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# Investigating the Factors Affecting Accountants' Behavioral Intentions in Accounting Information System Adoption: Empirical Evidence of Unified Theory of Acceptance and Use of technology, and Task-Fit Model

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## Abstract

Accounting information systems have recently received many investments in the implementation, resulting in introducing of its technology and gaining importance. However, factors affecting the accounting information system's success are the adoption and use by accountants in organizations. The present study used the unified model of acceptance and the use of technology and the model of task-technology fit to investigate the factors affecting the accountants' behavioral intentions regarding an accounting information system adoption. The present study was a descriptive survey regarding the applied purpose and collecting data tools. The data were collected using a questionnaire distributed among accountants of companies listed on the 2020 Tehran Stock Exchange, and 200 questionnaires approved by structural equation modeling were analyzed by Smart PLS 3 software. The results showed a direct and positive association between all model constructs (i.e., self-efficacy, effort expectancy, performance expectancy, and perceived technology fit) in accounting information system adoption, except the facilitating conditions in the research.

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## 1. Introduction

As an information system (IS), accounting measures economic activities, analyzes information as a report and provides the results to decision-makers. Accounting is regarded as the language of commerce; in this case, the accounting information system (AIS) is the intelligence or provider of that language. An accounting information system involves gathering, recording, storing, and processing data to provide information for decision-makers, which can be manual or computer-assisted, or sometimes between the two (manual and computer-assisted) (Tilahun, 2019). Traditional AIS only provided financial statements with less accounting data to managers, which limited the use as well as the incorrect entry of information and the inefficient performance of tasks. In the 21st century, information technology (IT) development has significantly affected the accounting profession, especially the methods. Accounting systems have led to changes in accounting information systems and accounting software (Salehi, Rostami and Mogadam, 2010)

Since the 1990s, the implementation of accounting information systems has attracted great attention and investment by companies and, thus, its technology found a place among accountants. Many companies have now adopted the accounting information system and entered the post-implementation phase; still, the implementation of technology does not mean that companies are more efficient and effective in accounting operations, so issues concerning the use of accounting information systems by accountants have become very important (Aoun, Vatansakdakul and Li, 2010). Due to the features in the information system or characteristics of accounting tasks, accountants may withdraw from using the system. How accountants adopt, a system is of special importance to confirm a high level of acceptance of the system. This issue is a prerequisite for any effort to apply an accounting information system in organizations. Studies on information technology devices have indicated that end users are often less likely to accept and use computer devices, especially when they have other options (Gonzalez, Sharma and Galletta, 2012). User adoption and confidence are critical to the development of any new technology. In addition, it is vital to examine the factors affecting Accountants' Behavioral Intention (ABI) in adopting an accounting information system. Behavior is a motivational factor that determines the effort a person must make. Showing a behavior assumes that behavioral goals drive individual behaviors. Behavior shows how much people are willing to try. They put a lot of effort into planning this behavior. In general, the stronger desire to perform a behavior stimulates people to do it (Özer and Yilmaz, 2011). The adoption of an accounting information system will require special attention. Behavioral intentions are a person's perception of the occurrence of a particular behavior; in other words, it is a mental and probable situation that connects the person with his action. Morris (2005) defines behavioral intentions as the intensity of the individual's intention and desire to do a specific action. According to the association between behavioral intentions and behavior, it is revealed that people are more likely to engage in behaviors they desire to perform, so the behavior is always determined by the individual's intention to engage in it and is associated with it. (Alamin et al., 2020)

Based on the literature on the current technology or techniques used in accounting, such as goal-based costing (Yazdifar and Askarany, 2012), most studies have focused on educators' and managers' roles, even if accountants have roles in various aspects of accounting information systems. Before adoption, the accounting information system remained relatively underdeveloped. Several individuals, organizational, institutional, and technological factors should be considered to better understand accountants' adoption of accounting information systems. However, the factors affecting accountants' behavioral intentions in adopting the accounting information system have not been fully studied. The factors each end-user considers influence his/her intentions, revealing their opinions and perceptions as well as the probability of acceptance or rejection of the technology (Alamin et al., 2015).

Since various technologies are now used in the workplace and the accounting information system and regarding the limited research in the literature on the accounting information system and the issue of adoption from the perspective of accountants, as well as because the successful implementation of the accounting information system depends on the actual adoption and use of accountants in companies, organizations should look for ways to ensure that accountants adopt the system instead of focusing only on the acceptance of decision-makers. Despite the important role of accountants' participation in the achievement of the system, the present study mainly focused on the issues associated with the design, development, and effects of implementing the system (Naheb, Sukoharsono and Baridwan, 2017). The case of technology adoption has led to the emergence of several accepted theories and models, providing a general understanding of the factors potentially affecting the adoption of IT (Taherdoost, 2018). In this regard, examining the general framework of the accepted model of individuals and theories that explain the behavioral origin of individuals can determine the reasons and factors influencing the adoption of technology. In this regard, the present study used a combination of the unified theory of acceptance and use of technology (UTAUT) and the model of the task-technology fit (TTF) as well as the use of individual self-efficacy factors to investigate the effective factors on the accountants' behavioral intention to adopt the accounting information system. The mentioned models have investigated the adoption of different information technology applications. Together, they have been used to explore the individuals' behavioral intentions in organizations (in Iran, no research has used a combination of these two models in this case). The factors under study in this research included effort expectancy (EE), performance expectancy (PE), facilitating conditions (FC), self-efficacy (SE), and perceived technology fit (PTF). Given that there are several technology packages in the country that provide computer-based accounting information systems, examining the acceptance of this system by end-users (accountants) can help organizational decision-makers who choose the new accounting information system to implement policies and trust the latest technology and also let the system developers know how to design a new accounting information system to be accepted and used by end-users. In the following sections, the review of literature, hypotheses, research methods, statistical findings, and conclusions.

## 2. Literature Review

### 2.1. The Unified Theory of Acceptance and Use of Technology (UTAUT)

Many studies on technology adoption have used the unified theory of acceptance and use of technology for analysis. This theory is one of the newest models in technology acceptance, aiming to provide a comprehensive viewpoint toward adoption by users (Odeh, 2019). The model is a combination of eight known models in the discussion of technology acceptance (innovation diffusion theory (IDT), technology acceptance model(TAM), social cognitive theory(SCT), model of PC utilization(MPCU), theory of reasoned action(TRA), technology of planned behavior(TPB), motivational model(MM), and combined model of TAM and TPB). The advantage of this model over other models is that it is the most comprehensive model ever proposed for acceptance. Capabilities can predict 70% of people's acceptable behavior in the face of innovations and technologies (Venkatesh et al., 2003). In this model, four factors can influence the behavioral tendencies in the acceptance and use of end-users: facilitating conditions, performance expectancy, social influence, and effort expectancy. The factors of performance expectancy, effort expectancy, and facilitating conditions influence the behavioral intention of adopting technology and can also be important in adopting the accounting information system (Aoun, Vatansakdakul and Li, 2010; Curtis and Payne, 2008; Katurura and Cilliers, 2018). But previous studies (Forward, 2009) and

Andwika and Witjakson (2020) showed that the factor of social influence, as an important and significant factor in ideation and measurement methods, is not very noticeable, so this factor was omitted in this study (Aoun, Vatansakdakul and Li, 2010). According to Venkatesh et al. (2003), performance expectancy refers to "the extent to which a person believes that using a system helps him or her achieve his or her goals in his or her job." The constructs that are similar to performance expectancy in the past models and theories are Perceived usefulness, which is derived from TAM; Extrinsic motivation, which is derived from MM, Job fit, which is derived from the MPCU; Relative advantage, which is derived from the IDT; and Outcome expectations, which are derived from the SCT. Previous accounting research has demonstrated that this factor 1) significantly affects behavioral intention (Aoun, Vatansakdakul and Li, 2010) and 2) influences auditors' decisions to adopt and use computer-based auditing tools (Mahzan and Lymer, 2014). Venkatesh et al. (2003) defined the expectation of effort as "the degree of ease associated with using a technology among users". Origins of the construct can be traced in TAM Complexity of technology, derived from the MPCU model, and Ease of use, derived from IDT. Therefore, it is claimed that this factor has predictive power for behavioral intention. The unified model of technology acceptance and use assumes that the technology acceptance is influenced by the expectation of trying to know and use new technology (Damanpour and Schneider, 2006). Venkatesh et al. (2003) described facilitating conditions as "the degree to which one believes one can provide organizational and technical infrastructure support if one uses technology.". This factor of UTAUT refers to various constructs that were captured by the existing theories and models. These constructs include Perceived behavioral control, which was adopted from TRA and TPB; FC, which was captured from MPCU; and compatibility, which was derived from IDT; ironically, the presence of performance expectancy and effort expectancy diminishes the influence of facilitating conditions on behavioral intentions in the UTAUT2 model. Venkatesh, Thong and Xu (2012) hypothesized that facilitating conditions affect users' behavioral intention and behavior. According to a study by Boontarig et al. (2012), facilitator conditions affect behavioral tendencies, and behavioral use of IT services has a positive effect

However, the weakness of this theory is that it does not consider the individual element in its ability to explain intentions. In the discussion of information technology, various studies have highlighted the impact of differences on adopting and using; therefore, understanding why and how users use IT is crucial (Alsyouf, 2021). In the study of technology adoption, it is important to examine personal characteristics due to differences in people's behaviors. One of the factors directing individuals to adopt information technology, including accounting, is self-efficacy. Bandura's social cognitive theory (1997) is the theoretical source of self-efficacy. Observation of others' performances led to the formulation of this theory. Bandura (2006) also considered individual performance resulting from different abilities to show the behavior to formulate the theory. This theory understands the result that one will achieve by using technology. Self-efficacy can be highly effective on a person's behavior and motivation. This perception of a person's ability to achieve the standards s/he has pursued affects individual behavioral and cognitive responses. The individuals who doubt their ability are quickly disappointed and fail, while those who are confident in their ability to perform the goal intensify their efforts until they succeed (Naheb, Sukoharsono and Baridwan, 2017). Self-efficacy is the belief in a person's ability to show a particular behavior. It is considered a major structure in social psychology that influences decisions about the behaviors to be performed (Hayashi, 2004). According to the definition by Compeau and Higgins (2017), Self-efficacy can be defined as "judging a person's ability to use a computer" to perform a specific task. Despite the association between self-efficacy and the findings of technology mastery theory, and because it cannot directly determine the behavioral intention in the unified model of technology

acceptance and use, studies have indicated that it is a significant factor in the adoption of new technologies (Chiu and Wang, 2008).

**2.2. Task - technology fit model**

Goodhue (1995) proposed a model of the association between technology and task to evaluate the success of information systems, which emphasizes the user's assessment of the efficiency and effectiveness of the business. He defined the concept of a fit model between task and technology as the effectiveness and success of a particular technology in assisting a user in performing his/her tasks. The task-technology fit model expresses the degree of matching between job requirements, individual abilities, and functions in the system (Shahreki & Nakanishi, 2016). It has been found that this concept significantly and positively affects IT adoption. If the technology is used for the user's needs, then such technology will positively affect the user's efficiency and performance. A large number of studies on IT adoption have used this model, which has added considerable empirical support to it. The model is mainly dealt with the fit between technology features and the existing methods and values. Most applications of accounting technology are not previously determined and flexible, contributing to making changes in their features to meet some special local or organizational needs; therefore, it makes sense to consider adopting accounting information systems from the perspective of the technology task fit model. It positively and significantly affects the adoption of information technology, so the appropriate perceived technology is also included in the research model (Naheb, Sukoharsono and Baridwan, 2017). As Goodhue (1998) and Goodhue & Thompson (1995) asserted, the word "fit" refers to the degree to which technology features help individuals perform their tasks to convert inputs into outputs. Zhou, Lu and Wang (2010) showed that the fit between user's duty requirements and mobile banking practices determines users' acceptance of mobile banking

**2.3. Behavioral intentions**

Behavioral factors are motivational factors that reveal individuals' willingness and plan to make efforts. As a rule, the higher a person desires to perform a behavior, the higher the probability is of acting. Fishbon-ajzen (1977) defined the desire of each individual to perform a particular behavior. This is a critical indicator in forecasting whether individuals are doing what they are doing or not doing it. The unified theory of acceptance and use of technology focuses on explaining the behavior of individuals based on their beliefs and regardless of psychological characteristics (Venkatesh, Thong and Xu, 2016). They found a direct association between behavioral inclination and the use of technology in the widespread acceptance of technology (Alamin et al., 2020). Behavioral inclinations measure a person's intention and desire to use the system. In examining the unified model of acceptance and use of technology, Vanktash et al. (2003). found that hope for expectation performance, the expectation for effort, and social influence behavioral intention to use technology determines the behavior and conditions that facilitate the use of technology; therefore, the direct association between a person's behavioral intentions and the use of technology is strongly confirmed. On the other hand, in the technology fit model, it can be claimed that a more efficient fit between existing accounting practices and accounting information systems performance processes improves people's behavioral intentions to adopt this system; at the same time, weaker proportions reduce accountants' behavioral intention to adopt such systems. This study considers accountants' behavioral intentions in adopting and using technology (equivalent to accounting information systems) the dependent variable.

**2.4. Research background**

In general, research on the adoption of accounting information systems is focused on two areas: 1) review of accounting information system and its comparison with a manual system, and 2) review of design and implementation of the accounting information system; however, few studies have been performed on factors affecting accounting information systems such as acceptance and use. Existing texts focus on managers' views on guidelines for technology implementation and accounting techniques (Askarany, Smith and Yazdifar, 2007). Aoun, Vatansakdakul and Li (2010) used a unified technology acceptance model to explain behavioral intention in accounting information systems in Australia. They aimed to examine the factors affecting accountants' use of accounting information systems. By measuring the expectations of effort, performance expectations, and cultural factors by a questionnaire, they concluded that the use of a unified acceptance model in the study of accounting information system acceptance is approved by accountants. Their results showed that performance expectancy, effort expectancy, and facilitating had a direct and significant effect on behavioral intentions and accounting information systems; however, the impact of social influence was small and insignificant. Özer and Yilmaz (2011) examined the behavioral intention of accountants in adopting information technology in Turkey. He hypothesized that mental attitudes and perceptions of behavior control could positively affect accounting goals toward information technology. This study showed that strong and positive tendencies towards using information technology could be enhanced by factors such as accountants' positive and strong attitudes, perceived behavioral control, and mental norms. Dowling (2009) developed a theoretical model that included factors that affected the auditors' support system use. Using inferential statistical analysis, the auditors showed a willingness to use the audit support system. The results also revealed that auditors with positive attitudes toward normative pressure and high self-efficacy would use the audit support system more. In a study of the audit program, Gonzalez, Sharma and Galletta (2012) used the model to study the behavioral intention in adopting the monitoring technology unit. The results confirmed their model because the four factors of effort expectancy, performance expectancy, social influence, and facilitating conditions played a key role in the dependent variable.

Naheb, Sukoharsono and Baridwan (2017) conducted a study to investigate the factors affecting behavioral intention in using computerized accounting systems in Libyan cement products from the two integrated models of technology acceptance and task fit and technology. They examined the factors affecting behavioral intention, including performance expectancy, effort expectancy, facilitating conditions, self-efficacy, and fit of task technology. The analysis showed that all variables except the expected effort affect the behavioral intention of accountants in using the computer accounting system. Tilahun (2019), in a study on the identification of key determinants in the acceptance of the accounting system by companies around the world, showed that committed management support, perceived ease of use, human resources, performance expectancy, and government support are the most critical factors that affect an accounting information system adoption. Using the modified model of technology adoption and combining it with institutional theory and the model of task-technology fit to investigate the factors affecting the adoption of the accounting information system by accountants, Alamin (2015) used the analysis of the questionnaires and concluded that the probability of adopting the accounting information system by accountants is influenced by five main factors, i.e., effort expectancy, self-efficacy, facilitating conditions, perceived technology fit, and mandatory pressure.

Odeh (2019) examined the influential factors on the acceptance of financial information systems by small and medium-sized companies in Jordan. It showed that social impact, effort expectancy, performance expectancy, and facilitating conditions affect small and medium companies' approval

of financial information systems. To examine the factors influencing the acceptance and use of ERP, Andwika and Witjaksono (2020) used the unified model of research acceptance and found the following results: factors such as effort expectancy, performance expectancy, and facilitating conditions positively and significantly affected users' behavioral intention, while social impact did not have a positive and significant impact on users' behavioral intention.

**2.5. Research models and hypotheses**

Considering the theoretical foundations and research background and since the purpose of the present study was to use the unified model of acceptance and use of technology and the model of the task-technology fit in examining the factors affecting the behavioral intention of accountants in adopting an accounting information system, the five factors of performance expectancy, effort expectancy facilitating conditions, self-efficacy, and perceived technology fit were revealed to have an impact on the model, so the following conceptual model and hypothesis were proposed (Figure1).

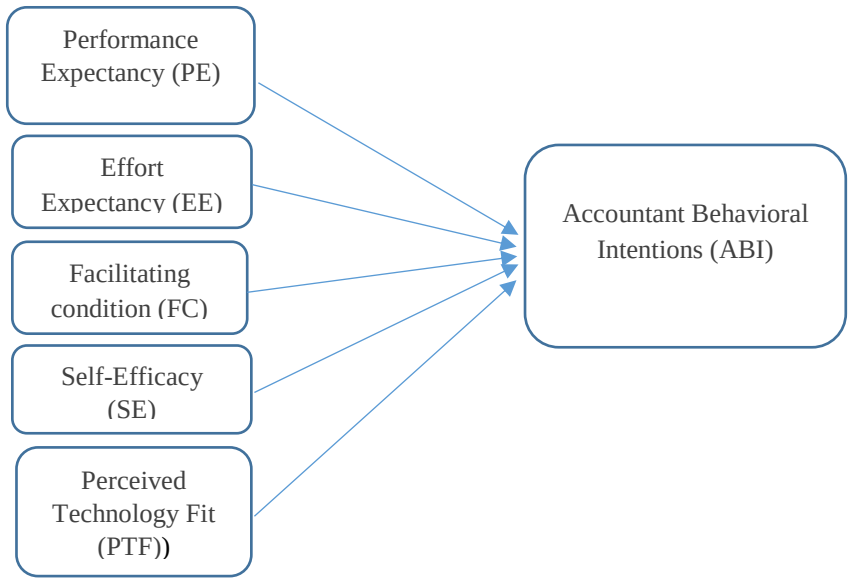


**Figure 1**. Conceptual model of research

Hypothesis 1 - Perceived performance expectancy of the accounting information system has a significant effect on the behavioral intentions of accountants in adopting the accounting information system.

Hypothesis 2 - the perceived effort performance expectancy of the accounting information system has a significant effect on the behavioral intentions of accountants in adopting the accounting information system.

Hypothesis 3 - Perceived facilitating conditions significantly affect accountants' behavioral intention in adopting the accounting information system.

Hypothesis 4: Perceived self-efficacy in accounting information system adoption has a positive and significant effect on accountants' behavioral intentions in accounting information system

adoption.

Hypothesis 5 - Perceived technology fit has a positive and significant effect on the behavioral intentions of accountants in adopting the accounting information system.

## 3. Research Methodology

The present study applied research in terms of purpose and descriptive-correlational research regarding data collection. Researchers used the library method with journals, textbooks, and websites to design its theoretical framework. The target population consisted of the accounting staff working in companies listed on the 2020 Tehran Stock Exchange. The data collection instrument was a questionnaire. A standard questionnaire by Venkatesh et al. (2003) was used to measure the variables related to the UTAUT model (performance expectancy, effort expectancy, facilitating conditions, and self-efficacy), and a questionnaire was used for perceived technology fit variables (Goodhue, 1995). The questionnaire consisted of 39 questions based on the purposes of the study; it covered all the hypotheses of the research in three parts: 11 general questions in the first part, two questions about the accounting system information system in the second part, and 26 technical questions the third part, which were measured by a 5-option Likert scale. The researchers could find no study on the subject under study and no model in accounting. The researchers translated the questionnaire. The first ten questionnaires were distributed among the participants in the next step, experts' and specialists' opinions. Experts confirmed the face and content validities of the questionnaire, and Cronbach's alpha was used to confirm its reliability. Model analysis and measurement were performed using structural equation modeling. Structural equation modeling as a powerful statistical technique was used to examine the linear relationships between unobserved and observed variables and confirm the measurement model (confirmatory factor analysis) and the structural model in regression or (path analysis) in rejecting or adapting it to the data. The software used in this research for analysis was Smart PL3. This software analyzes structural equations with several variables and direct, indirect, and interactive effects. This software is suitable for testing the moderating effect of software. The first generation of structural equation software, such as Emus Wizzler, needs more than 200 samples. Still, the PLS software belongs to the second generation of structural equation modeling software, so one of the reasons for its popularity and versatility is the lack of any need to use a high sample size in research. One of the well-known rules for determining the minimum required sample in this method was proposed by (Barclay, Higgins and Thompson, 1995) to select statistical samples in modeling structural equations Smart-pls3. The minimum sample size required to use this method is equal to the most significant value obtained from two rules: 1) 10 times the number of indicators of the measurement model that has the highest index among the measurement models of the primary research model 2) 10 times the most relationships in the structural part The primary model. According to Figures 1 and 2, the most common relationships are 7 relationships in the performance expectancy item, which multiply 10 by 7 to become 70 samples. On the other hand, the highest indicator in our model was the behavioral intention to which 8 arrows are entered, so 8 multiplied by 10 becomes 80, and we chose the maximum of 80 as the sample size.

Due to the special conditions of the COVID-19 epidemic and the consequent problems for face-to-face communication, the questionnaires were collected from late March 2019 to June 2020. After designing the approved questionnaire on the online platform, it was sent to the accountants via websites and emails of the listed companies. Moreover, the researchers used the capacity of online channels and groups of accounting activists. About 350 electronic links were sent, and 206 electronic questionnaires were sent back to the researcher. Six questionnaires were answered incompletely and thus were omitted

# 4. Data Analysis

## 4.1. Reliability of the questionnaire

To evaluate the face and content validities, a questionnaire was given to 10 academic experts to confirm its face and content validities. Content validity was assessed through two indicators, i.e., CVR and CVI, which were proved to be within acceptable limits for all items. To answer the question of the study, the opinions of ten professors and experts were obtained, and after several revisions and corrections, the final 26 factors in the form of five components of performance expectancy, effort expectancy, facilitating conditions, self-efficacy, and perceived technology fit were identified (Table 1). It was observed that, for all items, the CVR value was more than 0.62 and the CVI value was more than 0.79; thus, all the items were confirmed by the experts and were used in the study.

**Table 1.** CVI and CVR indicators to identify the factors affecting accounting behavioral intention and the adoption of accounting information systems

| NO | | | CVR | CVI |
|---|---|---|---|---|
| 1 | performance expectancy | Using the AIS in my accounting tasks would be useful. | 1 | 1 |
| 2 | | Using the AIS in my accounting tasks would enable me to accomplish my accounting tasks more quickly. | 1 | 1 |
| 3 | | Using the AIS in my accounting tasks would increase my productivity. | 0.8 | 1 |
| 4 | | Using the AIS in my accounting tasks would increase my chance of getting a promotion | 0.8 | 0.9 |
| 5 | | Using the AIS in my accounting tasks would increase my satisfaction at work. | 1 | 1 |
| 6 | | Using the AIS in my accounting tasks would fulfil accounting information needs for my judgment quality. | 1 | 1 |
| 7 | | Using the AIS in my accounting tasks would enhance all AIS processes in my organization. | 0.8 | 0.8 |
| 8 | effort expectancy | My interaction with the AIS would be clear and understandable | 1 | 1 |
| 9 | | It would be easy for me to become skillful in using the AIS. | 0.8 | 0.9 |
| 10 | | I would find that the AIS easily does what I want it to do. | 1 | 1 |
| 11 | | Learning to operate the AIS would be easy for me. | 1 | 0.8 |
| 12 | facilitating conditions | I have the necessary (hardware) resources to use the AIS for accounting tasks. | 1 | 1 |
| 13 | | I have the necessary knowledge to use the AIS. | 0.8 | 0.9 |
| 14 | | The accountants in my organization are getting the training needed to use the AIS. | 0.8 | 1 |
| 15 | | A specific person (or group) is available to assist with AIS difficulties | 1 | 0.9 |
| 16 | self-efficacy | I could complete my accounting tasks using the AIS if there was no one around to tell me what to do as I go | 1 | 1 |
| 17 | | I could complete my accounting tasks using the AIS if I could call someone for help if I got stuck. | 0.8 | 0.9 |
| 18 | | I could complete my accounting tasks using the AIS if I had a lot of time to complete the job for which the software was provided. | 1 | 1 |
| 19 | | I could complete my accounting tasks using the AIS if I had just the built-in help facility for assistance | 0.8 | 0.8 |
| 20 | Perceived Technology fit | Using the AIS fits well with the way I like to do accounting tasks. | 1 | 1 |
| 21 | | I can count on the AIS to be 'up' and available when I need it. | 0.9 | 1 |
| 22 | | My organization's AIS would be compatible with all aspects of my accounting practices. | 0.9 | 0.9 |
| 23 | | In helping me perform the accounting tasks, the functions of the AIS would be enough. | 0.8 | 1 |
| 24 | Behavioral Intention | I plan to use the AIS in the future. | 0.9 | 0.9 |
| 25 | | I predict that I will use the AIS in the future. | 1 | 0.8 |
| 26 | | I plan to use the AIS in the future. | 1 | 1 |

We followed the following steps to examine the confirmatory factor analysis of this questionnaire. To evaluate the reliability of the questionnaire, Cronbach's alpha and combined reliability indices were used. A value higher than 0.7 is considered desirable for these two indicators. Table 2 shows that the Cronbach's alpha and combined reliability indices for all questionnaire dimensions were higher than 0.7, indicating their desirability. Convergent validity exists when the scores obtained from the two tools on a concept are highly correlated. In other words, convergent validity means measuring the degree of explanation of the hidden variable by observable variables, which is measured by the mean of extracting variance (AVE). If this index is more than 0.4, convergent validity will be confirmed. According to the following table, it can be seen that the AVE index for all dimensions of the questionnaire was higher than 0.4. Divergent validity also measures the ability of a measurement model to differentiate the observability of the latent variable of the model from other observations in the questionnaire and is complementary to convergent validity measured through the Farnell-Larker matrix.

**Table 2**. Reliability and discriminant validity

| | Performance Expectancy | Effort Expectancy | Perceived technology fit | Facilitating Conditions | Self-Efficacy | Accounting Behavioral Intentions |
|---|---|---|---|---|---|---|
| Performance Expectancy | 0.729 | | | | | |
| Effort Expectancy | 0.534 | 0.792 | | | | |
| Perceived technology fit | 0.458 | 0.587 | 0.818 | | | |
| Facilitating Conditions | 0.417 | 0.497 | 0.678 | 0.765 | | |
| Self-Efficacy | 0.227 | 0.203 | 0.306 | 0.278 | 0.694 | |
| Accountant Behavioral Intention | 0.406 | 0.363 | 0.333 | 0.226 | 0.336 | 0.849 |
| Cronbach's Alpha | 0.853 | 0.803 | 0.836 | 0.778 | 0.704 | 0.808 |
| Combined reliability | 0.887 | 0.871 | 0.890 | 0.848 | 0.785 | 0.886 |
| AVE | 0.531 | 0.628 | 0.668 | 0.585 | 0.481 | 0.721 |

### 4.2. Descriptive findings

Based on 200 analyzed questionnaires, the following results were obtained: regarding the gender, 87 (43.5%) of the participants were women and 113 (56.5%) were male. Regarding the age of the subjects, 54 people (27%) were 30 years old and younger, 108 (54%) were 31-40 years old, and 38 (19%) were older than 40. In terms of education degrees, the highest frequency (86 people, 43%) was related to people with master's degrees, and the lowest frequency (10 people, 5%) was related to people with an associate degree. Most participants (148 people, 74%) studied accounting, and eight (4%) studied economics. Forty-two of the subjects (21%) were financial managers, 118 (59%) were accountants, and 21 (10.5%) were auditors. 19 people (9.5%) had activities in other fields. Most subjects (59 people, 29.5%) stated that they had worked in their current position for more than ten years. Eighteen people (24%) said they had been working in the current organization for more than ten years. The majority of the subjects (57 people, 28.5%) said that they had worked in accounting for more than ten years and had gained experience in information technology and computers. Most people (97 people, 48.5%) considered their level of knowledge in accounting information systems to be good. 51 people (25.5%) were working in manufacturing companies, 99 (49.5%) in service companies, and 50 (25%) in commercial companies. 122 (61%) people stated that their company's accounting information system was composed of manual and computer-assisted systems, and 78 people (39%) had worked in companies with computer-assisted systems.

### 4.3. Testing the hypotheses of the research model

Confirmatory factor analysis was used to investigate the research hypotheses. The association intensity between a hidden variable and the corresponding observed variable during the path analysis process is determined by a numerical value between zero and one as factor loading. The negative index of the factor loading indicates its negative effect in most structures; still, the main criterion is larger than the t-statistic. If the t-statistic value for judging the critical statistic is at the error level of 0.5, i.e., 1.96, the observed factor load is significant.

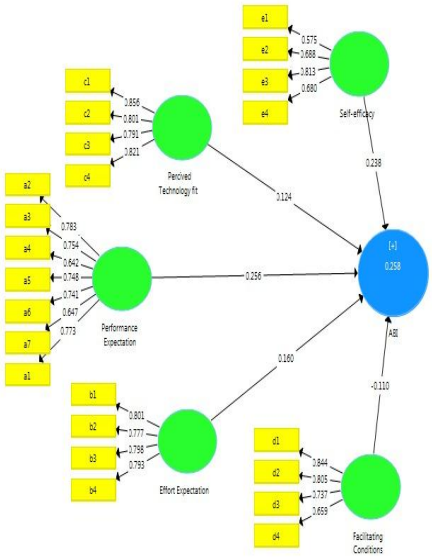


**Figure 2**. path coefficients

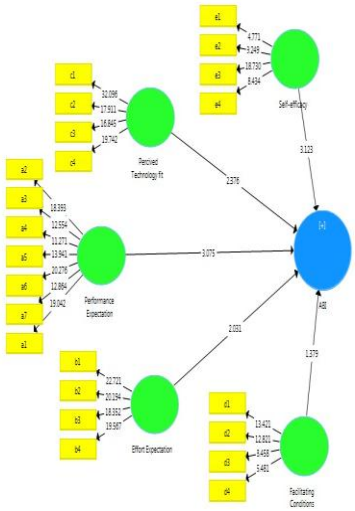


**Figure 3.** Statistics t

### 4.4. Goodness–of–fit measure

The GOF criterion refers to the general part of structural equation models. It helps the researcher control an available part fit by examining the fit of the measurement part and the structural part of the general research model. To measure fit in a general model, only one criterion, i.e., GOF, is used.

GOF = √average (Commonality) × average (R2)

Since the value of Commonality in AVE is equal to AVE in partial least squares, Wetzels, Odekerken-Schröder and Van Oppen (2009) have proposed the following formula:

GOF = √ average (AVE) × average (R2)

There are three values for evaluating the GOF index: Weak: the GOF value between 0.1 and 0.25; an average value between 0.25 and 0.36; and a strong value for values higher than 0.36.

Using Table (3), we obtain the mean AVE. According to figure 2, R2 is equal to 0. 258

**Table 3.** Calculation of goodness of fit of the structural model

| Variable | R2 | Average (AVE) |
|---|---|---|
| Behavioral Intention | 0.258 | 0.5786 |

GOF=0.380

A value of 0.38 for GOF indicates a strong overall model fit.

### 4.5. Summary of the findings of the research

The test results are presented according to the model test results in the form of path coefficients

with t-statistic hypotheses according to Figure (2) and Figure (3).

The first hypothesis stated that the expectations of the perceived performance of the accounting information system have a significant effect on the behavioral intention of accountants in adopting the accounting information system. In the analysis of this hypothesis, the value of the t-statistic related to the effect of perceived performance expectancy on accountants' behavioral intention was 3.075, which is higher than 1.96. On the other hand, it was observed that the value of the expected performance path to the accountants 'behavioral intention was 0.256, showing a direct effect of the positive effect of the perceived performance expectancy on the accountants' behavioral intention.

The second hypothesis stated that the expectations of perceived effort from the accounting information system have a significant effect on the behavioral intention of accountants in adopting the accounting information system. In the analysis of this hypothesis, the value of the t-statistic related to the effect of perceived effort expectations on accountants' behavioral intention was 2.031, which is more than 1.96. Accountants' behavior value was 0.160, and the positive coefficient of this path indicated the direct effect of perceived effort expectancy on accountants' behavioral intention.

The third hypothesis stated that the facilitating conditions perceived by the accounting information system affect the behavioral intention of accountants in adopting the accounting information system. The value of the t-statistic related to the effect of perceived facilitator conditions on accountants' behavioral intention was 1.379, which is less than 1.96. The negative effect of this path coefficient indicated that the effect of perceived facilitating conditions did not affect the accountants' behavioral intention, and thus this hypothesis was rejected.

The fourth hypothesis stated that the perceived self-efficacy of the accounting information system has a significant effect on the behavioral intention of accountants in adopting the accounting information system. In the study, the value of the t-statistic related to the impact of perceived self-efficacy on accountants' behavioral intention was 3.123, which is higher than 1.96. The positive coefficient of this path indicated that self-efficacy's perceived effect on accountants' behavioural intention had a direct impact.

The fifth hypothesis stated that the perceived technology fit from the accounting information system has a significant effect on the behavioral intention of accountants in adopting the accounting information system. In the study, the value of the t-statistic related to the impact of perceived technology fit on accountants' behavioral intention was 2.376, which is higher than 1.96. The positive coefficient of this path indicates that the effect of perceived technology fit on the behavioral of accountants had a direct impact.

## 5. Discussion and Conclusion

This study examined the factors that affect the behavioral intention of accountants in adopting the accounting information system using a combination of two models, i.e., the unified theory of acceptance and use of technology and the task-technology fit and task-technology fit. The results showed that, except for the facilitating conditions, other factors including performance expectancy, effort expectancy, self-efficacy, and perceived technology fit, were significantly influential in researching accountants' behavioral intention in adopting accounting information systems.

According to the results, performance expectancy was the first significant factor in respondents' adoption of technology; the higher performance the new technology has in their view, the more successful it will be. Indeed, the accountants found that the new system can increase their convenience and save time and ease of operation. They will take a positive approach to its use. This finding is in line with that found by Aoun, Vatansakdakul and Li (2010), Gonzalez, Sharma and Galletta (2012), and Odeh (2019), but Alamin et al. (2015) reached a different and inconsistent finding.

Another important factor in adopting the technology is effort expectancy. It is not surprising that accountants' understanding of whether adopting an accounting information system is easy or difficult is considered an essential factor in adopting it. Using a system needs mastery of skills for them. If accountants realize an accounting information system is easy to use, they will use it more. Accountants often prefer to adopt a system that is not complex and is easily enforceable. This finding is in line with the findings of the empirical research by Aoun, Vatansakdakul and Li (2010), Gonzalez, Sharma and Galletta (2012), Odeh (2019), and Alamin et al. (2015).

Another factor in technology adoption is the facilitating conditions. It is noteworthy that using new technology requires sufficient knowledge and support. Usually, people resist using whatever is unique, and the facilitating conditions work to eliminate this resistance. People believe that there is the infrastructure required to support the system, and lack of infrastructure and support leads to technology rejection and non-acceptance; in this study, no significant factor was found in the behavioral tendencies of accountants in accepting the system. This could be due to insufficient technical support, poor IT infrastructure, and poor knowledge of accounting information systems. This finding is consistent with the research results by Venkatesh et al. (2003) because he believed that when both the performance expectancy construct and the effort expectation construct exist in the model, the facilitating conditions are insignificant in predicting tendencies. This result is consistent with the results of studies by Gonzalez, Sharma and Galletta (2012) and Odeh (2019), but Alamin et al. (2015) reached a different result.

Another influential factor was self-efficacy, which reflects an individual's judgment of their ability to use technology as long as they perform a particular task. These individuals find themselves able to learn how to use and apply it because the adoption of the system is due to the ability of accountants to do it, and accountants with a higher sense of self-efficacy are more inclined to adopt information systems. Research by Alsyouf (2021) and Alamin et al. (2020) confirmed this factor.

Perceived technology fit is an important factor in adopting accounting information systems. It was found that the fit between the characteristics of accounting information systems and existing accounting practices was one of the biggest concerns of accountants for adopting this system. This means that it will be highly acceptable if accounting information systems have their characteristics in line with current accounting practices. This finding is in line with Alamin et al. (2015) and Naheb, Sukoharsono and Baridwan (2017).

As a result, according to the findings and results of the present study, the aspects of profitability and its comparative advantage over previous methods should be emphasized when introducing new technology. On the other hand, the systems introduced to accountants should be as simple and understandable as accountants naturally prefer to use their traditional methods, which they are fully aware of and can solve in case of a problem with their own opinion or that of their colleagues; so, when introducing a system, the users need to be assured that the support experts are there to help them. Accountants can be considered to design or upgrade software and information systems to motivate them to use the system. IT does not have to be usable. On the other hand, companies and managers hold continuous courses such as short courses, conferences, and workshops on training, especially for new users. Continuous attention to the needs of accountants is recommended because the implementation stage is after the acceptance stage to investigate the impact of successful acceptance in implementing systems and better understand the factors of cross-sectional studies in different periods. Like other studies, there were limitations in the present study, such as the design and collection of the questionnaire. The most important problem in discussing the questionnaire collection was that this research was conducted during the coronavirus outbreak, which led to the widespread restrictions on the questionnaire's physical collection. The researcher had to design the

questionnaire online and send it electronically to accountants. There was another limitation; respondents may also have answered questions about acceptance based on their mental simulation of computer-based accounting software and did not consider the broader dimensions of the systems.

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