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Abstract

The main objective of this study is to investigate the mediating effect of Information Communication Technology (ICT) training on the linkage between ICT confidence, ICT challenges as antecedents of Sole Proprietary Practicing Audit Firms (SPPAFs) where the firms having lower than 100 clients. The study adopts a quantitative approach where a set of questionnaires were designed using a Likert scale to collect 165 usable data from auditors of SPPAFs in India. The data was analyzed using Smart PLS and SPSS statistical tools. The findings confirmed that ICT training mediates the linkages between ICT antecedents (ICT confidence and ICT challenges) and SPPAF. The conceptual model of the study can be useful to understand ICT antecedents of SPPAFs to increase the effectiveness of auditing. Hence, practicing auditors could realize ICT confidence and ICT challenges to improve firm effectiveness.

JEL classification: M40, M42, O33

Keywords: *ICT confidence, ICT challenges, ICT training, sole proprietary, practicing audit firms*

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1. Introduction

Sole Proprietary Practicing Audit Firms (SPPAFs) are firms registered as a proprietary concern by individuals who are members of the Institute of Chartered Accountants of India (ICAI) and are licensed to practice. As per the authors' limited knowledge, sole proprietary audit firms are relatively more in number when compared to audit firms registered as limited liability partnerships. Sole proprietorships firms were more expectedly to bring innovations (Goel and Nelson, 2019). SPPAF may provide tailored service to their clients (Comprix and Huang, 2015). The majority of the Small and Medium Enterprises (SMEs) are dependent on SPPAFs for auditing their financial statements and for accounting services (Declich li *et al.,* 2020; Carey and Tanewski, 2016). SPPAFs adopt the latest technology (Lowe *et al.,* 2018) and encourages clients to run their business better and efficient manner (Rikhardsson and Dull, 2016). SPPAF can assist client's business operations and can give advice to make business secure and profitable manner (Ganesan et al., 2018). SPPAFs can undertake more focused audits and other related services to their clients (Kowaleski *et al.,* 2018). SMEs tend to outsource their accounting work to SPPAFs (Okpara *et al.,* 2017). SMEs have many options to outsource their accounting and auditing works abroad. If this works can be provided by SPPAFs in the home country's SMEs that may lead to a decrease in unemployment (Cahyaningtyas and Ningtyas, 2020). SMEs normally have limited resources and can provide services only by SPPAFs in an economical manner (Bills and Stephens, 2016). The client's over-reliance on non-human resources or information technology has been considered as one of the major challenges before SPPAFs (Thottoli and Thomas, 2020). Technology confidences have an important role in auditing practice (Thottoli *et al.,* 2019a). Increased technology confidence decreases audit risks and can be better managed in auditing (Salijeni *et al.,* 2019). The importance of awareness of bigdata in the accounting or auditing profession and technology training were emphasized by (Maldonado *et al.,* 2020).

Because of the recent rapid Information Communication Technology (ICT) changes, most SMEs going for paperless transactions (Oktaviani, 2017), investing money in accounting software (Kramer *et al.,* 2016), that may increase business risks as well as audit risks (Chen et al., 2019). The adoption of ICT in SMEs in turn compels SPPAFs to adopt and use ICT in their audit firms (Thottoli *et al.,* 2019a). The current 'Fourth Industrial Revolution' called 'Transformation Economy', shifts business organizations to adopt technology like blockchain, data automation, and artificial intelligence (Singh et al., 2020), and these changes also affect clients accounting practices and the way of doing audit services (Smith, 2018). Technology's exponential development has a positive impact on the adoption of audit software by SPPAFs (Thottoli *et al.,* 2019b; Chan *et al.,* 2018). This era is in the need of using technology in auditing (Mokhitli and Kyobe, 2019). Technology and artificial intelligence will affect SPPAFs and required close monitoring (Chan *et al.,* 2018). For increasing productivity and reducing costs, SPPAFs are implementing ICT in order to serve their clients what they want most (Pedrosa *et al.,* 2020). Some of SPPAFs uses manual way of doing audit and majority of them uses MS Excel to examine the arithmetical accuracy of the financial statements of their clients (Dias and Marques, 2018). Klynveld Peat Marwick Goerdeler (KPMG) and PricewaterhouseCoopers opined that 90% of SMEs auditing spreadsheets have material errors. Most of the SPPAFs employ untrained individuals to handle accounting spreadsheets (Panko, 2016). Accuracy of SPPAFs' auditing system using spreadsheets or MS Excel brings enormous challenges (Salijeni *et al.,* 2019), such as mistake in creating hidden cells, errors in manual formulas, wrong sum – count if commands, false believe in password protection, lack of data encryption option, lack of audit trail, lack of verification facility, errors of omission, errors of commission, transposition errors, single entry error, duplication of entry, risk of the

unskilled user, lack of internal control, more prone to human errors, lack of guidelines to use, risk of loss of data and risk of commitment of fraud. Computer Assisted Auditing Techniques (CAATs) are useful tools and techniques, that can increase SPPAFs productivity and reduce cost but the trend in adopting CAATs are less in developing countries (Siew *et al.,* 2020). Therefore, SPPAFs should utilize technology (CAATs) applications to conduct the audit efficiently and effectively. Thus, the main objective of this study is to investigate the mediating effect of ICT training on the linkage between ICT confidence, ICT challenges as antecedents of SPPAFs.

The remaining section of the paper provides ICT antecedents of SPPAFs, methodology, results, discussions, conclusion, and implications.

2. ICT antecedents of SPPAFs

2.1 ICT Confidence

Confidence in Information communication technology shows the ability in the effective completion of any task through the computer. Mawutor et al. (2019) intended to recognize the role of standards on auditing to improve the auditor's confidence in the audit of client's financial statements. Auditors' confidence in technology in assessing fraud was examined by Lim (2021). ICT confidence on the auditing practice of accounting professionals was aimed in the study by Thottoli, 2021; Thottoli *et al.,* (2019a). The impact of IT on dysfunctional audit behavior, as well as pressures such as time budget and task complexity were investigated by Umar *et al.* (2017). Auditor's technology confidence in the audit of client's financial statements recommended the need to carry out professional skepticism in all the phases of auditing to ensure reliability in the audit process (Hamshari *et al.,* 2021). An increased degree of auditor technology confidence in the clients' business operations will decrease the degree of professional skepticism, and the other way around (Rahmawati and Indrijawati, 2020). Auditors' increased degree of self-confidence, including technology, will inspire them to express opinion in the course of the brainstorming session (Sagara and Alkotdriyah, 2020). If an auditor has adequate technology confidence in their job performance backed by adequate infrastructure assistance, then there is an increased level of intention to adopt CAATs in the audit profession (Mohamed *et al.,* 2019).

2.2 ICT Challenges

Affordability of customized audit software, increased ICT training cost, increased risk of getting sufficient and adequate audit evidence through the computer, and basic knowledge in technology skills of junior auditors are considered major challenges facing by SPPAFs (Thottoli and Thomas, 2020). The consequences of blockchain in accounting and auditing were detailed with its challenges were examined by Liu *et al*. (2019). The effects of the ICT for the effective management of widespread challenges and the conduct of audit engagements linked with embedding big data analytics in the audit perspective were studied by Salijeni *et al.* (2019). Due to enhancements in technology, numerous challenges and opportunities that are placed to have a remarkable impact on the auditing and accounting profession (Liu, 2019). The likely disruptive impact of the ICT on the audit profession is not foreseen, mainly by sole proprietary audit firms (Brender *et al.,* 2019). CAATs aid auditors in strategical preparation to face probable ICT challenges in the current competing situation. The main benefits of CAATs are substantiated to reduce audit challenges through the computer (Serpeninova *et al.,* 2019). Jaber and Wadi (2018) found that technology challenges are evolving from traditional audit techniques to CAATs.

2.3 ICT Training

Sufficient and adequate ICT training eliminates ambiguity among junior auditors. Training helps to make auditing easier and faster. Thottoli and Thomas (2020), examined the link between ICT training and auditing practices. Continuous professional IT skilled training will guarantee practical skills and helps to keep technology-enabled audit documentation (Cristea, 2021). The robotic process of automation has been found widely in various industries including accounting or auditing industries. The application of robotic process automation in auditing was examined by Huang and Vasarhelyi (2019). Munoko et al. (2020) examined the challenges confronted by the talent training of accounting or auditing in the perspective of artificial intelligence and they proposed improvement for auditors through training. ICT training helps to face challenges in the financial world (Mamuda and Yusuf, 2020). Effective ICT training was found to be substantial during the internal audit for data security measures including cyber-attacks (Lois *et al.,* 2020). Audit training in the latest technology helps to detect or prevent possible fraud in the clients' financial statements (Putra and Dwirandra, 2019). Practicing auditors can improve their efficiency by adopting generalized audit software through timely ICT training on such audit software (Tansil *et al.,* 2019). Practicing audit firms should promote ICT training programs to enhance auditors' skills to enable them to use the latest audit software in the audit process (Marei and Iskandar, 2019).

From the above review of literature, the author has decided to examine the mediating effect of ICT training on the linkage between ICT confidence, ICT challenges as antecedents of SPPAFs. Accordingly, the study has developed the following hypotheses:

H1a: Lower the ICT confidence have higher the ICT training.
H1b: ICT training mediates the relationship of ICT confidence and willingness of SPPAFs to implement audit technology.
H2a: Higher the ICT challenges have higher the ICT training.

H2b: ICT training mediates the relationship of ICT challenges and willingness of SPPAFs to implement audit technology.

Accordingly, the below framework has been developed to investigate the mediating effect of ICT training on the linkage between ICT confidence, ICT challenges as antecedents of SPPAFs which is shown in the following figure 1:

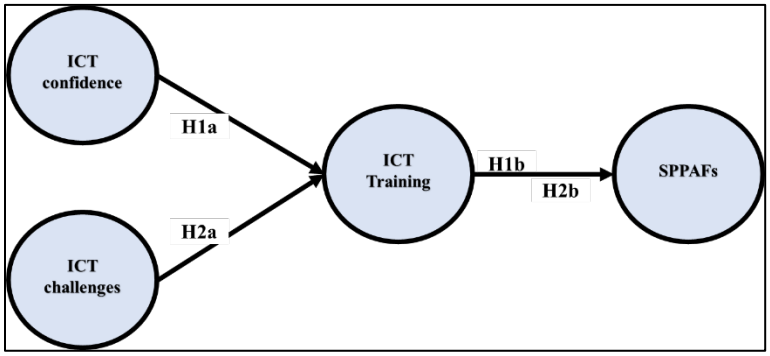

Figure 1. Theoretical Model

3. Methodology

3.1 Sample and Data Collection

This study has provided an opportunity to understand in-depth identification of ICT confidence, ICT challenges, and ICT training and has been designed to evaluate the variables. The study adopts a quantitative approach where a set of questionnaires were designed using a Likert scale to collect 165 usable data from auditors of SPPAFs in India. Primary data were collected and analyzed using Smart PLS and SPSS statistical tools. All the respondents were qualified chartered accountants who are engaged in self-practicing. The data were collected in the year 2019 for research analysis. For the data analysis, this study used Structural Equation Modelling-Partial Least Squares (SEM-PLS) software.

3.2 Method of Analysis

The conducted survey is based on constructs recommended and validated in the previous research study. The questionnaire was consisting of five sections. For Section A, in total there are 5 demographic questions; section B, indicate SPPAFs which consists of 10 sub-questions, section C, indicate ICT training which consists of 3 sub-questions; section D, indicate ICT challenges which consists of 4 sub-questions; and section E, indicate ICT confidence 4 sub-questions. This questionnaire is partly adapted from Thottoli and Thomas (2020).

3.3 Construct validity and reliability

Composite Reliability and Cronbach's Alpha of the constructs values were assessed to test the reliability and validity of the measurement model. Below Table I shows item loading, Variance inflation factor (VIF), Average variance extracted (AVE), and Cronbach's Alpha against each construct of the current study. The value of Cronbach's alpha factor is higher than 0.7 which is considered acceptable (Cronbach, 1951). Composite reliability of structured equation model can be considered as a good measure of Cronbach's alpha (Vinzi *et al.,* 2010) because of equivalent importance to all the indicators of a particular construct to know Cronbach's alpha coefficient which results in actual and precise values of composite reliability of each construct. According to the obtained values, composite reliability and Cronbach's alpha was located at a very desirable level (above 0.7).

Table I. Construct validity and reliability

Construct	Items	Items loading	VIF	AVE	Composite Reliability	Cronbach's Alpha
Sole proprietary practicing audit firms	SPPAFs1	0.484	3.806	0.620	0.940	0.946
	SPPAFs2	0.579	7.739			
	SPPAFs3	0.564	5.253			
	SPPAFs4	0.660	2.887			
	SPPAFs5	0.856	4.395			
	SPPAFs6	0.838	4.695			
	SPPAFs7	0.902	4.215			
	SPPAFs8	0.951	4.531			
	SPPAFs9	0.931	4.214			
	SPPAFs10	0.926	2.094			
ICT confidence	ICT_CON1	0.816	8.348	0.816	0.946	0.948
	ICT_CON2	0.846	6.478			

	ICT_CON3	0.936	9.321			
	ICT_CON4	1.004	2.566			
ICT challenges	ICT_CHA1	0.774	2.102	0.571	0.837	0.840
	ICT_CHA2	0.769	3.057			
	ICT_CHA3	0.512	1.644			
	ICT_CHA4	0.912	1.844			
ICT training	ICT_TRA1	0.974	10.145	0.916	0.970	0.970
	ICT_TRA2	0.964	12.452			
	ICT_TRA3	0.932	6.029			

4. Results

4.1 Descriptive Statistics

The results of descriptive statistics below Table II shows that SPPAFs (dependent variable) has a maximum of 5.000 and a minimum of 0.000, with a mean of 3.066 and a standard deviation of 1.117. ICT confidence (independent variable) has a maximum of 5.000 and a minimum of 1.000, with a mean 3.503 and a standard deviation of 1.090, ICT challenges (independent variable) has a maximum of 5.000 and a minimum of 1.667, with a mean 3.994 and a standard deviation 0.781, and ICT training (mediator variable) has a maximum of 5.000 and a minimum of 1.000, with mean 4.108 and a standard deviation 0.649.

Table II. Descriptive Statistics

Variables	Mean	Std. Dev	Minimum	Maximum
SPPAFs	3.006	1.117	0.000	5.000
ICT Confidence	3.503	1.090	1.000	5.000
ICT Challenges	3.994	0.781	1.667	5.000
ICT Training	4.108	0.649	1.000	5.000

Below Table III provides demographic information for the sample selected in the current study.

Table III. Demographic Information

Variables	Percentage (%)
Type of audit firm	
Sole Proprietorship	100
Gender	
Male	72.12
Female	27.88
Age	
0-20	0
21-40	81.12
Above 40	18.88
Year of experience in auditing	
0-10	71.52
21-40	28.48
Above 40	0
Professional qualification	
Yes	100
No	0

Discriminant validity test to the extent of which it constructs differ from one another empirically (Hair *et al.,* 2014). It is specified by inescapable lower correlation among the measure of interest and other measures that are supposedly not measuring the identical concept or variable (Heeler and Ray, 1972). There are some criteria that were applied to examine discriminant validity using Smart PLS. The AVE of each construct should be lower than the correlation involving the square root of each construct. Hence to discourse discriminant validity, the AVE is compared with the square root of the correlations of the other constructs (Fornell and Larcker, 1981).

Below Table IVa, Fornell-Larcker Criterion shows that it calculated the square root of the AVE exceeds the inter-correlations of the construct by the other constructs in the model which ensures acceptable discriminant validity. Table IVb, Heterotrait-Monotrait Ratio, shows the correlations (HTMT)'s values (Henseler *et al.,* 2015) are smaller than the (conservative) threshold of 0.85.

Discriminant Validity Constructs

Table IVa. Fornell-Larcker Criterion

	ICT_CHA	ICT_CON	ICT_TRA	SPPAFs
ICT_CHA	0.756			
ICT_CON	0.234	0.903		
ICT_TRA	0.513	0.621	0.957	
SPPAFs	0.220	0.752	0.481	0.787

Table IVb. Heterotrait-Monotrait Ratio (HTMT)

	ICT_CHA	ICT_CON	ICT_TRA	SPPAFs
ICT_CHA				
ICT_CON	0.235			
ICT_TRA	0.506	0.617		
SPPAFs	0.225	0.740	0.463	

The structural-model assessment might be performed only once the measurement-model examination has been passed effusively with the recommended principles. The initial part for judging the structural model was to understand the determination coefficient (R^2). In the current study, endogenous variable, refer Table V below, (IT confidence and ICT challenges) on ICT training shows that R^2 value has 0.528 (substantial) whereas endogenous variable (IT training) on SPPAFs shows that R^2 value has 0.231. That is SPPAFs can be explained by ICT antecedents (ICT confidence and ICT challenges) and ICT training on the linkage between ICT confidence, ICT challenges as antecedents of SPPAFs.

Table V. Variance Explained

Endogenous Construct	Variance Explained (R^2)
Exogenous Variables -> Endogenous (ICT_TRA)	0.528
Exogenous Variables -> Endogenous (SPPAFs)	0.231

4.2 Importance-Performance Map Analysis (IPMA)

Importance performance matrix analysis (IPMA) assesses the SEM relationship (significance of latent constructs) in the study analysis (Hair *et al.,* 2016). Figure 2 depicted the importance and performance percentages in the IPMA analysis. It has been seen that ICT training is the highest important construct which shows the importance rank (0.463). The IPMA results indicate that ICT confidence shows the 2nd highest importance rank (0.241), whereas ICT challenges have found at 3rd rank having importance (0.166).

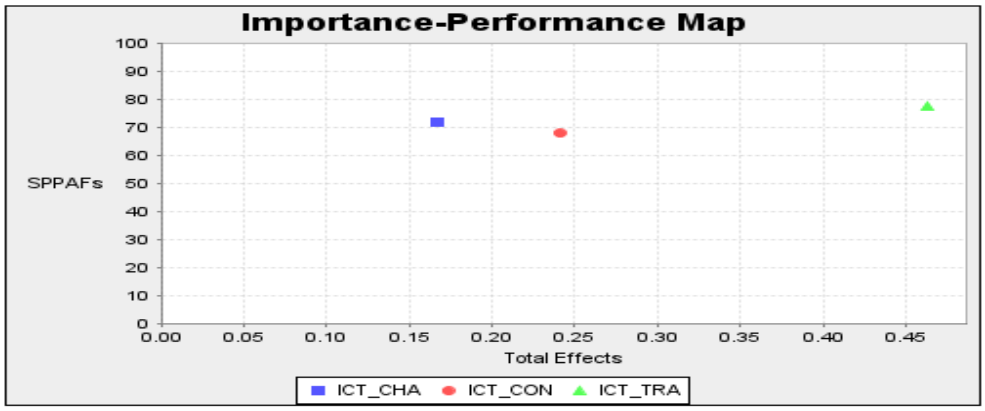

Figure 2. Importance performance matrix analyses (IPMA)

4.3 Hypotheses Testing

Hypotheses H1a and H2a were assumed to affect either positively or negatively in relationship with ICT training. Hypothesis H1b and H2b were assumed that ICT training mediates on the linkage between ICT confidence, ICT challenges as antecedents of SPPAFs. Those were tested using consistent PLS bootstrapping techniques. The path coefficient range must be larger than 0.1 to be considered satisfactorily acceptable (Lohmöller, 1989). Later, the computed path estimates from the primary set, all the antecedents of SPPAFs shows a positive and significant relationship with SPPAFs. The tested summarized hypotheses results are presented in below Table VI.

The result has shown that ICT confidence has a significant relationship with SPPAFs where P<0.001, t=9.231. This result indicates that ICT confidence has a positive impact on the practice of SPPAFs. This could be attributed to the fact that lower the ICT confidence has higher the need for ICT training. Therefore, H1a is supported.

The result has shown that ICT training mediates the relationship of ICT confidence and SPPAFs where P<0.001, t=4.192. This could be attributed to the fact that ICT training mediates the relationship of ICT confidence and the willingness of SPPAFs to implement audit technology. Therefore, H1b is supported.

The result has shown that ICT challenges have a significant relationship with SPPAFs where P<0.001, t=6.210. This result indicates that ICT challenges have a positive impact on the practice of SPPAFs. This could be attributed to the fact that higher the ICT challenges have higher the need for ICT training. Therefore, H2a is supported.

The result has shown that ICT training mediates the relationship of ICT challenges and SPPAFs where P<0.001, t=5.735. This could be attributed to the fact that ICT training mediates the relationship of ICT challenges and the willingness of SPPAFs to implement audit technology. Therefore, H2b is supported.

Table VI. Path Coefficients

Hypothesis	Path	Original Sample	Sample Mean	Path Coefficient	Standard Error	t-value
H1a	ICT_CON -> ICT_TRA	0.530	0.534	0.000	0.057	***9.231
H1b	ICT_CON -> ICT_TRA -> SPPAFs	0.254	0.262	0.000	0.061	***4.192
H2a	ICT_CHA -> ICT_TRA	0.389	0.390	0.000	0.063	***6.210
H2b	ICT_CHA -> ICT_TRA -> SPPAFs	0.187	0.188	0.000	0.033	***5.735

Note: Significance levels: ***p < 0.001 (t >3.33), **p < 0. 01 (t >2.33), *p < 0.05 (t >1.605) (based in one-tailed test)

5. Discussion

5.1 The impact on ICT antecedents (ICT confidence and ICT challenges) of SPPAFs

ICT confidence and ICT challenges are being considered as the ICT antecedents of SPPAFs and are tested in the current study. Initially, the researcher has considered ICT confidence, which has a significant relationship with ICT training. Some previous studies were identified that ICT confidence is one of the main factors that affect the effectiveness of audit practice of SPPAFs through the adoption of audit technology. This result has in line with what has proposed by (Putra and Sudana, 2019) found that practicing accounting firms should give more training to their audit assistants to improve auditor confidence in their assigned audit tasks. Likewise, Thottoli *et al.* (2019a); Thottoli *et al.* (2019c), found that ICT confidence and ICT training are crucial for ICT-enabled auditing. Path coefficient (Table VI) above shows a constructive and significant relationship between ICT confidence and ICT training at p < 0.001 and t=9.231. This has been in line with the hypothesis made in the current study. The auditors who are working in SPPAFs might have fewer skills to test clients' data using audit software, inadequate ICT qualification, and not confidence to audit items of financial statements through the computer. Thus, increased ICT training will be helpful to create better ICT confidence among auditors of SPPAFs. Ultimately, lower the ICT confidence might require higher the ICT training.

Later, the researcher has considered ICT challenges, which have a significant relationship with ICT training. Some previous studies were identified that ICT challenges as one of the main factors that affect the effectiveness of audit practice of SPPAFs through the adoption of audit technology. This result has in line with what has been proposed by (Stancheva-Todorova, 2018) opined that accounting practicing professionals were challenged to develop technology skills through appropriate training. Path coefficient (Table VI) above shows a constructive and significant relationship between ICT challenges and ICT training at p < 0.001 and t=6.210. This has in line with the hypothesis has made in the current study. The auditors who are working in SPPAFs might have higher level of ICT challenges such as generalized audit software might not be affordable to SPPAFs, ICT audit training increases the operational cost to the firm, ICT auditing might increase the risk of getting sufficient and adequate audit evidence through the computer, and junior auditors believe that ICT auditing can be understood only those who have advanced computer skills. Thus,

increased ICT training will reduce various ICT challenges among auditors of SPPAFs. Ultimately, higher the ICT challenges might require higher the ICT training.

5.2 The impact on mediator relationship of ICT training on the link between ICT antecedents (ICT confidence and ICT Challenges) and SPPAFs.

The study has examined the impact of the mediator relationship of ICT training on the link between ICT antecedents (ICT confidence and ICT Challenges) and SPPAFs and is tested in the current study. Initially, the researcher has considered ICT training as a mediator on the relationship between ICT confidence and SPPAFs. The study confirmed that ICT training mediates the relationship of ICT confidence and the willingness of SPPAFs to implement audit technology. Some previous studies were identified that ICT training had a mediator role in the relationship between other variables (Govaerts *et al.,* 2018). Path coefficient (Table VI) above shows ICT training significantly mediates on the relationship between ICT confidence and SPPAFs at $p < 0.001$ and $t=4.192$. This has in line with the hypothesis has made in the current study, ICT training mediates the relationship of ICT confidence and willingness of SPPAFs to implement audit technology. In another way, ICT training significantly mediates the relationship between ICT challenges and SPPAFs at $p < 0.001$ and $t=5.735$. This has also in line with the hypothesis has made in the current study, ICT training mediates the relationship of ICT challenges and the willingness of SPPAFs to implement audit technology. Sufficient and adequate ICT training eliminates ambiguity among audit assistants, training facilitates auditing easier, and it helps to do auditing faster. Less ICT confidence and higher ICT challenges will lead to increased ICT training which will increase the willingness of SPPAFs to implement audit technology.

The below figure 3 demonstrates the structural model, with mediating role of ICT training on the linkage between ICT confidence, ICT challenges as antecedents of Sole Proprietary Practicing Audit Firms.

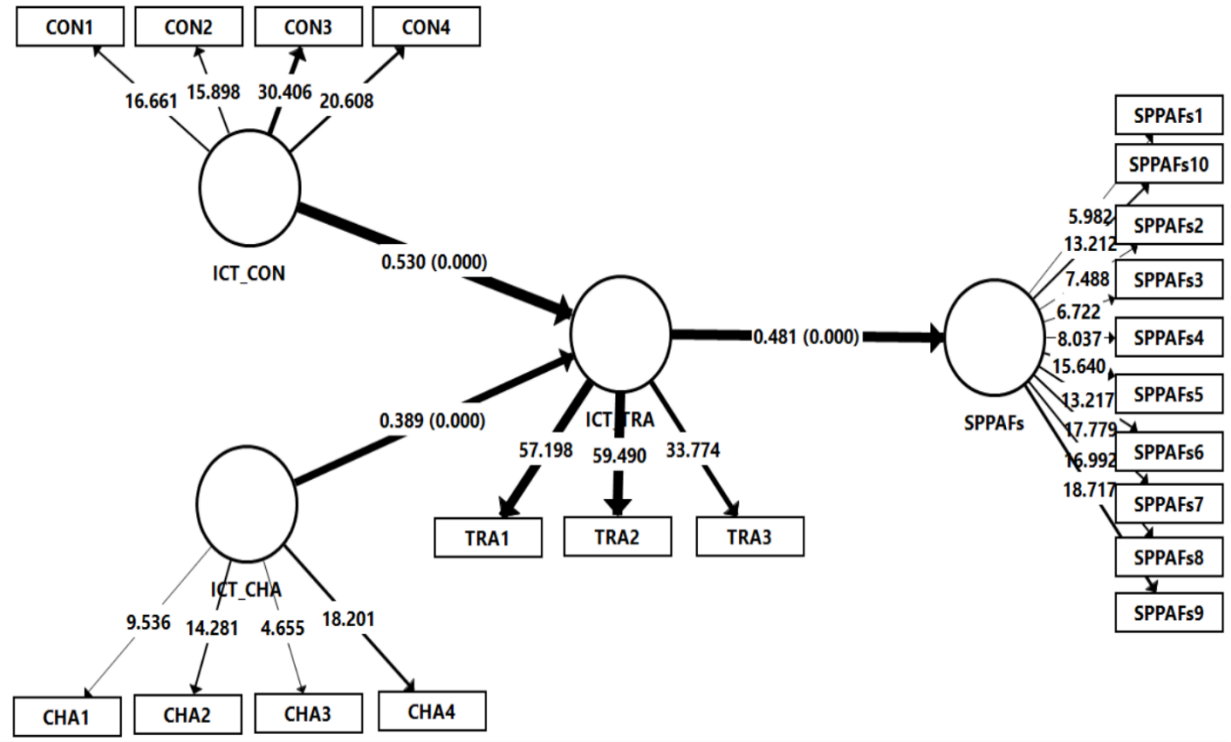

Figure 3. Structural Model

6. Conclusion

The inclusion of information communication technology tools by audit firms in recent years is widely recommended. Yet there are numerous benefits when using ICT audit tools by audit firms, numerous sole proprietary audit firms do not currently adopt these ICT tools when conducting an audit of clients' financial statements. In the current study, researchers try to establish an attempt to explore the antecedents of ICT and the mediator role of ICT training that leads and motivates SPPAFs to switch over from the traditional way of auditing to a computer-based auditing environment. This study considered various literature views by adding a new discussion about mediating effect of ICT training on the linkage between ICT confidence, ICT challenges as antecedents of SPPAFs and through which investigating those ICT antecedents on this relationship, which is exceptional as compared to earlier studies. This study tries to edify the importance of the use of ICT by SPPAFs after having been discussed ICT confidence and ICT challenges. The end result of the study has found that the level of adoption of technology tools by SPPAFs in India can be improved by giving adequate ICT training. The lack of ICT confidence and the high ICT challenges will lead to sufficient ICT training which will facilitate auditors of SPPAFs to adopt generalized or customized audit software. The findings confirmed that ICT training mediates the linkages between ICT antecedents (ICT confidence and ICT challenges) and SPPAF. The conceptual model of the study can be useful to understand ICT antecedents of SPPAFs to increase the effectiveness of auditing. Hence, practicing auditors could realize ICT confidence and ICT challenges to improve firm effectiveness.

7. Implications

The study findings have highlighted various implications. Firstly, the study enriches the knowledge of antecedents of ICT (ICT confidence and ICT challenges) and mediating effect of ICT training on the linkage between ICT antecedents and SPPAFs among practicing chartered accountants in view of accounting literature. According to the limited knowledge of authors, there is no previous study conducted in this area from an accounting and auditing perspective, this study brings novelty in the accounting and auditing profession. This research study expects to increase awareness among SPPAFs and small practicing auditors to think about changing from the traditional way of doing an audit to ICT enabled audit environment. In addition, this study has provided much information about ICT confidence and ICT challenges, especially for sole proprietary practicing audit firms. This may lead the Institute of Chartered Accountants of India and other government regulators to improve and amend the field of auditing curriculum by including compulsory IT practical courses as part of the current professional programs. Therefore, this study provides not only guidance to SPPAFs but also helps software developers to make customized audit software, especially for SPPAFs. Nowadays, very few audit firms say, some of the Big 4 audit firms are using customized audit software. This is, however, implying that if a software developer can develop generalized software which can fulfill almost all requirements of SPPAFs such as minimizing the cost of software, ease of use, reliable result, user-friendly audit tools, reduced operational cost of software, and so on. Auditors of SPPAFs can also adopt audit software to their firms and thereby increases overall firm performance. This change over will lead to achieving the intended expectations of various stakeholders who use financial statements. In addition, this research study may assist various statutory authorities such as tax authorities, government regulators, professional service providers, practicing auditors, and accounting firms to set vibrant and deliberate policies associated with considering factors of ICT antecedents and ICT training among SPPAFs.

Theoretically this study has explored the ICT training as moderating factor on the link between ICT antecedents and SPPAFs being significant in the successful adoption of technology in audit practice by SPPAFs. Specifically, the proposed ICT training moderator was - considered appropriate for the current study using quantitative research. This moderator was shown to be crucial in the two ICT antecedents (supporting ICT confidence and ICT challenges) on SPPAFs. The researchers believe that the current study has proven that these theories do offer valuable insights into the mind of auditors who are working in SPPAFs to adopt technology in the audit profession.

8. Limitations of the study

The main goals established for the current study were to know the mediator role of ICT training on the linkage between ICT antecedents (ICT confidence and ICT training) and SPPAFs that influencing only the auditors of sole proprietary audit firms for technology adoption by them. This research was conducted within one geographical area –Kerala, India. Hence, the research findings merely applicable to the ICAI regulatory environment in India.

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