

Information technology and E-accounting: some determinants among SMEs

E-accounting

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Abstract

Purpose – Based on the importance of E-accounting, the purpose of this study is to investigate the determinants influencing information technology and E-accounting among small and medium-sized enterprises (SMEs).

Design/methodology/approach – A survey method was used to select the sample among SMEs in Oman. Using descriptive statistics, the impact of the determinants on E-accounting practices in SMEs in Oman were tested.

Findings – The findings reveal that except information technology (IT) cost, all other possible determinants (IT risk, employee IT skills and employee theoretical knowledge) has a significant influence on E-accounting practice among SMEs.

Research limitations/implications – The link between variables of this study was not analyzed in Oman. Moreover, this study only concentrated on the impact of the fourth determinants, while in reality, there must be other determinants that should also be investigated by other researchers.

Practical implications – This study has added to the literature by examining the E-accounting practices while evaluating the effect of IT determinants on the relationship. Besides, this might add benefits to many SMEs relating to their current accounting practice that might lead to adopting E-accounting practice to ensure application of applicable accounting standards to show fair financial statements to its stakeholders.

Originality/value – This current study is one of the first works in the context of Oman. It has added a new discussion to the body of knowledge in light of the IT determinants and their relationship with E-accounting practices; hence, an approach that is not widely discussed in the literature. Furthermore, conducting such research in the field of accounting provides new insight into the literature among both emerging and developed economies including Oman.

Keywords E-accounting, Small and medium enterprises, Information technology, Oman

Paper type Research paper

1. Introduction

E-accounting involves making use of accounting software and computers to record, store and analyze financial data (Esmeray and Esmeray, 2020), and it makes sure that the information of critical financial is controlled, accurate and safe from corruption of data. E-accounting accuracy facilitates speed and lower cost of handling the business operations (Cong *et al.*, 2019); it eliminates some of the mundane and time-consuming tasks associated with hand-operated (manual) accounting (Jędrzejka, 2019), and it facilitates all the procedure (calculations), including additions and deduction, are done automatically by software

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(Uzrail and Bardai, 2019; Suyono *et al.*, 2019). Online accounting solutions make it easier for different individuals to access accounting information outside of the workplace in a secure manner (Teru *et al.*, 2019). E-accounting helps to prepare the financial statements and ensures high reliability (Bataneh, 2018) and it helps to records, keep, move data through using a software system easier than shifting through a bunch of documents (Teru *et al.*, 2019). The entire operations of preparing accounts become quicker while using E-accounting (Ganyam and Ivungu, 2019) and the statements or reports can be generated instantly at the click of a button. E-accounting is sometimes stored and saved in off-site locations to be safe from natural disasters, fires, earthquakes, arson and floods (Bailey *et al.*, 2019). And it is also more efficient than paper-based accounting, thus work will be completed faster, and time saved (Paul and Sadath, 2019). Viewing accounts using an E-accounting allows taking advantage of the option to view data in different charts, tables and formats (Akandinda, 2019; Gusai, 2019).

Even though there are many benefits, companies that use E-accounting information faces many challenges. The individual who established a company's E-accounting system may be duplicated by another person, who can then claim ownership of the data and claim to be the primary creator (Fiducci, 2019), and there is no such thing as a duplicate or original copy (Ye and Hu, 2020). An intruder can manipulate, modify or delete one or more accounting programs of a firm and makes the software unusable (Zhang, 2019; Park and Ellis, 2019). Stored data in computers are easily copied to compact disc (CD) or floppies which can be transferred to the company's competitors (Turner *et al.*, 2020). There is a danger that insiders of the company may sometimes send confidential information of a firm to another (Ye and Hu, 2020). Hackers can access any data if taken in the network (Kassem and Ionescu, 2019). According to Kassem and Ionescu (2019), if there are no scientific precautions, hackers can connect to a network and steal data. Recently stealing software itself is the most frequently committed information technology (IT) crime (Valerie *et al.*, 2019). An employee may also go for copying the E-accounting software purchased by the firm and copy it to his/her home computer (Kumar, 2019). As part of system security, controlling E-accounting hardware and software is considered as the first system security (Diao, 2018). To prevent hardware theft, the system should be locked and protect with password (Teru *et al.*, 2019). As part of the control mechanism, the company may need to go for keyboard locks in order to restrict physical and electronic access by any unknown people (Kimhi *et al.*, 2019), restricted access to systems, automatic logs and limited after-hour use (Bansal *et al.*, 2019). As part of security, all levels of managers should be provided unique passwords (Teru *et al.*, 2019) and the password should be changed frequently (Ye and Hu, 2020). Frequent backups of E-accounting updates sometimes protect against loss of software by the company. For this reason, it is necessary to take keep them separate from the usual media (Asonitou and Kavoura, 2019); software programs accounting should also be taken as backup (Habiba *et al.*, 2019) and backup should be kept in a secure place. E-accounting facilitates the exchange of accounting data with each other using a network, can connect with another person, and access files from the machine. Hence, special care should be taken for the security of systems and data located on the Internet (Alshurafat *et al.*, 2019). Based on the review of recent literature on testing, applying and adopting electronic accounting in particular, and adopting interface of its relationship with electronic banks in general, it is clear that it has faced scarcity and lack of interest by previous studies in this regard (Nguyen and Gopaldaswamy, 2018).

Adoption and use of E-accounting are common for a majority of the companies in developed countries. But technological adoption (Thottoli *et al.*, 2019a) and information and communications technology (ICT) usage among the Omani small and medium-sized enterprise (SME) industry is yet to reach a much-desired level (Thottoli *et al.*, 2019b, c). In Oman, the oil and gas sector will have price challenges in the future, and the government relies on now are the sectors of the non-oil industry such as e-commerce, services, and so on which require attention and intervention by researchers or scholars that helps to develop a

sustainable competitive culture among SMEs which ultimately contribute to the economy of the country. Since there are no specific researches, as to the author's knowledge, some serious ambiguities are existing in the field of E-accounting practices among SMEs in Oman. In addition, "work from home" is the message now spreading all over the world because of the outbreak of coronavirus disease 2019 (COVID-19). World Health Organization (WHO) has recently declared and assessed that COVID-19 has been characterized as a pandemic. All of these leads increase the scope to the researcher to look E-accounting and thus, the main goal of this study is to investigate the determinants influencing E-accounting practice among SMEs in Oman.

2. Literature review-empirical studies

E-accounting adoption is critical to the firm's ability to handle all financial information and use it to make decisions. As a result, the business may be well taken care of, and the profitability of firms, particularly SMEs, can be improved. E-accounting adoption is defined as using a computer (software and hardware) for financial reports preparation and accounting works at organizations whether the accounting software is built in the firm or developed by a vendor (Ghaffar *et al.*, 2019).

In the present literature, many relevant E-accounting studies were identified. For example, Amidu *et al.* (2011) examined the practices of E-accounting for SMEs in Ghana. The results indicated that SMEs put in place accounting software to generate their financial data. Relhan (2013) investigated adopting accounting software in SMEs operations in India. The questionnaire sent was received representing 56%. Users and non-users of E-accounting systems were included in the sample. According to the results, the software is used for accounts receivables, inventory management, accounts payable, payroll, fixed assets management, cash management, bank reconciliation and general ledger. The findings revealed that the majority of SMEs had issues with electricity supply, as well as a frequent failure of the accounting system. In addition, practically all SMEs are generally satisfied with the performance of their accounting software, according to the study. Ghaffar *et al.* (2019) were identified the determinants concerning the E-accounting adoption, particularly in the maritime industry for SMEs in Malaysian. The findings s showed that 44.4% of the variables can explain key factors in determining the deployment of E-accounting among Malaysian maritime SMEs. Nandan *et al.* (2011) investigated the E-accounting practices among SMEs. This research also examines the realities, expectations and barriers to implementing E-accounting. The findings show that small businesses use accounting software to generate financial data. Ghaffar *et al.* (2016) attempt to obtain the perceptions towards the use of information technology in E-accounting among SMEs. The results indicated that respondents strongly agreed with the factors of decision-maker, technological and institutional affecting them to adopt E-accounting in their SMEs. The various elements of E-accounting in SMEs were investigated, including the mediator effects of internal monitoring and the integration of how E-accounting relates to performance. The observed E-accounting has an impact on the internal monitoring system. According to the findings, the data demonstrate that improving the domestic monitoring framework leads to improved performance (Alfartoosi and Jusoh, 2020).

2.1 E-accounting practice

E-accounting stands for electronic accounting. Through this accounting system, the companies or accountants can practice their accounting functions or accounting information systems (AIS) using ICT. Organizational financial transactions are recording, classifying and summarizing using ICT without any paper. E-accounting helps SMEs to keep their financial

data and accounting software such as Tally, QuickBooks, Peach Tree, so on in a safe and protected environment that can allow key organizational personnel to access anywhere they wish at any time.

2.2 IT cost and E-accounting practice

IT makes SMEs record, process and keep their accounting functions efficiently, accurately, and timely. IT cost are mainly related to the price of accounting software, implementation cost, software customization costs and redesigning of accounting software costs.

The most important cost that affects the adoption of software to provide accounting service is that the price of the accounting software which is provided by the software vendor (Dinha and Dob, 2020; Putra, 2019). Effective implementation of AIS in an organization incurs implementation costs (Suyono *et al.*, 2019). Accounting service enterprises may incur initial training and annual training of employees cost for accounting software application (Hien *et al.*, 2019; Hossain and Rahman, 2019). Customization of accounting software is one of the determinant factors which affects the interests of SMEs to use accounting applications (Putra, 2019). SMEs undergoing AIS redesign may lead to redesign their existing accounting software as part of operational control and process (Turner *et al.*, 2020; Ghorbel, 2019). SMEs which have accounting software may go for upgrading software at some point. This software maintenance and up-gradation cost are one of the factors that affect the interests of SMEs using accounting applications to enhance the core program's functionality and rise software up-gradation (Putra, 2019; Mauricette, 2019). The majority of review of literature provided IT cost that affect E-accounting or accounting software adoption of any organization. Hence, it is hypothesized that:

H1. IT cost positively associates with E-accounting practice.

2.3 IT risk and E-accounting practice

IT risks are a threat that is linked to cyber or any such related risk of using IT, operation, possession, influence, involvement and acceptance of IT within SMEs or any business. Cyber risk leads to destroying e-files, theft of important data or information, theft of accounts details, spiked or contaminated systems is "top-of-mind/most recalled" these days. IT risk may affect firms' reputation, fair financial statements, balanced operational activities, applicable accounting standards, and or such other regulations. These IT risks have to be considered seriously by SMEs before the adoption of E-accounting. Several cases have affected AIS because of the risk of cybersecurity that affects positively on electronic auditing or auditing (Thabit, 2019; Bonsón and Bednárová, 2019; Petratos and Faccia, 2019; Eaton *et al.*, 2019; Hashim *et al.*, 2019). Hence, it is hypothesized that:

H2. IT risk positively associates with E-accounting practice.

2.4 Employee IT skills and E-accounting practice

Employees' IT skills in accounting have become increasingly important in the present globalized and competitive job market. It is tough to get an accounting graduate a suitable job without proficiency in accounting software which mandates IT skills. There are many accountings software or enterprise resource planning (ERP) software available in the market which must require IT skills to operate. QuickBooks and generalized Systems Applications and Products (SAP) or ERP, Tally, Peachtree, Oracle Microsoft Dynamics are just a few specific accounting software programs that use many companies to complete their accounting functions with the help of skilled and experienced accounting staff. Preparing and producing spreadsheets and using bookkeeping software will be necessary.

Woodside *et al.* (2019) and Thottoli and Thomas (2020) were expressed that IT skills in accounting include ERP experience (e.g. SAP, Oracle), Structured Query Language and advanced modeling techniques, Microsoft Word, Excel, PowerPoint skills, software knowledge of business intelligence such as IBM Cognos, skills in accounting (for preparation of financial statements and financial analysis) and skills in the analysis of bid data. SME employees in Oman are lacking in IT skills in accounting to allow firms to adopt an E-accounting system and practice. Hence, it is hypothesized that:

H3. Employee IT skills positively associates with E-accounting practice.

2.5 Employee theoretical knowledge and E-accounting practice

Freshly graduated accounting major students should have theoretical knowledge in accounting concepts and assumptions such as accrual basis of accounting, prudence concept, historical cost concept, dual aspect concept and so on. Every accountant should have at least basic knowledge in breakdowns in expenses and revenues to reach total expenses and total revenues, financial report analysis, identify capital and revenue expenditure and to know making adjusting entries if there are any errors lie in the books of accounts. The accountant should have basic knowledge in budgeting to forecast future required cash, sales or revenues which leads to forecast project fiscal balances in order to mitigate operational and financial risk. Accounting employees should be self-equipped to tackle any accounting-related problems and challenges whenever the need arises. Potter *et al.* (2019) mentioned that finance and accounting employees should be capable of preparing financial statement analysis which can tell the current business position using numbers and graphs with suggested corrective measures to be taken in the future. These studies suggest that majority of accounting software programs are weakening to meet the required accounting potentials of present competitive business and that has led importance of knowledge and skills of accounting employees in the real world. However, too many young and graduated students lack accounting basic knowledge which is required in medium to highly qualified accounting jobs in Oman. Hence, it is hypothesized that:

H4. Employee theoretical knowledge positively associates with E-accounting practice.

3. Underpinning theories

Oliveira and Martins (2011) contended necessary to employ theories to achieve an improved understanding of comprehensive novel ICT adoption. Presently, there is no generally accepted technology theory to describe ICT and its adoption. The current study focused on the acceptance stages of the unified theory of acceptance and use of technology (UTAUT) and the diffusion of innovation theory as proposed by Kollmann (2004). The main reason to choose diffusion of innovation theory is because of the argument made by Rogers (2003) on the perceived traits of innovation diffusion account for among 47 and 87% of the disparities in acceptance of innovations. Similarly, the study has included the UTAUT model since Venkatesh *et al.* (2003) have been argued that it expects more than 70% of the probability to adopt innovative technology. Technology tools have been used as an instrument of innovation policy in the defense material sector in many countries (Edquist and Hommen, 2000). This study considers innovation theory as an alternative to auction theory. As well, this study explicitly considers innovation theory and UTAUT as the most appropriate basis for developing policies and regulations concerning technology tools. We also believe that UTAUT and innovation theories provide solid foundations for a critical assessment of existing SMEs policy perspectives on technological instruments.

4. Methodology

This study's sample is made up of a small number of Omani SMEs. Finalizing sample size is one of the issues that arise in the design of a quantitative study. Sampling is the process of choosing units (such as people, corporations, banks and organizations) from a population of interest so that the results may be fairly generalized back to the population from which they were chosen by examining the sample (Arouna, 2004).

A random sample was employed as the sampling approach, which is one of the probability sampling methods. The most popular method of sampling is random sampling. Bias is reduced by using random sampling. Individual variance within the sample is a reliable indicator of variance in the total population that makes estimation more accurate of results. This sample provides the study more details within a specified sample size (Sekaran, 2003).

The current study has used a mixed method including both quantitative and qualitative approaches. As part of data collection, the survey method is used to select a sample of 160 SMEs throughout Oman. The number of responses from the distributed questionnaire was 99 out of 160, which represents 62% (partial least squares (PLS)) the method was utilized to analyze the data of the present work. Non-users and also users of electronic accounting were included in the sample of this study. To achieve the usefulness of E-accounting, the current study chose SMEs due to the fact that these kinds of companies adopt and focused their operations on adopting accounting software. The selection was on some accounting software users from the client lists.

The degree to which measurements are error-free, obtaining the expected results, is referred to as reliability. The most prevalent type of internal consistency reliability coefficient is Cronbach's alpha (Hair *et al.*, 1998). Nunnally (1978) recommended that the reliability of a construct between values 0.60 to 0.80 should be considered adequate (see Table 1).

The face validity of the items used was examined to confirm that they were valid. The respondents' impressions of whether the test is valid are reflected in face validity. Face validity refers to how a measure or technique is perceived by the general public, such as whether it looks to be a feasible method for obtaining the desired information, whether it appears to be designed property, and whether it appears to be reliable (Fink, 1995). SEM can do confirmatory factor analysis (CFA), which validates the number of factors or constructs in the measurement models as well as their indicators. The factor loadings of all observed variables or items in this study were found to be satisfactory which are ranging from 0.70 to 0.82. The latent observed variable factor loadings or regression estimations should be more than 0.50 (Byrne, 2001). This means that every construct satisfies the construct validity test.

5. Results

5.1 Descriptive statistics

Descriptive statistics in Table 2 shows that the level of the dependent variable which is the E-accounting practice was 14% representing the average of E-accounting practice, with a standard deviation of 2.06. Moreover, the value of E-accounting refers that the minimum was 5% and the maximum was 15%, respectively. Also, the results reveal the descriptive

| Variables | No. of items | Cronbach's alpha |
|-----------------------|--------------|------------------|
| E-accounting practice | 6 | 0.83 |
| IT cost | 5 | 0.95 |
| IT risk | 4 | 0.83 |
| IT skill | 5 | 0.81 |
| Theoretical knowledge | 3 | 0.86 |

Table 1.
Test of reliability

analysis reveals 9% as an average of the IT cost and the standard deviation was 1.44, while the average of IT risk was 14% with the value of the standard deviation of 1.42. In addition, for IT skills the two values were 15% and 3.09 and finally, the average of theoretical knowledge was 13% as an average and 1.94 its standard deviation.

Hair *et al.* (2010) demonstrated that discriminant validity denotes the range to which a construct is distinct compared to other constructs. Thus, to test it in using PLS analysis, there are some criteria that must be checked. In that, every average variance extracted (AVE) construct's square root must be more than the correlations range that the construct involved. Table 3 shows that the AVE square root is more than the construct's correlation compared with other constructs which reflect adequate regarding the validity of the discriminant.

The evaluation was done to check the structural model and the criteria was to test the coefficient (R^2). For the present work, the value for R^2 for the endogenous variable was 0.569, which reveals that E-accounting practice with a variance of 57% could explain by all the independent variables of the current study.

The variance explained for the endogenous construct is shown in Table 4 above. In this study, independent variables (IT cost, IT risk, IT skill and theoretical knowledge) were tested using variance inflation factors (VIFs) and condition indices to understand multicollinearity problems. It means that the independent variables (IT cost, IT risk, IT skill and theoretical knowledge) are correlated with dependent variable, E-accounting.

5.2 Hypotheses testing

H1, H2, H3 and H4 were hypothesized to result in a positive or negative link between determinants (IT cost, IT risk, IT skill and theoretical knowledge) and E-accounting practice, were examined via a procedure called bootstrapping. The range of the coefficient has to be more than 0.1 in order to be acceptable (Lohmoller, 1989). Following the calculating of the path, evaluation is calculated of the primary set, there were three significant variables with

| Variables | Mean | Std. dev. | Minimum | Maximum |
|-----------------------|------|-----------|---------|---------|
| E-accounting practice | 0.14 | 2.06 | 0.05 | 0.15 |
| IT cost | 0.09 | 1.44 | 0.04 | 0.12 |
| IT risk | 0.14 | 1.42 | 0.01 | 0.16 |
| IT skill | 0.15 | 3.09 | 0.12 | 0.21 |
| Theoretical knowledge | 0.13 | 1.94 | 0.08 | 0.18 |

Table 2.
Descriptive statistics

| | E-accounting practice | IT risk | IT skill | IT cost | Theoretical knowledge |
|-----------------------|-----------------------|---------|----------|---------|-----------------------|
| E-accounting practice | 0.465 | | | | |
| IT risk | -0.528 | 0.557 | | | |
| IT skill | -0.633 | 0.406 | 0.637 | | |
| IT cost | 0.084 | 0.007 | -0.440 | 0.569 | |
| Theoretical knowledge | -0.650 | 0.337 | 0.744 | -0.269 | 0.599 |

Table 3.
Discriminant validity constructs

| Endogenous construct | Variance explained (R^2) |
|--|------------------------------|
| Exogenous variables → Endogenous (E-accounting practice) | 0.569 |

Table 4.
Variance explained

one was insignificant. The explanation is shown in Table 5 regarding the findings that could be obtained from testing the hypothesis. It reveals there are three factors out of four of the independent variables that have a positive link with E-accounting practice (IT Risk -0.277, IT Skill -0.318, theoretical knowledge -0.361) whereas, remaining one independent variable has a negative link with E-accounting practice (IT Cost -0.151). The results showed that IT risk has a positive link with E-accounting practice where it was $p < 0.01$, $t = 2.746$. This finding suggests that IT risk has a positive impact on E-accounting. This could be attributed to the fact that there is a lack of E-accounting practice among Oman SMEs due to IT risk. Therefore, H2 is supported.

The results showed that the IT skills of employees have a positive link with E-accounting practice where it was $p < 0.05$, $t = 2.107$. This finding indicates that the IT Skill of employees has a positive impact on E-accounting practice. This could be attributed to the fact that there is a lack of IT skills among employees to accept E-accounting practice among Oman SMEs. Therefore, H3 is supported.

The results showed that accounting theoretical knowledge of employees has a positive relationship with E-accounting practice where it was $p < 0.001$, $t = 3.33$. This finding indicates that the accounting theoretical knowledge of employees has a positive impact on E-accounting practice. This could be attributed to the fact that there is a lack of basic accounting theoretical knowledge among employees to accept E-accounting practice among Oman SMEs. Therefore, H4 is supported.

The results showed that IT cost has a negative link with E-accounting practice auditing practice where it was $p < 0.05$, $t = 1.132$. This finding indicates that the IT cost has a negative impact on E-Accounting practice. This could be attributed to the fact that the IT Cost does not affect acceptance of E-accounting practice. Therefore, H1 is not supported.

Overall, three results have supported the assertion that the majority of factors does effect E-accounting practice.

6. Discussion

6.1 The impact of IT cost on E-accounting practice

The first determinant of IT, IT cost on E-accounting practice shows that there is a negative link between IT cost on E-accounting practice. Since this results in the negative relationship between IT cost and E-accounting, which is not in line with the proposed objectives of the present study where the hypotheses made that there is a positive relationship between them. This shows a negative and significant direction ($t = 1.132$, $p < 0.05$). This result has revealed that IT cost has no significant among SMEs in Oman to adopt E-accounting. Mokhtar *et al.* (2018) and Relhan (2013) were supported that the use of a computer by SMEs enables them to reduce cost and enhance clerical works. Caldarelli *et al.* (2017) were also supported that ICT structure allows lower costs and a higher degree of flexibility. Furthermore, Yvonne and Nizam (2018) suggested that accounting software ensures efficiency, ease of use, reliability, data quality and accuracy, thereby affecting the performance of firms. In the current study, the first objective is not in line with the hypothesis made.

| Hypotheses | Path | Path coefficient | Standard error | t-value |
|------------|----------------------------|------------------|----------------|----------|
| H1 | IT_Cost → E-Acct P | -0.151 | 0.133 | 1.132 |
| H2 | IT risk → E-Acct P | -0.277 | 0.101 | **2.746 |
| H3 | IT skill → E-Acct P | -0.318 | 0.151 | *2.107 |
| H4 | Theoretical KNW → E-Acct P | -0.361 | 0.108 | ***3.350 |

Table 5.
Path coefficients

Note(s): 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)

6.2 The impact of IT risk on E-accounting practice

The second determinant of IT, IT risk on E-accounting practice shows that there is a positive link between IT risk on E-accounting practice. Several prior studies have looked into the factors that influence IT risk and found that it is one of the most critical factors that affect SMEs' E-accounting practices (El-Hewety, 2019; Husain and Diab, 2018; Soudani, 2013). Internal controls are more closely related with IT risk or cyber risk, which will affect the usage of E-accounting systems in these businesses (Wu and Wang, 2020; Haapamäki and Sihvonen, 2019). Phishing hackers try to steal consumers' personal information and commit financial fraud (Fleischman *et al.*, 2019; Alsayed and Bilgrami, 2017).

Path coefficient analysis results which have shown in Table 4 above reveals that there is a significant positive link between IT risk and E-accounting practice ($\beta = 0.101, p < 0.01$). This is in line with the hypothesis made in the current research. That means, IT risk determinants such as cyber data theft, file destroy, usage risk and operational risk may affect significantly and positively on E-accounting practices among SMEs in Oman. In other words, the findings show that ICT adoption and auditing practice have a considerable positive relationship. This result shows that IT risks are strong determinants to adopt E-accounting in Oman SMEs. E-accounting is critically essential for SMEs to compete with the current IT world.

6.3 The impact of IT skill on E-accounting practice

The third determinant of IT, employee IT practical skills on E-accounting practice shows that there is a positive link too between IT skills on E-accounting practice. Various previous studies have tested the determinants of IT skills and identified that IT skills are one of the most important determinants that impact E-accounting practice among SMEs (Rezaee and Wang, 2019; Zheng, 2019; Coady *et al.*, 2018; Tan and Laswad, 2018). Employees' practical skills in IT are much required to enrich E-accounting practice among SMEs in Oman. This has been supported by many researchers (Tan and Laswad, 2018; Abbasi *et al.*, 2018; Sandifer, 2018).

Path coefficient analysis results which have shown in Table 4 above reveals that there is a significant positive relationship between IT skills and E-accounting practice ($\beta = 0.151, p < 0.05$). This is in line with the hypothesis made in the current study. That means, IT skill determinants such as proficiency in accounting software, software usage competency, skills to use accounting software (Quick Books, Tally, PeachTree or any customized accounting software), basic spreadsheet skills including MS Excel may affect significantly and positively on E-Accounting practices among SMEs in Oman. In other words, the findings show that IT skills and E-Accounting practice have a significant positive association. This result shows that IT skills are strong determinants to adopt E-accounting in Oman SMEs. Since accounting involves more practical work, employees' practical skills in accounting are very much required for adopting the latest accounting software in SMEs.

6.4 The impact of theoretical knowledge of accounting on E-accounting practice

The last determinants are employee theoretical knowledge in accounting and E-accounting practice shows that there is a positive link between employee theoretical knowledge in accounting and E-accounting practice. Various previous studies have tested the determinants of employees' theoretical knowledge in accounting and E-accounting and identified that it is one of the most important determinants that impact E-accounting practice among SMEs (Yang, 2019; Li, 2019; Liu and Fu, 2018; Lan and Yunnan, 2018). Accounting staff should first know basic accounting concepts and Generally Accepted Accounting Principles (GAAP) in order to handle efficiently with accounting software and E-accounting. This view has been supported by many researchers (Schroeder *et al.*, 2019; Rebele and Pierre, 2019; Harris and Stahlin, 2018; Brink and Stoel, 2018).

Path coefficient analysis results which have shown in Table 4 above reveals that there is a significant positive link between theoretical knowledge of accounting and E-accounting practice ($\beta = 0.108, p < 0.001$). This is in line with the hypothesis made in the current research. That means theoretical knowledge in accounting such as prudential concept, accrual concept, time interval concept, historical cost concept, dual aspect concept, forecasting knowledge, budget and budgetary preparation may affect significantly and positively on E-accounting practices among SMEs in Oman. In other words, the findings show that theoretical accounting knowledge and E-accounting practice shows a significant positive relationship. This result shows that basic accounting theoretical knowledge is a strong determinant to adopt and implement E-accounting practice among Oman SMEs. Since accounting is a practical discipline, an accountant should thoroughly know the basics of accounting.

7. Implication

The above-mentioned research findings have certain implications. First and foremost, the findings add to the body of knowledge in the field of information technology in accounting. This research added a new discussion, i.e. E-accounting practice among SMEs and its relationship with the IT factors. Furthermore, it is a new study because no earlier literature research, to the best of the authors' knowledge, has explored this topic from an accounting perspective.

This research would be useful to SMEs in taking into consideration the characteristics that will enhance the E-accounting practice, as the research findings indicated majority characteristics significantly affect the E-accounting practice. This, however, means that, when IT determinants are properly overcome and implemented with accounting standards, the practice of E-accounting will be improved. Thus, this enhanced accounting practice will improve the tools of E-accounting and consequently enhance the aggregate economic system in the long run. As well, this research gives a better understanding and clear picture of the IT determinants for managers and owners to adopt and achieve competitive accounting practice which will eventually maximize the profit of SMEs with the inclusion of applicable accounting standards. This would happen in light of being alert on risks of information technology which directs the managers' attention and could become a tool to encourage them to enhance E-accounting practice. Also, this current research may assist the policymakers in central banks in general, Higher Education Institutions (HEIs) in Oman to think and include adequate compulsory industrial training in accounting, to critique of accounting graduate courses concerns both syllabus content and the skills of the teaching-learning process, and to set wise and deliberate policies related to risks of technology and to promote organizational managers' commitment toward aggressively monitoring E-accounting practice by applying IT determinants criteria's. Ultimately, such a procedure would enhance accounting mechanisms' practices to the International Financial Reporting Standards.

8. Conclusion

"Work from home" is the message now spreading all over the world because of the outbreak of COVID-19. WHO has recently been declared and assessed that COVID-19 has been characterized as a pandemic. Apart from fact that the majority of organization has moved entirely to IT operations. Hence it is important to SMEs should undertake accounting activities by adopting customized or generalized accounting software. This leads to the development of a new accounting system, E-accounting, among SMEs. Ultimately it enriches SMEs to do their accounting more efficiently than the traditional way of bookkeeping. This study has been done to examine various IT determinants, namely IT cost, IT risk, employee IT skills and employee theoretical knowledge that affects E-accounting practice. The present study adds to understand IT determinants that impact E-accounting practice, especially which

focused SMEs in Oman. The findings reveal that except IT cost, all other possible determinants (IT risk, employee IT skills and employee theoretical knowledge) have a significant influence on E-accounting practice among SMEs in Oman.

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