

Interaction Effects of Situational Context on the Acceptance Behaviour and the Conscientiousness Trait towards Intention to Adopt: Educational Technology Experience in Tertiary Accounting Education

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ABSTRACT: The findings of this study reveal that it is unlikely for the interaction effects of situational context, namely educational technology experience (EXP), training frequency (TF), voluntariness (VOL), and class size (CSIZE), to influence accounting educators' intention to adopt educational technology. The original Technology Acceptance Model (TAM), which has been modified numerous times, is still relevant, especially for developing countries since their educational technology penetration is still very low. Conscientiousness trait from the Big Five Personality Model was applied in this study to measure intention as a powerful factor associated with the nature of individuals involved in the accounting profession. Measuring the factors from the individual perspective adds insight into the extant literature since past studies focused on organisational factors and student as the subject. The current study also overcomes the issue of stagnation in the accounting literature, specifically in the field of educational technology. Furthermore, this paper contributes by offering a good indication of using Structural Equation Modelling in the study, especially in the area of accounting and education, and using the most current reporting requirement for information system research.

Keywords: Accounting Education, Acceptance Behaviour, Conscientiousness, Educational Technology

1. Introduction

The advancement of technology has changed the educators' fundamental activities in teaching-learning, research, scholarship, and service to society (Rana, 2017). Technology is an excellent medium to enhance classroom teaching and learning activities by helping educators to communicate effectively and plan teaching aids and assisting students in self-expression and assertions (Khan, Hasan, & Clement, 2012; Mohd Yusof & Tahir, 2017). Accounting education has also shifted to using educational technology to supplement the pedagogy of 21st century education (Grabinski, Kedzior, & Krasodomska, 2015). The process of teaching and learning accounting subjects requires up-to-date education practices for educators to move from the traditional method of information delivery to contemporary teaching and learning experience (Yisau Abiodun & Tiamiyu, 2012). Therefore, accounting education needs to evolve to fulfil business requirements, prepare students for the market demand and adapt to the changing environment.

A particular concern of past scholars is that accounting educators' role is crucial (O'Connell, Carnegie, Carter et al., 2015), yet they are not using enough technology in the curriculum (Morris, Burnett, Skousen, & Akaaboune, 2015; Burritt & Christ, 2016). Furthermore, employers and industries nowadays are expecting accounting graduates to be equipped with a certain level of accounting skills, a reasonable knowledge of ICT (Ogundana, Ibadunni, & Jinadu, 2015), and deep knowledge of machine learning techniques (ICAEW, 2018) as a new way of thinking and acting of future accountants. The World Economic Forum (2018) predicted that occupation, such as accounting, bookkeeping and payroll clerks are among the top ten declining roles by 2022 due to global change, whereby the role of technology is increasing and changing the role of an accountant. (Morris et al., 2015; Ogundana et al., 2015). Furthermore, the investigation of educational technology research is still low in the Asian and African regions, and the literature is stagnant, especially in the accounting education field (Apostolou, Dorminey, & Hassell, 2020).

Considering the aforementioned concerns, therefore, it becomes the interest of this study to examine the acceptance behaviour and conscientiousness personality traits determinants that may contribute to the intention to use 21st century educational technologies among accounting educators. On top of that, this study also investigates the interaction effects of situational context (e.g., experience in using, training frequency, voluntariness, and class size) with the acceptance behaviour towards the intention to adopt educational technologies in tertiary accounting education.

2. Literature review

2.1. Educational technology in tertiary accounting education – Experience, issues and recent advancement in teaching practices

Technology and its applications are expanding, and it affects the global economy, leading to radical changes in the accountant's role. Thus, the process of teaching and learning accounting subjects requires a new age of educational practices (Grabinski et al., 2015; Morris et al., 2015; Ogundana et al., 2015). The changing of the accountants' role and accounting process is likely to be affected by how the accounting operates; the influence of technology, storage, processing, retrieval of data, and the process of transactions summarisation (Wells, 2018). Yet, numerous studies on accounting education and technology (e.g., Breedt, 2015; Wong & Wong, 2017; Al-Htaybat, von Alberti-Alhtaybat, & Alhatabat, 2018; Wu, Corr, & Rau, 2019) suggested that a huge gap exists in what is taught by educators in the university and what is being practised in the industry. Besides the audit and database software and general accounting software packages, other common applicable technologies are used in accounting education, such as the internet, e-mail, word processing, presentation, spreadsheets, and data analysis (Ahadiat, 2008; Morris et al., 2015). However, their application is not parallel with the current revolution of advanced technology.

Technology in 21st century teaching and learning is rapidly evolving, with Web 2.0, Web 3.0, virtual reality, e-learning, artificial intelligence, interactive mobile applications, multimedia technology, cloud computing, and other diverse platforms (Watty, McKay, & Ngo, 2016; Al-Htaybat et al., 2018). Therefore, as the key person in spreading technologies, educators need to seize the benefits that come with these innovations by improving their skills and preparing students for a future automated office environment (Nwokike & Eya, 2015; Al-Htaybat et al., 2018). Given the importance of transforming higher education, including the accounting field, Watty, McKay, Ngo et al. (2014) and Adam (2020) proposed ten categories of educational technologies for the accounting teaching and learning activities, which include (1) Learning management systems; (2) Social media or collaborative technologies; (3) Communication technologies; (4) Simulated learning system; (5) Learning style or approach concept; (6) Mobile technologies; (7) Assessment or evaluation technologies; (8) Presentation and learning resource creation tools; (9) Learning objects or resources; and (10) Common accounting tools.

Meanwhile, Yoon (2020) categorised four themes of technologies that can be integrated into accounting education in the digitalisation era, such as Artificial intelligence, Big data, Cloud computing, and Blockchain. These technologies are inevitable; thus, the accounting education field needs to embrace them to prepare future professional accountants with technology and automation knowledge, skills, and abilities. Furthermore, Janvrin and Watson (2017) asserted that the accounting curriculum must be integrated with technology because future accountants will be dealing with a massive volume of business data in the form of a paper-based system and a computer-based system or highly technical enterprise system. This would require proper analytical tools for recording, filtering, summarising, and consolidating the raw data into useful information. Additionally, the application of audit software and knowledge-sharing application using technology in practice indicating a staggering increase of gathering, processing, organising, evaluating, and presenting the financial information (Curtis, Jenkins, Bedard, & Deis, 2009), reporting the business performance, and decision-making process (Pan & Seow, 2016). This is evidenced by the removal of certain manual procedures for presenting the financial information to be aligned with modern business changes (Grabinski et al., 2015; Pincus et al., 2017).

Accordingly, accounting educators are required to respond to this evolution by assimilating with educational technology. It should be endorsed in educational settings to provide students with a new learning experience, given its substantial impact on education and the changes it brings to the pedagogical landscape. Despite the evolution in accounting education, the current scenario suggests that the effort to adopt educational technology is still infancy; both educators and the learners are not utterly familiar (Gaiziuniene & Janiunaite, 2018) with it. Issues, such as unawareness with the changes, lack of interest and knowledge, incompetent (Senik & Broad, 2011; O'Connell et al., 2015; Henriksen et al., 2018; Asonitou, 2020) educators' attitude, resistance to change, and lack of support from the university (Mat Dangi & Mohamed Saat, 2018) are the significant factors leading to the underutilisation of various types of technologies suitable for accounting education.

On top of that, a common dilemma relating to the unsatisfactory level of technology adoption among the accounting professionals, including the academia, is due to the lack of skills, talent leveraging and fails to understand the benefits of instilling technology usage in accounting teaching practices (Malaysian Institute of Accountants, 2018). It is alarming that this situation happens to educational institutions worldwide, especially in developing countries (Abbasi, Tarhini, Hassouna, & Shah, 2015; Khan et al., 2012; Darling-Aduana & Heinrich, 2018), particularly in the 21st century education environment. As the frontline of education, educators'

characteristics and behaviour are crucial elements in scaffolding the efforts to ensure that technology could be successfully integrated into accounting education.

2.2. Technology acceptance model (TAM) and the influence of conscientiousness trait

There have been numerous studies on the adoption, acceptance, intention to use, and usage of information technology in the educational context (Benbasat & Zmud, 1999; Hu, Chau, Sheng & Tam, 1999). However, many researchers are still battling to choose the suitable model or to construct a new model from a number of models (Venkatesh, Morris, Davis, & Davis, 2003), which has been used, altered, and integrated across disciplines, including social sciences, psychology, sociology, education, marketing, information system, and so forth. Weerasinghe and Hindagolla (2017) stated that of all the theories and models (e.g., the theory of reasoned action, unified theory of acceptance and use of technology, diffusion theory, etc.), TAM was the most widely used in many information and technology-related research, and identified as the most robust, parsimonious, and influential model. The technology acceptance model (TAM) was developed by Davis, Bagozzi, and Warshaw (1989) and used extensively by researchers to describe technology acceptance and to determine the reason for an action, whether to accept or reject information technology (Park, 2009).

In this model, there are two direct variables, namely perceived ease of use (E) and perceived usefulness (U) that indicate individuals' intention to utilise an activity while variable of attitude toward using (A) as the mediator predicts the behaviour intention to use (BI) and the intention predicts the behaviour or actual usage. However, the role of attitude towards use as the mediator for PU and PEU is unacceptable since many past studies found it to be a weak intermediary variable to predict the intention and actual usage. Thus, the present study will not remove the attitude construct from TAM, but it will not function as a mediator; instead, it will be one of the direct determinants to measure the accounting educators' intention to adopt educational technology. In a similar vein, Baker, Al-Gahtani, and Hubona (2007), and Altawallbeh, Thiam, Alshourah, and Fong (2015) found that attitude can be a positive determinant that will influence individuals to adopt technology. Additionally, the model application is still relevant in the educational setting. In particular, it can be used to predict the likelihood of new technology adoption in an organisation by groups or individuals (Breedt, 2015). Scherer, Siddiq, and Tondeur (2019) also suggested that TAM is a key model for describing teachers' intention to use technology.

In another perspective, the Big Five personality traits model is one of the most prominent models used in contemporary studies to comprehend the most salient features of personality (Zaidi, Abdul Wajid, Zaidi, Zaidi, & Zaidi, 2013). In particular, early studies provide evidence that personal characteristics have an impact on technology adoption (Xu, Frey, Fleisch, & Ilic, 2016), and it is significantly correlated with people's intention to use the internet, online applications, information sharing, and web browsers (see Tuten & Bosnjak, 2001; Swickert, Hittner, Harris, & Herring, 2002; Amiel & Sargent, 2004; Constantiou, Damsgaard, & Knutsen, 2006; Landers & Lounsbury, 2006). Nonetheless, for this research context, conscientiousness, one of the personality traits, which has been used in past literature, has been shown to be associated with and has an influence on individuals' personality, especially for the type of person working in the accounting profession (Wells, 2003). It should be applicable to study the accounting educators' conscientiousness trait since it is also under the same nature of job background. This would lead to a better understanding as it might imply that the optimal integration of technology into the education field can be achieved.

Moreover, past studies have proved that conscientiousness is also related to behavioural intention and adoption to use hypothetical software technology (Svendson, Johnsen, Almås-Sørensen, & Vittersø, 2013); it positively influences educational performance and work performance in education and learning contexts (Pornsakulvanich, Dumrongsiri, Sajampun et al., 2012) with interesting implications when studying behaviour through intentions (Barnett, Pearson, Pearson & Kellermanns, 2015). Thus, by studying this trait, it is expected that accounting educators with conscientiousness personality trait will be more inclined to have the intention to use technology since these individuals also demonstrate characteristics, such as accountability, dependable, careful, orderly, thoroughness, flexible, and time-saving (Dalpé, Demers, Verner-Filion, & Vallerand, 2019).

2.3. Interaction effects of situational context

Various situational contexts have served as the moderating variables for measuring the interaction effects between exogenous and endogenous constructs. In this study, experience in using educational technology, training frequency, voluntariness, and class size will test the prediction of such variables with educators' acceptance behaviour in tertiary accounting education. Experience in using educational technology, for instance, is used as a moderator since it is associated with individuals' level of knowledge of a new type of system

(Venkatesh et al., 2003). Past literature revealed that the effect of increased experience would impact the acceptance construct (Hartwick & Barki, 1994; Agarwal & Prasad, 1997). Likewise, Hong (2016) mentioned that users' long-term use of technology reflects the users' intention to continue using the technology.

Next is the training frequency, which refers to the efforts of acquiring knowledge and skills required for technology adoption that could improve the technical skills of individuals. As verified in past studies, the efforts of technology training significantly improved the acceptance level of individuals and their intention to adopt technologies (Torkzadeh, Pflughoeft, & Hall, 1999), manage individual perceptions and attitudes about technologies (Marler, Liang, & Dulebohn, 2006); and has a positive influence on the technology acceptance and the intention to use it (Escobar-Rodriguez & Monge-Lozano, 2012). In particular, the study by Mehta (2014) on training elements applied in the e-learning context showed a positive outcome where individuals' technology acceptance is correlated with perceived ease of use and perceived usefulness, and the intention to use the technology. Such training also provides diverse knowledge of the people before and after the training (Smith, 2012). Efficient training programmes provided by the institution can improve educators' level of confidence to easily use the technology, which subsequently develops their intentions to integrate it into their teaching process (Teo, Huang & Hoi, 2018). As a result, effective training will allow the strategy to increase learners' control and engagement (Johnson, List-Ivankovic, Eboh et al., 2010) and decrease the attrition (Salmon 2004) of individuals' acceptance behaviour of the intention to adopt technologies.

In regards to voluntariness, this situational variable is also suggested to have an interaction effect in the context of acceptance behaviour; it was examined in numerous studies on IT acceptance research (Venkatesh, 2000; Venkatesh et al., 2003; Venkatesh & Bala, 2008). It was introduced by Moore and Benbasat (1996) by extending Roger's DOI theory. Past studies also found significant effects of voluntariness variable in mandatory settings, but not in the non-mandatory circumstances (Hartwick & Barki, 1994; Moore & Benbasat, 1996; Agarwal & Prasad, 1997). In a meta-analysis study by Chiu and Ku (2015), it was evidenced that voluntariness context moderates the effects of acceptance behaviour on the intention to use. Such effects were stronger in high-voluntarily settings.

Lastly, the introduction of class size as the moderating factor seems promising in the modernisation of the technology era. A study conducted by Wu, Hsu, and Hwang (2008) found that educational technologies' acceptance and resistance using school factors are unexplored and need to be examined further. Their findings also suggested that educators in small school sizes tended to have a positive attitude towards technology use. The work of Tian, Bian, Han, Gao, and Wang (2017) used class sizes as a moderator in different settings and found that class sizes influenced the academic engagement towards behavioural changes. In this sense, smaller class sizes would inflict less pressure on educators, giving them ample time and opportunities to learn new technologies, offer emotional support and appropriate responses to their students (Beattie & Thiele, 2016; Tian et al., 2017). Thus, this would encourage readiness, acceptance behaviour, and intention to use such technologies in the classroom.

Based on the literature discussed, this study, therefore, postulates the hypotheses (Table 1) for the main effect and interaction effects between the accounting educators' acceptance behaviour and conscientiousness trait with the intention to adopt educational technology.

Table 1. Hypotheses development for main effect and interaction effects

Main effect hypotheses	
H1	There is a positive influence of perceived usefulness (ACPU) on the intention to adopt educational technology by the accounting educator
H2	There is a positive influence of perceived ease of use (ACPEU) on the intention to adopt educational technology by the accounting educator
H3	There is a positive influence of attitude towards use (ACAU) on the intention to adopt educational technology by the accounting educator
H4	There is a positive influence of conscientiousness trait (PTCO) on the intention to adopt educational technology by the accounting educator
Interaction Effect Hypotheses for EXP	
H5a	The positive influence between perceived usefulness (ACPU) and the intention to adopt educational technology will be stronger for high experience
H5b	The positive influence between perceived ease of use (ACPEU) and the intention to adopt educational technology will be stronger for high experience
H5c	The positive influence between perceived usefulness (ACAU) and the intention to adopt educational technology will be stronger for high experience

Interaction Effect Hypotheses for TF	
H6a	The positive influence between perceived usefulness (ACPU) and the intention to adopt educational technology will be stronger for frequent training
H6b	The positive influence between perceived usefulness (ACPEU) and the intention to adopt educational technology will be stronger for frequent training
H6c	The positive influence between perceived usefulness (ACAU) and the intention to adopt educational technology will be stronger for frequent training
Interaction Effect Hypotheses for VOL	
H7a	The positive influence between perceived usefulness (ACPU) and the intention to adopt educational technology will be stronger for mandatory
H7b	The positive influence between perceived usefulness (ACPEU) and the intention to adopt educational technology will be stronger for mandatory
H7c	The positive influence between perceived usefulness (ACAU) and the intention to adopt educational technology will be stronger for mandatory
Interaction Effect Hypotheses for CSIZE	
H8a	The positive influence between perceived usefulness (ACPU) and the intention to adopt educational technology will be stronger for small class size
H8b	The positive influence between perceived usefulness (ACPEU) and the intention to adopt educational technology will be stronger for small class size
H8c	The positive influence between perceived usefulness (ACAU) and the intention to adopt educational technology will be stronger for small class size

Note. ACPU – Acceptance Behaviour of Perceived Usefulness; ACPEU - Acceptance Behaviour of Perceived Ease of Use; ACAU - Acceptance Behaviour of Attitude towards Use; PTCO – Personality Trait of Conscientiousness; EXP – Experience; TF – Training Frequency; VOL – Voluntariness; CSIZE – Class Size.

3. Methodology of the study

The convenience sampling and questionnaire survey methods were administered on 275 accounting educators from 12 public universities in Malaysia, offering bachelor’s degree programmes in the accounting discipline. About 195 completed responses were received within five months of distribution. The public universities in Malaysia are among the high ranked in the QS World University Ranking, and the number of accounting graduates produced is prominent compared to the private university (Abd Jalil, 2018). The survey questionnaire provided brief information about the definition of intention to adopt and the definition of 21st century educational technology adoption. Since there are limited information pertaining to the technology adoption profile among accounting educators, this study refers 10 categories of educational technologies as outlined by Watty et al. (2014) and Adam (2020), suitably for the 21st century accounting education landscape (see Appendix). The respondents may reflect themselves with any list of educational technologies from the categories they are practicing in the accounting classroom.

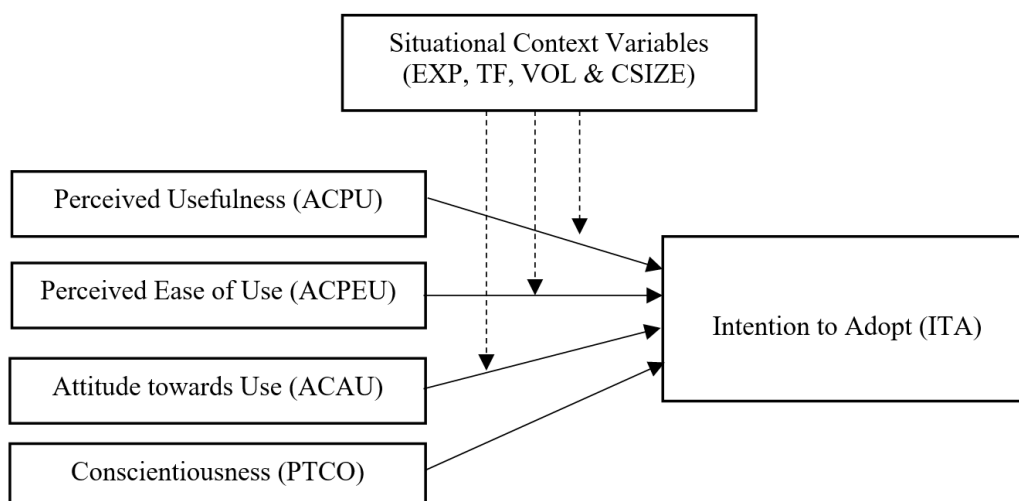


Figure 1. Framework of the study

The items of the survey are segregated into Section A for the demographic profile, Section B with 15 items on the intention to adopt measurements (ITA1–ITA15) with minor modification to suit with the context of the study, 21 adapted items in Section C, assessing the acceptance behaviour of perceived usefulness (ACPU1–ACPU7), perceived ease of use (ACPEU1–ACPEU7), attitude towards use (ACAU1–ACAU2), and conscientiousness trait (PTCO1–PTCO6). The items were assessed using the five-point Likert Scale, ranging from 1 = “Strongly Disagree” to 5 = “Strongly Agree”. Meanwhile, Section C listed four items of situational variables, which were then decoded into categorical variables for interaction effect analysis. Sources for the study were extracted from previous literature of reputable indexed publications authored by Gholami, Abdekhoda, and Gavani (2018), Abu Karsh (2018), Sultan, Woods, and Koo (2011), Agarwal and Prasad (1997), and Barnett et al. (2015). Outputs from this study were analysed using the SmartPLS 3.0 software, following the current requirement and rules of thumb for outer and inner measurement models. Furthermore, the framework of the study (Figure 1) is developed, considering the acceptance behaviour and conscientiousness trait towards the intention to adopt, followed by the testing of the interaction effect of various situational context variables.

4. Results and discussion of findings

4.1. Profile of respondents

The result of the demographic analysis shows the female respondents were the dominant gender, with 146 (74.9%) compared to the male with 49 (25.1%) respondents. The majority of the respondents were between 40 to 49 years old (53.3%), followed by those between 30 to 39 years old (30.2%), while 16.5% were under 50 years old and above. About 66.2% of the respondents possessed Philosophy Doctorate, whereas 32.8% have a Master’s Degree, and 1% have a professional qualification. In terms of current academic positions, more than half of the respondents (59.5%) are senior lecturers, followed by 22.6% associate professors and 13.8% lecturers. Professors and assistant professors shared the same percentage (2.1%). In this study, about 52.3% of the respondents frequently used educational technologies, while the rest mentioned they used them infrequently.

4.2. Assessment of reflective measurement

4.2.1. Internal consistency and convergent validity

This study applies a two-stage modelling technique following the steps recommended by Hair, Sarstedt, Ringle, and Gudergan (2018), the current update of SEM-PLS in information system research by Benitez, Henseler, Castillo, and Schubert (2020), to develop and examine the reflective measurement model for reliability and validity of the items and constructs, and subsequently to engage with the structural model (Hair, Hult, Ringle & Sarstedt, 2017b). Several assessments have been performed following the rules of thumb, such as internal consistency reliability, convergent validity, and discriminant validity to evaluate the model’s results (Henseler, Ringle, & Sinkovics, 2009; Chin, 2010; Roldán & Sánchez-Franco, 2012; Hair et al., 2017b). The results depicted in Table 2 also include the factor loading estimates of this study. The ranges are from 0.573 to 0.906 and significant at a 1% level, suggesting the measures’ reliability. For this study, all possible outer and inner paths were drawn, and output from the reflective measurement analysis was presented in diagrams and tabulated accordingly.

Table 2. Results for the measurement model

Construct	Indicator	Outer Loadings	Outer Weights	Cronbach Alpha α	Dillon–Goldstein’s ρ	Dijkstra–Henseler’s ρ_A	AVE
Intention to Adopt	ITA2	0.671***	0.127***				
	ITA6	0.646***	0.104***				
	ITA7	0.677***	0.132***				
	ITA8	0.765***	0.150***				
	ITA9	0.771***	0.136***				
	ITA10	0.805***	0.122***	0.906	0.921	0.904	0.52
	ITA11	0.725***	0.113***				
	ITA12	0.700***	0.109***				
	ITA13	0.771***	0.143***				
	ITA14	0.713***	0.145***				
	ITA15	0.638***	0.108***				

Acceptance	ACPU1	0.836***	0.184***				
Behaviour -	ACPU2	0.886***	0.187***				
ACPU	ACPU3	0.849***	0.176***				
	ACPU4	0.816***	0.143***	0.927	0.941	0.927	0.70
	ACPU5	0.816***	0.176***				
	ACPU6	0.884***	0.181***				
	ACPU7	0.751***	0.147***				
Acceptance	ACPEU1	0.817***	0.270***				
Behaviour -	ACPEU2	0.745***	0.216***				
ACPEU	ACPEU3	0.767***	0.141***				
	ACPEU4	0.822***	0.155***	0.875	0.902	0.865	0.57
	ACPEU5	0.790***	0.187***				
	ACPEU6	0.751***	0.210***				
	ACPEU7	0.573***	0.136***				
Acceptance	ACAU1	0.747***	0.163***				
Behaviour -	ACAU2	0.859***	0.167***				
ACAU	ACAU3	0.906***	0.189***				
	ACAU4	0.819***	0.206***	0.927	0.941	0.926	0.70
	ACAU5	0.805***	0.154***				
	ACAU6	0.834***	0.156***				
	ACAU7	0.865***	0.163***				
Personality	PTCO1	0.720***	0.255***				
Trait -	PTCO2	0.727***	0.175***				
PTCO	PTCO3	0.679***	0.213***	0.82	0.87	0.82	0.53
	PTCO4	0.816***	0.278***				
	PTCO5	0.760***	0.232***				
	PTCO6	0.666***	0.211***				
Situational	EXP						
Variable	TF	1.000	1.000	1.000	1.000	1.000	1.000
	VOL						
	CSIZE						

Note 1. ACPU – Acceptance Behaviour of Perceived Usefulness; ACPEU - Acceptance Behaviour of Perceived Ease of Use; ACAU - Acceptance Behaviour of Attitude towards Use; PTCO – Personality Trait of Conscientiousness; EXP – Experience; TF – Training Frequency; VOL – Voluntariness; CSIZE – Class Size.

Note 2. Situational variables have been decoded into “0” and “1” as the categorical variable.

Note 3. Loading indicators are significance when *** $p < 0.001$, (one-tailed test).

In order to achieve the uni-dimensionality of the constructs to ensure all indicators have equal factor scores loaded, the indicator loadings must be above 0.708, indicating that 50% or more of the variance in the observed variables were explained (Hair et al., 2017b). However, for the threshold loadings' value above 0.4, 0.5, 0.6, or 0.7, the indicators will be retained (Wülferth, 2013); if the loadings are below 0.4, then the reflective indicator must be removed from the model (Hulland, 1999; Avkiran & Ringle, 2018). Based on the measurement model in Figure 2, it can be concluded that the majority of the indicator loadings are above 0.5 since the AVE achieved the required minimum threshold of 0.50. Four indicators (ITA1, ITA3, ITA4, and ITA5) were removed one at a time from the lowest loadings, which contributed to the endogenous construct's AVE value of below 0.50. The removal of the items from the model involved only 10% of the whole measurement; thus, it can be assumed that it is a credible instrument design (Hair, Black, Babin, & Anderson, 2010; Hair, Babin & Krey, 2017a), especially when the testing is conducted in the Asia region.

Comparatively, all constructs of the model are considered satisfactory and strongly reliable, whereby both reliability scores assessment criterion using Dillon–Goldstein's ρ and the strict assessment of PLS consistent Algorithm of Dijkstra–Henseler's ρ_A , were above 0.70 (Nunnally & Bernstein, 1994; Dijkstra & Henseler, 2015; Hair et al., 2018; Benitez et al., 2020). None of the variable scores from the three assessments' criterion exceeded the problematic values of 0.95, which suggests redundancy.

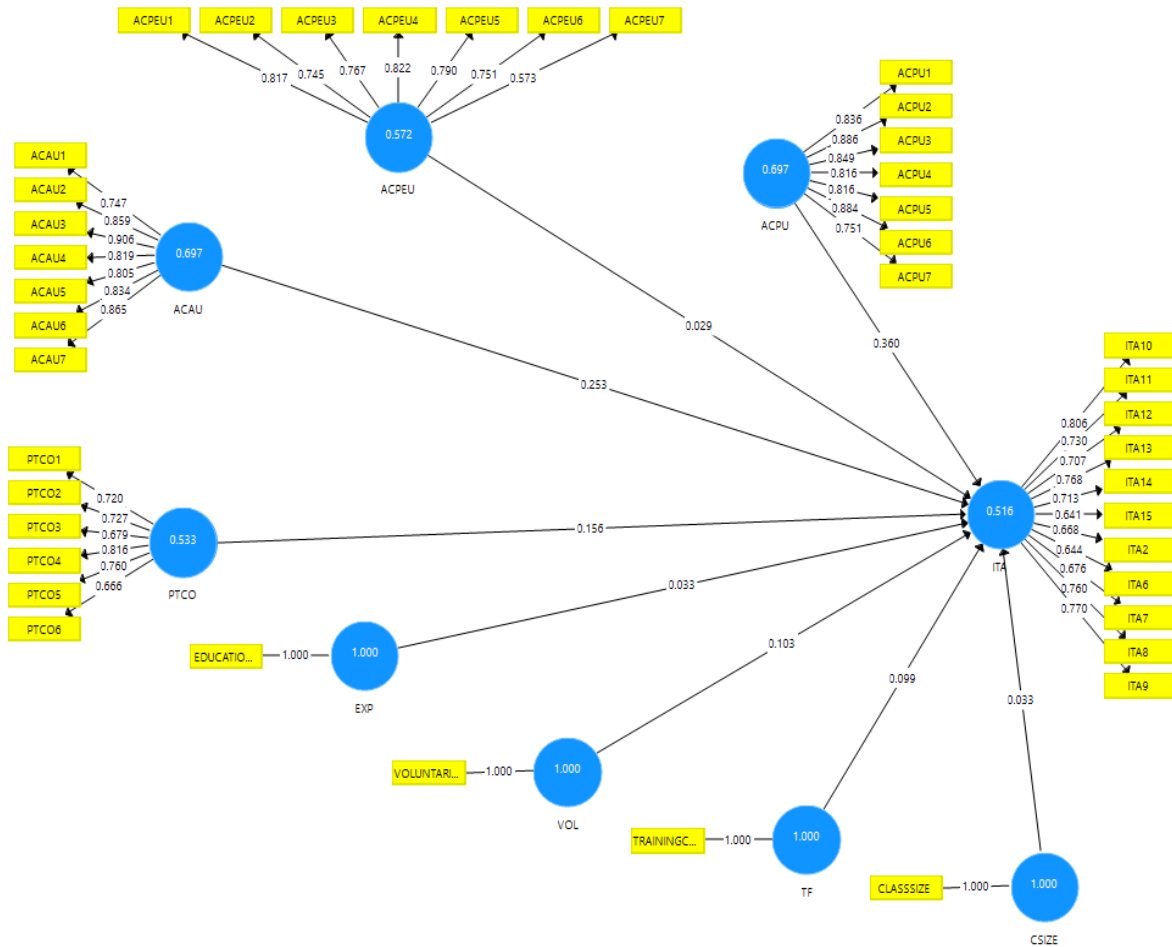


Figure 2. Measurement model of the study

4.2.2. Discriminant validity

The recent discriminant assessment is extended by using the heterotrait-monotrait (HTMT) ratio, as proposed by recent research (Henseler, Ringle, & Sarstedt, 2015; Voorhees, Brady, Calantone, & Ramirez, 2016), particularly in information system research (Benitez et al., 2020). Table 3 illustrates the discriminant validity results of HTMT, which indicate a satisfactory level for all constructs. The HTMT values present a lower value than 0.90 for the lenient threshold and the recommended strict threshold of less than 0.85 (Voorhees et al., 2016; Franke & Sarstedt, 2019). Furthermore, the two-sided of 5% and 95% percentile confidence interval (lower and upper CI) of HTMT does not include the value of 1, indicating that the latent variables are significantly different from 1 on any of the constructs (Henseler et al., 2015); hence, confirming the discriminant validity.

Table 3. HTMT criterion evaluation for discriminant validity

	ITA	ACPU	ACPEU	ACAU	PTCO	EXP	TF	VOL	CSIZE
ITA									
	0.674								
	CI. ⁹⁵								
	(0.569,								
	0.757)								
ACPEU	0.564	0.689							
	CI. ⁹⁵	CI. ⁹⁵							
	(0.450,	(0.605,							
	0.663)	0.770)							

ACAU	0.661 CI. ⁹⁵ (0.550, 0.731)	0.750 CI. ⁹⁵ (0.680, 0.810)	0.783 CI. ⁹⁵ (0.708, 0.841)					
PTCO	0.429 CI. ⁹⁵ (0.306, 0.544)	0.265 CI. ⁹⁵ (0.162, 0.392)	0.443 CI. ⁹⁵ (0.315, 0.548)	0.444 CI. ⁹⁵ (0.335, 0.556)				
EXP	0.219 CI. ⁹⁵ (0.080, 0.324)	0.144 CI. ⁹⁵ (0.054, 0.244)	0.110 CI. ⁹⁵ (0.053, 0.149)	0.168 CI. ⁹⁵ (0.054, 0.244)	0.370 CI. ⁹⁵ (0.254, 0.490)			
TF	0.383 CI. ⁹⁵ (0.276, 0.471)	0.327 CI. ⁹⁵ (0.232, 0.421)	0.429 CI. ⁹⁵ (0.318, 0.521)	0.380 CI. ⁹⁵ (0.269, 0.466)	0.213 CI. ⁹⁵ (0.086, 0.325)	0.116 CI. ⁹⁵ (0.020, 0.190)		
VOL	0.116 CI. ⁹⁵ (0.061, 0.176)	0.055 CI. ⁹⁵ (0.032, 0.063)	0.111 CI. ⁹⁵ (0.061, 0.167)	0.062 CI. ⁹⁵ (0.020, 0.115)	0.078 CI. ⁹⁵ (0.031, 0.097)	0.108 CI. ⁹⁵ (0.014, 0.222)	0.134 CI. ⁹⁵ (0.029, 0.244)	
CSIZE	0.050 CI. ⁹⁵ (0.029, 0.055)	0.093 CI. ⁹⁵ (0.040, 0.173)	0.062 CI. ⁹⁵ (0.025, 0.107)	0.068 CI. ⁹⁵ (0.026, 0.129)	0.081 CI. ⁹⁵ (0.025, 0.127)	0.153 CI. ⁹⁵ (0.019, 0.335)	0.120 CI. ⁹⁵ (0.083, 0.167)	0.086 CI. ⁹⁵ (0.014, 0.199)

Note. ACPU – Acceptance Behaviour of Perceived Usefulness; ACPEU - Acceptance Behaviour of Perceived Ease of Use; ACAU - Acceptance Behaviour of Attitude towards Use; PTCO – Personality Trait of Conscientiousness; EXP – Experience; TF – Training Frequency; VOL – Voluntariness; CSIZE – Class Size.

4.3. Assessment of the structural model

4.3.1. Evaluation of path coefficients, significance levels and their effect sizes

Several standard assessment criteria have been applied to assess the structural model, including the coefficient of determination (R^2), the blindfolding-based cross-validated redundancy, measuring the Q^2 , and also to test the statistical and relevance of the path coefficients (Hair, Risher, Sarstedt, & Ringle, 2019). Table 4 explains the results' direct effect result of the exogenous and endogenous constructs, as well as the interaction effects. Three hypotheses were supported (H1, H3 and H4), whereby the p -value $< .001$ and positively influenced the main effect of endogenous constructs. The coefficients of ACPU ($\beta_1 = 0.376$, $t = 4.021$), ACAU ($\beta_2 = 0.258$, $t = 2.555$), and PTCO ($\beta_3 = 0.178$, $t = 2.967$) showed a significant and strong positive influence of ITA, except the effect of ACPEU. Additionally, using the recommended confidence intervals to measure the results' precision, the percentile bootstrap confidence interval for the path coefficient estimate is considered statistically different from zero at a 5% significance level when its p -value is below 0.05 or when the 95% bootstrap percentile confidence interval constructed around the estimate does not include zero.

Figure 3 illustrates the R^2 result of 0.483 (48.3%), which is considered substantial (Cohen, 1988) and indicates a strong magnitude of the variance in the intention to adopt, explained and predicted by the exogenous constructs. Moreover, this value above the minimum threshold is widely embraced by many recent literature works (e.g., Benitez et al., 2020; Herrador-Alcaide, Hernández-Solís, & Hontoria, 2020) on the adoption of innovation and information system field. Furthermore, the PLS model of the tested paths demonstrates evidence of predictive relevance, with Q^2 of 0.238 indicating the model's index of reconstruction goodness by model and parameter estimations (Andreev, Heart, Maoz & Pliskin, 2009), which measures the extent of the model's prediction success (Urbach & Ahlemann, 2010).

In this study, the interaction effects using the variables of situational context are used to identify the interactions between the exogenous constructs and endogenous construct. Table 4 shows that three hypotheses are supported (H5c, H6b, and H7b), while the other hypotheses did not exhibit interaction effects between the measured constructs. The significant effects also imply that the confidence interval did not straddle to zero, which signifies the meaningful interaction effects. Meanwhile, the effect sizes of the hypotheses ranged from small to medium. The finding is consistent with many studies in the education field, such as Kraft (2020), which mentioned that

the small effect interpreted by Cohen's standards is often large and meaningful and difficult to achieve large effect sizes (Bakker, Cai, English, Kaiser et al., 2019). Meanwhile, a minimum of 0.02 is recommended for practical significance (Franzblau, 1958; Lipsey, 1998), specifically in the education context.

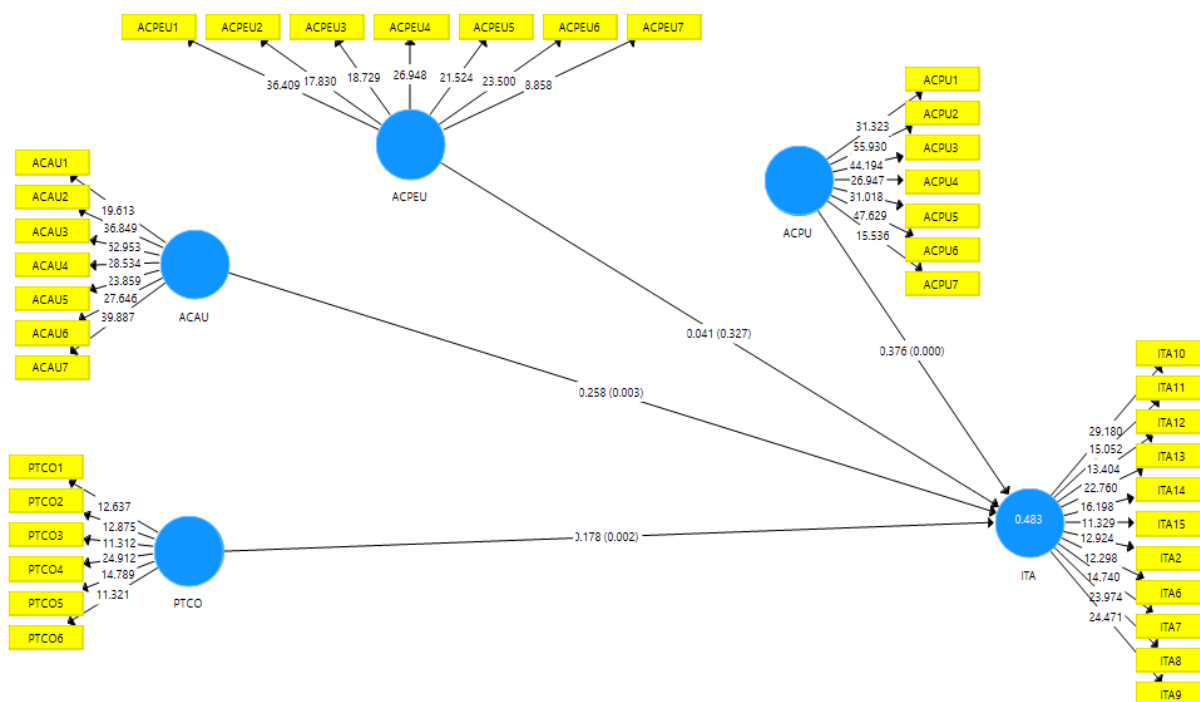


Figure 3. Main effects of the structural model

Table 4. Structural model evaluation

Relationship	Path Coefficient	f^2	R ² Included	R ² Excluded
Main effects:				
Perceived Usefulness → Intention to Adopt (H1)	0.376*** (4.021) [0.069, 0.408]	0.13		
Perceived Ease of Use → Intention to Adopt (H2)	0.041 (0.478) [-0.122, 0.159]	None		
Attitude towards Use → Intention to Adopt (H3)	0.258*** (2.555) [0.069, 0.408]	0.05		
Conscientiousness → Intention to Adopt (H4)	0.178*** (2.967) [0.071, 0.265]	0.05		
Interaction effects: EXP				
ACPU*EXP → ITA (H5a)	0.411 (0.878) [-0.481, 0.997]	None	0.400	0.392
ACPEU*EXP → ITA (H5b)	0.037 (0.113) [-0.625, 0.470]	None	0.290	0.291
ACAU*EXP → ITA (H5c)	0.516** (1.732) [0.013, 0.971]	0.04	0.423	0.399
Interaction effects: TF				
ACPU*TF → ITA (H6a)	0.149 (1.205) [-0.215, 0.249]	0.02	0.437	0.424
ACPEU*TF → ITA (H6b)	0.145** (2.191) [0.027, 0.240]	0.02	0.327	0.314
ACAU*TF → ITA (H6c)	0.061 (1.009) [-0.071, 0.136]	None	0.415	0.413
Interaction effects: VOL				
ACPU*VOL → ITA (H7a)	-0.323 (1.527) [-0.671, 0.025]	0.03	0.418	0.403
ACPEU*VOL → ITA (H7b)	0.426** (2.276) [0.735, 0.117]	0.04	0.334	0.310
ACAU*VOL → ITA (H7c)	-0.166 (1.042) [-0.429, 0.097]	None	0.419	0.415
Interaction effects: CSIZE				
ACPU*CSIZE → ITA (H8a)	0.131 (0.076) [0.001, 0.319]	None	0.403	0.394
ACPEU*CSIZE → ITA (H8b)	-0.025 (0.060) [-0.180, 0.160]	None	0.288	0.287
ACAU*CSIZE → ITA (H8c)	0.030 (0.034) [-0.237, 0.138]	None	0.394	0.393

Note. *t*-values (one-tailed test) are presented in parentheses. Percentile bootstrap confidence intervals are presented in brackets.

5. Discussion on the findings

The findings of the main effects show that perceived usefulness (ACPU), attitude towards use (ACAU), and conscientiousness (PTCO) are significant; thus, they can be predictors to the intention to adopt educational

technology. In line with many other studies, ACPU is one of the strong predictors that influence individuals' intention to adopt educational technology (Al-Marouf & Al-Emran, 2018; Kanwal & Rehman, 2017). Researchers posited that when educators realise the high value of educational technology, they will eventually transform their teaching and learning activities by adopting technology (Akinde & Adetimirin, 2017; McKenney & Visscher, 2019).

Next, attitude (ACAU) variable were also found to be a strong determinant that influences a person's intention to adopt the technology. Therefore, educators with positive attitude towards the use of technology in teaching and learning will potentially be leaning towards implementing or embedding technology in their instructional process (Elkaseh, Wong, & Fung, 2016). This has been highlighted in many studies, which found that a positive attitude towards technology use will result in more efficient use of technology in the teaching and learning process by educators (Guillén-Gámez & Mayorga-Fernández, 2020).

For conscientiousness (PTCO), the significant finding indicates that the accounting educators tend to have similar characters as professional accountants, such as their sensing, thinking, and judging (Bealing, Baker & Russo, 2006), attention to detail, creativity, flexibility, and excellent organisation (Myler, 2021); thus, there is a high probability that educators with high conscientiousness would integrate technology in their instructional activities.

Meanwhile, perceived ease of use (ACPEU) is found to be insignificant. A plausible explanations for this finding could be related to the values and beliefs of accounting educators themselves who not acknowledge the changes of teaching and learning preferences with current needs (Hartman, Townsend & Jackson, 2019), interpreting educational technology as unimportant and not significant to their teaching and learning (Demirbağ & Kılınç, 2018). In this sense, integrating technology in teaching and learning process may be regarded as overwhelming and a burden for accounting educators since it requires much effort to learn and may involve additional costs in terms of financial and time to acquire the skills (Cheung, Wan, & Chan, 2018). In relation to the typical accounting mind-set, accounting educators may assess whether the potential investment in using technology outweighs the cost and guarantee the return (Carlson, 2019). They may use educational technology when it is perceived as useful, meet the learning objectives, and facilitates the instruction process (Akinde & Adetimirin, 2017). In a nutshell, although educational technologies are relatively easy to use and meaningful, the sense of burden, costly and resistance could prevent educators from exploring the opportunities further (Hartman et al., 2019).

On the other hand, of the four situational context variables, three showed interaction effects, namely educational technology experience (EXP), training frequency (TF), and voluntariness (VOL) (excluding the class size [CSIZE]). However, the interaction effects of the three variables affect only one item of TAM. For instance, EXP shows significant interaction effects between ACAU and the intention to adopt technology. Several studies (e.g., Gist, Rosen, & Schwoerer, 1988; Gist, Schwoerer, & Rosen, 1989; Igbaria, Guimaraes & Davis, 1995) corroborate, which suggested that experience could improve individuals' perception and belief about technology use. In particular, when individuals are exposed to technology and have used it for an extended period, it will eventually improve their attitude towards technology use (Hong, 2016).

Correspondingly, training frequency (TF) and voluntariness (VOL) show significant interaction effects between ACPEU and intention to adopt technology, respectively. In view of that, educators could overcome the barriers or anxiety in using technology by getting sufficient training. This is explained by Hu et al. (1999), claimed that training can change individuals' self-efficacy and affect their willingness to adopt technology, including the advanced one. In other words, the number or length of training that educators have will influence their perception of technology's ease of use. Meanwhile, voluntariness (VOL) is the explicit condition that assists in the understanding of individuals' perception of using a specific technology (Venkatesh & Davis, 2000). Thus, educators are likely to use technology, either directly through compliance with mandatory settings or indirectly by recognising the technology's usefulness due to the identification and internationalisation process (Abbasi et al., 2015). The findings of this study are in line with the study by Venkatesh and Davis (2000), which found that individuals will perform a specific behaviour as instructed (in this case, using technology) without prioritising their intentions.

Conversely, the insignificant interaction effects witnessed that perceived usefulness (ACPU) and perceived ease of use (ACPEU) are not moderately influenced by accounting educators' level of experience (EXP) in using technology in their classroom. This is probably related to when individuals are familiarised with technology features and criteria and gain practical experience with them; hence, affecting the perceived ease of use and perceived usefulness would drift away into the background (Tripathi, 2018). Meanwhile, training frequency (TF) and voluntariness (VOL) do not moderately influence both perceived usefulness (ACPU) and attitude (ACAU).

In this sense, ineffective training programmes and poor training content could lead to poor inculcation of positive attitude and difficulties in changing educators' perceptions about the usefulness of technology (Ibrahim, Isa, & Shahbudin, 2016; Akinde & Adetimirin, 2017) in accounting education.

Furthermore, similar to past studies (e.g., Agarwal & Prasad 1997; Chiu & Ku, 2015), voluntariness did not moderately affect attitude as this particular context may be driven by personal interests. Educators either might voluntarily or mandatorily use technology when this effort could meet their personal interests, whether it is favourable or unfavourable (Quazi & Talukder, 2011; Alshmrany & Wilkinson, 2017). Perhaps, the effects between voluntariness and attitude and perceived usefulness could be achieved when accounting educators are surrounded by highly voluntary settings from their colleagues, management, and institutional environment (Fathema, Shannon, & Ross, 2015; Durodolu, 2016; Weerasinghe & Hindagolla, 2017; Opoku & Enu-Kwesi, 2020).

On the other hand, the class size (CSIZE) also did not moderate all the acceptance behaviour constructs (e.g., ACPU, ACPEU and ACAU). This might be explainable as the class size reflects the classroom capacity and may not have a strong influence on strengthening the relationship between accounting educators' acceptance behaviour and their intention to use technology. Educators might think that regardless of the class size, whether big or small, the efforts (e.g., cost, time, skills and knowledge) to prepare themselves with technology would be the same. However, this assumption and perception could be developed and changed when educators have positive attitude, realise the potential benefits of technology in teaching and learning, aware of their need to learn and capture the importance of embracing such technologies in the classroom (Ibrahim et al., 2016).

6. Conclusion and future study

The use of educational technology is widely accepted by educators in many disciplines throughout the world as its benefits are prominently evidenced in the 21st century environment. The merging of e-learning and other educational technology approaches has greatly affected accounting education, whether secondary, tertiary, or professional accounting programmes. Technology affects accounting education in developing the intellectual capital pool by improving teaching quality and inculcating the culture of lifelong learning. This study revealed that TAM and personality traits of conscientiousness could measure individuals' intention towards educational technology. At the same time, characteristics of accountant professionals, especially conscientiousness-related, are reflected. If educational technology is uncomplicated and easy to use but not particularly useful, the intention to adopt is not present and not even considered. The reason being, usefulness implies high return and great benefits for their time, finance, and investment.

Meanwhile, interaction effects' results showed that only experience, training, and voluntariness affect the interaction between certain variables. Moreover, class size did not affect the accounting educators' intention to adopt educational technology in their teaching practices. Several results show the significance and various meaningful indications, especially in the educational context, from small to medium size. Furthermore, this study has its limitations; for example, the sample size of the study might be deemed modest compared with the population. Future studies should consider investigating by using the non-random sampling technique, and also, they could choose individuals who have embraced educational technology for some time or frequently.

In conclusion, the interaction effects' results suggest that the intention to adopt educational technology is derived from the perspectives of individual factors or their attributes. Other factors that might influence their acceptance behaviour will not be affected substantially. Therefore, considering more on individual factors, such as other personality traits that are not commonly associated with individuals in accounting background, would be a meaningful step to generate more findings on the intention to adopt. Future studies may also further explore the accounting educators' characteristics and demographic factors, such as gender, age group, working experience, academic position, income level, and so forth, to understand this technology adoption pattern from an individual perspective. In addition, many studies revolve around students' performance and the impact of using technology. Still, studies on the adoption factors by educators from the academic's perspectives are limited.

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Appendix: Survey Questionnaire

Guidelines for the respondent while answering this survey:

Definition of Intention to Adopt: refers to the individual's willingness to perform a given behavior.

Definition of 21st Century Educational Technology Adoption: the use of any forms of technology-based devices or platforms, tools, approach and resources since 2000s from various areas of knowledge in the design and development of instructional practice for teaching and learning activities.

Based on the definition of the abovementioned terms, the following list of items are examples of the most prevalent educational technology tools, platforms, approach and resources as a reference to reflect your intention to adopt. Perhaps the list is different from your current practice, but it is acceptable as long as it is under the above definition and not limited to the given examples.

Table 1. Examples of 21st Century Educational Technology that can be integrated in Accounting Education

No.	Categories of Education Technology	Example	Example of Application in Teaching and Learning Environment
1.	Learning Management Systems (LMS)	Moodle; Blackboard; Desire2Learn; iLearn System; MOOCs; i-Folio; Claroline; MyGuru2; Learning Care; Learning Cube; Blackboard; PutraLMS; MyLMS; UFuture.	This software application is often used for documentation, administration, tracking, reporting, delivering educational courses, training programs, or learning and development programmes. It also allows accounting educators to personalise teaching activities to be interactive.
2.	Social Media or Collaborative Technologies	Blogs; Wikis; Twitter; Facebook; Instagram; YouTube; Google Drive; Dropbox; Vimeo; Metacafe;	Social media or collaborative technologies provide powerful means of interaction and communication between the accounting educators and students to discuss any educational-related matters.
3.	Communication	<i>Asynchronous</i> (e.g., Online Discussion Board; e-mail; WhatsApp; WeChat; Telegram) <i>Synchronous</i> (e.g., Skype; Google Hangout; Adobe Connect; Bloomz; Remind; Sli.do)	The use of communication software and applications provide an alternative way to communicate and help to build a flexible accounting educator-student interaction without space and time boundaries when discussing educational matters.
4.	Simulated Learning Systems – Institutional Customised Development	The Normalised Game; Legends of Learning; Classcraft; SiLAS Solutions; CodaQuest; Animoto, Legends of Learning	Often used to simulate reality, either a system or environment and includes instructional elements to help students to learn, explore, navigate, or obtain information.
5.	Learning Styles or Approach Concept	Gamification; Padlet; Nearpod; Kahoot! Socrative; Blended-Learning; Mobile-Learning; Distance / Online Learning, Peardeck	The application of these approaches provides a different perspective than the traditional teaching practice as it motivates students to engage and participate actively during the teaching and learning activities. Accounting Educators may personalise the content of teaching, create assessments, and have interactive classroom activities.

6.	Mobile Technology	Tablet computer; Smartphones; Mobile Apps (e.g., iOS, Android)	Mobile technology generally used for cellular communication, and also for cooperative learning where accounting educators may provide students with electronic information and educational content, also known as mobile learning or m-learning that assist in the acquisition of knowledge through a variety of mobile devices.
7.	Technology Assessment or Evaluation	Quizlet; Quizlet live; Google classroom; Quizizz; Formative; MOOCs; ZipGrade; Flipgrid; Scan Attendance Manager; Plickers; Kahoot!; Write to Pdf; Google Spreadsheet; Google Form; ClassDojo	The use of these applications helps educators convert to a digital testing environment– tracking and assessing their students’ performance. They also facilitate communication between accounting educators and students and create digital records for students’ growth and development. More importantly, these applications serve as platforms and mediums for teaching, learning, and assessment.
8.	Presentation and Learning Resource Creation Tools	<i>Software</i> (e.g., Adobe Presenter; Voice Recognition Software; Microsoft PowerPoint; Google Slide; Book creator; Adobe Captivate; Screen capture, i.e., Jing, Camtasia; Prezi; Powtoon; Padlet; Nearpod; Google Slides; Canva; PiktoChart; Adobe Acrobat Reader; Showbie; Plotagon Education) <i>Hardware</i> (e.g., Drawing Tablet, i.e., Wacom; Microphones; In-class Document Reader; Smartphones)	With these applications, accounting educators and students engaged in technological tools and platforms to create presentation and learning resources in a creative, interactive, and enjoyable manner. These applications provide a more engaging way to deliver educational content, accessibility, and better-conveyed presentation.
9.	Learning Objects or Resources	eBooks; Lecture notes or slides; Narrated PowerPoint slides; Podcast, i.e., audio & video; Video lecturers; Instructional videos; Automated video drawings; Flickr; Google Photos; Photobucket; HP Reveal; Aurasma; Google Drives; QR Code Scanner	Learning objects or resources provide tools and the building blocks for the teaching-learning process, prepare the content, learning activities and elements of context for teaching delivery. These applications enable accounting educators to search and access, and reuse objects and resources in learning activities.
10.	Accounting Tools	ATO eTax software; Microsoft ACCESS; Advanced Microsoft Excel; ABSS; Quickbooks; SAS Enterprise Guide; Internet Evidence Finder Forensics, UBS Accounting Software, SQL Accounting Software, ABSS, Mr. Accounting, AutoCount	These accounting tools can be used to manage the process and functions in accounting activities, such as recording and reporting financial information through electronic media and digital platform. Accounting Educators can expose students to these applications in line with the current technological environment.

SECTION A: RESPONDENT'S PROFILE

Please answer ALL questions by ticking (✓) in the box below the item number that BEST describes your situation.

1. Please specify your **AGE**.

<input type="checkbox"/>	25 – 29 years old
<input type="checkbox"/>	30 – 34 years old
<input type="checkbox"/>	35 – 39 years old
<input type="checkbox"/>	40 – 44 years old
<input type="checkbox"/>	45 – 49 years old
<input type="checkbox"/>	50 years old and above

2. Please specify your **GENDER**.

<input type="checkbox"/>	Male
<input type="checkbox"/>	Female

3. Please specify your highest **EDUCATION LEVEL**.

<input type="checkbox"/>	Philosophy Doctorate (Ph.D.) or DBA
<input type="checkbox"/>	Master Degree
<input type="checkbox"/>	Bachelor Degree
<input type="checkbox"/>	Professional Qualification (ACCA, CIMA, etc.)
<input type="checkbox"/>	Others: _____ (<i>Please specify</i>)

4. Please specify your **WORKING EXPERIENCE** as an educator.

<input type="checkbox"/>	Below 5 years
<input type="checkbox"/>	6 – 10 years
<input type="checkbox"/>	11 – 15 years
<input type="checkbox"/>	16 – 20 years
<input type="checkbox"/>	21 – 25 years
<input type="checkbox"/>	26 – 30 years
<input type="checkbox"/>	Above 30 years

5. Please specify your **CURRENT ACADEMIC APPOINTMENT**.

<input type="checkbox"/>	Professor
<input type="checkbox"/>	Associate Professor
<input type="checkbox"/>	Assistant Professor
<input type="checkbox"/>	Senior Lecturer
<input type="checkbox"/>	Lecturer
<input type="checkbox"/>	Assistant Lecturer
<input type="checkbox"/>	Tutor
<input type="checkbox"/>	Others: _____ (<i>Please specify</i>)

6. Average **CLASS SIZE** that you teach normally per semester.

<input type="checkbox"/>	Less than 10 students
<input type="checkbox"/>	10-15 students
<input type="checkbox"/>	16-20 students
<input type="checkbox"/>	21-25 students
<input type="checkbox"/>	26-30 students
<input type="checkbox"/>	More than 30 students
<input type="checkbox"/>	Others: _____ (<i>Please specify</i>)

7. Please indicate how **OFTEN** you adopt educational technology in your teaching and learning activities.

<input type="checkbox"/>	Not at all
<input type="checkbox"/>	Rarely
<input type="checkbox"/>	Occasionally
<input type="checkbox"/>	Frequently
<input type="checkbox"/>	Almost always
<input type="checkbox"/>	All the time
<input type="checkbox"/>	Others: _____ (<i>Please specify</i>)

8. Please indicate your **TRAINING LEVEL** of educational technology for teaching and learning purposes.

<input type="checkbox"/>	Not at all
<input type="checkbox"/>	Rarely
<input type="checkbox"/>	Occasionally
<input type="checkbox"/>	Frequently
<input type="checkbox"/>	Almost always

9. Please indicate your **EXPERIENCE** in using educational technology for teaching and learning activities.


<input type="checkbox"/>	Never learned about it formally
<input type="checkbox"/>	Learned, but not used
<input type="checkbox"/>	Learned, and used for at least one semester
<input type="checkbox"/>	Learned, and used it frequently

10. Please indicate your **VOLUNTARINESS** in using educational technology for teaching and learning activities.

<input type="checkbox"/>	Completely free to decide
<input type="checkbox"/>	Self-commitment, drive to adopt
<input type="checkbox"/>	Some mandated, but otherwise free to decide
<input type="checkbox"/>	Mandated in most aspects of teaching

SECTION B: RESPONDENT’S INTENTION TO ADOPT EDUCATIONAL TECHNOLOGY IN TEACHING AND LEARNING ACTIVITIES


The following questions describe your **INTENTION TO ADOPT educational technology in teaching and learning activities**. Please indicate if you agree or disagree with the following items by using the scale below.

1 = Strongly Disagree  5 = Strongly Agree

	SCALE				
	1	2	3	4	5
1. I will make physical changes to accommodate educational technology in my classroom or computer laboratory.					
2. I will ask my students to use educational technology to enable them to be self-directed learners.					
3. I will use educational technology to record my students’ learning activities.					
4. I will share all teaching materials using educational technology with my students.					
5. I will request students to access the teaching materials and resources using educational technology.					
6. I will use educational technology for my teaching management.					
7. I would incorporate educational technology (video, audio, animation) in my teaching and learning activities.					
8. I will conduct the assessment (e.g., quiz, test, simulation test, lab evaluation, project, etc.) using educational technology.					
9. I will instruct my students to use educational technology to complete their assignments and learning activities.					
10. I will motivate the students to communicate and interact using educational technology.					
11. I will ask my students to discuss and collaborate with other students using educational technology platform.					
12. I will use educational technology to encourage my students to share their opinion, response, and idea.					
13. I will perform my students’ continuous assessment evaluation using educational technology.					
14. I will evaluate my students’ skills acquisition using educational technology.					
15. I will request my students to provide feedback on the teaching and learning using educational technology.					

SECTION C: RESPONDENT’S ACCEPTANCE BEHAVIOUR AND INTENTION TO ADOPT EDUCATIONAL TECHNOLOGY IN TEACHING AND LEARNING ACTIVITIES

The following questions describe your **ACCEPTANCE BEHAVIOUR and intention to adopt educational technology in teaching and learning activities**. Please indicate if you agree or disagree with the following items by using the scale below.

1 = Strongly Disagree  5 = Strongly Agree

	SCALE				
	1	2	3	4	5
ACPU					
1. I perceive that educational technology enhances my instructive effectiveness in teaching and learning activities.					
2. I perceive that educational technology increases my performance and productivity in teaching and learning activities.					
3. I perceive that educational technology enables me to accomplish tasks in teaching and learning activities more quickly					
4. I perceive that educational technology makes my teaching and learning activities more effective.					
5. I perceive that educational technology gives greater control over my work in teaching and learning activities.					
6. I perceive that educational technology improves the quality of my work in teaching and learning activities.					

7. I perceive that educational technology supports the development of learning outcome in teaching and learning activities.					
ACPEU					
1. I have a clear and understandable interaction with educational technology for teaching and learning activities.					
2. I think the interaction with educational technology in teaching and learning activities is satisfying.					
3. I perceive that learning to operate educational technology and to apply it in teaching and learning activities is not complicated.					
4. I think it is not difficult to remember how to perform tasks using educational technology in teaching and learning activities.					
5. I perceive that interaction with educational technology in teaching and learning activities is flexible.					
6. I think I could become skilful at using technology in teaching and learning activities.					
7. I perceive that interaction with technology in teaching and learning activities does not require much effort.					
ACAU					
1. I think it is fun to use educational technology in teaching and learning activities.					
2. I look forward to the aspects of my job that require me to use educational technology.					
3. I feel passionate about using educational technology for my teaching and learning activities.					
4. I think I am satisfied with using educational technology in teaching and learning activities.					
5. I feel eager when my friends are talking about educational technology.					
6. I am excited when I am working with many types of educational technology in teaching and learning activities.					
7. I am enthusiastic when using educational technology in teaching and learning activities.					

CONSCIENTIOUSNESS TRAIT AND INTENTION TO ADOPT EDUCATIONAL TECHNOLOGY IN TEACHING AND LEARNING ACTIVITIES.

The following questions describe your **CONSCIENTIOUSNESS TRAIT and intention to adopt educational technology in teaching and learning activities**. Please indicate if you agree or disagree with the following items by using the scale below.

1 = Strongly Disagree —————→ **5 = Strongly Agree**

	SCALE				
	1	2	3	4	5
PTCO					
1. I am always prepared					
2. I do not waste my time					
3. I find it is not difficult to get ready to work					
4. I perform a job efficiently					
5. I carry out my plans					
6. I am carefully in my duties					

Thank you for your participation!