support student and overall class improvement. Educators can access reports by class and overall school performance for improved scheduling.

There are some institutions use LMS for record-keeping purpose. They used to store student information systems and document the educational journey during and after graduation. LMS is able to track degree requirements and map students' paths beyond graduation. The technology also useful for creating, issuing and certifying blockchain-based certificates to students. Furthermore, accounting educators also can use an LMS to program lessons and courses onto a blockchain. They will get notified when assignments are completed by their students. The technology will outline a list of tasks for the completion of accounting course for the students.

Many educational institutions have widely adopted LMS that is available commerciallyin the market as a learning platform. The provision of online learning and assessment,

management of ongoing professional education, cooperative learning such as application sharing and discussion are dimensions of Learning Management System. Siragusa (2002) asserts that rising rivalry between education providers and prospect from numerous stakeholders, have placed pressure on education providers to discover cost-effective substitute approaches for course delivery. Indeed, some institutions are using a n LMS mainly as a cost-saving delivery instrument, whereas others have restructured courses and utilised the tools available within an LMS. Further, many educators claimed that LMS support interactive communication between students through discussion forums, email facilities and online bulletin boards (Beard and Harper, 2002). Basioudis, Basioudis, Lange,Suwardy, and Wells (2012) came to a similar decision, pointing to the use of LMS to improve access to learning materials and provide feedback to students through an online assessment. All students share class material and have access to the lesson including objective, activities and resources regardless of where they are. Instead of purchasing and lugging textbook to and from school every day, textbooks can be shared online via LMS applications and any up-to-date product can be linked into the class page. A good LMS should be simple to operate in order to promote accounting students to participate. The layout of the LMS should be friendly and function well based on user requirements. LMS combines together under one single platform for all academic curricula,study guides and training. This technology tool does not require additional training and it is easy implement at educational centre. LMS allows personalised access to users members of its group, such as the support received in a classroom environment. The software has made it easy for both accounting educators and students to make notes and integrate tools such as calendars and word processors. Accounting students can easily find the communication tools they need, making presentations or resource mapping. An LMS helps to make learning interesting and engaging accounting students to participate actively in their own development. Having all information in cloud

is a strong dispute for using an LMS and preventing missing of data and info.

A study was undertaken in Australia, United Kingdom and New Zealand to investigate accounting students' insights about the usefulness of LMS. The authors found their fulfilment with the LMS was significantly associated with providing lecture notes, chat rooms and video summaries. Similarly, Lange, Suwardy, and Mavondo (2003) discovered a high levelof fulfilment for undergraduate students with the delivery of LMS to support the introductory of accounting subjects. The topic covered in this subject includes double-entry of accounting system, financial statement analysis and management accounting. The majority of the learning materials have been delivered online using the application of LMS, which students could download from servers and print their copies. The use of LMS has the potential to alter accounting education, by furnishing the opportunity for students to develop a variety of soft skills like writing and collaborative skills. The combination of availability, accessibility and affordability of this technology has surely spurred the adoption in accounting education. LMS also has been widely used in primary and secondary schools in Turkey (Balkaya and Akkucuk, 2021). To achieve an effective learning environment, teachers use the applications in teaching such as conducting quizzes and watching video. Quizzes can be administered from the LMS and grading them can be automated and made even easier. Students can choose to take these assessments from anywhere. The cumbersome collection and sorting of papers is avoided by online submission, which can then be reviewed by the educators anytime and anywhere. Personalized assessments can be made for accounting students depending on their progress in the course. Not just that, homework, projects, and presentations can all be managed directly from the LMS. Apart from that, parents able to have access to their child's calendar, class timetable and examination dates. This generates chances for conversation to meaningfully occur outside of class time, and parents can actively participate in their child's learning. There is also transparency of feedback between

educators and parents. Feedback from them for formative tasks can be easily shared with the student through the lesson page of an LMS. These can also be sent onto the parental page and permits all feedback to be kept so students can easily access in later on.

2.2.4 Cloud Computing (CC)

CC is not merely a technical solution, or a computer program that has been kept, but rather a new technique of delivering computing resources. It is variety of apparatus that provides outsourced internet-based resolutions to the need to access information regardless of place and time (Becker and Drum, 2011). Examples of cloud computing include Dropbox.com, which permits users to record data on the website and access it from any place for free. One method to boost a setting of innovation in institutions is via CC. The application suggests the chances for innovation in the classroom.

By applying CC, it becomes probable to bring educators and students together on a united platform. One of the biggest barriers for educators in teaching is lack of time. CC offers them more time to emphasis on instruction. As students can gain real-time access from any place, educators can spend less time creating many copies for the same materials. They will no longer have to handle the problems of missing materials and assignments as the cloud stores all this information. Educators also able to mark and provide comment on assignments from their device despite of carrying home books and paper for grading. The cloud application streamlines the process for collecting missing and late work for absent students. Cooperation is also streamlined for educators. With the cloud, they can easily share course plans between colleagues and work on them together regardless of place and time. Through the application, different schools can break fences that avert them from collaborating, which in turn result in a more global educational group.

Switching to CC also eliminates the need for institutions to continuously substitute outdated textbooks. Schools, colleges, and universities need not buy or maintain their own servers. Instead, they can leverage CC to avail compute power, databases and storage when they need them. Cloud-based services help institutions by accelerating the use of new digital technology to meet educational needs. Accounting students can use the application without having to purchase, install and keep the application on their computer. It provides opportunities for greater students' choice in learning. Using an internet, accounting students can access a wide array of resources that suit their learning interests. Furthermore, CC is offering more speediness in data operation and gaining from the giant infrastructure provided by the cloud provider. It is easy to understand and user-friendly. Bothaccounting educators and students do not need to worry about the complexity of the application. Issues of security and safety of users' information often overlooked. CC helps institutions to meet data protection requirements by ensuring student and employee information is kept safe. Most cloud services invest in security precaution that delivers the standard level of security on their cloud infrastructure. Safety actions utilised in the cloudare easy for users to steer. The cloud also delivers reliability when devices fail as we can kept data in the cloud.

The application of CC in accounting education has become a priority for educational institutions due to the flexibility in automated software integration. In this way, cloud users do not have to make extra efforts to customize and integrate their applications to their requirements. Accounting educators and students have fast access to accounting and financial info, as well as database updates, is enabled. Once they log in to the cloud, they are given access to info from anywhere regardless of location and time region. The adoption of cloud technology in the financial accounting subjects will significantly improve the quality of teaching. Boundless storage of financial information, backup of data as well as restoring databases will provide accounting students with online access

for better scrutiny of the company's operation and financial reports.

In fact, CC is a method of digital transformation that improves accounting courses. The main reason being the scalability and simplicity of the system access it offers across the globe. Also, it decreases the need to keep expensive hardware on-site, which can save on administrative costs and eliminates that 24-hour air-conditioned server room. Alhelou, Rashwan, and Abu-Naser (2021) discuss the practice of using CC in accounting education in Palestinian universities. The result reveals that the technology aids faculty members and students to retrieve their files at any time and anywhere on the internet. Since CC is able to store a large number of exercises and practical cases on the server, it enlightens the level of accounting education for students and their achievement of better grades. Mahmoud (2018) investigated the implication of using CC in improving accounting education in Egypt to deal with the contemporary business environment and the requirements of the labour market. The research concluded that the technology leads to the spread and improvement of university accounting education, and the development of comprehensive scientific, professional and technological skills. In a similar study, Jibrin, Musa, Shittu, and Yusuf (2019) discovered that 135 academic staffs in Federal College of Education Kontagora, Nigeria are alert of CC support for teaching and learning, enabling them to communicate by electronic means with colleagues. The study also found that problems of security, cost of internet and lack of trust of cloud service providers were among the worries expressed by the participants. The paybacks of CC in the accounting education sector are immense. The cloud is recognised as the best opinion for both accounting educators and students as well. Nothing fit the convenience of accessing learning at the fingertips and cloud technology makes it probable. No matter how large or small of a school, everyone in the industry is undergoing the optimistic impact of the CC.

2.2.5 Blockchain

Blockchain is a technique to organise and record data. It is defined as an information network that comprises a set of nodes, each of which signifies a database and a ledger where all transactions that take place within the network are subject to verification of validity by the rest of the network devices (Akter, Michael, Uddin, McCarthy, and Rahman, 2020). A blockchain database begins with a user key in a record. The record is then validated and added to a block that comprises many records. Thereafter, the block is then added to a chain of blocks creating the blockchain. Each block in the chain is signified by a code. No central data storage is established in a blockchain network and the reliability lies in a peer-to-peer process to verify every item in the structure. This process eliminates the need for intermediaries to approve those transactions. Once a transaction is approved by the participants, new information is added at the bottom of the ledger while the original record will be left intact.

All accounting records are stored in a database either manually or using accounting software in a traditional accounting system, via which only accountant will have access to the ledger using double entry accounting system. But, with blockchain technology, the accounting records are available to all parties by engaging a triple-entry accounting. This means that auditor, clients, banks and regulators will have an access of the ledger on a real time basis across the network. The efficiency of blockchain technology impacts recordkeeping processes starting from the way transactions are initiated, processed, authorised, recorded and reported. It will be impossible for someone to manipulate the data since all entries in a blockchain are distributed and cryptographically sealed. Thus, accountants will need to have sufficient knowledge to perform triple-entry accounting works on a blockchain platform since it replaces double-entry bookkeeping. Their skills need to expand to comprise an understanding of the aspects of blockchain. Blockchain

solutions reduce costs of maintaining, reconciling ledger and provide assurance over the ownership and history of assets. For accountants, using blockchain could help them to focus on planning and valuation, rather than record keeping.

From an accounting education perspective, adding blockchain to an Accounting Information Systems (AIS) course appears to be the best fit and it seems to be the easiest to carry out at the graduate level. For instance, blockchain already added into the syllabus for Institute of Chartered Accountants in England and Wales (ICAEW) qualification. Blockchain solution helps in developing transparency and transform from double entry to a triple entry in record keeping. It reduces the boundary of error when accounting students prepare financial reports and cuts the time and effort spend, as the accounting recording of transactions will be directed in a common ledger. American Accounting Association has provided conferences and resources in an effort to educate accounting educators on blockchain technologies so they can pass over the knowledge to their students. Effectively presenting blockchain into the accounting curriculum will safeguard that education maintains relevancy and prepares students for the future.

As the digital world becomes more complex, cybersecurity is a top precedence for companies and controls need to be in place to ensure data is recorded in a safety environment. The adoption of blockchain technologies is a vital tool for cybersecurity systems. Educating accounting students on procedures such as network security, data security and privacy and access controls can act as an early layer of control to quickly respond to security breaches. They should be cognizant of how the data is being secured and what methods are being used to ensure data validity. A thoughtful of how systems are being secured and how the information is being validated is indispensable.

In addition, blockchain technology is also applied to both internal and external auditing. Combination of blockchain solution with data analyses could help with the transactions level assertions involved in an audit, and the auditor's skill would be better spent in view

of high-level questions. Instead of requiring knowledge of the business, those judgemental elements frequently involve context that in not available to the public. Therefore, with blockchain in place, the auditor will have extra time to emphasis on these questions. Real-time assurance of transactions may remove procedures of audit such as sampling and replace them with 100% testing through data analytics. There would be less requirements to perform confirmation of a company's financial status since all transactions are visible on blockchains. The immutable blockchain records themselves may be audited evidence formany financial statement assertions. One of the major benefits of blockchain technologyis its stability. Once data is stored in the digital ledger, it is hard to remove or amend it. The system can make procedures easier than previously. The data saved on blockchain isvisible and accessible by the people who have permission to access. It enables more transparency through the transaction process. Tracing back past records is also easy as auditor can conduct audits trials. As a result, blockchain practice must come into effect toensure the integrity of accountants is well maintained and prepared accounting students for the future. Yet, it puts forward an important question regarding how it needs to be included within curricula content in terms of topics. Together with professional bodies, the educational institutions and regulators are motivated to create the best practices in the blockchain system.

2.3 The Challenges of Using Digital Technology in Accounting Education

2.3.1 Resistance to Change

There is little evidence of technology integration among educators regardless of huge funding of digital technology in the educational (Buabeng-Andoh, 2012). Hence, it created a gap between the educational institution and industrialbusiness practice in regard

to technology usage. Granted, some accounting educators hadintegrated the current trend of digital technology into their teaching process, yet there is still resistance from other educators due to the existence of opposition to the change in teaching methods (Watty, McKay, and Ngo, 2014). They prefer traditional teachingmethods compared to innovative teaching. Clearly, accounting educators are agreeable with the traditional approach of teaching and hence resist to get out of their comfort zones.

They often view technological integration as outside the scope of their job requirements. Simga-Mukan (2010) argue that traditional teaching methods do not encourage students to establish analytical skills and capabilities. Negative attitudes and resistance of accounting educators have been obstacles to technology integration. For example, it is hard to change the way they teach when they have been using the same teaching methods for entire teaching career. Accounting educators are having preferences for manual writing notes compared to typing. Therefore, it is imperative to provide plenty of information and benefits to the accounting educators as to why digital technology should be integrated into the classroom.

Using digital technology in accounting education is merely not what they are used to. It is a change. Accounting educators are afraid of change and they are scared to take a leap. They cling to the traditional ways of lecturing as a means of imparting knowledge to their students. Most of them are adherence to textbook content delivery. They also view learning a new technology tool as a risky method. Thus, accounting educators resist veering from the status quo. The natural extension of this argument is that digital technology becomes imperative in accounting education to develop students' level of communication and thinking capabilities. In addition, accounting content must change dynamically and adjustments in teaching methods' design should be made.

Learning accounting must not be limited by rules. Accounting students need to know the underlying accounting principles and organise all accounting procedures into a coherent

whole. For example, the accounting concept of double-entry cannot be applied by remembering items that need to be debited or credited. Considerable thinking is necessary as the student needs to learn how to relate the effects of each business transaction on the accounting calculation before applying the process of debiting or crediting. In addition, book-keeping includes the process of preparing the profit and loss and financial statements. These steps consist of recording transactions based on documents, posting journal entries to ledgers, inspecting the accuracy of recording with trial balance, making journaladjustment entries and preparing adjusted trial balance. Therefore, accounting students must occupy a deep approach to learning in order to dominate the whole set of accounts rather than fragmentally studying accounting process.

Educators' attitudes have a significant impact on their ability to integrate technology. As institutions implement new technology, expectations rise for them to integrate it into their classrooms for instruction and learning purposes. Accounting educators are holding the key to dominate how technology is integrated in schools as they control all aspects of the technology and determine if students will benefit from the perks that technology provides. They are supposed to present a united front by highlighting which digital technology can have positive outcomes for the students. Educators often described as agents of knowledge and skills providers, and they should exploit the potential of digital platforms which can benefit classroom practice and aid the students. If accounting educators do not believe in using digital technology, they will fail to transform classes and align with teaching goals. The flexibility and embedded special features, the delivery methods available in digital technology make learning more attractive and effective. Without accounting educators' active participation, the intention to integrate technology in the teaching and learning process would be unattainable. Therefore, there is a deficiency in accounting education curriculum due to reliance on traditional methods of teaching, and the inconsistency of accounting education programmes in terms of linking the theoretical

and applied aspects by focusing on the theoretical side, as well as not keeping pace with technological developments. Although this resistance to change can be difficult to overcome, working with school administrators, head department and faculty to support them in integrating digital technology can help make them more likely to embrace it.

2.3.2 Heavy Workload and Stress

The use of digital technology is particularly fundamental to accounting education because it enhances student learning and satisfaction. As technology modernizes rapidly, new technological tools are integrated into teaching. Accounting educators might sense the need to continuously learn the technology. The integration of digital technology in the teaching and learning process has created immense workloads for accounting educators. Watty et al. (2016) interviewed 13 accounting academics and found that they are not keen to use digital technology in the educational process as they have to spend much time dealing with the technological tools. For instance,accounting educators need to plan for technology integration, collaborate with colleagues, prepare lessons and support materials, practice strategies for embedding technology within the curriculum and develop skills with evolving technology. In a similar vein, Ezeani and Akpotohwo (2014) indicated similar findings of barriers to integrating digital technology in accounting education.

A mutual complaint among accounting educators has been the rising in their workload, typically the total of time they have spent on teaching activities. Therefore, they find themselves overwhelmed and increasing of work overload are considered the most significant consequences experienced by educators during the Covid-19 lockdown. Most of accounting educators are busy with daily teaching and research jobs, hence they do not have sufficient time to convert their courses to online content. For example, creating informative educational learning videos for students has been a main challenge that

accounting educators face. This might be a result of educators' inexperience on how to create those videos, what is required to be in the video, and how would such videos be impactful to students. They complained exerting too much effort and time in creating online videos. The increasing workload through increased hours, typically unpaidovertime has led to higher distress and anxiety levels.

Teaching with digital technology is not the same as traditional teaching. Accounting educators need to spend time discussing practice with colleagues as well as time developing instructional settings in teaching and learning. Shortage of time in schools, they are usually burdened with multiple tasks other than teaching. Educators claimed that they did not have enough time for the integration of digital technology in class, as the integration would spend a lot of time. Providing day-to-day and modernized content demanded more time than in-person classes. Moreover, they have to teach all types of subjects along with digital technology, which means they have a heavy load. The accounting educators need to learn how to use hardware and software and at the same time keep themselves updated with the latest technology.

While digital technology could improve effectiveness in teaching, yet the complexity in preparing and devising effective lessons using technology compared to traditional method can be challenging and time consuming. There is further dispute to those educators who would like to gain competence in the use of technology tools. Accounting educators need time to spend learning and exploring with digital technology. Educators need time to reflect on their learning to integrate new knowledge into practice. They need to do a trial and make necessary modifications as needed.

No doubt digital technology can enhance learning through accessing information, as well as providing collaborative learning opportunities. However, it creates stress and pressure for accounting educators to become a digital expert. Complex digital technology is often problematic to use. They involve extensive training and integration into current platforms.

Achieving high usage when the technology being integrated requires hours of extra time from accounting educators is challenging. The right teaching tools should be easy to set up and ultimately improve effectiveness for those using them. Digital technology needs to be simple to use and not add time to the educator's busy schedule. Rigid software that requires accounting educators to abandon their existing lesson plans often fails because it does not align with what is being taught. The technology should be flexible, editable, and supplemental to individual educators.

2.3.3 Digital Literacy and Professional Development

Another inherent problem of accounting educator struggling to integrate digital technology into the teaching process is lack of knowledge and understanding how to use technology. Some of them do not have basic digital skills to emerge digital technology into the accounting syllabus. Accounting educators do not possess adequate skills to successfully integrate the new capabilities into their teaching approach. Correspondingly, Nuris, Nagari, and Nuraini (2019) came to the same conclusion pointing; there is a lack of usability expertise towards technology tools among the accounting educator's workforce. The results are that the new technology is underutilised, or used in a way that mimics an old process compared to innovating new methods that may be more engaging for students. Thus, they may not maximise the impact of technology for staging changes in the education system.

Learning accounting knowledge by using textbooks is not only boring and dull, but sometimes can be difficult to grasp. Eventually, it can be very time-consuming for accounting educators to keep on explaining accounting principles and concepts to the students. However, if the educators are equipped themselves with digital literacy skills, the ultimate goals of students' achievement can be achieved with the integration of digital

technology into the syllabus. Accounting educators should continuously improve their ICT knowledge more in-depth (Lawrence, Ching, and Abdullah, 2019). Though some educators are subject expertise in accounting, but somehow, they are lack of technological skills. This shortcoming may hamper the teaching and learning process

They need to know how to operate digital technology to redesign course materials and improve students' achievement. Their primary responsibilities are to ensure the best strategies to stimulate students learning process using effective digital technology in the field of accounting.

This further point toward that when an accounting educator is not familiar about the tools, he or she is unwilling to utilise the technology. This current result conformity with Sife et al. (2007) opined that those systemic challenges and limited skills mandatory for the integration of e-learning, coupled with absence of technical support, prevent the actual usage of e-learning. Makgato (2014) also noted that an absence of substantial assistance from the technical division is a key problem that hindered effective usage of e-learning facilities in various higher education institutions. The creation of content using digital technology is an important concept in the teaching and learning process. Holmes and Prieto-Rodriguez (2018) remarked that academics are stressed with content creation when using e-learning platforms. This is due to the circumstances that the respondents lack the sufficient skills needed for emerging interactive e-learning activities. Thus, they are not maximising the technology to its full advantage. This is consistent with the claims of Kumar and Al-Samarraie (2018) as they also established inadequacies in the proficiencies of e-learning instructors about the use of various e-learning platforms.

Besides this, accounting educators also struggle to provide with professional development resources to help them increase knowledge and familiar with the function of digital technology. There is insufficient of constant professional development for accounting educators who are required to integrate new technology into their classrooms yet who are

unprepared or unable to understand new technology. They need professional development opportunities in order to strengthen their ICT skill for formative learning, assessment, accessing online resources, and fostering students' interaction and collaboration. Without proper training and continuous development, digital technology becomes a burden rather than a saviour.

Training and mentoring are considered essential for accounting educators. Most of them would agree that training should be offered to develop technology competency. This was evidenced by previous studies that found a positive association between training on technology and educators' attitude toward their integration of technology in teaching improvement (Gilakjani, 2013). Whilst some accounting educators see the value of digital technology, their drawback is lack of technical training. They counter system failures and get stuck during the teaching process. Educators may find it difficult to use technology for support and learning. Therefore, all training and professional development opportunities that are provided to them must be adequate enough for them to grip the concepts and have trial experience using the technology to develop course when they are in an online environment. Extensive workshop and sessions should be held to aid accounting educators locate, adapt, and translate educational resources for their students. This would help them to increase technology skills and are better able to apply what they have learned.

Without the continuous training provided by the institution, accounting educators tend to stimulate some form of resistance. Undoubtedly, usage would only increase if training were provided on a regular basis. Initial training programs do not guarantee continuous useof technology by accounting educators. All they needed is continuous support for integration of digital technology in the classroom. If technology support is difficult to access, this can result frustrating emotions for accounting educators. Constant technical support is a key factor for positive technology use.

Several issues need to address in training such as a hands-on module for practice and a match between the level of instruction and the ability of the students. Accounting educators cannot be expected to learn to use digital technology by viewing others. They need to tryit out themselves. Some of educators become anxious when working with technology. They are worried about the disparity in skills and knowledge between themselves and their colleagues. A thoughtfully designed workshops provide opportunities for accounting educators to interact, collaborate, learn together from each other. The creation of collaborative environment makes them feel more comfortable about technology use and lessen their anxiety. Increasing new and advanced technology pops up every day, thereforeaccounting educators need to be kept updated and know how to get the most out of each new educational tool and how to train their students in its use. A shortfall of these supports will encourage them to continue using the old style of delivery method, thereby limiting students' thinking.

2.3.4 Cybersecurity

Issues concerning the usage of digital technology in accounting education is technology risk related to security breaches, exposure to viruses and hacking attacks. There is danger of security breach of personal information due to data trafficking. Many schools and universities are worried about their student's data and privacy. Somehow, they believe that the integration of digital technology will compromise the integrity of student data and pose serious concerns. Data privacy and security is the inquiry that comes up in any discussion about data ethics. Since the advent of the internet, safety has become a main concern issue. Both students' and employees' personal data are targeted for cybercriminals. Cybercriminals are using social network to spy on their victims and use the information they have stolen for specific and malevolent purposes. The challenge depends on using personal data while ensuring the protection of individual privacy

preferences and personally identifiable information.

Confidentiality and privacy of individuals must superior any other conditions in the digital transformation of teaching. The greatest accounting educators fear when they uploaded lesson recordings and course materials was lack of security due to sensitive information. A poorly protected database leaves an opening for hackers to access teaching materials, institutions and students' information. The information may be used for malicious purposes if their personal financial information is accessed. Many educators have used the zoom platform because it is free and convenient, but questions were raised due to its security failures and design flaws (Hosszu and Rughiniș, 2021). Thecase of Zoom, a remote conference services company that has appeared to store all video conference recordings on storage space, proves we have to thoughtfully choose the digital tools for online learning delivery. Therefore, finding a balance between the integration of digital technology and data security prioritization is not an easy thing.

With the increasing use of the internet, cyber security has been a major consideration for educational institutions. Students and educator's safety is a main challenge with the avert of cyber bullying, access to illegal or banned materials. More and more institutions are being targeted for hacking and scams regardless of their size. As methodsof hacking and malware become progressively more sophisticated, it is crucial to ensure both accounting educators and students are trained in identifying possible threats. Institutions should have the right policies in place to minimise the risks or manage a situation. Further, they need to implement strict password policies and identify any areas of weakness in the system. If a threat is identified, they are confident in managing this situation to ensure data remains encrypted and secure. Unreliable devices or software can present barriers for the integration of digital technology. It could cause students to have trouble accessing tests or staying logged in. Although digital technology can be apowerful tool, however it needs to be reliable for it to remain a feasible option in the future. Security is the utmost

importance within the educational institution's environment.They should therefore look for robust data security software to protect devices from unauthorised harmful access.

In addition, accounting educators need to prevent fraud among students since they need to organise online exams using digital technology. Often, students cheat on the online exam and educators do not know if they have access to another device while taking the exam. They are able to access huge amounts of info via digital technology and may present that info as their own. Accounting students may take advantage of new technological advancements to overcome the system. It becomes difficult to detect students cheating, and even proving it becomes more challenging. Plagiarizing may be difficult for universities to identify due to the wide-ranging scope of the Internet and the troubleshoot of finding all sources of information. Subsequently, some students get away withit and acquire their degrees. This problem could result long-term consequences, mainly due to the incapability of educational institutions to assurance that the student truly possesses the knowledge needed for a job. For this reason, the security and privacy standards still need to be fully addressed. If the practical integration of digital technology in the accounting educational curriculum is considered, such limitations need to be solved to prevent theft and misuse. All access to personal data must always be under the institutional regulation's ethical umbrella.

2.3.5 Costs

Digital technology is not one-time investments. It required massive costs of purchase equipment, hardware and software at the initial start-up stage. The quality of hardware and software will influence the success of digital delivery in the accounting courses. Incompatibility between hardware and software caused frustration to accounting educators and students. Some school principals criticized that the outdated and slowness of the digital technology in their schools may be a consequence of hardware not

supporting the current system or lack of compatible hardware for the available software. Inevitably, accounting educators will encounter problematic devices during the teaching process, and require the assistance of technical staff. As a result, sufficient technical staff to troubleshoot and providing technical assistance related to faculty development and campus organisation is relatively important. Whenever accounting educators face issues with the computer, they deliver support like printers, network and internet connectivity issues.

Likewise, accounting educators and technical staffs need to undergo periodical training workshops to strengthen their skills and expertise. Hence, the training costs may increase and this is likely to adversely impact schools and universities' budget which is already tight. Not every school or university has sufficient funds to support the integration of digital technology into teaching activities. Therefore, the cost of using digital technology as instructional delivery is relatively expensive compared to face-to-face classroom teaching.

Further, the curriculum needs to be constantly upgrading the platforms as and when technologies change. The continued upkeep, management, and maintenance of digital technology should take into account. Maintenance and upgradation are necessary for a school or university to run smoothly. They need to specifically hire instructional designers, software developers and network engineers to develop systems and course content. These individuals operate user accounts, allow permissions, uphold mail services and supervise safety of the network. Furthermore, they also manage data backup, restorations and backup operational power supply. Moreover, the involvement of computer programmers is vital for educational institutions. They have to test programs and systems to look for errors until these technology tools can operate without errors, constant with layout requirements. Also, computer programmers need to continue to evaluate programs that are in use, making updates and adjustments as needed. Developing and

maintaining technology is costly mainly when digital technology can quickly become out of date. It can be a pricy venture.Once materials for accounting course are created, there are ongoing maintenance costs. More notably, new developments in the subject area may need to be put up. Accounting educators will need to be involved with decisions about curricula content replacement and updating. Maintenance is not typical for a single course; it can build to a huge amount if an expert is involved in the design and creation of several online courses.

Internet access maintenance and support, cost of professional development for accounting educators, as well as utilities are often overlooked. High speed and stable internet connectivity are also critical to an institution using digital technology to support teaching and learning. Bagarukayo and Kalema (2015) indicated that academics are inhibited from proficiency implementing e-learning by reason of erratic internet access and connectivity. Thus, they are dejected by limited access and slow connection speeds. In addition, the inability to connect to the server for long periods hinders the uptake and use of digital technology. Accounting educators may feel dissatisfied with the level of internet access if schools and universities failed to provide proper wireless network infrastructure to support the teaching and learning processes. Using digital technology in accounting education has presented further challenges, including broadband bandwidths and Wi-Fi connectivity. With technology evolving at a fast pace, educational institutions should ensure adequate bandwidth to keep up speed with technological requirements. With the right infrastructure, they will have the flexibility to grow and adapt with continual changes in the educational sector. Sufficient bandwidth makes integration of digital technology more likely to succeed. Everything less than high-speed connectivity can be annoying, particularly when every classroom in a building wants to access the network simultaneously. Moreover, the bandwidth must be competent to carry compressed videos so that accounting students can have access to the wide variety of educational materials

available in photographs and video clips. As a result, the cost of the networking is another financial burden that hinders the integration of digital technology.

Without adequate electricity supply, schools and universities are unable to integrate digital technology into education. In fact, they need power to run technology devices for teaching and learning purpose. Uptake will be slow if the power supply is not widely available and affordable for those institutions. The condition is worse specifically in rural areas where electricity is cut down most of the time. In developing countries, technology integration into accounting education systems is a difficult task as it requires a magnum of funds.

Budget cuts are a major hurdle that limit the effort of educational institutions to provide digital technology to students. Most schools and university accounting departments have limited financial resources which allow them for effective innovation in teaching. Due to the budget constraint, they are unable to cater for a large number of students. One of the reasons reported by accounting educators for not using digital technology was lack of adequate resources andfacilities. Without the use of accounting laboratory for practical lessons hinders the study of the accounting subject. For successful teaching and learning, accounting educators need a variety of teaching tools and instructional materials extending from projectors, accounting packages to sophisticated multimedia facilities. The inadequate of up-to-date teaching aids, teaching approach generally adopted in accounting education delivery is grossly insufficient because it lacks creativity, and does not support in-depth analysis and detailed clarification of problems which often makes educators rely exclusively onthe lecture method of delivery. Research has shown that when resources are readily available to educators, it increases their chances of integrating the tools in their lessons. As a result, if more resources were readily available to accounting educators, there is a possibility of improved technology use by them. Budget limitations are especially difficult to overcome because great digital technology does not

come cheap. Technology tools like Google Cloud can be a powerful tool for accounting education, however it requires institutions to provide Chromebooks to accounting students, which tight budgets simply cannot handle. Finding the funds to withstand technology in the classroom can present block to its integration in accounting field. In short, digital technology has massive costs devoted to it.

2.4 Determinants of Behavioural Intention (BI) and Use Behaviour (UB)

The growing research on determinants of BI and UB toward technology led to numerous numbers of models and theories.

2.4.1 Social Cognitive Theory (SCT)

SCT is grounded on the dynamic interplay between personal, behaviour and environment toforecast individual and group behaviour. This theory was originated by Albert Bandura in 1960s. SCT assumed that people learn new behaviour by observing the behaviour of other people and the outcome of their behaviour. They recall the order of actions and use this info to guide following behaviours. Using observation, it can cause people to engage in behaviour they already learned. If the behaviour is rewarded, people are likelyto imitate it and vice versa if the behaviour led to punishment. In other word, people do not learn new behaviour merely by trying them, but somewhat the existence of humanityis reliant upon the imitation of the actions of others.

SCT focus on human social behaviours. It discusses human behaviour, cognition, and the environment into consideration as total. This theory has its flexibility in describing the differences in an individual's behaviour. As an instance, when there is a variation in an individual's environment, the individual's behaviour may modify. SCT is considered empowering as it is easily put to use and helps individuals determine themselves with the appropriate behaviour through observation and practising the intended behaviour. The

nextstrength deal with reinforcement and punishment. People constitute a presumption about the likely outcome of upcoming responses founded on how current responses are strengthened. Their expectations are also affected by the notice of the outcome that followsother people's behaviour. There is also a presumption of goal-directed behaviour. SCT suggest that individual sets target for themselves and perform their behaviour accordingly.They are stimulated to hit those goals. In the classroom, accounting students are driven by the goal line, such as high-grade point average (GPA). These goals direct behaviour. Findings from SCT also enhanced understanding of how people establish, store, and recallmemories. By knowing more about how these procedures, psychologists can exploit newways of helping people fight potential memory difficulties.

One of the main criticisms of SCT is that this theory presumes that variations in the environment will automatically result in changes in the person, which may not be accurate. It does not take into account individual interpretations of situations and relates to differences in all behavioural. In addition, SCT does not emphasis on emotion, rather than through reference to past experience. Also, not all social learning can be directly observed. Learning is an inner process that might or might not result to behaviour. It might not happen instantly. An individual could process the new behaviour, but his or her learning might not be affected until a later time. Henceforth, it can be difficult to quantify the effect that social cognition has on development. Finally, SCT emphasizes three factors; personal, behaviour and environment. It is uncertain the degree to which each of these factors constitutes into actual behaviour and which one is more significant than another.

2.4.2 Diffusion of Innovations Theory (DOI)

The DOI was established in 1962 by Everett Rogers. This theory outlining how new technological disseminates throughout the community, starting from introduction to widespread adoption. DOI seeks to clarify how and why new idea or behaviour are adopted, with timelines potentially spread out over long periods. The key to engagement is that individual has to recognise the idea or behaviour as innovative. The engaging process does not happen at once in a social system. It is somewhat a process whereby some people are more apt to engage the innovation than others. Academics have found that people who engage an innovation early have dissimilar characteristics than people who engage an innovation later. When facilitate an innovation to a target population, it is vital to understand the characteristics of the population that will help engagement of the innovation.

One of the core strengths of the DOI lies in its generalizability. A huge volume of studies across multiple disciplines have applied the theory and it has yielded similar outcomes, thus confirming the diffusion process. Swasy (2016) examined the adoption phase with the social network Twitter by displaying evidence for the diffusion process of accepting new technology. Participants were identified as early adopters who had quickly adapted their attitude regarding the technology as soon as they found out the benefit of social networks. Consequently, most of the participants adapted and engaged with the technology. Furthermore, DOI considers an innovation's adoption within the context of a social system, where the focus is the whole of the community. This theory also provides adequate explanatory power. Many researchers have applied this theory to scrutinise the process of information technology and predict the adoption process of new technology. By understanding every stage of diffusion of innovation, it becomes easier to develop strategies to reach the people at each one, which will foster consumption of the innovation. There are situations where the model fails. Despite distinguishing between different types

of adopters, Rogers did not differentiate between different target groups within the adopters but considered them as unified groups. This creates problems of internal consistency and instabilities within the related concepts. It also makes false conclusions as to why certain innovations caught on and some failed, which in turns also affects its predictive power. Due to the limitations of this theory, it is important to examine the explanatory power of the theory. Researchers also complaining that the theory has focused on mass communication without taking environmental, technological and interpersonal factors into account. In addition, this theory proposes that every innovation has distinct featured which are measurable (Hai, 1998; Premkumar et al., 1994; Rogers, 1995; Tomatzky and Klein, 1982). With more technologically complex innovations, it is increasingly harder to determine all features and explain their impact. Moreover, DOI works well with the adoption of behaviours compared to the cessation or inhibition of behaviours.Lastly, the theory does not consider an individual's resources or social support to engage the new behaviour or innovation.

2.4.3 Theory of Reasoned Action (TRA)

TRA proposes that an individual establishes intentions to engage a behaviour or technology based on their beliefs about the consequences of adoption (Fishbein and Ajzen, 1975). Any human behaviour is forecast and described via three main cognitive components comprising attitudes, subjective norms and intention. The model posits that attitude and subjective norms affect behavioural intention, which in turn influences the real behaviour.It assumes individuals are rational who constantly analyses and appraise the relevant behaviour beliefs in the process of establishing their attitude toward the behaviour. Attitude is refers to an individual’s overall evaluation of performing a behaviour. A positive perception of technology usage directly relates to its usage intention (Abdullah, Ward, and Ahmed, 2016). Likewise, subjective norms explicate the decision

to use technology that can be influenced by people surroundings and behaviour is defined as a result of intention.An individual can exert undue influence, especially if their opinions are valued. Behavioural intention is explained as the motivational factors that impact a specific behaviour. The more likely the attitude and the subjective norms, the more powerful the person's intention to engage the behaviour.

The primary advantage of the TRA is, it explains why different background factors are related to a given behaviour. It examines the underlying fundamental motivation to execute an action to understand an individual's voluntary behaviour. TRA specifies that an individual's intention to engage behaviour is the main denominator of whether or not they actually perform that behaviour. Based on the theory, intention to engage a behaviour precedes the actual behaviour. The more powerful the intentions result in an increased effort to execute the behaviour, which also increases the probability for the behaviour to be engaged. Theorists stated that TRA could be employed in any situation to understand andeven forecast any human behaviour. The measurement of behavioural intention can forecast whether or not an individual will engage a specific act, as long as the behaviour is well defined.

Although the scope of TRA is extensive, the theory still has its limitations. Ajzen recognized that individuals can never be assured that they will be in aposition to carry out their intentions. Every intention is a goal whose accomplishment is subject to some level of ambiguity. TRA also failed to address the role of habit for validation. As the habit increases, it will reduce the impact that intention has on behaviour. Another restriction is individuals will be free to act without limitation when they form an intention to act. In general, constraints such as environmental,time or habits will restrict the freedom to act. Additionally, some intentions do not play a part in terms of connecting attitudes and behaviour. The performance of a behaviour is not always preceded by a strong intent. In actual fact, attitudes and behaviours might not always be connected by intentions,

specifically when the behaviour does not require much effort. Further, the model does not permit the generation of hypotheses because of their vagueness. Next, attitudes toward behaviour and subjective norms also change based on culture. This would propose that people come from different cultural background perceive subjective norms and existing attitudes differently. A closer examination based on culture process will comprehend the understanding of TRA.

2.4.4 Theory of Planned Behaviour (TPB)

Aside from the TRA model, TPB was introduced by Ajzen (1991) to predict an individual's behaviour in a mandatory context. TPB added a new variable, perceived behavioural control, affecting behavioural intention and use behaviour (Ajzen, 1991). Perceived behavioural control indicates individuals' perception if they have the necessary capability and a sense of control in successfully executing the behaviour. Furthermore, TPB has a direct impact on actual behaviour as well as the indirect via behavioural intentions.

TPB is suitable for making estimates. By considering the variables, it offers more reliability in the forecast of behaviour, mainly over the TRA. This model helps to identify determinants of specific behaviour. For instance, positive behavioural beliefs and evaluation may be enhanced if individuals are given experiences with enjoyable types of activities and then gradually encouraged to increase the intensity and frequency of those activities. Next, perceived behavioural control is a crucial element in forming an intention. When individuals perceive exercise is difficult to carry out, their intention is low. Assisting them to overcome barriers like feelings of inability, could enhance perceptions of control about carry out the exercise.

Some academics reject TPB as a passable explanation of human social behaviour. They are questioning about its sufficiency or inquire into its limiting requirements. Although

theremay be an optimistic behavioural intention, yet the theory does not consider the gap between intention and behaviour. The theory failed to take in other behavioural factors such as emotions. Emotions such as fear, threat and mood can influence our perception, beliefs and tendency to take action. Factors like demographic variables also not directly taken into consideration within the theory and may limit its predictive power. It has been claimed that many behaviours are not rational and that one's affect may be counter to one's cognitions about engaging in a particular behaviour. The model is suitable for finding the connection of attitudes to behavioural intention; however, it does not address how to determine actions that result in changing behaviour. Besides, there is vagueness about how to define perceived behavioural control and this creates measurement problems. The term perceived behavioural control may be misleading. Ajzen further claimed that perceived behavioural control is comprises of two components: self-efficacy and controllability.

TPB presumes that behaviour is the result of a linear decision-making process, and does not reflect that it can change as time pass. The predictive power of intention will differ inversely with the time between the measurement of intention and performance of the behaviour. Behaviour will less likely to perform if the time period between intention and behaviour become longer. As time passes, intervening events can change an individual's behavioural and modify attitudes or perceptions of control, thus create revised intentions.Constant with this dispute, shorter intervals between assessment of intentions and behaviour are linked with stronger correlations compared to longer time intervals. Subjective norms are perceived as a weaker predictor of intention. One reason for this argument is that the role of significant others may not be important in encouraging participation of individuals. Though both TRA and TPB models are constructed initially to investigate individuals' IT usage behaviour, they are not powerful enough to provide more consistent predictions of the use of the technology.

2.4.5 Technology Acceptance Model (TAM)

Building on TRA, TAM attempts to clarify factors impact individuals' intention to use a new system (Davis, 1989). If a technology improves a person's performance and requires less effort to perform a task, it is likely that the person will adopt the technology. TAM is the most widely used models as it is simple and easy to understand. This model wasput forth to scrutinize the influence of external variables on individuals' intentions and attitudes. TAM explained two core predictors: perceived usefulness (PU) and perceived ease of use (PEOU) in explaining users' technology acceptance of a new system. Specifically, PU describes the degree of belief that using the new technology would enhance an individual performance, whereas PEOU is the degree of belief that using a new technology will require little effort (Davis, 1989). Both constructs are directly linked with the user's attitude towards using, and behavioural intention to use different group of technologies. It has been used in many settings to investigate user acceptance of information technology. Lee et al. (2003) directed a meta-analysis of literature about the TAM. The model displayed robust results and keeping its proficiency in the explanation of technology acceptance by the users of information system. In the study, TAM has been successfully applied in field such as email, internet, banking systems as well as different situations and control factors like sex and organizational size, which lead to many researchers to believe on its strength.

Though TAM has proved successful in recognizing individuals' willingness to utilise information and communication technology, limitations of theory still exist. The components of TAM were not strong enough to predict technology acceptance behaviours with various characteristics (Nikou and Economides, 2017). The main constructs of TAM cannot completely reflect the specific impacts of technology and usage-context factorsthat may influence users' acceptance. There is still a lack of studies and limitations of this model in describing how multiple variables are transformed into the action.

TAM model has eliminated an individual's subject norms and value on the usage of technology. Since this model ignored the social influence factor, therefore it may not successfully explain usage intention, which in turn predicts use behaviour. Family, relatives and friends could have impact technology use via social influence.The variables of PU and PEOU also fail to look at other issues, for instance, costs that force an individual in adopting a new technology.

Besides, TAM gave weak results in the studies and some intrinsic motivations need to be supplemented into TAM to provide a constant prediction of usage behaviour (Sumak and Sorgo, 2016). As posted by McFarland and Hamilton (2006), TAM can only explain between 45% and 57% of the variance in individuals' intentions to use technology. Similarly, Bagozzi (2007) also claimed that, TAM only account for 40% of a technological system's use. Numerous scholars have tried to extend TAM so that it can adapt to the non-stop changing information technology environments which resulted in a state of uncertainty. As a result, two other models have been incorporated. The first is Technology Acceptance Model 2 (TAM 2). The second is Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) based on research of eight prominent information system adoption models including TAM.

2.4.6 Technology Acceptance Model 2 (TAM 2)

TAM 2 was advanced by Venkatesh and Davis on the fundamental of TAM in 2000. It concentrated on the antecedents of perceived usefulness and behavioural intention. Two setsof constructs, social influence and cognitive have been integrated into this model. The goal of TAM 2 is tounderstand how the effects of these determinants change with user experience increase over time with the target technology. The model is outperformed for both voluntary and mandatory situations. In term of explanatory power, it reaches 60% in explaining user usage of the technology system. The only exclusion is related to

subjective norm which has influence in mandatory settings but do not in voluntary settings. TAM 2 also been criticized as a non-complete model because it does not determine the factors that impact the perceived ease of use.

Social Influence Processes

Social influence process contains elements: subjective norm, voluntariness, and image. These three constructs are imperative feature that affects individual acceptance or rejection of technology. Subjective norm has a direct effect on behavioural intention in TAM. Whereas in TAM 2, it acts as a medium of social influence processes. Subjective norms are referred to an individual's insight that most people who are vital to him think he should or should not engage the behaviour. Meanwhile, voluntariness is the degree to which potential adopters perceive the adoption decision to be non-mandatory. Next, image refers to the belief of a people significant to an individual that some behaviour ought to carry out.

Cognitive Instrumental Processes

The three cognitive instrumental processes in TAM 2: job relevance, output quality and result demonstrability are the determinants of perceived usefulness. Job relevance is refers to an individual’s perception about the degree to which the target technology is applicable to his or her job. The output quality is perceived as the degree to which an individual judges the effect of a new technology. In other meaning, it is the degree to which one thinks that a new technology can perform required tasks. TAM 2 theorizes that result demonstrability as the tangibility of the results of using the technology, will directly impact perceived usefulness. This indicates that individual will have more positive perceptions of the usefulness of a technology if positive results are easily observed. If the result demonstrability of a technology is low, individual may attribute their achievement

to work behaviour compared to usage of the technology.

Venkatesh and Davis also incorporated experience as a moderator variable into TAM 2. Individuals' acceptance of a new technology could differ with the increase in their experiences. Thus, their acceptance was tested at three time points, which are before, during and after use. It includes the time before technology implementation, one month after implementation, and three months after implementation. Although subjective norm has a significant effect on individual intentions prior to technology development, the effect may become non-significant three months after its implementation.

Numerous numbers of theories and models have been intended to explain technology adoption. All these studies offered diverse context and methodology in different settings. The development of technology adoption models shares different perceptions, research problems, measurements and variables. Such discussion is vital to enable parties such as academics, researchers and government to understand the philosophy of the technology adoption models**.** Despite that, the UTAUT is utmost appropriate because it aids to forecast users' behaviour. The legitimacy of the theory has also been verified and was found to be remarkable. Venkatesh et al., (2003) discovered that those technology adoption models explained between 17% and 53% of the variance in users' intention to use technology. However, the UTAUT outperformed all those models using the similar data interpret about 70% of variance in behavioural intention (Venkatesh et al., 2003) and 50% in technology use (Venkatesh, Thong, and Xu, 2012). Considering above evidences, it is strong that UTAUT provide a solid base to describe why users accept or reject a technology in a particular viewpoint. Lastly, they empirically confirmed the model provide better consistency to their contribution. Over a period of time, UTAUT has worked as a reference point and it has been put in use in studies with a variety of technology background. While many studies donate to understanding the utilisation of UTAUT in various frameworks, there is still the need for a systematic investigation that

would apply to accounting educator's technology use background. The model investigates the impact of digital technology on use behaviour of accounting educators. It leads to better prediction of the use of new information technology. UTAUT model was designed to expand additional behaviour constructs to upsurge the understanding of digital technology. The model is fit for investigating the actual usage of the technology especially testing of new technology to get the viewpoint of accounting educators.

2.5 Unified Theory of Acceptance and Use of Technology (UTAUT)

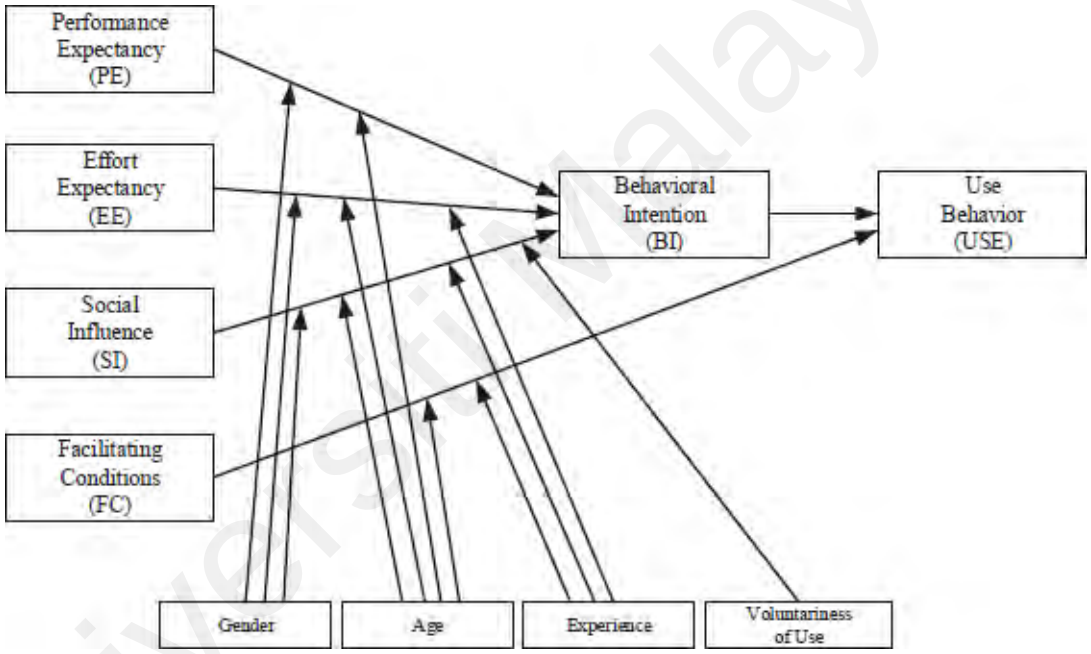

Figure 2.1: UTAUT Model

Sources: Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003)

Venkatesh et al., (2003) has proposed the Unified Theory of Acceptance and Use of Technology (UTAUT) model as presented in Figure 1. The main determinants were PE, EE, SI and FCs to explore users' BI to use a particular technology and subsequently monitor their UB. Furthermore, the four moderator variables (age, gender, experience and voluntariness of use) have been validated through empirical studies. Sumak and Sorgo

(2016) revealed that UTAUT has high explanatory power than other technology acceptance models. Additionally, previous literature studies showed that the UTAUT model delivered a better and complete explanation about user' technology acceptance behaviour and has the best predictive ability. Since it was developed, this model has been widely used in information technologies, such as e-learning systems andvirtual learning (Sumak, Polancic, and Hericko, 2010).

Performance expectancy (PE)

PE represents the context in which an individual be certain of using a new system will help him or her to accomplish job achievement (Venkatesh et al., 2003). It is hypothesised by the advantages and outcome of expectations of using digital technology. PE involved the perception of users on the advantages that could be attained through the use of digital technology in accounting education, such as increasing efficiency and saving time. Venkatesh et al., (2003) established that PE was the strongest predictor of an individual's intention to use new technology. Numerous UTAUT literaturealso asserted that PE is the most decisive influence on behavioural intention (Zhai and Shi,2020).

If an accounting educator is persuaded that digital technology is more productive and efficient, he or she will be encouraged to use it. Digital technology offers benefits in a number of ways. It permits accounting educator a greater control over the learning environment. It enables the teaching and learning process to take place in ways that outfit to different individual's needs. For digital technology to be viewed as useful, accounting educators judge their ability to gain advantage in their working environment. It is a fast reference tool for educator to access info and imparting knowledge in a more accessible manner. Given these favours, digital technologies have enabled teaching method to become more vigorous.

Effort expectancy (EE)

The term EE has denoted the level of ease linked with using the system (Venkatesh et al., 2003). It is linked with the effort of using a technology, whethersimple to use or difficult. An individual will be willing to study about technology features and use them more frequently in their work practices if the technology is relatively simpleto utilise.

In the setting of this study, accounting educators believe that they would like to engage digital technology in their workplace because it is easy to access and understandable. It is a person's valuation that engaging with digital technology will require less effort. Small EE owned by an individual will significantly reduce the behavioural intention to use the system (Nurkhin, 2020). Mahande and Malago (2019) reported that EE has a direct relation with behavioural intention.

Social influence (SI)

SI relates to how significant others may view an individual after using the technology (Venkatesh et al., 2003). An individual will have intention to executea specific behaviour if the subjective norms of the behaviour are favourable. SI is viewed as the opinion of group influence on an individual's choice. The action of peers, parents and family impacted individuals' opinion of the value of a technology. Individuals usually depend on their people that are important to them for assistance when they are using new technology, lessen the level of own effort required to become skilled users (Eckhardt, Llaumer, and Tim, 2009). Furthermore, individuals observe how others who are linked to them or use similar types of IT and the impact of using these technologies on their workperformance. This offers them with a chance to validate the technology's work-related values.

In school or university, individuals may view a technology to be more useful in helping to achieve job goal line if referent others in their workplace, for example colleagues,

departments and faculty leaders endorse the use of such technology. The analytical influence of social factors on behavioural intention to use an application has been made in previous literature (Abdullah, Ward, and Ahmed, 2016). Across the settings of this study, accounting educators who view digital technology as endorsed by referent others within their social environment are more probable to use it. When they encounter new digital technology tools, they will be more likely to appreciate their relevance to their professional development if they see their colleagues perform better at their occupations after using these tools. Earlier empirical research revealed that SI is a vital factor of behavioural intention to use technology in education. Seeing others use technology canbe a good source of social pressure to stimulate imitation behaviour (Sumak and Sorgo, 2016). Furthermore, students usually pressure the teacher, who demands a greater usage of technologies in the classroom (Ledbetter and Finn, 2018).

Facilitating conditions (FCs)

FCs is connected with technical infrastructures such as projectors, screens, and computers that influence educators' attitudes towards the task. This variable focusses on whether adequate physical conditions are met. It denotes that an individuals' perception of organisational and technologies infrastructure to support the use of the technology (Venkatesh et al., 2003).

Daugherty and Funke (1998) found that faculty members had specified the absence of technical support and adequate equipment to be blocked for adopt distance education. Precisely, FCs were established to be a strong determinant of use behaviour. Among the facilitating condition, technical support was mentioned by teachers as a substantial driver for their use of technology for instructional purposes. This finding was supported by Teo (2009), who discover FCs to be a substantial variable in describing attitude toward computer use. In other meaning, accounting educators believe that, in the existence of

good enough support, they would develop optimistic feelings toward technology use.

Behavioural intention (BI)

BI represents a salient factor behind the actual use of technology. It refers to one's intention or likelihood of someone to engage a specified behaviour using technology (Fishbein and Ajzen, 1975). It also implies an individual self-motivation to perform technology usage behaviour (Sharma and Srivastava, 2019). Ajzen (1991) claims that BI reflects how much effort a person is willing to devote to engage a certain behaviour. BI is the most proximate predictor of actual behaviour. This construct is based on personal initiative and characteristics, trust, perceived usefulness, and perceived ease of use.

Based on this study, BI signifies an accounting educator's willingness to use digital technology in the workplace (Herting, Pros, and Tarrida, 2020). If the attitude toward technology use is positive, they will establish an intention to behave in a consistent manner. For instance, Yi and Hwang (2003) found that when individuals have a strong BI to use university resource for teaching and learning, they would access university websites more frequently and stay longer than those individuals with weak intentions.

Use behaviour (UB)

UB towards technology can be considered as the ultimate measure of usage. It includes an individual's feelings or thinking about carrying out the target behaviour (Fishbein and Ajzen, 1975). If individuals perceive technology to be useful and simple to use, it is likely that their attitude toward that technology will be optimistic. The logic behind this rationale proposes that people establish intentions to engage behaviours towards which they have a positive effect (Davis, 1989). In the study suggested by Sumak and Sorgo

(2016), the attitude toward using technology represents enjoyment, pleasure and liking associated with technology in higher education.

Thanh and Trang (2020) investigated factors affecting the behavioural intention for the acceptance of e-learning. Additionally, the author also examined the relation amongst technology acceptance and use behaviour. The research concluded that PE exerted most substantial impact for affecting behavioural intention to use cloud computing, followed by EE, FCs and SI. The participants are full time accounting students studying in economic universities in Vietnam including Thuongmai University (TMU) in Northern Vietnam, Danang University of Economics (DUE) in Central Vietnam, and University of Economics in Ho Chi Minh city (UEH) in Southern Vietnam. The use of cloud computing enhances accounting students' academic performance and they are satisfied with the e-learning as this teaching method is adjusted in time and creates a suitable space to meet their needs. This finding also consistent with (Fagan, 2019) study. The research supports the UTAUT model and it has discovered that PE and SI were important determinants influencing the integration of IPad mobile devices in student learning. A final sample was collected from 171 undergraduate students at a Texas public university enrolled in a core curriculum class. Overall, they perceived IPad to be useful and enjoyable educational tools for improving learning outcomes.

In a similar vein, Agustin and Mulyani (2018) aimed to find empirical evidence to clarify the utilisation of e-learning by exploring UTAUT model among accounting lecturers of state and private universities in Padang, Indonesia. The finding reveals that PE, EE, SI and FCs have a positive role in improving the intention of accounting lecturers to use e-learning in the teaching process. The presence of an e-learning system enhances the quality of the teaching and learning process for accounting lecturers which further reinforces their intention to re-use the system. In addition, the intention of accounting lecturer becomes stronger when their colleagues, faculty and department leader use the e-

learning system in the workplace. Besides this, the facilities provided by the universities such as Wi-Fi and IT staff strengthen accounting lecturers to be more active and often use e-learning systems to support the teaching and learning processes. However, the study fails to demonstrate the positive role of the intention to use on the actual use behaviour of e-learning systems. This could be due to the e-learning system is not integrated as a complementary element in the learning activities, hence does not result in BI to use and UB of e-learning for accounting lecturers. As a result, they will continue to rely on face-to-face for teaching activities.

This is further supported by Hayatu, Dalhat and Deba (2021). The study focused on determining the BI toward mobile learning adoption among financial accounting teachers of government science and technical colleges in Gombe state using the UTAUT model. The result indicated the financial accounting teachers demonstrated a high positive BI toward mobile-learning adoption. All four constructs of UTAUT have significant influence on BI. Also, the independent variables explained 85% of the variances in the dependent variable, which is the BI. Mobile-learning not only makes the teaching process effortless, but also speed up its delivery and consequently improves the performance of students in examinations. Frequent training from school such as seminars, workshops and conferences aid financial accounting teachers to utilize mobile devices for teaching.

Additionally, Taamneh (2022) defined factors which affect university lecturers' integration of the Moodle platform under the conditions of Covid-19. The UTAUT model was applied and statistics were obtained from the 226 respondents through an online structured questionnaire. The results postulated that PE has a significant influence on BI. Meanwhile, EE, SI and FCs have no effects on BI. FCs directly affects the actual use of Moodle. Finally, BI has a strong influence on Moodle's actual usage.

Nevertheless, other research contradicted the aforementioned findings. In the study by Marlina, Tjahjadi and Ningsih (2021), it displayed some differences in the emphasis of

the UTAUT model influencing accounting students' behaviour and performance via e-learning. The UTAUT constructs, namely; SI, FCs, and EE have a substantial influence on accounting students' behaviour, while the PE variable has no significant effect. This may be due to the accounting students enjoying in the teaching and learning process using web 4.0 technologies and they can gain various information easier to support their academic activities. Therefore, there is no visible result between use behaviour and performance expectancy. The study also describes that behavioural intention has positively related to the use behaviour.

Following, Sitardja (2018) analysed the acceptance and use behaviour of Enterprise Resource Planning (ERP) accounting application between accounting lecturers and students. The ERP system performs accounting processes such as general journals, accounts receivable, cost control, budget and profitability analysis. It reduces the number of routine tasks performed by management accounting so that it makes it more flexible and analytic with info. The finding indicates SI has most influential impact on BI to use the ERP accounting system. SI contain pressure or the influence from management, senior staff and colleagues who benefit from using ERP. Surprisingly, PE and EE are not proven to have an effect on BI to use the ERP accounting system. In addition, the empirical result also implies that FCs and BI to use have no effect on UB. Furthermore, Puspa, Ilona, and Zaitul (2019) investigated the four primary relationships of the UTAUT model on BI to use MYOB accounting application amongst accounting students in University of Bung Hatta.The author also found that there was a positive relationship between FC and BI to use theaccounting application. Social factors such as norms, belief, values and friends are the root of the construct which sharpens accounting students' perception to accept and use MYOB accounting software in the class. This accounting application helps students process the financial transaction faster and release accounts live – the cloud enabled version.

Musyaffi (2022) attempts to measure accounting students' acceptance and confidence in using the Learning Management System (LMS) in auditing, management accounting and financial management courses. There are 198 participants in this research and the result indicates a strong effect between EE and BI. The easier the effort a student makes in using LMS than old-style methods, the more he/she will continue to use an LMS. As a result, thisstudy aid accounting educators understand students' behaviour in integrating LMS methods in improving their understanding of the subjects they study.

Past studies have examined the usage of information and communication technology tools in teaching process in the educational field. The authors also identified the benefits and drawbacks of using those technologies in delivering knowledge to students. Additional evidence also proposes institutions innovating advanced educational technology proactively, improving the quality of education. Past and existing studies haveconfirmed the generalisability of UTAUT model in exploring BI and UB of an individual.Given various of information communication technologies used in the education sector, a number of scholars have successfully applied the UTAUT model and it offers stronger predictive power. The model provides insight into technology usage by comparing prominent technology acceptance theories. All the key constructs of the model able to explain variance that occurs on the intention to use and use behavioural of technology tools.

This research contributes by discovering the key elements on integration of digital technology in accounting education in teaching and learning process. The influencing factors examined are the development of the UTAUT model. The findings propose insights into how strategies for engaging digital technology can be made more effective when the target users' perceptions are taken into account. Earlier studies have presented how accounting students perceive the potential of various technology tools for better achievement, particularly in enhancing their study performance and technological skills.

Through which, the authors discovered the crucial factors that are associated with their intention to use the new technology tool. This study is meaningful as it helps define the roadmap for planning how technology portfolios can be well integrated in accounting education.

The current study aims to add a new contribution to the existing literature on the investigation of the main factors impacting technology integration among accounting educators. Specifically, in the current Covid-19 crisis with a long period of remote teaching, accounting educators with high technology usage will have more positive reviews on the technology's effectiveness. They act as agents in transferring knowledge and motivate students toward lifelong learning. Once good practices are established, this will further expand the overall technology usage. It showed that it is imperative for technology integration in an environment, where management, teachers and students support technology. As this study is concentrating on the integration of digital technology in accounting education, it is indispensable to understand the latest drifts in the field and examine the job market to identify if digital skills are one of the main areas that are needed for accounting graduates. A deeper understanding is also needed in the accounting education system as well as to capture an overview of accounting educators' perceptions working in either public or private universities.

Nevertheless, all these past studies were bound to several restrictions which could be attended to in future research. First, though there are many studies that applied UTAUT model in other countries, but it is not in Malaysia. Consequently, the findings may not be generalizable. Studies are required to be directed to find out the usage behaviour of accounting educators toward the integration of digital technology in the accounting field, particularly in Malaysia. There is still a dearth of empirical findings in the literature regarding the use of digital technology, especially in the area of accounting education (Watty, McKay, and Ngo, 2014), and thus far the integration of digital learning in the

teaching and learning of accounting education in universities is still lacking (Rhodes, 2012).

Besides, the UTAUT model has been employed to study the technology integration for supporting education. Specifically, this UTAUT model has also been inspected in wide areas of educational environments such as virtual learning technologies, learning management systems, cloud computing and interactive whiteboards. However, none of the study focusses in the case of digital technology as a whole. This study grants the resultsof a study to fill this disparity.

Meanwhile, previous research has studied accounting students' perceptions of using technology in accounting education. The vast majority of these studies do not involve accounting educators' voices but only involve accounting students' views. The central question of this study is to discover the determinants of accounting educators' integration of digital technology. Though the extent to which digital technologies are pertinent varies across disciplines, the integration of digital technologies to accounting educators would onlybe meaningful if it improves the way teaching and learning take place. Failing to deliberate individual needs in planning integration strategies may only result in an inefficient blanket approach to promote the digital technology portfolio. Therefore, this current study wants to discover their perception with regard to the integration of digital technology in daily teaching activities. Next, respondents from previous studies are limited to one university. This study fills the gap by inviting accounting educators working in either public or private universities in Malaysia. With a greater sample, more advanced data analyses could be directed to verify statistically the causal relation among independent variables that would impact their usage behaviour of digital technology.

CHAPTER 3

CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

3. 0 Chapter Overview

Chapter 3 describes the present study and details conceptual framework. The hypothesis of this study is consequently formulated on the root of this analysis.

3.1 Conceptual Framework

Based on the UTAUT model, for the current study, below framework is developed:

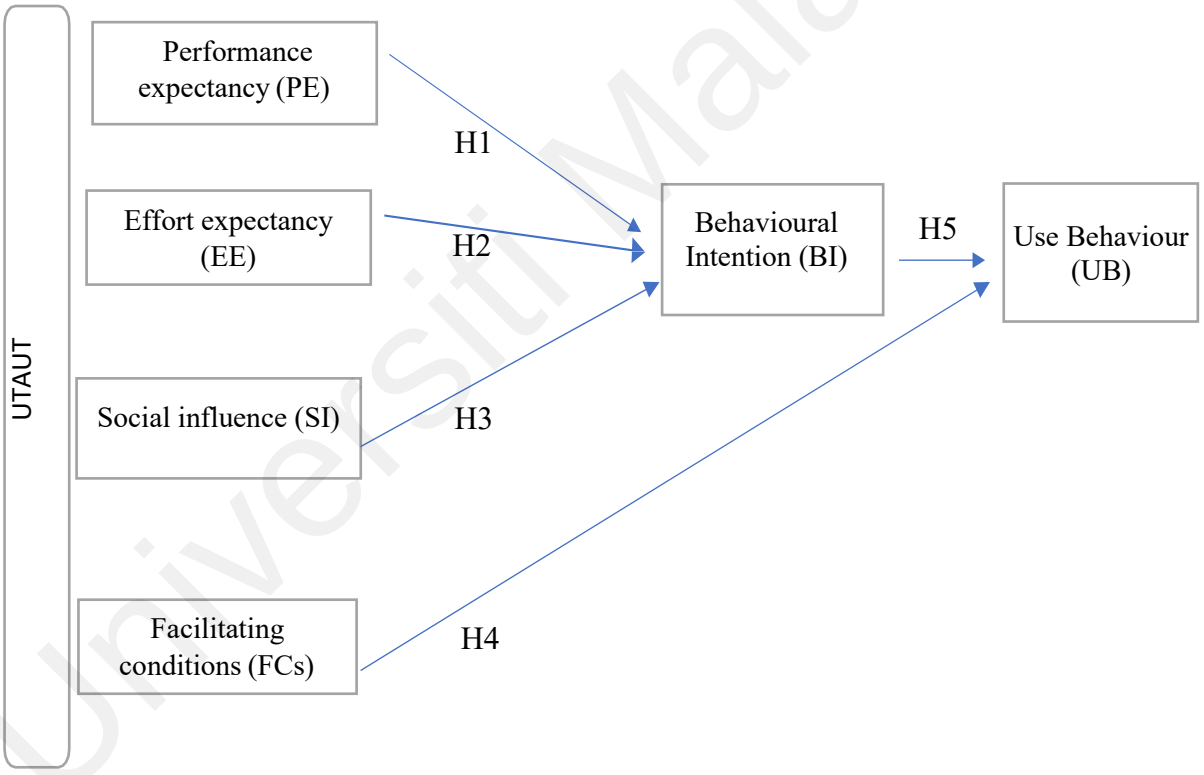

Figure 3.1: Conceptual Framework

In this framework, moderator variables that affect the construct of the UTAUT model are not tested in this research as there may not be any variation in the moderator for the adoption and use setting (Dwived, Rana, Jeyaraj, Clement, and Williams , 2019). For

example, the adoption and use of an informational technology may have been mandated by the universities such that all educators will have to use the technology. This results in a circumstance in which voluntariness as a moderator may not be readily applied. Several studies have not applied the complete UTAUT model as initiated by (Venkatesh et al., 2003). They have disregarded moderating variables in their research (Morosa and DeFranco, 2016; Oechslein, Fleischmann, and Hess, 2014; Raman and Don, 2013). Similarly, Venkatesh, Thong, and Xu (2012), noted that most studies typically dropped moderators and only employed only a subset of the model. This study deliberately focuses to explain behavioural intention and actual usage of digital technology by accounting educators working in public and private universities.

3.2 Hypothesis Development

Performance Expectance (PE) and Behavioural Intention (BI)

PE signifies an individuals' thought process about how new technology will lead to an enhancement in its performance (Venkatesh et al., 2003). Althunibat (2015) also defines PE to the degree which individuals are persuaded by the truth that utilising the technology will aid them perform superior in the completion of their career. Studies reported that PE has direct influence on users' BI to use the technology (Liu and Zainuddin, 2021).

In fact, Venkatesh et al., (2003) specified that the PE is the strongest determinant of an individual's intention to use new technology. Previous research also reported a positive connection between PE and BI (Chiu and Wang, 2008). Taiwo and Downe (2013) conducted a meta-analysis of 37 selected empirical studies and found that the strongest connection amongst the four key factors and BI was PE. In the same way, Kaba and Toure (2014) conveyed that PE positively influenced 1030 social network website users in

Africa's intentions to use social networking.

Earlier studies also supported the integration of different technology types for instructional purposes (Abdekhoda et al., 2016). In a related study, Ma et al. (2020) analysed 585 Chinese EFL teachers' intention to use ICT at various education institutions. The findings postulated that PE had a significant result on BI to use ICT resources. Teo et al. (2019) assessed teachers' opinion of technology's usefulness impacts the usage of Web 2.0 for teaching. The author concluded PE positively influenced BI where the teachers perceived that the instrument is practical in improving their job. Likewise, Oye et al. (2011) examined utilisation of ICT for teachers in education institutions. The finding suggested PE is the most powerful construct in the acceptance and use of ICT among those teachers. 78% of the participants trusted that the use of ICT in their workplace can increase their chance in job opportunities. They also indicated that there is monetary reward related to the usage of ICT and get a better job in the future with high salary.

In this study, PE represents a degree of accounting educator's belief that digital technology helps them to achieve educational goals. Apparently, with the use of digital technology, PE will improve their class performance and enhance students' learning outcomes. If accounting educators realise the advantages of using digital technology, their intention to use it is likely to increase. Digital technology has many advantages for accounting educators as they able to manage over learning environment and help them accomplish tasks quickly, notwithstanding of time and place. While accounting students find it useful because digital technology led to an enhancement in their study process. We, therefore, proposed the first hypothesis:

H1: PE has a positive influence on BI to use digital technology in accounting education.

Effort Expectancy (EE) and Behavioural Intention (BI)

EE involves an individual's perceived effort when they use new technology. It also denotes to the level of ease with regard to the utilisation of new technology. In order to take full advantage of the new technology's performance, accounting educators must believe that digital technology will fulfil their needs. In the initial phases of engaging a technology, the tools should simple to use, therefore it is believed that the EE has direct influence on BI to use technology. Accounting educators must perceive digital technology is easy to apply without any barriers and require little effort to use in the educational field. If the technology is relatively simple to use, they will be more willing to study about its features and use more of them intensively. Also, accounting educators will adapt theirwork practices to fit its norm and integrate digital technology into the classroom.

EE has been broadly explored and was found to have a positive relationship on individuals' intention to use technology (Moslehpour, Pham, Wong, and Bilgiçli, 2018). EE also received researchers' attention within the educational context. Prior studies proposed that EE is an important predictor on intention to use technology (Ghalandari, 2012). In other words, one can reduce usage accordingly if the usage of technology requires a huge exertion. Teachers' technology integration choices are form depends on perceived effort when they use the technology. Also, Nikou and Economides (2019) determined EE to be the utmost imperative factor in teachers' intention to utilise mobile learning assessments. Hence, the second hypothesis was formulated:

H2: EE has a positive influence on BI to use digital technology in accounting education.

Social Influence (SI) and Behavioural Intention (BI)

SI are important in shaping behavioural intention. It is defined as the context to which an individual view how important of other people believe he or she should use a technology (Venkatesh et al., 2003). It represents the degree to which individuals'opinions that the people who are close to them or hold vital positions in their life believe that they should try using the new technology. SI dealings with support of societies. Individual mostly will rely on the opinion of friends, family and colleagues when they want to use a certain technology. These people's opinion has a big impact on their decision-making capabilities. In the UTAUT model, SI is evaluated as a four-item constructs that influences an individual's intention to continue using a new technology. Individuals use technologies as part of the social networking in their daily activities. The actions of peers and other salient people influence their conception of the value of the technology. For instance, they could ask their friends to help download apps or edit a picture. Furthermore, individuals also observe how others use similar types of technology and the impact of their achievement of using these technologies on work performance (Lewis, Agarwal, and Sambamurthy, 2003). This provides them with an occasion to authenticate the technology's work-related values.

From digital technology viewpoint, accounting educators encountering new educational tools, such as cloud computing will be more likely to appreciate their relevance to their professional development if they see their colleagues perform better at their jobs after using these tools. SI imply the variances of technology adaption in various cultural and social environments, including head departments, workmates, important people in their lives, and educational institutions (Sabah, 2016). When accounting educators start to use digital technology and become familiar with it progressively, they begin to inspire and convinced their colleagues and friends to use it. In consideration of past studies (Sabah,

2016), SI has positive effects on BI. Past researches have revealed that SI in the beginning steps of using technology is the robust predictor in acceptance of that technology, and this effect will be lessen slowly (Venkatesh et al., 2003). Therefore, an individual's intention to use new technology is impacted by evaluations of others people and judgement, which leading to the following hypothesis:

H3: SI has a positive influence on BI to use digital technology in accounting education.

Facilitating Condition (FC) and Use Behaviour (UB)

FCs indicates an individual perception of the availability of technological and resources that can remove resistance to use technology (Venkatesh et al., 2003).These resources can include ICT infrastructure, which definitely lead to better technical support. It also denotes to the degree of which individuals think that there are certain organisational conditions existing that help facilitate the use of the technology. In term of educational institution, these conditions include both hardware and software support systems. FCs is measured by the accessibility of a designated person to help an individual of a new technology, reflecting the appropriateness of training provided to aid in the use of that technology and building self-confidence of technology usage. Venkatesh et al., (2003) hypothesized that there would be a direct association between FCs and UB, instead of BI. Research done by Tiba, Condy and Tunjera (2016) perceived that FCs such as the readiness and accessibility of technology in schools were elements affecting teachers' use of technology. In the setting of digital technology, FCs include the knowledge, skills, internet speed, and support staffs that accounting educators must acquire and perform successful behaviour. Studies have shown that the presence of technical staff to support individuals will have a substantial effect on the intention to use technology. Lack of availability of timely support,assistance and incomplete information may hinder them

from using the technology. As an example, limited access to broadband wireless network may hinder accounting educators from using digital technology. Indeed, if there are better facilities and equipment, they will have good experience and more effective to integrate technology inwork practices. In developing countries, some educational institutions do not have sufficient budget to fund digital technology for respective educator, therefore the essential for government support is an important issue in technology integration. Alalwan, Dwivedi, and Rana (2016) verified that FCs have a direct influence on UB. Accordingly, it is hypothesised that:

H4: FCs have a positive influence on UB of digital technology in accounting education.

FCs does not positively influence behavioural intention. A possible explanation of this finding is that educators, as human beings, live at the fast pace of the technology development world. They have adapted to the use of the internet and technology in daily lives, such as smartphones and laptops. Therefore, they believe infrastructure such as digital technology is needed in the workplace, which in turn does not generate the intention to use digital technology. Another argument could possibly be a result of the effect being captured by EE. Venkatesh et al., (2003) found that there was no significant association between FCs and BI. The authors implied that EE could be a mediating variable between FCs and BI.

Behavioural Intention (BI) and Use Behaviour (UB)

BI can be understood as an antecedent to behaviour. It refers to the readiness to use or to act a behaviour towards a particular thing (Davis, 1989). BI portrays how an individual is in consciously planning to carry out the behaviour in the future (Sommer, 2011). Thus,BI is assumed to play an imperative role in influencing an individual's decision to make actual use of technology. Several studies have conveyed the direct effect of BI on the

actual usage of technology (Ma et al., 2020).

UB measured an individual actual frequency of technology use. It is a form of reaction to one's desire for specific technology, which influences the frequency of technology use. Khan and Ahmad (2015) corroborated that BI strongly influences the UB in electronic government adoptability. Thus, the following can be hypothesised:

H5: BI has a positive influence on UB of digital technology in accounting education.

CHAPTER 4

RESEARCH METHODOLOGY

4.0 Chapter Overview

In Chapter 4, the adoption of a quantitative research approach is justified, and the broader research methodology is discussed. The research design is defined afterwards with a summary of the instruments used. The practice for the data collection process is then outlined. The chapter completes by indicating statistical calculations for sample size estimates and the groundwork for statistical analyses.

4.1 Research Design

The study aimed to examine factors influencing digital technology integration in accounting education by utilizing the UTAUT model. A survey was conducted in the form of online questionnaires to validate the hypothesis and verify conceptual framework.

There are benefits associated with using the online survey as it is cost-saving and it increases the response rate. As the internet is now a basic need for everyone and it helps people to connect, thus the participants can response the survey easily regardless of place and time. All questions were established with the function 'required' so that the participants need to complete all questions before they exist and submit the survey. This is also good to avoid incomplete answers in the survey. Data is instantly available for the researcher as it can be easily transferred into spreadsheets when more detailed analysis is needed. Moreover, a complex type of survey can be efficiently conducted using the internet. The questionnaires can include response formats needed rather than different type of answer provided by participants.

In addition, the target population for this study is accounting educators working in either public or private universities in Malaysia. The data collected in this method is quantitative, whereby it involves statistical analysis and allows for generalisation of findings. The sample size is select grounded on Krejcie and Morgan (1970) table. This helps to create an efficient method to determine sample size since they serve as a representative for a population. There is a lack of reliable answers to the research questions if the sample size is too small. The participants are selected based on purposive sampling method. Since this study wishes to gain detailed knowledge about accounting educators, therefore the participants must have criteria such as teaching accounting subjects and experience in using technology for teaching framework. The outcomes are pertinent to the research setting as this study collects information from the best-fit participants. It also leads to better insight and arriving at more precise research results. Purposive sampling reduces margin of error in data as the date sources are closely fit to research context. Participants also on a voluntary basis and their confidentiality is assured. According to thestatistics obtained from the Ministry of Higher Education as of 31 December 2020, thereare 43,281 lecturers in public and private universities in Malaysia. With reference to the Krejcie and Morgan table, the minimum sample size for this population is 380.

4.2 Data Collection

The survey questionnaire was created using a google form. The interface is simple to use and it stores the feedback received where the researcher able to analysing it in detail. The tools also offer real response answer and allows researchers to see a preview of the survey before sending it over to the recipients. Thereafter, the survey was emailed to respective accounting educators working in either public or private universities. The data collection was conducted in two phases. The first phase pilot study took place over a period of six

weeks in the months of May and June, 2021. Necessary adjustment on questionnaires is made before sending out the final survey for the final study. The second phases took place in between April to June 2022.

4.3 Research Instrument

Table 4.3 Research Instrument

Variables	Measurement
PE	i. Using digital technology would increase my productivity
	ii. Using digital technology would increase my job performance
	iii. Using digital technology helped me to accomplish the tasks more quickly
EE	i. I consider digital technology is an easy tool
	ii. My interaction with digital technology is clear and understand
	iii. I become skilful when using digital technology
SI	i. People who influence my behaviour think I should use digitaltechnology
	ii. People who are important to me think I should use digitaltechnology
	iii. People whose opinions I value prefer me to use digitaltechnology
FC	i. I have the necessary resources to use digital technology
	ii. I have the necessary knowledge to use digital technology
	iii. I can get support from other people when I have difficultieswith digital technology
BI	i. I am intended to use digital technology in teaching
	ii. I will always try to use digital technology in my daily teaching
	iii. I have the plan to continue using digital technology inteaching
UB	i. I have been using digital technology for teaching purpose
	ii. I often use digital technology for daily work
	iii. I have been using digital technology to communicate with students

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

The survey instrument was adapted from Venkatesh et al., (2003) and it is used to measure behavioural intention and use behaviour. In this study, the independent variables comprise of four constructs: PE, EE, SI and FCs. Dependent variables were composed of two constructs: BI and UB. The measurement of each construct is made by the evaluation of

three items. Each item is framed as a statement. Preferably 3 and above per construct is suggested as it will lead to convergent solution in confirmatory factor analysis (Marsh, Hau, Balla, and Grayson, 2010). Adequate internal consistency and reliabilities can be obtained with as few as three items. In total, there were 18 items of measurement, and the details of every construct are presented in Table 4.3. The item was gauged per a five-point Likert scale ranging from disagree (1) to strongly agree (5).

Questions were included measuring various demographic characteristics in the initial part. The responses were collected through an online self-administered questionnaire. On the base of the comments realised, minor modifications were made to the wording for reason of clarity. Accordingly, the findings of the pilot study were demonstrated (see Para 4.5).

4.4 Data Analysis

Partial Lease Square (PLS) method was employed for data analysis. According to Hair et al. (2019), PLS-SEM eases the chance to forecast complex models with many constructs, indicator variables and structural paths without imposing distributional assumptions on the data. In another word, it does not involve the assumption of data normality. PLS is better accommodating both reflective and formative scales easily compared to covariance structure analysis. Besides, all data collected were analysed using the Smart PLS 4.0 software.

The model was directed in two steps. Firstly, the measurement model was assessed, in which the reliability of the measures and their convergent and discriminant validity was evaluated. The purpose of the measurement model stipulated in what way latent variables were measured in relations of observed variables. Secondly, the structural model, which examine the hypotheses, was established. It aims to specify a causal relation between

independent and dependent variable.

4.5 Pre-Test and Result of Pilot Study

In order to validate and lessen the measurement error of the questionnaire, five participants were asked to participate in the pre-test with two universities' accounting lecturers and three accounting educators from secondary school. They assessed the content and examine the relevance of the question. The process of examining and reviewing questionnaire is a quality control measure for this research. The participants assisted in making sure the questions are relevant, accurate and significant. It also helps reducing writing errors and reduce bias.

Following this, a pilot study was directed on a smaller scale to estimate how well the study plans and findings could be, so as to make necessary adjustments before the main study. The analysis of the results from the pilot study enables the identification of weakness that needs to be addressed. Ideally, a well-planned pilot study is likely to increase the quality of the research. In this stage of conducting a survey, the questionnaire is administered to a fraction of the total sample population based on purposive sampling method. This pilot study is a small feasibility study planned to test various aspects of the methods and for larger investigations (Arain, Campbell, Cooper, and Lancaster, 2010). In essence, a pilot study is directed to hinder the occurrence of a fatal flaw in a study.

The pilot study was carried out among 49 participants. 3 participants are excluded from the analysis since they are non-accounting lecturers. The final sample of pilot test consisted of 46 participants. There were 78% female and 22% male. Roughly, 32 participants working in public universities and remaining 14 are from private universities. Almost half of the respondents have more than 11 years of teaching experience in accounting subjects. After the data collection process, we then examined the reliability and the validity of the construct using PLS. Information extracted through questionnaire

wasevaluated through measurement and structural model. The details of result from the pilotstudy revealed in the validity and reliability test, as shown in Table 4.5, according to three criteria namely: Cronbach alpha, composite reliability and average variance extracted.

Table 4.5 Validity and Reliability Test of Pilot Study (n=46)

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
PE	0.712	0.839	0.639
EE	0.733	0.848	0.652
SI	0.940	0.962	0.894
FC	0.865	0.918	0.788
BI	0.938	0.961	0.891
UB	0.833	0.901	0.752

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

With regard to reliability, all latent variables presented Cronbach's alpha values above the lowest limit of 0.70. They also presented composite reliability (CR) above 0.6 and Average Variance Extracted (AVE) higher than 0.5. Thus, it is possible to conclude that the variables presented appropriate reliability and validity.

CHAPTER 5

RESULTS

5.0 Chapter Overview

Chapter 5 reports the findings of the ultimate result. It discusses the data inspection process such as normality, validity and reliability assessment. Tables are used to summarize the data analyses and presents descriptive statistics with regard to the sample and instruments. Afterwards, followed by confirmatory factor analysis to estimate measurement models for the study's four main constructs. It is then continued with structural equation modelling to examine the hypotheses of this study.

5.1 Demographic Profile

Table 5.1 shows the respondents' information for this study. A total of 166 responses was received for this survey out of 300 distributed, which resulted a response rate of 55%. The respondents' socio-demographic characteristics (age, gender, educational qualifications and teaching experience) from the two categories (public and private) of universities were analysed using frequency counts and percentages. After removing 10 null respondents, 156 valid surveys are eligible for statistical analysis. The majority of the respondents were females (121 responses; 77.56%), while male constitutes 35 responses (22.44%). In terms of the educational qualification of the respondents, data showed that the highest number of respondents have doctorate certificates (85 responses; 54.49%), 68 of the respondents (43.59%) have master degree, followed by 3 respondents (1.92%) who is a degree holder. 117 respondents were working in public university in Malaysia which constituted 75%. Interestingly, almost half of the respondents (46.15%) were professional qualification holder. Further, Table 5.1 tabulated that 42.95% of the accounting educators have between 11 to 20 years of experience in teaching accounting subjects. About 33.98% of

the accounting educators have less than 10 years of teaching experience in accounting. Finally, 23.07% of the accounting educators have more than 20 years in teaching accounting subjects.

Table 5.1 Demographic Profile

Characteristic		**Number**	**Percentage (%)**
Gender	Female	121	77.56
	Male	35	22.44
Education level	Degree	3	1.92
	Master	68	43.59
	PhD	85	54.49
Professional qualification	Yes	72	46.15
	No	84	53.85
Teach in public or private university	Public university	117	75.00
	Private university	39	25.00
University currently working on	Public university	117	75.00
	Private university	39	25.00
Number of years working in university	1-10	58	37.18
	11-20	62	39.75
	21-30	33	21.15
	31-40	3	1.92
Accounting lecturer	Yes	156	100
	No	0	0
Years of experience in teaching accounting subjects	1-10	53	33.98
	11-20	67	42.95
	21-30	33	21.15
	31-40	3	1.92

5.2 Descriptive Analysis

Effective data cleaning is a critical part of the data analytics process. The aim of data cleaning is to fix any data that is incorrect, incomplete, repeated, or even unrelated to the target of the data set. In data cleaning process, we check for the minimum and maximum value. We also remove the entries associated with missing data. Furthermore, we identify standard deviation to validate dataset before performing data analysis.

Afterwards, descriptive statistic was used to analyse participants' responses to individual UTAUT constructs. In Table 5.2, mean, standard deviation, skewness and kurtosis are assessed using the Smart PLS 4.0 software. The average mean value of all constructs is above than the mid-point (3.729-4.297). Table 5.2 shows that UB of digital technology has the highest mean of 4.297, while the lowestis SI, which constitute the mean of 3.729. The standard deviation represents a narrow spread around the mean as it ranges from 0.602 to 0.823. FCs towards use behaviour of digital technology has the highest standard deviation while BI has the lowest standard deviation, which is 0.602. In addition, skewness determined the context to which a variable's distribution is symmetrical. While kurtosis deals with whether data is heavy or light-tailed in a normal distribution. Kline (2011) stated the limit value for skewness and kurtosis should not be more than 3 and 10 individually. Hence, the distribution of data is normal considering the value of skewness and kurtosis. As revealed in Table 5.2, all value of skewness and kurtosis was verifiable.

Table 5.2 Descriptive Statistics

Construct	Mean	Standard deviation	Skewness	Kurtosis
PE	4.283	0.731	-1.214	2.784
EE	3.946	0.718	-0.669	0.896
SI	3.729	0.784	-0.560	0.477
FCs	3.815	0.823	-0.844	0.687
BI	4.283	0.602	-0.490	0.852
UB	4.297	0.630	-0.742	1.628

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

5.3 Measurement Model

The measurement model acted as exploratory analysis to obtain the reliability and validity of the construct (Briz-Ponce, Pereira, and Carvalho, 2017). The model was assessed through the reliability and validity construct (convergent and discriminant validity) using factor analysis. It helped to scrutinize the factor structure of the instrument.

As proposed by Sabah (2016), reliability was defined as how fit a set of instrument items selected for a given construct measures the same construct. On the other hand, validity indicated the selected instrument items for a given construct were reasonably measured. Grounded on criteria suggested by Briz-Ponce et al. (2017), Cronbach's alpha and composite reliability were reliability measurements, while average variance extracted and composite reliability were convergent validity measurements, and square root of AVE was discriminant validity measurement.

Table 5.3.1 Convergent Validity

Construct	Cronbach's alpha	Composite reliability	Average Variance Extracted
PE	0.881	0.927	0.808
EE	0.804	0.884	0.718
SI	0.925	0.952	0.869
FC	0.698	0.825	0.613
BI	0.904	0.940	0.838
UB	0.850	0.909	0.769

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

Nunnally (1978) posted that the minimum value for Cronbach's alpha coefficient was 0.7. In sum, the Cronbach's alpha values of the variables displayed in Table 5.3.1 meet the threshold limit of 0.70, suggesting the instrument used has high internal validity. Composite reliability (CR) was taken into account of different outer loadings of the constructs. It evaluated the internal consistency of a criterion. Also, the minimum accepted value for CR is 0.7 (Bagozzi and Yi, 2012). The outcome obtained from the PLS software revealed that all CR is higher than 0.70, representing good reliability.

Convergent validity examines whether the measures of each construct within the model was reflected by their indicator (Gefen, Straub, and Boudreau, 2000). This will help to eliminate any unreliable indicators. To establish convergent validity, Average Variance Extracted (AVE) should more than 0.5, and CR is greater than the AVE. Fornell and Larcker corroborated that CR should be higher than or equal to 0.50. AVE examined the

amount of variance obtained by a construct in relation to variance due to random measurement error (Sabah, 2016). The data in Table 5.3.1 showed that the AVE of all the constructs is above 0.5, indicating acceptable convergent validity for all factors. Also, all constructs have adequate reliability and convergent validity.

Table 5.3.2 Discriminant Validity according to the Fornell-Larcker Criterion

Construct	BI	EE	FC	PE	SI	UB
BI	**0.916**					
EE	0.647	**0.848**				
FC	0.456	0.580	**0.783**			
PE	0.597	0.492	0.273	**0.899**		
SI	0.440	0.412	0.230	0.331	**0.932**	
UB	0.690	0.511	0.381	0.397	0.269	**0.877**

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

Discriminant validity evaluated whether each construct's measure was supposed to be unrelated were statistically different (Gefen, Straub, and Boudreau, 2000). Fornell and Larcker proposed a comparison between the AVE for each construct and the variance shared between the constructs. To test the discriminant validity, the AVE of each factor was compared with the square of their correlation. The analyses specified that the AVE for each factor is higher than the squared correlation coefficients and the variance shared between constructs' coefficients, as shown in Table 5.3.2. In conclusion, the result appearedto be satisfactory. Furthermore, we assessed the discriminant validity through cross- loading. Each factor loading presented in Table 5.3.3 is greater than 0.70. Assessing the loadings of the items on their corresponding factors indicates good construct validity.

Table 5.3.3 Discriminant Validity according to the Cross-Loading Score

Construct	Indicators	BI	EE	FC	PE	SI	UB
BI	BI1	**0.908**	0.578	0.425	0.556	0.441	0.631
	BI2	**0.933**	0.596	0.412	0.542	0.414	0.635
	BI3	**0.906**	0.605	0.416	0.541	0.351	0.629
EE	EE1	0.532	**0.836**	0.488	0.413	0.354	0.453
	EE2	0.517	**0.883**	0.588	0.420	0.358	0.394
	EE3	0.589	**0.822**	0.408	0.417	0.336	0.446
FC	FC1	0.338	0.367	**0.766**	0.244	0.152	0.227
	FC2	0.429	0.538	**0.881**	0.224	0.192	0.398
	FC3	0.279	0.432	**0.690**	0.181	0.205	0.215
PE	PE1	0.583	0.484	0.309	**0.921**	0.344	0.353
	PE2	0.530	0.462	0.219	**0.909**	0.244	0.378
	PE3	0.490	0.374	0.199	**0.865**	0.302	0.342
SI	SI1	0.366	0.359	0.221	0.310	**0.913**	0.281
	SI2	0.444	0.424	0.256	0.326	**0.951**	0.256
	SI3	0.412	0.366	0.165	0.290	**0.932**	0.221
UB	UB1	0.659	0.456	0.377	0.344	0.264	**0.905**
	UB2	0.615	0.431	0.338	0.319	0.214	**0.865**
	UB3	0.529	0.459	0.277	0.391	0.229	**0.860**

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

Table 5.3.4 Discriminant Validity according to the HTMT Criterion

Construct	BI	EE	FC	PE	SI
EE	0.762				
FC	0.583	0.751			
PE	0.657	0.577	0.387		
SI	0.476	0.494	0.313	0.353	
UB	0.766	0.631	0.529	0.429	0.297

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

In the following, we also measured discriminant validity through the heterotrait-monotrait ratio of correlations (HTMT). The acceptable levels should less than 1.00 as recommended by Henseler, Ringle, and Sarstedt (2015). An HTMT value above 1.00 depicts a lack of discriminant validity. Table 5.3.4 presented value of HTMT is within threshold, therefore the result is acceptable.

5.4 Structural Model

After assessing the measurement model, structural model tests were estimated. It was used to predict the causal relationship between variables and testing research hypotheses. Table 5.4.1 indicates the path coefficients computed using t-values. All the relationships were greater than 1.96 significant level (at the 95% confidence level) except H4, where FCs does not positively influence UB of digital technology in accounting education.

Table 5.4.1 Hypotheses Testing Results

Hypothesis	Path coefficients	P Values	Standard deviation	t-statistics	Result
PE → BI	0.340	0.000	0.072	4.718	Supported
EE → BI	0.416	0.000	0.062	6.687	Supported
SI → BI	0.155	0.008	0.059	2.638	Supported
FC → UB	0.083	0.217	0.066	1.257	Not supported
BI→ UB	0.652	0.000	0.069	9.515	Supported

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

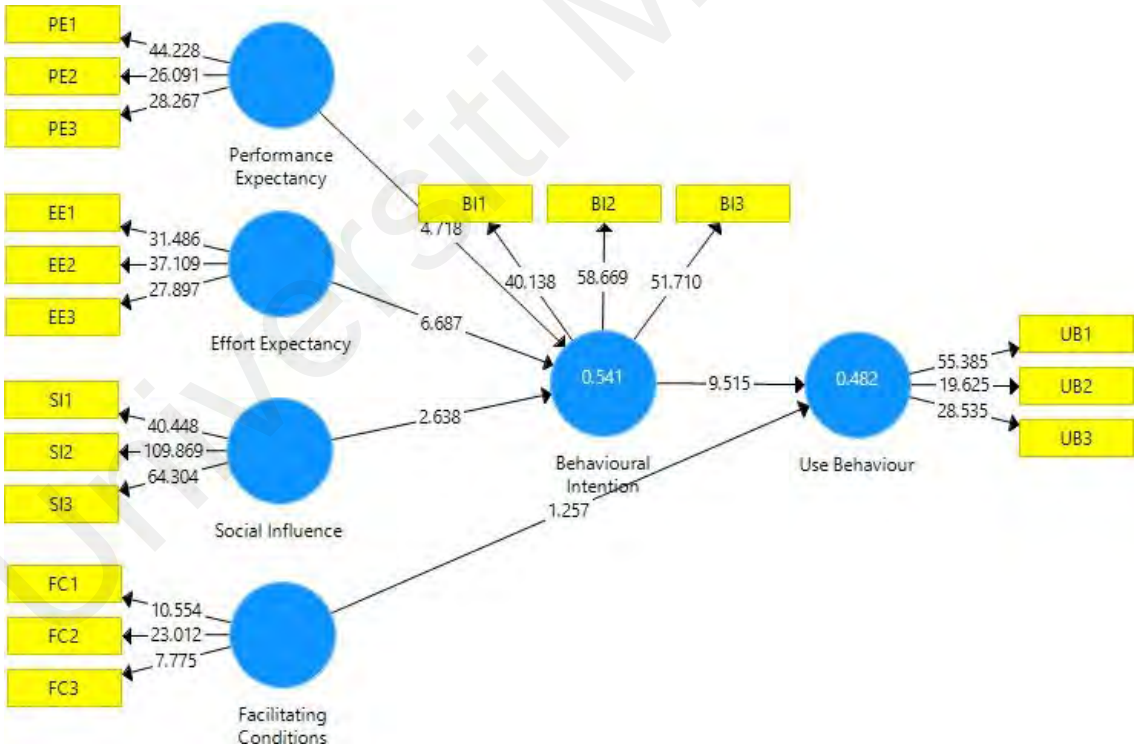

Figure 5.4.2 Structural Model

From the path analysis, the results of the final structural model demonstrated that PE and EE displayed a positive standardised beta, 0.340 and 0.416 respectively, significant at 0.05 level. Moreover, SI also has a positive standardised beta 0.155, significant at 0.05 level. These results supported H1, H2 and H3, where PE, EE and SI were positively influenced BI to use digital technology in accounting education. Whereas the relationship between FCs and UB of digital technology in accounting education was insignificant, at 0.05 significant level, even though the relationships were positive (β=0.083). Therefore, H4 was not supported. In addition, the result also showed that BI has a positive standardise beta 0.652, significant at 0.05 level. Thus, H5 was accepted, where BI positively influenced UB of digital technology in accounting education.

Table 5.4.3 R-Square Results

R-Squared of the Endogenous Latent Variables		
Constructs relation	R^2	Result
BI	0.541	Moderate
UB	0.482	Moderate

Note: BI: behavioural intention; UB: use behaviour.

Table 5.4.3 displays the results of the R-square analysis. It dealt the strong point of the analytical model through the construct it provides. The R-square value for the endogenous variables of BI was 0.541, meaning the percentage of BI which can be explained by PE, EE, SI and FCs is 54% and the rest 46% is explained by other variables that did not examine in this study. Meanwhile, the R-square for the endogenous variable of UB is 0.482, meaning the percentage of UB which can be explained by BI is 48% and the rest 52% is explained by other variables that did not examine in this study. According to Chin (1998), an R^2 value of more than 0.67 is considered high, between 0.33 to 0.67, it is considered moderate, and between 0.19 and 0.33, it is considered weak. It is rejected if it

is less than 0.19. Since both variables showed value of more than 0.33 and less than 0.67, it means this research model has moderate predictive relevance.

CHAPTER 6

DISCUSSION OF FINDINGS AND CONCLUSION

6.0 Chapter Overview

This chapter interpret the findings from the statistical analyses. The results generate from the hypotheses are afterward appraised and clarifications are provided for precise outcomes in the data. Prior to concluding, this chapter addresses the contribution, shortcomings of the study and proposes area for forthcoming research. The chapter ends with a cogent conclusion summarizing the significance of the study findings.

6.1 Discussion of Findings

Performance Expectancy (PE) and Behavioural Intention (BI)

Based on the research results, PE has a direct relation on BI to use digital technology in accounting education. Accounting educators admitted that using digital technology improves their teaching performance and the quality of the teaching process. This is congruent with the findings of Kim and Lee (2020). The findings indicated that PE is main construct in interpreting teachers' educational technology adoption (Scherer et al., 2019). If educators find a specific technology useful, they are more probable to integrate the technology into their daily teaching. For instance, Barry, Murphy and Drew (2014) remarked that the use of WhatsApp in education boost student engagement which result in superior learning outcomes.

Also, Ma et al. (2020) found that PE presented an imperative role in the intention to use ICT in English as a Foreign Language (EFL) teaching. In the similar situation, Kim and Lee (2020) stressed that the relation between PE and BI was the most noteworthy, which

suggested that respondents relate the paybacks of ICT as useful technologies in order to make educational gains. This finding is further supported by Agustin and Mulyani (2016). In contrast, some previous researchers have discovered PE was not a powerful predictor. Moreover, some studies have also shown that this construct does not have any influence towards BI (Nicholas Omoregbe, Azeta, Chiazor and Omoregbe, 2017). The result is also in conformity with the submission of Jairak et al. (2009) which espoused that PE has no significant result on BI.

Regardless of these contradictory findings, this study has demonstrated the positive effect ofPE on BI. When accounting educators felt that digital technology was able to improve class performance, it further reinforced their intention to integrate it. The presence of digital technology is recognised by accounting educators in both public and private universities in Malaysia as a tool that facilitates students to quickly achieve the learning outcomes of the accounting courses they took.

Effort Expectancy (EE) and Behavioural Intention (BI)

The finding of this study postulated that EE has positive correlation with BI in the UTAUT model. It reported a t-statistic value of 6.687, which is greater than 1.96. Accounting educators are more prefer to use digital technology if the tool is simple to use and convenient. This finding also corroborates the results described in earlier studies, confirming that EE is a noteworthy predictor of the use of online technology (Nikou and Economides, 2019).

Even though accounting educators have to spend more time at the beginning, but they will have an easy job and accounting students can possess extensive learning in the forthcoming. They believe that the availability features of digital technology are simple to learn and use. Having noted that digital technology was not required as a teaching tool to include it in the teaching process for accounting educators, so it is clear the participants

were not motivated to use it. This is consistent with the propositions of the UTAUT which suggest that people would be more inclined to engage a technology if they believe that it will help them improve their occupational performance. This was even validated in this study when accounting educators believe the integration of digital technology will add value totheir teaching practice. This result is constant with previous studies by Kim and Lee (2020) implying that teacher will be more willing to utilise technology if the tools require less effort and simple to use.

On the other hand, this result was contradicted to Gitau's (2016) study in which EE was recognised to be the least significant impacts on the use of Web 2.0 tools due to the participants think that some of the applications were hard to use. In a similar study, Sangeeta and Tandon (2021) discovered that EE failed to encourage senior teachers' adoption of online teaching in Indian schools. The result also in conformity with Raman and Rathakrishnan's (2018) study on e-learning in the Malaysian setting in which teachers are refusing to use the Frog VLE as it is not user friendly. This could be explained by the situation that educators have become more accustomed to digital tools and online platform. As they are more get to use to new technology, they prepare and trainthemselves to accomplish job (Rehman et al., 2016), which subsequently weakens the impact of EE. Ease of use may not essentially result in behavioural intentions to use digital technology due to contextual factors. Educators become aware with technology resources with the accessibility of ICT, so they were more motivated to think of the usefulness of technology compared with the effortlessness of using ICT. While digital technology may be simple to use, however accounting educators may not keen to continueusing it if it does not have precious content and quality design. For instance, if the teaching tools are outdated or unclear, educators will find it hard to integrate, because they will have to spend more effort in sifting through the tools to discover which content is worth learning.

Social Influence (SI) and Behavioural Intention (BI)

In this study, SI influenced BI positively and directly (H3, β=0.155). According to the UTAUT model, social influence is a very important pre-cursor of whether an individual adopts a new system or not. In the context of this study, the opinions of the peer and principal were very crucial because they ultimately influence whether accounting educators integrate digital technology in their teaching practice. Therefore, if they perceived that accounting educators should not use digital technology in teaching lessons, then they would be declined to use it even if they had the skills to do so. This outcome is consistent with past studies by the display that persuasion by colleagues and administrators is preceding than preaching.

Similar findings were reported by Lakhal and Khechine (2016) and Sabah (2016), in which SI was found to have a positive relationship on BI. The result noted that students trust that the opinions and attitudes of their peers and parents can influence them in emerging digital technology. If the number of accounting educator who adopt and use digital technology is increased to a significant level, the participation of the other non-adopting educators might increase quicker. Graham et al. (2020) study demonstrating that the ICT use was believed to be a decisive factor by the people who were important for the participants. This result was supported in other past studies (Kim and Lee, 2020).

As students, friends, and teachers establish a unified community of practice, they could influence each other by sharing their experience and learning. This makes it probable for the members of the community to adopt one another's learning and teaching tactics with digital technology. In other words, accounting educators are more inclined to integrate digital technology when they perceive their important communal influences support them to accept digital technology. The findings are constant with past studies abroad by Khechine et al (2014) and Agustin and Mulyani (2016). The support for this hypothesis

3 infers that the intention of accounting educators in public and private universities in Malaysia to integrate digital technology becomes stronger if faculty and department leaders, students, or their colleagues always remind them to use digital technology in the workplace.

Contrary to these studies, however, there are research which does not have predictive relation between SI and BI (Alasmari and Zhang 2019).

Facilitating Conditions (FCs) and Use Behaviour (UB)

FCs does not significantly affect accounting educators' use behaviour of digital technology ($\beta = 0.083$, p-value > 0.05) in accounting education. This could be linked to the fact that when technology becomes more obligatory and available in educational institutions, accounting educators have learned a coping mechanism to resolve difficulties to the use of hardware and software. They do not see this FC as a predicting factor. This outcome upholds the findings of Jambulingam (2013) and Arenas-Gaitan et al. (2015). Infrastructure support to use digital technology turn out to be pointless since accounting educators are equipped with skills to embrace technology. The result also can be related to the finding of Ertmer (2012) who found that access to ICT is no longer a significant barrier to its integration.

However, previous studies showed that FCs have significant impact toward use behaviour of Web 20.0 technologies (Kim and Lee, 2020). The study described that FCs in terms of technical support and various hardware and software should be provided to English Foreign Language (EFL) teachers in order to integrate Web 2.0 technologies. The positive effect of FC on teachers' actual use behaviour specified that the existing of technical infrastructure, facilities as well as continuous support of schools can result in adopting Web 2.0-based teaching at large. The study noted that the disparity in ICT

infrastructure of schools and the percentage of the internet users differs significantly between and within the sub-regions.

Haghshenas et al. (2012) found FCs to be a significant determinant in predicting use behaviour. While including digital technology in accounting education, having a support crew could advantage both lecturers and students in making teaching and learning easier. A good support system that offers cheering feedback will create well-integrated educators by helping them feel good about themselves to dedicate their time and energy to satisfy others. It implies that digital technology is in very good shape for use in universities as a learning platform. The findings are conformity with past studies abroadby Prasetyo and Anubhakti (2011). If universities in Malaysia provide variety resources required by accounting educators to integrate digital technology such as IT staff and Wi-Fi, it will strengthen them to be more active using digital technology more often to support the teaching and learning process. The accounting educators will be at a disadvantage when they do not optimize the facilities that have been provided by the campus to create amore comfortable learning process.

The absence of resources becomes factors that hindering accounting educators to use digital technology. Various approaches have been taken by institutions to broaden technology access to the educators. Thus, the decision maker needs to create resources policies to ensure wider access and use of digital technology between accounting educators. For example, the provision of laptops and tablets that can be used in the classroom, so that accounting educators can have access to some form of technology they can use with their students.

Behavioural Intention (BI) and Use Behaviour (UB)

Accounting educators' BI to use digital technology does, in detail, forecast the actual use of technology for teaching and learning of accounting. The result reported that BI significantly influences the UB. It has a t-statistic value of 9.515 which is greater than the t-table of 1.96. Through the integration of digital technology is not mandatory in teaching practice, however the BI of accounting educators would automatically become actual use. Similar outcome was found in Graham et al. (2020) who reported that educators' intentions to use ICT does forecast the actual usage of ICT. Kim and Lee (2020) also came up with the same conclusion. This significant impact may indicate that as educators believe more in intending to use digital technologies in EFL instruction, the chance of actually using Web 2.0 will arise. BI to use has been explored as an influential factor in actual use of technologies in prior research (Venkatesh et al., 2016). Thus, as accounting educators' behavioural intention to use digital technology rises, their actual use will be also affected. As a result, educators and students will rely on digital technology as a teaching tool for source of learning activities. Table 6.1 provide a summary of the results in this study.

Table 6.1 Summary of the Results

Research Objectives	Hypotheses	Results
To examine whether PE positively influences BI touse digital technology in accounting education	**H1**: PE has a positive influence on BI to use digital technology in accounting education.	Supported
To examine whether EE positively influences BI touse digital technology in accounting education	**H2**: EE has a positive influence on BI to use digital technology in accounting education.	Supported

Table 6.1 Summary of the Results (continued)

Research Objectives	Hypotheses	Results
To examine whether SI positively influences BI to use digital technology in accounting education	**H2**: SI has a positive influence on BI to use digital technology in accounting education.	Supported
To examine whether FCs positively influence UB of digital technology in accounting education	**H4**: FCs have a positive influence on UB of digital technology in accounting education.	Not supported
To examine whether BI positively influences the UB of digital technology in accounting education	**H5**: BI has a positive influence on the UB of digital technology in accounting education.	Supported

Note: PE: performance expectancy; EE: effort expectancy; SI: social influence; FC: facilitating condition; BI: behavioural intention and UB: use behaviour.

6.2 Theoretical and practical contribution

From a theoretical standpoint, this research has contributed to the existing studies by verified reliability and validity of UTAUT model. The findings successfully provide support for the actual use of technology is directed by behavioural intention. The perceived likelihood of adopting the technology is reliant on the direct effect of four main constructs, namely performance expectancy, effort expectancy, social influence, and facilitating conditions. The UTAUT model provided empirical insight into technology adoption. Hence based on the model, it unifies previous technology acceptance theories regarding how a user accept and use the technology. The study would add to the theoretical development by integrating UTAUT model and how it fosters the adoption of technology usage.

Furthermore, this study also inflates on earlier studies in the context of digital technologies. Previous studies only focused on informational technology but did not detailed explanations which technology have been used. The original UTAUT model has been used to examine technology adoption in various segments, such as healthcare (Gu,

et al., 2021), e-government (Gupta, Dasgupta, and Gupta, 2008), mobile internet (Venkatesh, Thong and Xu, 2012) and enterprise systems (Chauhan and Jaiswal, 2016). Precisely, this study contributes in the settings of accounting education.

One of the practical contributions of this research is the detailed insight provided by accounting educators in Malaysian universities. The findings reveal that performance expectancy, effort expectancy and social influence have positive relationship on behavioural intention to use digital technology in accounting education. This implies that for effective adoption, attention should be stressed on the foremost of digital technology towards the learning and teaching process. This will help to increase the integration of digital technology initiatives. The result also reveals that behavioural intention has substantial influence towards use behaviour. The behavioural intention of accounting educators in turn become actual use of digital technology in their teaching task. With the emergence of digital technologies, academicians, and regulators starting to direct their focus to the influence of digital technology on accounting education. The finding of this study indicated that digital technology has strong benefits on the operational efficiency of the teaching process. Alongside these advantages, universities, however, need to counter some of the challenges. There is no doubt that the disruptive technologies are having a deep impact on the skills required of accounting educators. The result obtained from the current study proposes that it is essential for accounting educators to cultivate digital talents. It seems that digital technology should implanted into the accounting content because technology is no longer a niche subject area. Digital skills are the engine of the future's growth, hence it is a prerequisite for educational institutions to reveal future graduates with such knowledge. This would prepare them to practice accounting with more effective since digital technologies' utilisation offers huge paybacks. By doing so, it can improve their attitude and habitual strategies for recognising, remembering and problem solving in job performance. With adequate training and support from the faculty

and government, the accounting educators' competency could be upgraded, and digital technologies' utilisation could increase. In response to the speed of technological and digital advances notable in the accounting setting, it is crucial for them to invest in digital technologies, and to know how to utilise them.

Next, this research contributes to knowledge on the ground of accounting education study. It reflects on the important use of digital technologies in accounting education as a tactic to expand the learning and teaching processes of the accounting students. The use of digital technology as teaching aid are recommended to provide accounting educators with the ability to better teach, interpret and analyse accounting programs. The upshots of the study also encourage policy makers to adopt digital technology in their institutions. Understanding how accounting educators' feedback toward using digital technology in teaching process may establish a decisive part of selecting appropriate teaching tools. Moreover, digital technologies have certain educational qualities that could boost knowledge construction. It allows accounting students to shed light on accounting concepts and be able to validate their mental models.

6.3 Limitations and Future Research

This study has investigated the factors affecting accounting educators' technology integration in accounting education. However, it has several limitations. Firstly, data collection is restricted to Malaysia. The findings should be meticulously generalized for other countries. Further studies are essential to investigate technology integration issues in more developing countries and to identify the most effective approach between contexts.

Next, this study was grounded in a quantitative research approach. Forthcoming research may adopt a mix-method approach that would reinforce the findings. An in-depth interview can provide further insights into the integration of digital technology in the

accounting field. This survey is conducted during the Covid-19 pandemic where all the schools and universities are still closed. All data are being collected online and there is no interaction occurring between the researcher and the participants. Therefore, a face-to-face interview is uplifted to obtain a better result for participants' standpoints on technology integration.

Also, this study analysed accounting educators' behavioural intention and use behaviour at a single point in time. It is suggested to carry out a similar longitudinal study as individual perceptions change over time. The future studies with longitudinal perspective is needed to monitor the relationship between accounting educators and digital technology and observe the differences between effect of the relation exist within the UTAUT model. In addition, forthcoming research should analyse this model for different types of digital technology. Limited focus has been directed towards exploring the moderating factor of the UTAUT model on digital technology. Constructs, such as gender, age, level of education and nationality can be included. The combination of these factors can boost the prediction capacity of the model.

6.4 Conclusion

Digitalization sets forth a good opportunity for accounting education. The development of ICT brings a lot of modification to the accounting profession as well as educational field. Though the usage of digital technology increased along with development in ICT, however at the same time it becomes more complicated. It will change the method of accountant's job and think. Many of accounting tasks demanded critical thinking and creativity. The process of recording and storage of financial information becomes fast and easy with the help of digital technology. The process of supervision of transaction becomes shorter. As a result, accounting students need to well-prepared for the future before they

are graduated. Routine and repetitive tasks of accountants will be eliminated in the near future. Wider accounting knowledge and technology skills are powerful tools for successfully getting hired. The process of digitalisation impacted the preparation of financial reportingwhich could have influences on the investor decision. The profession will transform from record keeping to advisors for the business clients. In fact, accountant will shift their rolesto consultancy. Thus, ICT and analytical skills would have developed. As such, accounting students need to seize the opportunity of the growth of technology that stimulates their profession. This situation also requires schools and universities to alter their accounting education programs in order to prepare accounting students for work in a modern environment coupled with digitization. Accounting curriculums should be madeupdated to train accounting educators and students, so that they are open to technology and fully utilise its potential benefits. This will result in an innovative learning program to suit with the development of rapid technology. The pandemic has forced accounting educators to take responsibility for how they deal with situations beyond their control andgenerate a new way of thinking. Using digital technology can develop a highly valued growth opportunity for all users in accounting education. With regard to this, research needs to be carried out concerning the usage of digital technology in accounting education.

The pandemic has reinforced the need of innovation and urge institutions to engage digital technology and perform a digital communication culture. In fact, COVID-19 permissible the global community to widely introduce digital technology as educational tools must keep pace with rapid technological development. Producing adaptive post pandemic teaching process involves suitable integration of digital technology to transfer knowledge to accounting students. Digital technology has become knowledge technologies in the hands of accounting educators. Learning how to use digitaltechnology within a short period of time demanded by the pandemic is difficult. An extensive amount of preparation

must be set forth in the design of accounting curricula, as well as the weighty shift in accounting educator's thinking. Working cooperatively with colleagues who perform technical expertise is a minimum requirement for active learningenvironments. Within the establishment of schools and education institutions, accessing support to make such variations has been relatively impossible. To make such changes would include persuasion with school and university administrators and considerable factor on the part of the accounting educator who seeks a change to policies. Furthermore, policymaker in accounting education may consider to find out the potentially digital technology that are used and preferred by accounting educators and students to close thegap created by ICT in an uncertainty environment. Alternatively, existing educational institutional teaching approach could be restructured to access more widely available andsimple to use digital technology. Supplementary research may emphasize on exploring in more detail the features of digital technology that make it easy and attractive for both accounting educators as well as students to engage.

This research produced promising implications for the literature. First, it adopted the UTAUT model to explore behavioural intention and use behaviour of digital technology in the educational sector, precisely in the accounting field. The factors of PE, EE, SI were strongly correlated with educators' BI. Out of five hypotheses, four were sustained, which, to a huge supports the exploration of the study. Furthermore, the respondents believed that those related to the technology are essential to sustenance the usage of digital technology in learning due to the relationship between these factors.

Next, this study sought the views of accounting educators. It explained the key constructs that caused the variation in the intention to use digital technology. The use of digital technology as an educational tool to support the delivery of accounting subjects can improve students' motivation and enhance their learning outcomes. Further, this study can design appropriate procedures for diverse users and promote digital technology for

educators who have not used the application yet. One approach to enhance technology usage is to reduce the impact of behavioural intention on technology. To do this, educators need to reduce the resistance and uncertainty linked with technology. Therefore, the results discovered from this study will inspire the effective use of such an application.

Also, this study showed that it is imperative for the technology integration within the teaching and learning environment, in which accounting educators and school management support technology. The process of imparting knowledge to accounting students are establishes and thus further expands the overall technology integration. Building a culture of technology use by accounting educators is a difficult task that requires a multi approach which takes into consideration various elements that influence their decision to use. The policy maker and course instructor can gain advantages from the findings in this study,which provide a real picture about digital technology. The result also could take as a guideline to improve the usage of digital technology among accounting educators and students.

In a nutshell, this study sought to discuss behavioural intention and use behaviour of digital technology in the accounting curriculum. Through this, we revealed the key factors that are associated with the intention to use the technology. Accounting education is on the brink of undergoing considerable change triggered by the prevalence of technology and Covid-19. These trends impact accounting education by providing new opportunities for educators to re-think how they teach accounting topics. A new encompassing way is needed to redesign accounting education with new gestalts. Accounting educators thereof must carefully consider the usefulness of digital technology to accounting education. Though educating accounting students is a long process, however the discovery of innovative teaching strategies is more beneficial for them to enter the profession. The findings are meaningful as they help define the roadmap for planning how digital technology can be better implemented in institutions.

REFERENCES

A.Inan, F., & Lowtherb, D. L. (2010). Laptops in the K-12 classrooms: Exploring factors impacting instructional use. Computers & Education, 937-944.

Abdekhoda, M., Dehnad, A., Ghazi Mirsaeed, S. J., Zarea Gavgani, V. (2016). Factors influencing the adoption of e-learning in Tabriz University of medical sciences. Medical Journal of the Islamic Republic of Iran (MJIRI), 30(1), 1-7.

Abdullah, F., Ward, R., & Ahmed, E. (2016). Investigating the influence of the most commonly used external variables of TAM on students' Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) of e-portfolios. Computers in human behavior, 75-90.

Agustin, H., & Mulyani, E. (2016, August). Studi empiris penerimaan dan penggunaan e-learning system di kalangan mahasiswa akuntansi fakultas ekonomi unp. In Seminar Nasional Aplikasi Teknologi Informasi (SNATI).

Ainsworth, P. (2010). Changes in accounting curricula: discussion and design. Accounting education, 279-297.

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 179-211.

Akter, S., Michael, K., Uddin, M. R., McCarthy, G., & Rahman, M. (2020). Transforming business using digital innovations: the application of AI, blockchain,cloud and data analytics. Artificial Intelligence in Operations Management, 1-33.

Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Williams, M. D. (2016). Consumer adoption of mobile banking in Jordan: Examining the role of usefulness, ease of use, perceived risk and self-efficacy. Journal of Enterprise Information Management.

Alasmari, T., & Zhang, K. (2019). Mobile learning technology acceptance in Saudi Arabian higher education: an extended framework and A mixed-method study. Education and Information Technologies, 24(3), 2127-2144.

Albrecht, W. S., & Sack, R. J. (2000). Accounting Education: charting the course. Accounting Education Series, 1-72.

Alhelou, E. M., Rashwan, A.-R. M., & Abu-Naser, S. S. (2021). The Role of Using Cloud Computing in Improving the Quality of Accounting Education in Palestinian Universities in Light of the Covid-19 Pandemic. Journal and Economics, Financeand Accounting Studies, 11-32.

Alqahtani, A. Y., & Rajkhan, A. A. (2020). E-Learning Critical Success Factors during the COVID-19 Pandemic: A Comprehensive Analysis of E-Learning Managerial Perspectives. Education sciences, 1-16.

Althunibat, A. (2015). Determining the factors influencing students' intention to use m-learning in Jordan higher education. Computers in Human Behavior, 52, 65-71.

Arain, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. BMC medical research methodology, 10(1), 1-7.

Arenas Gaitán, J., Peral Peral, B., & Ramón Jerónimo, M. (201 5). Elderly and internet banking: An application of UTAUT2. Journal of Internet Banking and Commerce,20 (1), 1-23.

Bagarukayo, E., & Kalema, B. (2015). Evaluation of elearning usage in South African universities: A critical review. International Journal of Education and Development using ICT, 11(2).

Bagozzi, R. P. (2007). The legacy of the technology acceptance model and a proposal for a paradigm shift. Journal of the association for information systems, 8(4), 3.

Bagozzi, R., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. Journal of the academy of marketing science, 8-34.

Balkaya, S., & Akkucuk, U. (2021). Adoption and Use of Learning Management Systems in Education: The Role of Playfulness and Self-Management. Sustainability, 1-27.

Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes, 248-287.

Barry, S., Murphy, K., & Drew, S. (2015). From deconstructive misalignment to constructive alignment: Exploring student uses of mobile technologies in university classrooms. Computers & Education, 81, 202-210.

Basioudis, I. G., Lange, P. D., Suwardy, T., & Wells, P. (2012). Accounting students' perceptions of a Learning Management System: An international comparison. Accounting Research Journal, 72-86.

Beard, L., & Harper, C. (2002). Student perceptions of online versus on campus instruction. Education, 658-663.

Becker, D. A., & Drum, D. (2011). Accounting Students Will Live in the Cloud. Workshop on Learning Technology for Education in Cloud (pp. 57-63). Berlin : Springer.

Berikol, B. Z., & Killi, M. (2021). The effects of digital transformation process on accounting profession and accounting education. Singapore: Springer.

Berrett, B., Murphy, J., & Sullivan, J. (2012). Administrator Insights and Reflections: Technology Integration in Schools. Qualitative Report, 200-221.

Bhimani, A., & Willcocks, L. (2014). Digitisation, 'Big Data' and the transformation of accounting information. Accounting and Business Research, 469-490.

Blair, G. S. (2021). The Role of Digital Technologies in Responding to the Grand Challenges of the Natural Environment: The Windermere Accord. CellPress Open Access, 1-8.

Blau, I., & T. S.-I. (2017). Digital competences and long-term ICT integration in school culture: The perspective of elementary school leaders. Education and Information Technologies volume, 769-787.

Borthick, A. F., & Clark, R. L. (1986). The role of productive thinking in affecting student learning with microcomputers in accounting education. Accounting Review, 143-157.

Braun, N. M. (2004). Critical Thinking in the Business Curriculum. Journal of Education for Business, 232-236.

Briz-Ponce, L., Pereira, A., Carvalho, L., Juanes-Méndez, J. A., & García -Peñalvo, F. J. (2017). Learning with mobile technologies–Students' behavior. Computers in human behavior, 72, 612-620.

Bromwich, M., & Scapens, R. W. (2016). Management Accounting Research: 25 years on. Management Accounting Research, 1-9.

Bryant, S. M., & Hunton, J. E. (2000). The Use of Technology in the Delivery of Instruction: Implications for Accounting Educators and Education Researchers. Issues in Accounting Education, 129-162.

Buabeng-Andoh, C. (2012). An Exploration of Teachers' Skills, Perceptions and Practices of ICT in Teaching and Learning in the Ghanaian Second-Cycle Schools. Contemporary Educational Technology, 36-49.

Chaudhari, A. A., & Mulay, P. (2018). SCSI: Real-Time Data Analysis with Cassandra and Spark. Singapore: Springer.

Chauhan, S., & Jaiswal, M. (2016). Determinants of acceptance of ERP software training in business schools: Empirical investigation using UTAUT model. The International Journal of Management Education, 248-262.

Chiu, C. M., & Wang, E. T. (2008). Understanding Web-based learning continuance intention: The role of subjective task value. Information & management, 45(3), 194-201.

Chin, W. W. (1998). Commentary: Issues and opinion on structural equation modeling. MIS quarterly, vii-xvi.

Daugherty, M., & Funke, B. L. (1998). University faculty and student perceptions of Web-based instruction. Journal of distance education, 13(1).

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 319-340.

DebSledgianowski, Ttan, C., & Gomaa, M. (2017). Toward integration of Big Data, technology and information systems competencies into the accounting curriculum. Journal of Accounting Education, 81-93.

D'Aquila, J. M., Wang, D., & Mattia, A. (2019). Are instructor generated YouTube videos effective in accounting classes? A study of student performance, engagement, motivation, and perception. Journal of Accounting Education, 63-74.

Dwived, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams , M. D. (2019). Re-examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model. Information Systems Frontiers, 719-734.

Eckhardt, A., Laumer, S., & Weitzel, T. (2009). Who influences whom? Analyzing workplace referents' social influence on IT adoption and non-adoption. Journal of information technology, 24(1), 11-24.

Ertmer, P. A., Ottenbreit-Leftwich, A. T., Sadik, O., Sendurur, E., & Sendurur, P. (2012). Teacher beliefs and technology integration practices: A critical relationship. Computers & education, 59(2), 423-435.

Ezeani, N.S. & Akpotohwo, F.C. (2014). Intergrating information and communication technology (ICT) in accounting education instruction in ekiti state universities. International Journal of Business and Social Science, 5, 6(1),

Fagan, M. H. (2019). Factors Influencing Student Acceptance of Mobile Learning in Higher Education. Interdisciplinary Journal of Practice, Theory, and Applied Research, 105-121.

Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: An introduction to theory and research. Boston: Addison-Wesley.

Gefen, D., Straub, D., & Boudreau, M. (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the association for information systems, 7.

Ghalandari, K. (2012). The effect of performance expectancy, effort expectancy, social influence and facilitating conditions on acceptance of e-banking services in Iran:The moderating role of age and gender. Middle-East Journal of Scientific Research, 12(6), 801-807.

Gilakjani, A. P., Leong, L. M., & Ismail, H. N. (2013). Teachers' Use of Technology and Constructivism. International Journal of Modern Education & ComputerScience, 5(4).

Gitau, M. W. (2016). Application of the utaut model to understand the factors influencing the use of web 2.0 tools in e-learning in Kenyan public universities (Doctoral dissertation, University of Nairobi).

Groves, & Zemel. (2000). Instructional technology adoption in higher education: An action research case study. International Journal of Instructional Media, 57.

Gu, D., Khan, S., Khan, I. U., Khan, S. U., Xie, Y., Li, X., & Zhang, G. (2021). Assessing the Adoption of e-Health. Sage Open, 1-13.

Gupta, B., Dasgupta, S., & Gupta, A. (2008). Adoption of ICT in a government organization in a developing country: An empirical study. The Journal of Strategic Information Systems, 140-154.

Guo, X. (2019). Research on Accounting Teaching Based on Virtual Reality Technology. International Conference on Virtual Reality and Intelligent Systems (ICVRIS), (pp.36-39).

Haghshenas, H., Chatroudi, E. A., & Njeje, F. A. (2012). Does educational level matter in adopting online education? A Malaysian perspective. Journal of Marketing for Higher Education, 22(1), 117-151.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European business review, 31(1), 2-24.

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. Industrial management & data systems.

Hayatu, S., Dalhat, B. S., & Deba , A. A. (2021). Behavioural Intention of Financial Accounting Teachers Toward Mobile Learning Adoption in Goverment Science and Technical Colleges in Gombe State. International Journal of Teacher Education and Teaching, 50-63.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Scienc, 115-135.

Herting, D., Pros, R., & Tarrida, A. (2020). Patterns of PowerPoint use in higher education: A comparison between the natural, medical, and social sciences.Innovative Higher Education, 65-80.

Holmes, K., & Prieto-Rodriguez, E. (2018). Student and staff perceptions of a learning management system for blended learning in teacher education. Australian Journalof Teacher Education (Online), 43(3), 21-34.

Hosszu, A., & Rughiniș, C. (2021). Design Issues in e-Learning during the COVID-19. 23rd International Conference on Control Systems and Computer Science (CSCS),(pp. 432-438).

Ibrahima, N. K., Raddadi, R. A., AlDarmasi, M., Ghamdia, A. A., Gaddourya, M., AlBara, H. M., & Ramadanaa, I. K. (2020). Medical students' acceptance and perceptionsof e-learning duringthe Covid-19 closure time in King Abdulaziz University, Jeddah. Journal of Infection and Public Health, 17-23.

Jairak, R., Praneetpolgrang, P., & Mekhabunchakij, K. (2009, December). An investigation of trust in e-learning for instructors and students in private and public universities. In Proc. 6th elearning for knowledge-based society conf., Thailand (pp. 17-18).

Jambulingam, M. (2013). Behavioural intention to adopt mobile technology among tertiary students. World applied sciences journal, 22(9), 1262-1271.

Janvri, D. J., & Watson, M. W. (2017). "Big Data": A new twist to accounting. Journal of Accounting Education, 3-8.

Janvrin, D. J., Raschke, R. L., & Dillaa, W. N. (2014). Making sense of complex data using interactive data visualization. Journal of Accounting Education, 31-48.

Jibrin, M. A., Musa, M. N., Shittu, T., & Yusuf, A. (2019). Level of Awareness and Usage of Cloud Computing. International Journal of Information System andEngineering, 1-12.

Kaba, B., & Touré, B. (2014). Understanding information and communication technology behavioral intention to use: Applying the UTAUT model to social networking site adoption by young people in a least developed country. Journal of the Associationfor Information Science and Technology, 65(8), 1662-1674.

Kar, S., Kar, A. K., & Gupta, M. P. (2021). Industrial Internet of Things and Emerging Digital Technologies–Modeling Professionals' Learning Behavior. Ieee Access, 30017-30034.

Khan, F. A., & Ahmad, B. (2015). Factors influencing electronic government adoption: perspectives of less frequent internet users of Pakistan. International journal of scientific & technology research, 4(1), 1-10.

Khechine, H., Lakhal, S., & Ndjambou, P. (2016). A meta-analysis of the UTAUT model: Eleven years later. Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration, 33(2), 138-152.

Khechine, H., Lakhal, S., Pascot, D., & Bytha, A. (2014). UTAUT model for blended learning: The role of gender and age in the intention to use webinars. Interdisciplinary journal of E-Learning and Learning objects, 10(1), 33-52.

Kim, J., & Lee, K. S. S. (2020). Conceptual model to predict Filipino teachers' adoption of ICT-based instruction in class: using the UTAUT model. Asia Pacific Journalof Education, 1-15.

Kim, J. J., Yoon, Y., & Kim, E. J. (2021). A Comparison of Faculty and Student Acceptance Behavior toward Learning Management Systems. International Journal of Environment Research and Ppublic Health, 1-16.

Kline. (2011). Principles and practice of structural equation modeling, Methodology in the social sciences.

Kumar, J. A., & Al-Samarraie, H. (2018). MOOCs in the Malaysian higher education institutions: The instructors' perspectives. The Reference Librarian, 59(3), 163- 177.

Lane, A., & Porch, M. (2010). Computer Aided Learning (CAL) and its impact on the performance of non-specialist accounting undergraduates. Accounting Education,217-233.

Lange, P. D., Suwardy, T., & Mavondo, F. (2003). Integrating a virtual learning environment into an introductory accounting course: determinants of student motivation. Accounting Education, 1-14.

Lawrence, R., Ching, L., & Abdullah, H. (2019). Strengths and weaknesses of education 4.0 in the higher education institution. International Journal of InnovativeTechnology and Exploring Engineering, 511-519.

Ledbetter, A., & Finn, A. (2018). Perceived teacher credibility and students' affect as a function of instructors' use of PowerPoint and email. Communication Education,31-51.

Lewis, W., Agarwal, R., & Sambamurthy, V. (2003). Sources of influence on beliefs about information technology use: An empirical study of knowledge workers. MIS quarterly, 657-678.

Liu, T., & Zainuddin, S. (2021). Extrinsic and intrinsic motivation towards the online component of blended learning in accounting education: evidence from a Malaysian public university. Quality Assurance in Education, 293-310.

Ma, M., Chen, J., Zheng, P., & Wu, Y. (2022). Factors affecting EFL teachers' affordance transfer of ICT resources in China. Interactive Learning Environments, 30(6), 1044-1059.

Mahande, & Malago. (2019). An E-Learning Acceptance Evaluation through UTAUT Model in a Postgraduate Program. Journal of Educators Online.

Mahmoud. (2018). Use of cloud computing services to develop university accounting education in Egypt. Egypt.

Makgato, M. (2014). The challenges of teaching and learning technology subject at schools in South Africa: A case of INSET teachers in Mpumalanga Province. Procedia-Social and Behavioural Sciences, 116, 3688-3692

Marlina, E., Tjahjadi, B., & Ningsih, S. (2021). Factors affecting student performance in e-learning: A case study of higher educational institutions in Indonesia. The Journal of Asian Finance, Economics and Business, 8(4), 993-1001.

Marsh, H. W., Hau, K. T., Balla, J. R., & Grayson, D. (2010). Is More Ever Too Much? The Number of Indicators per Factor in Confirmatory Factor Analysis. Multivariate Behavioral Research, 181-220.

McFarland, D. J., & Hamilton, D. (2006). Adding contextual specificity to the technology acceptance model. Computers in human behavior, 22(3), 427-447.

Merhi, M. I. (2015). Factors influencing higher education students to adopt podcast: An empirical study. Computers & Education, 32-43.

Monterio, B. J. (2013). Integrated Reporting and the Potential Role of XBRL. Strategic Finance, 62-65.

Morosa, C., & DeFranco, A. (2016). It's about time: Revisiting UTAUT2 to examine consumers' intentions to use NFC mobile payments in hotels. International Journal of Hospitality Management, 17-29.

Moslehpour, M., Pham, V., Wong, W., & Bilgiçli, İ. (2018). E-purchase intention of Taiwanese consumers: Sustainable mediation of perceived usefulness and perceived ease of us. Sustainability, 234.

Mulyani, E. D. S., Agustin, Y. H., Surgawi, N. M., & Susanto, S. (2018). Implementasi Algoritma K-Means Dan Fp-Growth Untuk Rekomendasi Bimbingan Belajar Berdasarkan Segmentasi Akademik Siswa. IT (Informatic Technique) Journal, 6(2), 160-173.

Mun, Y. Y., & Hwang, Y. (2003). Predicting the use of web-based information systems: self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. International journal of human-computer studies, 59(4), 431-449.

Musyaffi. (2022). Learning Management System Sustainability for Accounting Student: The Existence of Self-Efficacy. Quality - Access to Success, 224-230.

Nagari, P. M., Nuraini, U., & Nuris, D. M. R. (2019). A Case Study: The Application of REACT Learning Model in Accounting Education. International Journal of Education, 4(24), 30-37.

Nguyen, D. T., Vu, T. H. N., & Kim, H. T. (2020). Factors affecting e-learning based cloud computing acceptance: an empirical study at Vietnameseuniversities. Journal of International Economics and Management, 20(3), 118- 133.

Ng, W. (2015). New Digital Technology in Education. Switzerland: Springer.

Nicholas-Omoregbe, O. S., Azeta, A. A., Chiazor, I. A., & Omoregbe, N. (2017). Predicting the adoption of e-learning management system: A case of selected private universities in Nigeria. Turkish Online Journal of Distance Education, 18(2), 106-121.

Nikou, S. A., & Economides, A. A. (2019). Factors that influence behavioral intention to use mobile-based assessment: A STEM teachers' perspective. British Journal of Educational Technology, 50(2), 587-600.

Nikou, S., Brännback, M., & Widén, G. (2019). The impact of digitalization on literacy: Digital immigrants vs. digital natives. In proceedings of the 27th European conference on information systems (ECIS), Stockholm & Uppsala, Sweden, June8-14.

Nikou, S., & Economides, A. (2017). Mobile-Based Assessment: Integrating acceptance and motivational factors into a combined model of Self-Determination Theory and Technology Acceptance. Computers in Human Behavior, 83-95.

Nunnally, J. C. (1978). An overview of psychological measurement. Clinical diagnosis of mental disorders, 97-146

Nurkhin, A. (2020). Analysis of Factors Affecting Behavioral Intention to Use E-Learning Uses the Unified Theory of Acceptance and Use of Technology Approach. KnE Social Sciences, 1005-1025.

Nwazor, J. C., Maduike, G., & Constance, C. (2017). Extent of Availability And Utilization Of E-Learning Technologies. International Journal of InnovativeResearch and Advanced Studies, 66-73.

Oechslein, O., Fleischmann, M., & Hess, T. (2014). An Application of UTAUT2 on Social Recommender Systems: Incorporating Social Information for Performance Expectancy. 47th Hawaii international conference on system sciences (pp. 3297-3306). IEEE.

O'Connell, B., Carnegie, G. D., Carter, A. J., Lange, P. d., Hancock, P., Watty, K., & Hellair, C. V. (2015). Shaping the future of accounting in business education in Australia. Melbourne: CPA.

Oye, N. D., Salleh, M., & Iahad, N. A. (2011). Challenges of e-learning in Nigerian university education based on the experience of developed countries. International Journal of Managing Information Technology, 3(2), 39- 48.

Puspa, D. F., & Ilona, D. (2019, December). Behavioural intention to use MYOB accounting application among accounting students. In Journal of Physics: Conference Series (Vol. 1339, No. 1, p. 012126). IOP Publishing.

Rabah, J. (2015). Benefits and Challenges of Information and Communication Technologies (ICT) Integration in Québec English Schools. Turkish Online Journal of Educational Technology, 24-31.

Raman, A., & Rathakrishnan, M. (2018). Frog VLE: Teachers' technology acceptance using UTAUT model. International Journal of Mechanical Engineering and Technology, 9(3), 529-538.

Raman, A., & Don, Y. (2013). Preservice Teachers' Acceptance of Learning Management Software: An Application of the UTAUT2 Model. International Education Studies, 157-164.

Recker, J. (2016). Reasoning about Discontinuance of Information. Journal of Information Technology Theory and Application, 41-66.

Rhodes, N. (2012). Gateways to positioning information and communication technology in accounting education. South African Journal of Higher Education, 26(2), 300-315.

Roca, J. C., & Gagne, M. (2008). Understanding e-learning continuance intention in the workplace: A self-determination theory perspective. Computers in Human Behavior, 1585-1604.

Rogers, E. M. (1995). Diffusion of Innovations: Modifications of a Model for Telecommunications. New York: Free Press.

Rumanyika, J., & Galan, R. (2015). Challenges for teaching and learning information and communication technology courses in higher learning institutions in Tanzania: A review. Information and Knowledge Management.

Sabah, N. (2016). Exploring students' awareness and perceptions: Influencing factors and individual differences driving m-learning adoption. Computers in Human Behavior, 522-533.

Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. Computers & Education, 128, 13-35.

Setty, K., & Bakhshi, R. (2013). What is big data and what does it have to do with it audit. ISACA Journal, 1-3.

Sharma, L., & Srivastava, M. (2019). Teachers' motivation to adopt technology in higher education. Journal of Applied Research in Higher Education.

Sharples, M., Sánchez, I. A., Milrad, M., & Vavoula , G. (2009). Mobile Learning: In Technology-Enhanced Learning. Dordrecht: Springer.

Shelly, G. B., Cashman, T. J., Gunter, R. E., & Gunter, G. A. (2005). Teachers Discovering Computers: Integrating Technology and Digital Media in the Classroom, Fourth Edition. Course Technology Press.

Sife, A., Lwoga, E., & Sanga, C. (2007). New technologies for teaching and learning: Challenges for higher learning institutions in developing countries. International journal of education and development using ICT, 3(2), 57-67.

Siragusa, L. (2002). Research into the effectiveness of online learning in higher education: Survey findings. In Proceedings of the Western Australian Institute for Educational Research Forum.

Siritongthawor, S., Krairi, D., Dimmitt, N. J., & Paul, H. (2016). The study of e-learning technology implementation: A preliminary investigation of universities in Thailand. Education and Information Technologies volume, 137-160.

Sitardja, M. (2018). The Analysis Of Acceptance On Implementation ERP Accounting In Unified Theory Of Acceptance And Use Of Technology (UTAUT). Prosiding Business And Economics Conference In Utilizing Of Modern Technology, 138-150.

Sledgianowski, D., Tan, C., & Gomaa, M. (2017). Toward integration of Big Data, technology and information systems competencies into the accounting curriculum. Journal of Accounting Education, 81-93.

Sommer, L. (2011). The theory of planned behavior and the impact of past behavior. International Business and Economics Research Journal, 10(1), 91-110

Sugahara, S., & Watty, K. (2016). Global convergence of accounting education: An exploratory study of the perceptions of accounting academics in Australia and Japan. Asian Review of Accounting, 254-273.

Sumak, B., & Sorgo, A. (2016). The acceptance and use of interactive whiteboards among teachers: Differences in UTAUT determinants between pre-and post-adopters. Computers in Human Behavior, 602-620.

Sumak, B., Polancic, G., & Hericko, M. (2010). An empirical study of virtual learning environment adoption using UTAUT. Second international conference on mobile, hybrid, and on-line learning (pp. 17-22). IEEE.

Swasy, A. (2016). How journalists use Twitter: The changing landscape of US newsrooms. Lexington Books.

Taamneh, A., Alsaad, A., Elrehail, H., Al-Okaily, M., Lutfi, A., & Sergio, R. P. (2022). University lecturers acceptance of moodle platform in the context of the COVID-19 pandemic. Global Knowledge, Memory and Communication.

Taamneh, A. (2022). University lecturers acceptance of moodle platform in the context of the COVID-19 pandemic. Global Knowledge, Memory and Communication.

Tandon, U. (2021). Factors influencing adoption of online teaching by school teachers: A study during COVID-19 pandemic. Journal of Public Affairs, 21(4), e2503.

Taiwo, A. A., Downe, A. G., & Loke, S. P. (2014). Behavioral intention towards e-government in Malaysia: a structural equation modeling approach. International Journal of Electronic Government Research (IJEGR), 10(2), 8-21.

Teeter, S., Madsen, S. R., Hughes, J., & Eagar, B. (2007). The Perceptions and Experiences of Students in a Paperless Accounting Class. The Journal of Effective Teaching, 15-30.

Teo, T. (2009). Modelling technology acceptance in education: A study of pre-service teachers. Computers & Education, 52(2), 302-312.

Tiba, C., Condy, J., & Tunjera, N. (2016). Re-examining factors influencing teachers' adoption and use of technology as a pedagogical tool. Empowering the 21st Century Learner.

Turner, M., & Baskerville, R. (2012). The Experience of Deep Learning by Accounting Students. Accounting Education, 582-604.

Twining, P., Davis, N., Charania, A., Chowfin , A., Henry, F., Nordin, H., & Woodward, C. (2015). Developing New Indicators To Desribe Digital TechnologyInfrastructure In Primary and Secondary Education. 4-59.

Underwood, J., & Banyard, P. (2008). Managers', teachers' and learners' perceptions of personalised learning: evidence from Impact 2007. Technology, Pedagogy and Education, 233-246.

Vasarhelyi, M. A., Kogan, A., & Tuttle, B. M. (2015). Big Data in Accounting: An Overview. Accounting Horizons, 381-396.

Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. MIS Quarterly, 157-178.

Venkatesh et al., (2003). User acceptance of informationtechnology: Toward a unified view. MIS quarterly, 425-478.

Victoria State Government Education and Training. (2019, September 25). Retrieved from https://www.education.vic.gov.au/school/teachers/teachingresources/digital/Pages/teach.aspx#:~:text=Digital%20technologies%20are%20electronic%20tools,acros

Wamba, S. F., Akter, S., Edwards, A., Chopin, G., & Gnanzou, D. (2015). How 'big data' can make big impact: Findings from a systematic review and a longitudinal case study. International Journal of Production Economics, 234-246.

Watty, K., McKay, J., & Ngo, L. (2014). Innovators or inhibitors? Accounting faculty resistance to new educational technologies in higher education. Journal of Accounting Education, 1-15.

Zhai, X., & Shi, L. (2020). Understanding How the Perceived Usefulness of Mobile Technology Impacts Physics Learning Achievement: a Pedagogical Perspective. Journal of Science Education and Technology, 743-757.

Zheng, Y., Wang, J., Doll, W., Deng, X., & Williams, M. (2018). The impact of organisational support, technical support, and self-efficacy on faculty perceived benefits of using learning management system. Behaviour & Information Technology, 311-319.