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# Adoption of tax digitalisation among Malaysian tax practitioners

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**ABSTRACT**

The rapid advancement of digitalization has significantly impacted various aspects of accounting professions, particularly in taxation. Tax digitization offers numerous advantages, including streamlining tax processes, reducing administrative burdens, increasing efficiency, and enhancing data security. While tax practitioners in advanced economies have embraced digitalization, their Malaysian counterparts are still in the early stages of transitioning to a modern digital system. This situation has prompted researchers to predict factors that could accelerate the adoption of tax digitalization among Malaysian tax practitioners. Emulating the Unified theory of acceptance and use of technology (UTAUT), this study investigates the adoption of tax digitalization with performance expectancy, effort expectancy, social influence, and facilitating conditions. The researchers distributed 200 questionnaires to Malaysian tax practitioners. However, only 142 proceeded for further analysis. Results from multiple regression using partial least squares structural equation modelling (PLS-SEM) 3 indicate that all variables: effort and performance expectancy, social influence, and facilitating conditions exhibit a significant relationship with tax digitalization adoption. These findings provide valuable insights for policymakers, tax authorities, and professional bodies in developing strategies and initiatives to promote the adoption of tax digitalization among practitioners. Embracing digitalization is crucial for transforming the profession and fostering efficiency, sustainability, and resilience.



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## 1. INTRODUCTION

Digital transformations have ushered in profound changes across various professions [1] introducing innovations that reshape how individuals engage with the world. Alnasrallah and Saleem [2] define digitalisation as converting information from manual or analogue formats to digital forms. The proliferation of digital tools, including cloud computing, big data, artificial intelligence, robotics, blockchain, and the internet of things, has gradually reshaped the global business landscape and practices. This evolution is believed to stimulate economic development by enhancing business operational efficiency.

The impact of digitalisation is evident across various sectors, transforming the business landscape [3], healthcare [4], education [5], environmental sustainability [6], and areas such as accounting, auditing, and taxation [7], [8]. Tax practitioners, in particular, stand to gain substantial benefits, including increased

efficiency, improved service quality, reduced document management, enhanced capacity, better data analysis, accurate decision-making, improved access to information, and streamlined communication [9]. Recognizing the strategic and operational capabilities of digitalisation, the International Federation of Accounting (IFAC) emphasizes its importance for the sustainability and resilience of tax practitioners. Tax firms, responding to evolving tax policies and administration, are compelled to adopt ubiquitous digital tools such as tax software, artificial intelligence (AI), big data, and e-cloud storage to stay competitive.

To date, although developed nations have widely employed tax digitalisation, tax practitioners in Malaysia are struggling to familiarise themselves with the system. The Malaysian Institute of Accountants (MIA) survey in 2022 revealed that only 23% of Malaysian accounting practitioners used tax software, while the remaining 77% had never or rarely used it [10]. The survey further indicated three main barriers hinder tax digitalisation adoption: lack of talent and benefits besides funding. Talent is crucial for harnessing skills and competencies. Falahat *et al*. [11] articulated that digitalisation requires skilful and talented people. Those with substandard talent would encounter difficulties and must put extra effort into familiarising themselves. Malaysian tax practitioners need to accelerate digitalisation adoption to keep pace with developed nations. Despite studies on audit and accounting software [12], little attention has been given to tax digitalisation, including tax software, artificial intelligence, big data, and internet of things.

Emulating the proposition postulated by the unified theory of acceptance and use of technology (UTAUT) [13], the objective of this study is to investigate the tax digitalisation adoption on effort expectancy, performance expectance, social influence and facilitating condition among tax practitioners in Malaysia. The remainder of the study are followed by a review of the literature, describing the research methodology, analysis, and discussion of results. Finally, it highlights the implications, limitations, and recommendations for future studies.

## 2. LITERATURE REVIEW

### 2.1. Tax digitalisation adoption

Tax digitalisation involves incorporating digital technologies to upgrade various aspects of the tax system, aiming to enhance efficiency, accuracy, transparency, and convenience in tax-related activities [7]. For tax practitioners, embracing digitalisation brings numerous advantages, including reduced administrative burden, minimized tax evasion, improved revenue collection efficiency, and heightened transparency. Successful implementation necessitates careful planning, stringent cybersecurity controls [14], infrastructure development [15], and effective stakeholder communication [16].

While tax practitioners in advanced economies have widely adopted tax digitalisation, those in emerging economies encounter challenges. The study focuses on tax digitalisation adoption, reflecting the user's psychological state immediately preceding the adoption of this technology [17]. The success of tax digitalisation hinges on practitioners' willingness to adopt the system, particularly in emerging economies where adoption lags despite its widespread use in advanced economies.

### 2.2. Unified theory of acceptance and use of technology

Venkatesh *et al*. [13] proposes a UTAUT to explain factors that lead to the adoption of a new technology by a user. The proposed factors consist of performance expectancy, effort expectancy, social influence and facilitating conditions. Abundances of studies have employed UTAUT as an underpinning theory in various accounting contexts such as cloud-based accounting information [2], e-Taxpay [18], blockchain [17], accounting system [19], accounting software [20], digital technology accounting [2], computer-assisted audit tools and techniques (CAATTs) [1], and accounting [11].

Additionally, many studies have empirically examined the adoption of new technology by users using the UTAUT model in various sectors. Amongst them are education [5] and auditing [21]. In this study's context, a new technology refers to tax digitalisation. In other words, the willingness of tax practitioners to adopt tax digitalisation in performing their task.

### 2.3. Performance expectancy and tax digitalisation adoption

Performance expectancy, the belief that new technology will improve work productivity, is linked to the adoption of digital tools [13]. In Turkey, students are more likely to adopt an electronic document management system if they perceive it as a performance catalyst [21]. The study's findings indicated that performance expectancy played a significant role, accounting for 61% of the adoption of electronic document management system (EDMS).

Supporting this trend, [22] demonstrated that Jordanian auditors embraced cloud-based accounting information systems and computer-assisted audit techniques (CAATs). These studies collectively highlight the pivotal role of performance expectancy in influencing users' decisions to adopt technological innovations. Thus, emulating the UTAUT [13], and literature [21], [22] the researchers formulate the following hypothesis. H1: performance expectancy positively related to tax digitalisation adoption.

### 2.4. Effort expectancy and tax digitalisation adoption

Effort expectancy pertains to the extent of a user's perception that learning and adopting a new digital tool can be achieved without significant difficulties [18]. In the context of user adaptation, effort expectancy evaluates the ease of learning and utilizing digitalisation [13]. For instance, [23] indicated that the intention of auditors to adopt CAATs in public accounting firms in Indonesia does not show a significant relationship with effort expectancy. This suggests that, regardless of the perceived difficulties associated with the system, auditors are inclined to adopt CAATs as they deem essential for audit tasks. Hence, aligned with the UTAUT [13] and prior literature [18], [23], the researchers formulate the following hypothesis. H2: effort expectancy positively related to tax digitalisation adoption.

### 2.5. Social influence and tax digitalisation adoption

Social influence refers to the extent to which individuals anticipate support from their significant others in adopting new digital tools [13]. Existing literature consistently underscores the impact of social influence in the realm of digitalisation. Notably, social influence plays a pivotal role in shaping the adoption of online accounting platforms, as evidenced by the seminal works. Al-Okaily *et al*. [24] further substantiate this by illustrating how families and peers exert influence on the adoption of cloud-based accounting information systems.

However, the study conducted by [18] in the context of Indonesian auditors revealed that social influence did not significantly affect the adoption of CAATs. Despite this study showing an insignificant relationship, the consistency in findings from both the former studies supports the notion of a meaningful connection between social influence and technology adoption. Considering these observations and in alignment with the UTAUT [13] and prior literature [18], [24] the researchers propose the following hypothesis. H3: social influence positively related to tax digitalisation adoption.

### 2.6. Facilitating conditions and tax digitalisation adoption

Facilitating conditions, as defined by [13], denote the circumstances that make it more convenient for consumers to utilize new digital tools to accomplish various tasks. The UTAUT theory emphasizes the significance of facilitating conditions in influencing user adoption of emerging technologies. Additionally, a body of literature has consistently demonstrated the predictive power of facilitating conditions in digitalisation adoption [19], [25]. In an empirical examination employing meta-analytic structural equation modelling (SEM) across 90 previous studies on e-government. Hooda *et al*. [25] found direct effects of facilitating conditions on digitalisation adoption. Specifically, the results underscored the crucial role of facilitating conditions in shaping the adoption of digital tools. Hatta *et al*. [19] concurred that facilitating conditions exert a significant positive influence on the adoption of accounting software among accountants. In line with the UTAUT [13] and the prior literature [19], [25], the researchers propose the following. H4: facilitating conditions positively related to tax digitalisation adoption.

## 3. RESEARCH METHOD

### 3.1. Research design

The researchers employed a rigorous methodology that combined descriptive, positive, and quantitative techniques to investigate the research questions thoroughly. Using a cross-sectional approach, they distributed well-structured questionnaires to identified respondents, allowing for a comprehensive data analysis. By testing hypotheses derived from their research inquiries, the researchers were able to derive meaningful insights and draw reliable conclusions from their study.

### 3.2. Population and sample

The study involved tax practitioners registered with Malaysia association of tax accountants (MATA). Researchers sent 200 questionnaires via what-apps, and 160 responded. After cleaning, 142 data were processed for further analysis.

### 3.3. Measurement

The researchers adapted the measurements for all variables from [13]. Prior studies have used and verified the measurements namely tax technology adoption, effort expectancy, performance expectancy, social influence and facilitating conditions [18], [19], [21]–[25]. The researchers used a five-point Likert scale in a continuum from 1 to 5 (strongly disagree to strongly agree), which is consistent with prior studies in investigating the adoption of new technology [11]. In the context of this study, technology adoption is equivalent to the intention of tax practitioner to adopt tax digitalisation in their course of duties.

## 4. RESULTS

### 4.1. Preliminary analysis

The researchers distributed 200 questionnaires, and out of this number 160 returned. However, the researchers eliminated 12 due to inappropriateness or partially filled. Finally, a total of 142 data proceeded for further analysis. First, the researchers employed pre-replacing and embedded techniques to treat the missing data. Next, the researchers perform normality test. Results indicated that skewness and kurtosis values for all items were between -1 to +1, indicating data were within normal distribution [26].

### 4.2. Respondents demographic profiles

After satisfying with the preliminary analysis, the researchers proceeded to analyse the demographic profile of the respondents. They employed SPPS version 27 to describe their profiles in frequency and percentage. The results indicated that 64 people or 45 per cent of the respondents were females, while the remaining 78 or 55 per cent were males. Additionally, almost 134 people or 94.37 per cent were married; the remaining 8 or 5.63 per cent were single. In terms of age, most respondents were between 30 years and below (10 people or 7 per cent), followed by between 31 to 40 years (52 people or 37 per cent), between 41 to 50 years (61 people or 42 per cent), and 51 years and above (19 people and 13 per cent). The majority of the respondents were degree educated (95 people or 67 per cent), followed by those who obtained a diploma (32 people or 22 per cent), and master degree and PhD (15 respondents or 11 per cent).

### 4.3. Measurement model

The researchers used structural equation model (SEM) of partial least square (PLS) (PLS-SEM) version 3 to analyse the data further. Smart PLS-SEM is better than other regression analysis tools because the study concentrated on prediction instead of testing the entire model of UTAUT [25]. PLS-SEM evaluates data in two models: measurement and structural. The measurement model examines the goodness of data, whether the data fulfil the validity and reliability requirements. Meanwhile, the structural model evaluates the hypotheses testing, determining whether the research answer the research questions and meet its objectives.

In the measurement model, the researchers assess convergent validity by measuring the value of items loading, composite reliability (CR), and average variance extracted (AVE). Results revealed the factor loadings for all items were between 0.61 to 0.92, above 0.50, as suggested by [26]. The value of CR for all the constructs surpassed the threshold value (above 0.7) with values ranging between 0.84 and 0.93 [27]. Additionally, the AVE values were in the range between 0.57 to 0.76, exceeding the minimum requirement of 0.5 [26]. Although there are two items with factor loading of less than 0.7, none of the items were deleted since all AVE values are greater than 0.5. Hence, all values fulfil the criteria of validity and reliability. Table 1 depicts the results of the measurement model.

Table 1. Measurement model

| Constructs | Items | Loading | AVE | CR |
|---|---|---|---|---|
| Performance expectancy | | | | |
| Tax digitalisation enables me to accomplish task more quickly | X1.1 | 0.754 | 0.685 | 0.895 |
| Tax digitalisation increases my productivity | X1.2 | 0.772 | | |
| Tax digitalisations enable me to spend less time on the routine tasks of taxation | X1.3 | 0.712 | | |
| Tax digitalisation improves the quality of the taxation work | X1.4 | 0.780 | | |
| Effort expectancy | | | | |
| My interaction with tax digitalisation is clear | X2.1 | 0.882 | 0.634 | 0.873 |
| I find tax digitalisation is easy to adopt | X2.2 | 0.896 | | |
| I can quickly adopt tax digitalisation | X2.3 | 0.610 | | |
| Adopting tax digitalisation requires less effort | X2.4 | 0.886 | | |
| Social Influence | | | | |
| People who influence my behaviour think than I should adopt tax digitalisation | X3.1 | 0.881 | 0.570 | 0.841 |
| People who are important to me believe that I should adopt tax digitalisation | X3.2 | 0.912 | | |
| Our firm's/ department's senior managers have been helpful to the use of tax digitalisation | X3.3 | 0.892 | | |
| In general, our organization has supported the adoption of tax digitalisation | X3.4 | 0.676 | | |
| Facilitating conditions | | | | |
| I have the necessary resources to adopt tax digitalisation | X4.1 | 0.701 | 0.715 | 0.908 |
| I believe that stability of the internet network to support tax digitalisation is important | X4.2 | 0.725 | | |
| My firm has good infrastructure to support tax digitalisation adoption | X4.3 | 0.873 | | |
| I have all necessary resources to adopt tax digitalisation | X4.4 | 0.870 | | |
| Tax digitalisation adoption | | | | |
| I am willing to adopt tax digitalisation in the course of my work | Y1 | 0.832 | 0.928 | 0.763 |
| I believe tax digitalisation is better than manual taxation | Y2 | 0.884 | | |
| Adopting tax digitalisation, make me feel overwhelming | Y3 | 0.888 | | |
| Generally, I have positive view on tax digitalisation | Y4 | 0.888 | | |

### 4.4. Discriminant validity

After satisfying that data fulfilled the convergent validity, the researchers performed discriminant validity using the Heterotrait-Monotrait ratio of correlations (HTMT) criterion. For the stricter criterion, the HTMT values should be below 0.85. Meanwhile, for the lenient standard, the value should be below 0.90. Results indicated that all the values were below the criterion, showing that all four constructs were distinct. Another measurement of validity is discriminant validity, which is distinct from convergent validity. Discriminant validity is concerned with whether a construct is distinct from other constructs in the model [26].

The data fulfil HTMT criterion, if the values are lower than 0.85 [26], showing the establishment of discriminant validity for the constructs. The results indicated that all constructs had appropriate discriminant validity because their values were below the threshold of 9.0, indicating that two latent variables that represent different theoretical concepts are statistically different. Table 2 depicts the discriminant validity of the HTMT criterion.

Table 2. Discriminant validity

| | Effort expectancy | Facilitating condition | Performance expectancy | Social influences |
|---|---|---|---|---|
| Effort expectancy (EE) | | | | |
| Facilitating condition (FC) | 0.698 | | | |
| Performance expectancy (PE) | 0.669 | 0.592 | | |
| Social influences (SI) | 0.867 | 0.708 | 0.628 | |
| Tax digitalisation (TD) | 0.877 | 0.765 | 0.651 | 0.840 |

### 4.5. Structural model

Next, the researchers analyse data in structural model. The ultimate focussed is testing the hypotheses. To fulfil this purpose, the researchers employed PLS path modelling of multiple regression approaches, using the bootstrapping technique. This technique will confirm that all the model parameters have empirical sampling distribution and standard error. The standard method for evaluating the structural model in PLS-SEM are the significance of the path coefficient, the level of R-squared (R2), the effect size (f2), and the predictive relevance (Q2).

The results indicated that all the variance inflation factor (VIF) values were less than 5.0, showing a low correlation between predictors, and thus, indicating that the collinearity between is free from the inheritance [26]. The results further indicated that the R2 was 0.694, in which all four predictors explained 69.40 percent of the variance in tax digitalization adoption. Besides, the results indicated the value of model predictive relevance (Q2) for tax digitalization was 0.516, showing that the model had a good predictive value. Additionally, the results revealed that all variables had a small effect size. According to Hair *et al.* [26], the effect sizes should be considered irrespective of its size as they have unique characteristics that can affect the dependent variable. Next, the researchers examine the relationship between four predictors namely performance expectancy, effort expectancy, social influence, and facilitating condition with tax digitalization adoption through hypotheses testing.

The results indicated that performance expectancy (β1=0.112, t1=2.076 **p<0.05), effort expectancy (β2=0.340, t2=3.415 ***p<0.00) social influence (β3=0.289, t3=2.855 ***p<0.00) and facilitating condition (β4=0.227, t2=2.855 ***p<0.05) are positively related to tax digitalization adoption, thus, supported all H1, H2, H3, and H4. Figure 1 depicts the structural model of the study based on algorithm analysis and Table 3 depicts the results of hypotheses testing for all relationships.

Table 3. Hypotheses testing

| Hypothesis | | Estimate | S.E. | T | *p-value* | VIF | $f^2$ | Relationship |
|---|---|---|---|---|---|---|---|---|
| H1 | PE→ TD | 0.112 | 0.054 | 2.076 | 0.038 | 1.820 | 0.022 | Significant |
| H2 | EE →TD | 0.340 | 0.099 | 3.415 | 0.001 | 2.677 | 0.141 | Significant |
| H3 | SI → TD | 0.289 | 0.101 | 2.855 | 0.004 | 2.512 | 0.108 | Significant |
| H4 | FC → TD | 0.227 | 0.109 | 2.081 | 0.038 | 1.808 | 0.093 | Significant |

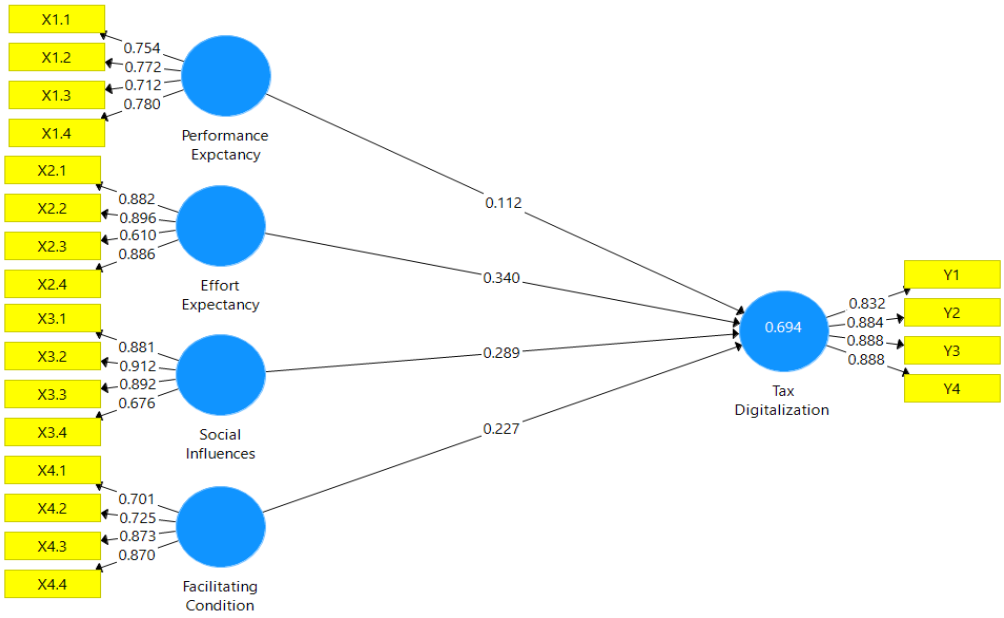


Figure 1. Structural model-based on algorithm analysis

## 5. DISCUSSION

The first objective of this study is to investigate the relationship between performance expectancy and tax digitalization adoption among Malaysian tax practitioners. Results revealed that performance expectancy has a significant and positive relationship with tax digitalization adoption (β1=0.112, t:2.076, and p<001). The findings are in tandem with UTAUT model [13] and prior literature [21], [22], although the research was performed in diverse contexts. Essentially, the more confident practitioners are about digitalisation benefiting their work, the more willing they are to embrace it. Thus, the study confirms that performance expectancy has a positive relationship with tax digitalisation adoption among Malaysian tax practitioners, supporting the first hypothesis (H1).

Next, the study investigates the relationship between effort expectancy and tax digitalization adoption. Results highlighted that effort expectancy has a positive relationship with tax digitalization adoption (β2=0.340, t:3.415, and p<001). The results are aligned with the UTAUT model [13] and prior literature, even though previous studies focused on different forms of digitalisation, such as blockchain for auditors [23]. Despite the variation in digital tools, the general trend remains consistent: when tax practitioners find digital processes easy to use and integrate into their work, they are more likely to adopt them. This supports the second hypothesis (H2) of the study, which posited that effort expectancy is positively related to tax digitalisation adoption among Malaysian tax practitioners.

The third objective is to investigate the relationship between social influence with tax digitalization adoption. Results revealed that social influence has a positive and significant relationship with tax digitalization adoption (β3=0.289, t:2.855), and p<0.004). The results support UTAUT model [13] and prior literature [18], [24]. When tax practitioners perceive that their peers or social networks positively endorse digitalisation, they are more inclined to adopt these technologies themselves. This supports the study's third hypothesis (H3), which proposed that social influence is positively related to tax digitalisation adoption among Malaysian tax practitioners.

Finally, in the fourth objective, the study investigates the relationship between facilitating condition with tax digitalization adoption. Results indicated a positive relationship between facilitating conditions, such as internet infrastructure and user-friendly interfaces, and tax digitalisation adoption among Malaysian tax practitioners (β4=0.227, t:2.081, p<0.001). The results support UTAUT [13], also consistent with prior literature in the field [19], [25]. Revealing that the higher the tax practitioners perceived that they work under conducive internet infrastructure such as internet connection and stability, user friendly inter-phase, the more likely they will adopt tax digitalization. Moreover, the study also highlighted that funding was identified as one of the barriers to tax digitalisation adoption, as revealed by the MIA survey. This underscores the importance of facilitating conditions and addressing potential barriers, such as financial constraints, to promote the widespread adoption of digital tax processes. Accordingly, the results supported H4, that facilitating condition positively related to tax digitalization adoption.

### 5.1. Theoretical and practical implications

The study's findings also underscore the significance and applicability of the UTAUT framework in understanding and predicting tax digitalisation adoption patterns among tax practitioners. This validated model serves as a valuable tool for crafting targeted interventions, devising strategic plans, and formulating policies that can streamline the adoption process and alleviate complexities associated with digitalisation. By leveraging the insights from the UTAUT, tax stakeholders can enhance their efforts towards successful digital transformation initiatives, ultimately leading to improved efficiency and effectiveness in tax-related.

### 5.2. Limitations and suggestions for future research

The study on Malaysian tax practitioners' adoption of tax digitalization has several limitations. Its quantitative approach provides less insight into their thoughts and motivations, suggesting a mixed-method approach. Additionally, the model's accuracy may be affected by evolving digital technology, such as AI-driven automation and blockchain. Future research should consider these factors to improve understanding.

## 6. CONCLUSION

The adoption of digitalization is crucial for the sustainability and resilience of tax practitioners in digital economies. It is more likely when practitioners perceive performance benefits, user-friendly systems, social support, and a supportive infrastructure. This knowledge can guide the development of training programs to enhance digital skills and capabilities, enabling efficient, accurate, and proactively serving clients and stakeholders**.**

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## REFERENCES

[1] A. Afsay, A. Tahriri, and Z. Rezaee, "A meta-analysis of factors affecting acceptance of information technology in auditing," *International Journal of Accounting Information Systems*, vol. 49, p. 100608, Jun. 2023, doi: 10.1016/J.ACCINF.2022.100608.

[2] W. Alnasrallah and F. Saleem, "Determinants of the Digitalization of Accounting in an Emerging Market: The Roles of Organizational Support and Job Relevance," *Sustainability*, vol. 14, no. 11, p. 6483, Jun. 2022, doi: 10.3390/su14116483.

[3] M. Diller, M. Asen, and T. Späth, "The effects of personality traits on digital transformation: Evidence from German tax consulting," *Int. J. Account. Inf. Syst.*, vol. 37, p. 100455, 2020, doi: 10.1016/j.accinf.2020.100455.

[4] M. Z. Alam, M. R. Hoque, W. Hu, and Z. Barua, "Factors influencing the adoption of mHealth services in a developing country: A patient-centric study," *International journal of information management*, vol. 50, pp. 128–143, Feb. 2020, doi: 10.1016/J.IJINFOMGT.2019.04.016.

[5] M. J. Mohamed and S. A. Hassan, "Studying the Factors that Influence the Adoption of Educational Technology in Mogadishu Secondary Schools Using UTAUT Model," *Int. J. Inf. Educ. Technol.*, vol. 13, no. 7, pp. 1070–1077, 2023, doi: 10.18178/ijiet.2023.13.7.1906.

[6] M. Shamsuddoha and A. G. Woodside, "Achieving radical process innovations by applying technology-mindset transformations via second-order system-dynamics engineering," *J. Bus. Res.*, vol. 147, pp. 37–48, Aug. 2022, doi: 10.1016/J.JBUSRES.2022.04.006.

[7] M. J. P. Azuaje, "Digitisation and/or digital transformation in the field of tax administration," *Review of International and European Economic Law*, vol. 04, no. 02, pp. 1–23, 2023.

[8] W. N. W. Ahmad, R. A. Hassan, M. Zakaria, and S. Nazri, "Predicting the adoption of ' Buku Kedai': a digital book-keeping application among Malaysian micro-entrepreneurs," *TELKOMNIKA (Telecommunication Computing Electronics and Control)*, vol. 22, no. 1, pp. 95–103, 2024, doi: 10.12928/TELKOMNIKA.v22i1.25607.

[9] M. M. A. Afifa, H. V. Van, and T. L. H. Van, "Blockchain adoption in accounting by an extended UTAUT model: empirical evidence from an emerging economy," *J. Financ. Report. Account.*, 2022, doi: 10.1108/JFRA-12-2021-0434.

[10] MIA, "Technology Adoption by the Accountancy Profession Survey 2022," *MIA Accountants Today*, 2022. https_www.at-mia.my/?url=https%3A%2F%2Fwww.at-mia.my%2F2022%2F06%2F29%2Ftechnology-adoption-by-the-accountancyprofession-survey-2022%2F (accessed Mar. 03, 2023).

[11] M. Falahat, P. K. Cheah, J. Jayabalan, C. M. J. Lee, and S. B. Kai, "Big Data Analytics Capability Ecosystem Model for SMEs," *Sustain.*, vol. 15, no. 1, 2023, doi: 10.3390/su15010360.

[12] K. Chanthinok and K. Sangboon, "The Development of Digital Accounting System on Cloud Computing," *J. Comput. Sci.*, vol. 17, no. 10, 2021, doi: 10.3844/jcssp.2021.889.904.

[13] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, "User acceptance of information technology: Toward a unified view," *MIS Quarterly*, vol. 27, no. 3, pp. 425–478, 2003, doi: 10.2307/30036540.

[14] Z. Gao, L. Y. Lu, and Y. Yu, "Local Social Environment, Firm Tax Policy, and Firm Characteristics," *J. Bus. Ethics*, vol. 158, no. 2, 2019, doi: 10.1007/s10551-017-3765-2.

[15] M. Meiryani, H. Oktavianie, and V. Teresa, "Understanding Determinants of Computer Assisted Audit Techniques (CAATs) Adoption Intention Among Auditors in Indonesia," in *ACM International Conference Proceeding Series*, 2022, vol. 1, no. 1, pp. 117–124, doi: 10.1145/3545897.3545915.

[16] F. Ullah, S. M. E. Sepasgozar, M. J. Thaheem, and F. Al-Turjman, "Barriers to the digitalisation and innovation of Australian Smart Real Estate: A managerial perspective on the technology non-adoption," *Environ. Technol. Innov.*, vol. 22, May 2021, doi: 10.1016/j.eti.2021.101527.
[17] F. Maphumula and K. Njenga, "Innovation in Tax Administration: Digitizing Tax Payments, Trust and Information Security Risk," in *2019 Open Innovations Conference, OI 2019*, 2019, doi: 10.1109/OI.2019.8908232.
[18] A. Lutfi, "Factors Influencing the Continuance Intention to Use Accounting Information System in Jordanian SMEs from the Perspectives of UTAUT: Top Management Support and Self-Efficacy as Predictor Factors," *Economies*, vol. 10, no. 4, 2022, doi: 10.3390/economies10040075.
[19] M. Hatta, F. Marietza, and R. Y. Desthomson, "The Influence of Intention Utilization and Use Of Accounting Software on Individual Performance: Unified Theory Approach of Acceptance and use Of Technology (UTAUT) Model," *J. Akunt.*, vol. 6, no. 1, pp. 85–100, May 2019, doi: 10.33369/j.akuntansi.6.1.85-100.
[20] G. Gilberta, R. Widuri, and F. Kasenda, "Factors Affecting the Implementation of Remote Audit in the Audit Process in the COVID-19 Pandemic," *Proc. 6th Int. Conf. E-Commerce, E-bus. E-Government*, 2022, pp. 318–324, doi: 10.1145/3537693.3537745.
[21] A. Ayaz and M. Yanartaş, "An analysis on the unified theory of acceptance and use of technology theory (UTAUT): Acceptance of electronic document management system (EDMS)," *Comput. Hum. Behav. Reports*, vol. 2, Aug. 2020, doi: 10.1016/j.chbr.2020.100032.
[22] M. Al-Okaily, H. M. Alqudah, A. A. Al-Qudah, and A. F. Alkhwaldi, "Examining the critical factors of computer-assisted audit tools and techniques adoption in the post-COVID-19 period: internal auditors perspective," *VINE Journal of Information and Knowledge Management Systems*, 2022, doi: 10.1108/VJIKMS-12-2021-0311.
[23] B. L. Handoko and J. E. Lantu, "UTAUT 2 model for predicting auditor's blockchain technology adoption," in *ACM International Conference Proceeding Series*, 2021, doi: 10.1145/3481127.3481168.
[24] M. Al-Okaily, A. F. Alkhwaldi, A. A. Abdulmuhsin, H. Alqudah, and A. Al-Okaily, "Cloud-based accounting information systems usage and its impact on Jordanian SMEs' performance: the post-COVID-19 perspective," *J. Financ. Report. Account.*, vol. 21, no. 1, pp. 126–155, 2023, doi: 10.1108/JFRA-12-2021-0476.
[25] A. Hooda, P. Gupta, A. Jeyaraj, M. Giannakis, and Y. K. Dwivedi, "The effects of trust on behavioral intention and use behavior within e-government contexts," *Int. J. Inf. Manage*, vol. 67, Dec. 2022, doi: 10.1016/j.ijinfomgt.2022.102553.
[26] J. F. Hair, G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, and S. Ray, *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. In Classroom Companion: Business. Springer International Publishing, 2021, doi: 10.1007/978-3-030-80519-7.
[27] R. P. Bagozzi, Y. Yi, and L. W. Phillips, "Bogazzi_Assesing Construct Validity in Organiational Research," Administrative Science Quarterly, vol. 36, no. 3, pp. 421–458, 1991, doi: 10.2307/2393203.

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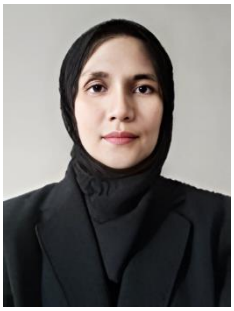

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