The Causal Relationship Model of Continuing Accounting Professional Development and Technology Adaptation Affecting Accounting Software Package Usage Skill and Accountant's Personal Values of Accounting Firms in Northern Thailand

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Abstract

This research aims to investigate the causal relationship model of continuing accounting professional development and technology adaptation affecting accounting software package usage skill and accountant's personal values, by using a questionnaire as an instrument for collecting data from 385 accountants of accounting firms in Northern Thailand. All composite reliability values ranged from 0.939 to 0.955. The data was analyzed by SEM using Lisrel. The results show that technology adaptation was the most influential factor directly on the accounting software package usage skills and indirectly on the personal values, with the mediator being accounting software package usage skill. The results also show that the measurement model was in congruence with the empirical data (χ^2= 145.075, p-value = 0.506, df= 146 (χ^2/df =0.993), RMSEA = 0.000, GFI = 0.962, AGFI = 0.954, NFI = 0.968, NNFI = 0.995). This model exhibits goodness of fit.

Keywords: 1) Continuing Accounting Professional Development 2) Technology Adaptation 3) Accounting Software Package Usage Skill 4) Accountant's Personal Values 5) Accounting Firms in Northern Thailand

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Introduction

The world has entered the age of the digital economy and society where the structure of economic and social activities has been influenced to change by technology. Besides, COVID-19 has brought a siginificant transition that has driven businesses to respond and adapt into the digital world. To be competitive with competitors, they need to equip with superior knowledge and information for quick decision making, creativity, and innovation. Accounting information is an essential part of business that fosters informed decision making and the direction of a business in the future. At present, most businesses use accounting firms to prepare accounting information. The pandemic has led a shift in the way accountants work. Yet they still need to maintain work standards to make them be accepted and trusted (Papadopoulou and Papadopoulou, 2020, p.39). This shift is challenging accountants to create self-value and reliability. Also, management expects their accountants'credibility and their expanding roles, from current accounting responsibilities and preparing reports to such boarder desired responsibilities in increasing value of the firm as applying technology to accounting work as well as analyzing and presenting information that is more useful for business decision-making (Chairat, 2020).

Based on the above circumstances, Chartered Global Management Accountant :CGMA has developed a framework called CGMA Competency Framework 2020 to help accountants understand the knowledge requirements and the skills needed for their profession, which include learning skill for professional development, professional skill and digital skill. Accountants require continuous commitments to professional development to ensure effective data processing, data analysis and reporting, and provide useful information to both internal and external data users according to professional standards. They also need adapt to learn basic digital technologies in Cloud Computing, Data Analytics and Digital Costing in order to increase their personal value and to change their role from data support to data advisor for business decision-making. This will enable accountants to strive in their professions sustainably by building more self-esteem (Thailand Federation of Accounting Professions, 2020).

Application of modern computer and communication systems to existing accounting information system can help accountants exchange accounting data efficiently and effectively, resulting in a more efficient and reliable overall performance (Jaiyen, et al., 2017, p.196). New generation accountants need to constantly develop other skills than accounting. Apart from accounting knowledge, accountants have to gain more knowledge related to the accounting profession or more cross-disciplinary knowledge. Especially in the digital age, accountants must have insights into business, technology and innovations and be able to apply well-rounded knowledge and modern technology as a tool with existing accounting software packages. This will increase the personal value of the accountant. All the aforementioned reasons have sparked an interest and promted the researchers in studying the causal relationship model of

continuing accounting professional development and technology adaptation affecting accounting software package usage skill and accountant's personal values of accounting firms in Northern Thailand

Objectives

The objective of the study is to investigate the causal relationship model of continuing accounting professional development and technology adaptation affecting accounting software package usage skill and accountant's personal values in accounting firms in Northern Thailand.

Literature Review

For the study of the causal relationship model of continuing accounting professional development and technology adaptation affecting accounting software package usage skill and accountant's personal values in accounting firms in Northern Thailand, the researchers conducted a literature review to create a research conceptual framework based on related documents, academic articles and research reports, which are presented in brief as follows.

Continuing Accounting Professional Development

Continuing accounting professional development refers to creating new experiences to develop knowledge and up-to-date professionalism to acquire new techniques for performing work continuously. The accountant's continuous learning can lead to a sense of self-worth, pride in their previous learning experiences, self-confidence and desired behaviors in performing accounting tasks more appropriately (Komalasari, et al., 2018, pp.262-273). Furthermore, differences in consistency in professional learning create different experience, thereby triggering different self-value behaviors. Continuous development of the accounting profession is vital to enable individual accountants to fully understand the true value of the profession. Learning to keep up with current changing situations will help individuals to have an understanding of how to adapt work behaviors appropriately and work in a goal-oriented manner as well as understanding how to perform tasks appropriately and distinguish between right and wrong through rational thinking rather than intuitive (Putra, Albab and Swara, 2019, p.105). Continuing professional accounting development also increases credibility in the accountant's professionalism, reflecting presonal value building. Both male and female accountants will value rational principles in their careers rather than their beliefs (Kapardis and Zopiatis, 2011, pp.59-70). Based on the reviewed literature, it can be seen that continuing accounting professional development is a factor that allows accountants to use rational thinking in their ethical practices and to create credibility in the profession that reflects the personal values. This research study, therefore, examined whether continuing accounting professional development had a significant positive effect on the accountant's self-value.

In addition, at present, accounting software packages are being used more and more widely in the preparation of accounting data. Accountants need to have a comprehensive

understanding of the accounting rules, regulations and standards in practice with continuous professional development, so that they can gain practical skills in choosing and using accounting software packages that specifically suit each business's circumsatance. Continuous professional development is considered to be essential to prepare accountants with better practical accounting skills (Wells, 2002, pp.24-28). Continuous professional knowledge development is established by the International Accounting Standard Education Board: IASEB in order for accountants to develop their knowledge to be able to apply in their professional practice reliably. Soa (2018, pp.145-150) stated that constant professional learning could bring about skills needed in the career. Moreover, continuing accounting professional development is a behavioral pattern in gaining and using new knowledge and new modern accounting information in practice, leading to practical skills in integrating various kinds of knowledge to achieve a more efficient accounting performance (Wongjinda and Ussahawanitchakit, 2014, pp.11-26). In addition, continuous accounting professional development is also necessary to improve the quality of work by continually learning new professional techniques which enhance the skills required in applying technology to the accounting practice to be more efficient (Frijat and Saleh, 2020, pp.28-44). Particularly in accounting that requires accuracy, speed and timely delivery in reporting accounting information, accountants need to continuously develop their accounting skills and apply technology skills they possess to help them perform better accounting tasks (Alsabahi, Bahador and Saat, 2020, pp.51-56). It can be seen that continuous accounting professional development is a factor that enhances skills in applying technology that can help improve accounting functions. This study, thus, examined whether continuing accounting professional development had a significant positive effect on the accounting software package usage skill.

Technology adaptation

Adaptation refers to the process of trying to change one's behavior to the environment that has changed, thereby being able to live or work normally and achieve what has been set forth (Sricharumedhiyan and Sricharumedhiyan, 2020, p.54). In this study, technology adaptation is defined as the accountants' adjustment of behavior to accept and apply modern technology for efficient accounting work (Kaneko and Yimruan, 2018, p.117). Phyu and Vongurai (2020) pointed out that accountants' adoptation of modern technology in their practice and adaptation to modern technology is an important factor affecting their skills in using accounting software. Similarly, Thottoli (2020) claimed that modern accountants who want to be efficient and reliable must learn and adapt modern accounting technology and build their skills in using accounting software in preparing financial statements and other relevant reports. The skills will enable accountants to perform their duties effectively, which reflects the accountant's personal value. Therefore, this study was intended to examine whether technology adaptation had a significant positive effect on the accounting software package usage skill,

and whether technology adaptation had a significant positive effect on their personal value.

Accounting software package usage skill

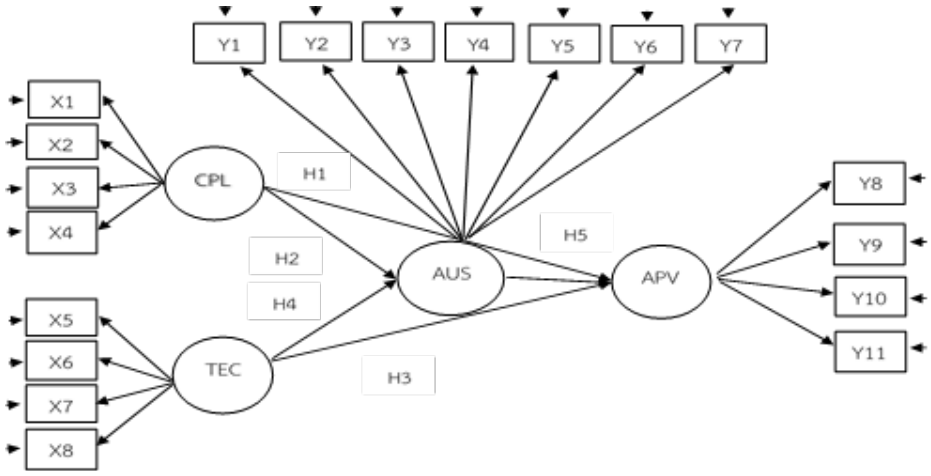
Accounting software package usage skill, in this study, is a technical ability of an accountant to properly and effectively use an accounting software package for accounting tasks. Thailand Federation of Accounting Professions (2020) noted that a good accounting software package usage skill will increase the accountant's personal value. Those with the skill will be able to produce accounting information to stakeholders and investors better and faster, and be able to analyze data and provide advice and consulting service to help management make decisions faster and more comprehensively. According to Tanaka and Sithole (2015, pp.47-52), the world has entered the era of the digital economy and society, resulting in changes in the data collection, storage, processing and accounting data, which requires technology to assist in data recording, analyzing and processing at every single step, so accountants must be skilled at using accounting software packages as well as other modern accounting technology. These skills greatly affect the efficiency and effectiveness of professional accountants contributing to sustainability in their work. This research study aimed to examine whether the accounting software package usage skill had a significant positive effect on the accountants' personal value.

Accountant's presonal value

Self-value or personal value is defined in this study as the value of a person as a result of having a good work performance, being reliable and gaining recognition for his/her work (Schwartz and Bardi 2001, p.269).

The value can explain the accountants' behavior that exhibits a strict commitment to the code of professional accounting ethics, and highly values adaptation in response to changes by continuous development of their competency. The value will help create good idealism that instills accountants' commitment to doing their job properly, complying with regulations, working with professional integrity to gain credibility, trust and acceptance (Mubako, et al., 2020; Laonamtha and Laohamethanee, 2014 pp.59-61). We can see from the literature review in this study that the accountant's personal value refers to the consequence of doing the job accurately, completely and reliably, and having ethical practice that leads to acceptance and trust from others.

The above related literature has demonstrated a causal relationship model of continuing accounting professional developments (CPL) and technology adaptation (TEC) affecting accounting software package usage skill (AUS) and accountant's personal values (APV). It has been formulated as a research conceptual framework to show the causal relationship of various variables as shown in Picture No. 1.



Picture No. 1 Research Framework

Research Hypothesis

Based on the review of literature and the causal relationship model framework of continuing accounting professional development and technology adaptation affecting accounting software package usage skill and accountant's personal values in accounting firms in Northern Thailand, the researchers formed the research hypotheses as follows.

H_1 : Continuing accounting professional development has a significant positive effect on the accountant's personal value.

H_2 : Continuing accounting professional development has a significant positive effect on accounting software package usage skill

H_3 : Technology adaptation has a significant positive effect on the accountant's personal value.

H_4 : Technology adaptation has a significant positive effect on accounting software package usage skill

H_5 : Accounting software package usage skill has a significant positive effect on the accountant's personal value.

H_6 : Continuing accounting professional development has a significant positive effect on the accountant's personal value through accounting software package usage skill as a mediator.

H_7 : Technology adaptation has a significant positive effect on the accountant's personal value through accounting software package usage skill as a mediator.

Methods

The research population was comprised of 9,178 accountants in accounting firms in Northern Thailand (Department of Business Development, 2020). The researchers were prompted to study accounting firms in Northern Thailand by a research study conducted by Choi, et al., (2010, pp.73-97) finding that accountants in large accounting firms delivered more reliable service than those in small ones in regional Thailand. We chose the northern region where accounting firms were mostly considerably small compared to those in the industrial economy region in Thailand. We were keen to find out what factors affected accountants in the Northern accounting firms in creating their own professional values and credibility.

The study sample consisted of 385 accountants in accounting firms in Northern Thailand, derived through Yamane's (1973) formula, at a 95% confidence level and a 5% margin of error. The sample size was calculated based on the following formula.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{9,178}{1 + 9,178*(0.05)^2}$$

$$n = 385$$

when N = Population size

n = Sample size

e = Sampling errors set at 0.05

The researchers theAn calculated the sufficiency of the sample size used in the structural equation model analysis according to the ratio of 20 per 1 observed variable (19*20 = 380) (Schumacker and Lomax, 2010). It can be concluded that the sample size derived through Yamane's was sufficient for the structural equation model analysis. In order to ensure that we would get a higher number of questionnaires returned, a copy of the questionnaire was sent to 1,910 participants by postal mail, using a stratified random sampling method. We received 392 copies of questionnaire back, 7 of which were incomplete and were excluded, making the total of 385 complete copies. The data collection took 160 days, with the response rate of 20.16%, which was higher than an acceptable response rate of 20% (Aaker, Kumar and Day, 2001).

The researchers developed a questionnaire as the research tool based on previous research studies related to continuing accounting professional development, technology adaptation, accounting software package usage skill and accountant's personal value. The questionnaire consisted of 5 parts. Part 1 is the respondent's general information, which includes 6 checklist questions about gender, age, marital status, education, work experience and average income. Part 2 is designed to collect opinions on Continuing Accounting Professional Development (CPL) as an exogenous latent variable, which includes 4 questions on training attendances (X1), opinion exchanging (X2), past mistake analysis (X3), and technical learning (X4). Part 3 covers opinions on Technology Adaptation (TEC) as an exogenous latent variable, including 4 questions about appropriate work behavior (X5), situation-based problem analysis (X6), understanding in work procedures (X7), and technical understanding of technology (X8). Part 4 covers opinions on Accounting Software Package Usage Skill (AUS) as an endogenous latent variable, consisting of 7 questions about professional insights (Y1), professional skills (Y2), professional experience (Y3), technical skills (Y4), problem-solving skills (Y5), work procedure reduction (Y6), and system analysis (Y7). Part 5 covers opinions on Accountant's Personal Values (APV) as an endogenous latent variable, including 4 questions about work accuracy(Y8), trustworthiness (Y9), recognition (Y10), and work ethics (Y11). The questions in Parts 2-5 are 5-ponit Likert scale questions. The questionnaire was tested for its content validity using an IOC technique by 3 experts. The IOC values ranged between 0.67 and 1.0. The questionnaire was then trialed and tested for its reliability and validity in terms of discrimination power through Item-Total Correlation. It was found that the

discrimination power values (r) of CPL, TEC, AUS and APV were between 0.801 and 0.954, which were higher than an acceptable value of 0.40 (Nunnally, 1978). The reliability was checked through Cronbach's Alpha Coefficient, ranging between 0.940 and 0.969, which were higher than 7.0 threshold, showing that the instrument was reliable (Nunnally and Bernstein, 1994). Measurement systems analysis was employed to verify validity and reliability as follows:

Measurement validity is the relationship between a concept and a measurement of that concept. In this study, the analysis was based on factor loading as shown in Table No. 1.

Table No. 1 Summary of Structural Model

Construct variables	Items	Standardized Estimates	T-Value	Loading	CR	AVE
Continuing accounting professional development (CPL)	X1	0.912	11.084	0.945	0.944	0.810
	X2	0.551	6.573	0.790	-	-
	X3	0.670	8.089	0.874	-	-
	X4	0.693	8.388	0.890	-	-
Technology adaptation (TEC)	X5	0.916	13.821	0.980	0.949	0.786
	X6	0.916	12.999	0.747	-	-
	X7	0.938	13.400	0.863	-	-
	X8	0.911	12.926	0.845	-	-
Accounting software package usage skill (AUS)	Y1	0.809	N/A	0.972	0.955	0.755
	Y2	0.833	9.019	0.789	-	-
	Y3	0.810	8.839	0.973	-	-
	Y4	0.818	8.901	0.878	-	-
	Y5	0.757	8.407	0.935	-	-
	Y6	0.798	8.743	0.864	-	-
	Y7	0.814	8.871	0.876		
Accountant's personal value (APV)	Y8	0.777	N/A	0.849	0.939	0.795
	Y9	0.890	9.719	0.829	-	-
	Y10	0.727	8.435	0.914	-	-
	Y11	0.782	8.896	0.853	-	-

The table shows that the 4 constructs were between 0.747 and 0.980, exhibiting sufficient evidence for measurement validity as t-values of factor loadings were statically significant (Chow and Chan, 2008, pp.458-462). The indices of Composite Reliability (CR) and Average Variance Extracted (AVE) are used to measure variables ξ_j in explaining the extent of validity and reliability of a construct (Hair, et al., 2010, pp.776-779). In Table No. 1, the factor loadings indicate if the measure of a construct is consistent. The CR was then calculated. The CR values were between 0.939 and 0.955, which were above 0.70 threshold, indicating sufficient measure validity and reliability (Fornell and Larcker, 1981, pp.39-50; Hair, et al., 2010, pp.776-779).

In the discriminant validity test, the researchers determined the cross correlation between construct variables in Table No. 2. It can be seen that the diagonal value, which is the squared AVE for each construct, is higher than the cross-correlation between that construct and the other constructs, thus demonstrating sufficient discriminant validity (Fornell and Larcker, 1981, pp.39-50). The AVE values obtained to compare the variance frame with the measurement error between 0.755 and 0.810, which were greater than 0.5 threshold, indicates sufficient measure validity and demonstrates sufficient discriminant validity. The findings show that discriminant validity of the model was achieved, that is, a measure of each construct was able to measure its own parent construct well, but not measure other construct of interest (Barclay, Higgins and Thompson, 1995, pp.285-309). The CR and AVE values were based on the following calculations.

Composite Reliability (CR) = square of the sum of the factor loadings, then divided by the square of the sum of the factor loadings plus the sum of error variances

$$CR = \frac{(\Sigma\lambda_{ij})^2}{(\Sigma\lambda_{ij})^2 + \Sigma Var(\varepsilon_{ij})} = \frac{(\Sigma\lambda_{ij})^2}{(\Sigma\lambda_{ij})^2 + \Sigma Var(1 - \lambda_{ij}^2)}$$

Average Variance Extracted (AVE) = sum of the squared factor loadings divided by the sum of the squared factor loadings plus the sum of error variances

$$AVE_j = \frac{\Sigma\lambda_{ij}^2}{\Sigma\lambda_{ij}^2 + \Sigma Var(1 - \lambda_{ij}^2)} = \frac{\Sigma\lambda_{ij}^2}{m_j}$$

Table No. 2 Mean, standard deviation, and discriminant construct validity

Variables	APV	AUS	CPL	TEC	VIF
Mean	4.176	4.179	4.198	4.138	
S.D.	0.539	0.566	0.539	0.676	
APV	1	-	-	-	
AUS	0.775*	1	-	-	3.352
CPL	0.682*	0.678*	1	-	1.931
TEC	0.744*	0.811*	0.638*	1	3.055

*statistically significant at 0.05

After collecting sufficient data, the researchers performed the data analysis as follows:

1. The respondents' general information was analyzed using frequency and percentage

2. The data from parts 2-5 were analyzed using mean, standard deviation and Pearson's correlation coefficient analysis.

3. The hypotheses were tested by the structural equation modelling of causal factors affecting the accounting software package usage skill and the accountant's personal values with empirical data by using the software Lisrel

Results

Descriptive results

The general information of the sample group, accountants in accounting firms in Northern Thailand, was collected through a survey using a questionnaire. The first part of the survey contained questions on demographic information, consisting of 6 checklist questions including gender, age, marital status, education level, work experience and average monthly income. The results show that most of the respondents were female (N=281, 73%); aged under 30 years (N=169, 43.9%) and between 30-35 years (N=141, 36.62%); single (N=261, 67.8%) and married (N=120, 31.17%); with a Bachelor's degree or lower (N=365, 94.81%); with less than 5 years of work experience (N=223, 46.4%) and with 5-10 years of experience (N=87, 22.6%); with a monthly income of 15,000-25,000 baht (N=197, 51.17%) and less than 15,000 baht (N=127, 32.99%) as shown in Table No. 3.

Table No. 3 Demographic Information of accountants of accounting firms in Northern Thailand

Demographic Information	N	Percent
1. Gender		
1.1 Male	104	27.00
1.2 Female	281	73.00
Total	**385**	**100.00**
2. Age		
2.1 Less than 30 years	169	43.90
2.2 30 - 35 years	141	36.62
2.3 36 - 40 years	53	13.77
2.4 More than 40 years	22	5.71
Total	**385**	**100.00**
3. Marital status		
3.1 Single	261	67.80
3.2 Married	120	31.17
3.3 Widowed/ divorced	4	1.03
Total	**385**	**100.00**

Demographic Information	N	Percent
4. Education level		
4.1 Bachelor's degree or lower	365	94.81
4.2 Higher than Bachelor's degree	20	5.19
Total	**385**	**100.00**
5. Work experience		
5.1 Less than 5 years	223	57.92
5.2 5 - 10 years	87	22.60
5.3 11 - 15 years	64	16.62
5.4 More than 15 years	11	2.86
Total	**385**	**100.00**
6. Average monthly income		
6.1 Less than 15,000 baht	127	32.99
6.2 15,000 – 25,000 baht	197	51.17
6.3 More than 25,000 baht	61	15.84
Total	**385**	**100.00**

Overall fit

The model fit was analyzed with the empirical data using the following indices: χ^2= 145.075, p-value = 0.506, df = 146 (χ^2/df =0.993), RMSEA = 0.000, GFI = 0.962, AGFI = 0.954, NFI = 0.968, NNFI = 0.995, IFI = 0.996, CFI = 0.996, RFI = 0.963, SRMR = 0.035, CN = 438.734. It was found that the chi-square showed no statistical significance, with χ^2/df smaller than 2; RMSEA smaller than 0.05; GFI, AGFI, NFI, NNFI, IFI and CFI greater than 0.95; and CN greater than 200. The findings indicate that the hypothetical model presented a goodness of fit with empirical data. In addition, the RFI above 0.95 threshold and the SRMR under 0.05 threshold demonstrate goodness of fit of the empirical data to the theoretical model (Schumacker and Lomax, 2010).

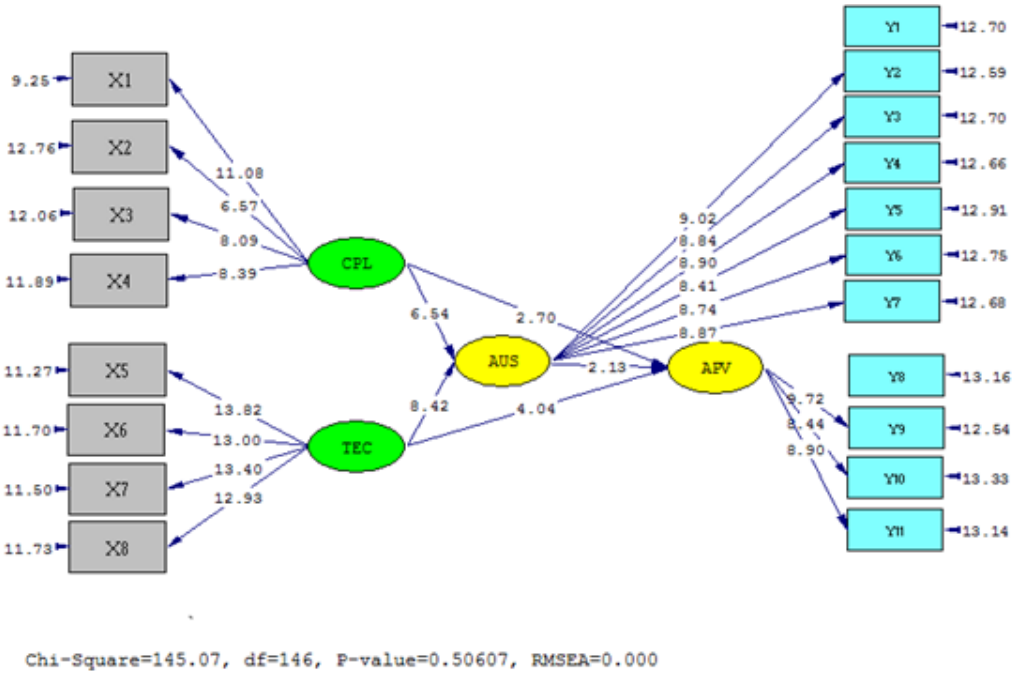
It can be concluded that all model goodness of fit was achieved and supported by the empirical data. The R2 values of the accounting software package usage skill and the accountant's personal value being 0.793 and 0.802, respectively reveal that the endogenous variable's variance can be explained by the independent variable's variance at 79.3% and 80.2% respectively. It is evident that the casual relationship model of continuing accounting professional development and technology adaptation affecting accounting software package usage skill and accountant's personal values exhibits a considerable goodness of fit with the empirical data as detailed in Table No. 4.

Table No. 4 Structural Equation Modeling Analysis

Indices	Criteria	Outcome	Interpretation
χ^2	-	145.075	-
Df	-	146	-
χ^2/df	χ^2/df<2	0.993	Accepted
P	p>0.05	0.506	Accepted
RMSEA	RMSEA<0.05	0.000	Accepted
GFI	GFI>0.95	0.962	Accepted
AGFI	AGFI>0.95	0.954	Accepted
NFI	NFI>0.95	0.968	Accepted
NNFI	NNFI>0.95	0.995	Accepted
IFI	IFI>0.95	0.996	Accepted
CFI	CFI>0.95	0.996	Accepted
RFI	RFI>0.95	0.963	Accepted
SRMR	SRMR<0.05	0.035	Accepted
CN	CN>200	438.734	Accepted

The casual relationship model test

The casual relationship model test show that continuing accounting professional development (CPL) had a significant positive effect on the accountant's personal value (APV) (ß = 0.300, t - value = 2.697, p<0.05). The Hypothesis 1 was, therefore, accepted. According to the result showing that CPL had a significant positive effect on accounting software package usage skill (AUS) (ß = 0.463, t - value = 6.645, p<0.05), the Hypothesis 2 was accepted. A significant positive effect of technology adaptation (TEC) on APV (ß = 0.531, t - value = 4.039, p<0.05) means there is an evidence to accept the Hypothesis 3. TEC had a significant poisitive effect on AUS (ß = 0.624, t - value = 8.419, p<0.05), so we can accept the Hypothesis 4. AUS significantly positively affected APV (ß = 0.386, t - value = 2.128, p<0.05); therefore, the hypothesis 5 was accepted. The finding that CPL had a significant positive effect on APV through AUS as a mediator (ß = 0.494, t - value = 2.752, p<0.05) led us to accept the Hypothesis 6. A significant positive effect of TEC on APV when mediated by AUS resulted in sufficient evidence to accept the Hypothesis 7. To conclude, the hypothesis testing shows that all the set hypotheses were accepted as shown in Picture No. 2 and Table No. 5.



Picture No. 2 T-values by Path Analysis

Table No. 5 Path coefficient and hypothesis testing

Hypotheses	Relationship	Path Coefficient	T- value	Decision
H1	CPL => APV	0.300*	2.697	Supported
H2	CPL => AUS	0.463*	6.541	Supported
H3	TEC => APV	0.531*	4.039	Supported
H4	TEC => AUS	0.624*	8.419	Supported
H5	AUS => APV	0.386*	2.128	Supported
H6	CPL => APV mediated by AUS	0.494*	2.752	Supported
H7	TEC => APV mediated by AUS	0.607*	8.211	Supported

*statistically significant at 0.05

Conclusion and Discussion

The results show that the causal relationship model of continuous accounting professional development and technology adaptation affecting accounting software package usage skill and accountant's personal value was fit with the empirical data according to the hypotheses. The model goodness of fit with the empirical data was determined using the following indices: χ^2 = 145.075, p-value = 0.506, df = 146 (χ^2/df =0.993), RMSEA = 0.000, GFI = 0.962, AGFI = 0.954, NFI = 0.968, NNFI = 0.995, IFI = 0.996, CFI = 0.996, RFI = 0.963, SRMR = 0.035, CN = 438.734. It was found that the endogenous variable's variance can be explained by the independent variable's variance at 79.3% and 80.2% respectively. The findings suggest that technology adaptation and continuous development had a positive impact on accounting software skill and their

personal value. This could be because the ability to apply technical accounting software packages appropriately and effectively in accounting services under constantly changing circumstances to gain credibility, trust and acceptance from management or stakeholders necessarily relies on behavior modification factor that focuses on increasing technology skill and proficiency in its application that suits the constantly changing work environment. The change in behavior to current environment is an important factor that directly results in more efficient service. In addition, the constant pursuit of professional knowledge and development is indicative of continuous accounting development that fosters understanding of the right accounting practices, and analytical and rational ability in performing accounting tasks. This is another factor that directly contributes to the reliability and acceptance of the accountant's work performance. Both of the above factors can lead to effective performance. With the help of an accounting software package, the accountant will be able to work in a more efficient and accurate manner and in accordance with relevant professional standards including professional ethical standards that reflect the values, which is reflective of the accountant's personal value and the higher work efficiency. This is in line with the Chairat's study (2020), finding that technology adaptation can improve individual's work behavior to become more systematic and methodological, thereby being able to integrate technical knowledge and skills of technology innovations into practice, which is considered as a factor creating the accountant's personal value perceived by the management. Similarly, in a study conducted by Kapardis and Zopiatis (2011, pp.59-70), it was found that continuous accounting professional development resulted in the accountant's credibility and personal value. This is also consistent with what has been found in a research study by Frijat and Saleh (2020, pp.28-44), which suggested that continuous professional knowledge development is essential to the quality of work by continually learning new professional techniques, which increases the up-to-date skills required in the use of technological techniques to help perform accounting tasks with greater accuracy and efficiency. A similar conclusion was reached by Alsabahi, Bahadorand and Saat (2020, pp.51-56), who stated that constant development of professional knowledge can contribute to technology application skill that help with better accounting performance.

Accountant's personal value was found to be affected by accounting software package skill. The finding might be due to the collective nature of skill acquisition that requires knowledge, competency, and professional and technical experience. Technology application skill involves applying the gained knowledge and experience in performing the most effective accounting services. The skill also needs a considerable amount of time to master. The accounting software skill is thus one of the most important factors in gaining credibility and recognition in the acoountant's work. This reflects the accountant's personal value arising from the skill in applying accounting software packages in accounting functions that make it easier, faster, and more accurate.

This is in accordance with Thailand Federation of Accounting Professions (2020) stating that an accountant with a good command of accounting software packages can increase his or her personal values in that they will be able to provide accounting information to stakeholders and investors better and faster, to analyze data, and to offer advice and consulting service to help management make decisions faster and more comprehensively. A similar pattern of results was obtained in Tanaka and Sithole's (2015, pp.47-52) study which found that accountants need to be skilled in using accounting software packages and modern accounting technology. These skills will have a positive impact on accounting performance and professionalism.

It was found that technology adaptation had a significant positive effect on the accountant's personal value through accounting software package usage skill as a mediator. This finding may be explained by the idea that technology adaptation is an attempt to change the work practices to be appropriate to current circumstances and to maximize the benefits of professional practice. Adaptation to and application of modern technology to work in combination of development of knowledge, technical skill and experience can lead to higher efficiency in accounting operations. These co-factors result in faster operational performance, which reflects the quality of work and creates the accountant's value. This is consistent with Thottoli (2020), stating that modern accountants who expect valuable results in performing accurate and reliable work must learn and adapt modern accounting technology in their work by building accounting software skills in the preparation of financial statements and other related reports. The practice will help the accountant to work more efficiently and effectively.

Accountant's personal value was significantly positively affected by continuing accounting professional development through accounting software package skill as a mediator. An explanation for this finding is that continuous professional development is the pursuit of modern knowledge and the acquisition of technical knowledge to be applied in maximizing work efficiency. In particular, development of accounting technology along with practical accounting technology skill will help to improve the ability to perform tasks that create value in the job. The quality of work can also be improved in terms of data analysis, and accurate, reliable and timely data reporting. This reflects the continuing professional development and accounting technology skills that can create value in accountants. This finding also accords with that of Frijat and Saleh (2020, pp.28-44), which found that continuous improvement in the accounting profession is important in improving the quality of work by continually learning new professional techniques together with building the skills needed for applying technology in accounting practice. Apart from improving job quality, it also increases the accountant's personal value. This finding was also reported by Alsabahi, Bahadorand and Saat (2020, pp.51-56), finding that the accounting practice requires accuracy and timeliness in reporting of accounting information, so accountants need to continually

develop their accounting profession and use their skills in applying technology to help them perform better accounting services.

Suggestion

Suggestions for applying the research results

1. The results showing that the accountants' continuous development and technological adaptation had a positive effect on accountants' values and skills in using accounting software packages suggest that accountants should always learn professionally in order to gain credibility and to apply appropriate technology in their work as well as adapting their work behavior to constantly changing environment and situation. It is also suggested that regulatory sectors can take these findings into account and formulate policies to improve work efficiency of accountants accordingly.

2. The results showed that the skills of using accounting software packages had a positive effect on the accountants' value. Therefore, accountants need to acquire and possess knowledge and ability to apply technology that helps to increase work efficiency and accuracy.

Suggestions for future research

1. The results showed that the accountants' continuous development and technological adaptation had the most positive effect on the skills of accountants using the accounting software package. Therefore, future research should be conducted to explore the factors contributing to technological adaptability for operational efficiency.

2. It was found that the accountants' continuous development and technological adaptation could explain the skills of using accounting software packages of the accountants in accounting firms in the northern region of Thailand for 79.3%. Although the causal factors were high in explaining the endogenous latent variables, there are also other causal factors that affect the skills. It is, therefore, suggested that future research studies should look at other causal factors that may affect the skills in using accounting software packages. Similar studies can be carried out with different sample groups to confirm the generalization of the findings.

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