

Determining the Factors of Tax Agents' Readiness Towards the Digitalisation of Tax Administration

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Abstract: The increase in digital transformation through Industry 4.0 has become a top priority for both businesses and governments on a worldwide scale, thus forcing the need for updating the tax system. With substantial technological advancements and accelerating demands to save costs, many tax authorities are undergoing a considerable transformation from the conventional to an online platform in engaging with taxpayers and tax agents; however, the tax agents responsible for advising and assisting companies or individuals with income tax matters may not be ready for such a transformation. This study aims to examine tax agents' readiness towards the digitalisation of tax administration in Malaysia. By using the probability sampling technique, a list of tax agents was obtained from the Inland Revenue Board Malaysia (IRBM)'s website and data were collected from the structured questionnaires distributed to the IRBM-registered tax agents in Malaysia. Considering that Malaysia is still at an early stage of fully digitalising its tax system, the findings of this study are, therefore, important for many parties involved and the body of knowledge. By selecting 173 respondents that consist of tax agents listed with the Inland Revenue Board Malaysia (IRBM), this study employed Quadrant Analysis to determine the factors of priority in supporting the readiness towards the digitalisation of tax administration. Based on the findings, the three elements that demand immediate attention from the policymakers are perceived ease of use, technology infrastructure, and government policy and support. These findings are crucial for policymakers who intend to speed up the digital transformation process to improve the efficiency and effectiveness of tax administration. This study should be able to ascertain the factors that influence tax agents' readiness to deal with the digitalisation of Malaysian tax administration. There is a paucity of research on the digitalisation of tax administration, particularly for services to taxpayers that should have been fully digitalised years ago. This study should contribute to the literature by identifying the factors that contribute to the delay in fully digitalising tax administration in Malaysia.

Keywords: Tax agents, Industry 4.0, Digitalisation, Tax administration, Technology acceptance model.

INTRODUCTION

Digitalisation is not only transforming the many facets of daily lives, the business ecosystem, and how the economy and societies are structured, but also the nature of policy-making due to the advent of diverse tools supporting policy development and implementation. In the current ever-changing world, many policymakers are faced with complex challenges. As such, the formulation and execution of policies must be planned to allow for such a change, along with adequate transparency to give confidence and clarity that promotes long-term economic growth. In terms of tax administration, digitalisation is believed to yield numerous implications for taxation that offers new tools, introduces new challenges, and affects tax policy and the tax system at both national and international levels. Thus, the implications of digitalisation have been focused on whether or not the

international tax standards are still deemed "fit for purpose" at present.

Many countries have acknowledged that digitalisation will result in easier and more robust tax administration. From the tax perspective, digitalisation brings both obstacles and possibilities that exceed the mere transformation of a communication channel with tax administrators or from paper- to digital-based services (Kudrle, 2021). The five levels outlined in the digitalisation of national tax administrations are e-filing, e-accounting, e-match, e-audit, and e-access (see Table 1) (Ernst & Young, 2017) which overall indicates how far a country's tax administration has progressed. At Level 1, e-filing serves as the beginning of digitalisation, where substantial time and costs can be saved in a way that enables tax administrators to collect data more systematically. Next, the utilisation of accounting data at Level 2 through an e-accounting system that serves as part of the filing support from e-filing further simplifies the collection of data.

At Level 3, the tax administrators will match the data across tax forms and perhaps across taxpayers and jurisdictions to validate the data. At this level, data can also be validated by

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Table 1. Tax Administration Digitalisation Levels.

Level 1 E-Filing	Level 2 E-Accounting	Level 3 E-Match	Level 4 E-Audit	Level 5 E-Access
Uniform electronic forms are used to file compulsory and optional tax returns; all income data such as payroll and finance are electronically filed and matched every year.	Accounting or other data sources such as invoices and court balances are submitted in a required electronic format to support submissions in a certain timeline with frequent updates and changes.	Additional accounting and original data such as bank statements are submitted in order to be accessed by the government and further matched in real-time across tax forms and possibly across taxpayer and jurisdictions.	Government agencies analyse Level 2 data and cross-check it against filings in real-time to map the geographic economic ecosystem while electronic audit assessments with limited response time are given to taxpayers.	Submitted information is used by government entities for measuring tax without using tax forms while taxpayers are given limited time to evaluate and respond to the government's tax determination.

Source: Ernst and Young (2017).

government agencies or other third-party providers to diminish fraud in tax relief, allowance, and rebate claims as well as in accounting records. As a result, the tax audit process as outlined in Level 4 becomes easier owing to the real-time analysis and review of data that allow for faster data collection and immediate auditing as per the end of the tax year. Finally, at Level 5, the collected data can be used to compute taxes without using tax forms because the data have been correlated and are applicable for creating a full set of information for taxpayers. Besides, the taxpayers are also given a limited duration to review and respond to the taxes imposed.

Nonetheless, despite these digitalisation levels, the tax administration system in Malaysia remains stuck at the e-filing level compared to other Asian countries due to inadequate infrastructure, resources, and competence (Ernst & Young, 2017). Currently, the taxpayers in this country can only opt for electronic tax form submissions and the completely stand-alone accounting system is unlinked to the tax administrators. As a result, not all tax administration aspects can be accessed online. For example, many required documents, for instance, accounting supporting records are still to be submitted manually by the tax agents for auditing because not all document submissions can be done via email due to limitations such as file size and when the files are blocked by the email providers (Saruji & Hamid, 2020). In response to this, digitalisation can help reduce the time spent by tax agents to gather, review, and organise data. Besides, with the data derived from government records and business systems, manual entry errors may also be eliminated (Power, 2016). Thus, it can be inferred that Malaysia still needs to undergo several stages before the country can achieve an efficient level of tax administration.

Digitalisation will adversely impact tax professionals if they lack innovation and diversification in their work, thus affecting the roles of tax agents in the tax system. As the kinds of tax advice provided by the tax agents will also grow as the digital economy develops (Institute of Chartered Accountants in England and Wales (ICAEW), 2018) it is important that the tax agents navigate current challenges and maximise opportunities through digitalisation, especially considering that tax-related issues are continuous and may affect their work scope (Deloitte, 2018). In brief, digital technology will ensure that tax returns are pre-populated by the automatic export of data from the accounting software (Ernst & Young, 2017) thus, the tax agents must familiarise them-

selves with the recent technology in the tax system. In this regard, the present study aims to determine the acceptance and readiness of tax agents towards possible problems and opportunities regarding the digitalisation of tax administration in Malaysia.

LITERATURE REVIEW

Technology Acceptance Model (TAM) theory

Businesses are incorporating new technologies to improve their work processes; however, many technology-based products and services have yet to reach their utmost potential (Burton-Jones & Hubona, 2006). Failed technology investments did not only result in financial losses but also dissatisfaction among employees (Venkatesh, 2000) therefore, forecasting readiness prior to the implementation of new technology or system adoption is crucial. Comprehensively, end-user adoption and acceptance of technology and systems have been studied to anticipate and explain its determinants (Esen & Erdoğan, 2014). One of the theories included in this area is the Theory of Reasoned Action (TRA) by Fishbein and Ajzen, which depicts the attitudes of users towards technology implemented in organisations. As such, the Technology Acceptance Model (TAM) adapted from the TRA serves as the current dominant model in this area.

The broad acceptance of TAM is founded on a good theoretical foundation and its practical efficacy (Opoku & Francis, 2019). According to the TAM theory, the two key factors influencing the willingness of individuals in using new technology are perceived ease of use and perceived usefulness. Thus, the conceptual framework of this study was developed based on the assumption that the three significant determinants, namely perceived usefulness (PU), perceived ease of use (PEOU), and attitude towards usage (AT) (ATU) influence decision-making in terms of how and when new technology will be used by the users. This demonstrates users' acceptance and use of technology as per the next digitalisation level of the tax administration in Malaysia.

Future digitalisation users such as tax agents might be hesitant to adopt or utilise new technology based on their mere perceptions of the usefulness of IT and its simplicity. Moreover, technology acceptance might be influenced by other external factors (Tabrizi, Lam, Girard, & Irvin, 2019). Since TAM is the most acknowledged model to date (Sánchez-

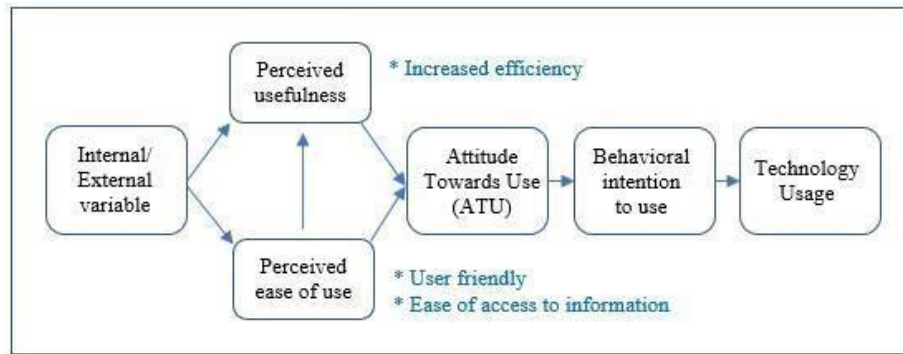


Fig. (1). Technology Acceptance Model Theory (Davis, 1989).

Prieto, Migueláñez, & García-Peñalvo, 2015) and has been widely used in examining technology acceptance in various contexts and technology applications (Tan & Leby, 2016) owing to its adaptability and logical soundness, TAM is, therefore, used in this study to examine user acceptance of digitalisation by identifying the possible determinants influencing the readiness of tax agents towards the next digitalization level (Chong, Chan, & Ooi, 2012).

Readiness to Adopt Digitalisation in Tax Administration

The word "digitalisation" was used by Loebbecke and Picot (2015) to describe the disruptions in existing patterns with relevant economic and social innovations. Besides enabling the new ways of working, communicating, and collaborating, digitalisation also allows for the advancement of an open, dynamic, and knowledge- and skill-based economy by the tax authorities in enhancing the efficiency and effectiveness of tax administration while benefiting the taxpayers (Organisation for economic Co-operation and Development (OECD), 2018a). Since digitalisation already has an impact on business settings and how organisations function, it may disrupt not only the organisations' whole operational environment but also their internal operations (Parviainen, Tihinen, Kääriäinen, & Teppola, 2017). Hence, digitalisation and its impacts, including the organisations' digitalisation objectives can be evaluated from three viewpoints:

- I. Internal efficiency: businesses are working and functioning more efficiently through digital technologies and re-organised internal systems.
- II. External opportunities: new business opportunities in the current business domains such as new services and new customers.
- III. Disruptive changes: business operations are essentially changing due to digitalisation (Parviainen et al., 2017).

Digital resources are a set of IT-enabled tools that users acquire and enhance in the form of digitised business work processes and information systems by increasing their digitalisation awareness and integrating it into every aspect of business operations (Tsou & Hsu, 2015). Based on the Organisation for economic Co-operation and Development (OECD) (2018b) interim report, digitalisation already has a threefold positive impact on tax administration, especially in

enhancing the efficiency of tax compliance and taxpayer services while diminishing tax compliance burdens.

Perceived Usefulness

Perceived usefulness denotes the belief that the benefits users received from the implementation of new technology would enhance their work performance (Davis, 1989). In information system adoption, the perceived usefulness of a system is the belief that the use of the system will yield positive impacts. In fact, several studies have evidenced the direct effect of perceived usefulness on individual willingness to adopt new technology and the digitalisation process such that the users will adopt and use the system if they deem it useful. Thus, the hypothesis that perceived usefulness has a positive relationship with digitalisation has been widely supported.

The IRBM has been acknowledged with improved communication and taxpayer responses by way of online services (The Star, 2019) which might be attributed to the usefulness of technology in providing equivalent information without the need to queue in a physical office. In this regard, a high degree of technological adoption can be beneficial to all parties, especially tax agents who provide tax-related matters and information from the site (Min, So, & Jeong, 2019).

Perceived Ease of Use

Perceived ease of use constitutes the belief that the users' physical and mental efforts in executing their work will be reduced by technology (Davis, 1989). Evidently, perceived ease of use has a positive influence on the behavioural intention towards system adoption (Fagan, Hanson, Hawkins, & Arthur, 2008; Suki, Ramayah, & Suki, 2008) however, empirical evidence for perceived ease of use as a determinant of its purpose has been inconsistent and certain factors are also deemed less important than perceived usefulness (Hu, Chau, Sheng, & Tam, 1999; Lucas Jr & Spitzer, 1999; Subramanian, 1994; Tarmidi et al., 2022; Omodero & Iyoha, 2022). Additionally, perceived ease of use has also been found to have no influence on the behavioural purpose of a program's implementation (Ruiz-Mafé, Aldás-Manzano, Lassala-Navarré, & Sanz-Blas, 2009). Nonetheless, such varying situations and technology might be due to the different findings of these studies (Lu, Yao, & Yu, 2005). For instance, a study by Clark (2000) involving 800 professionals in England has shown that perceived ease of use is one of the

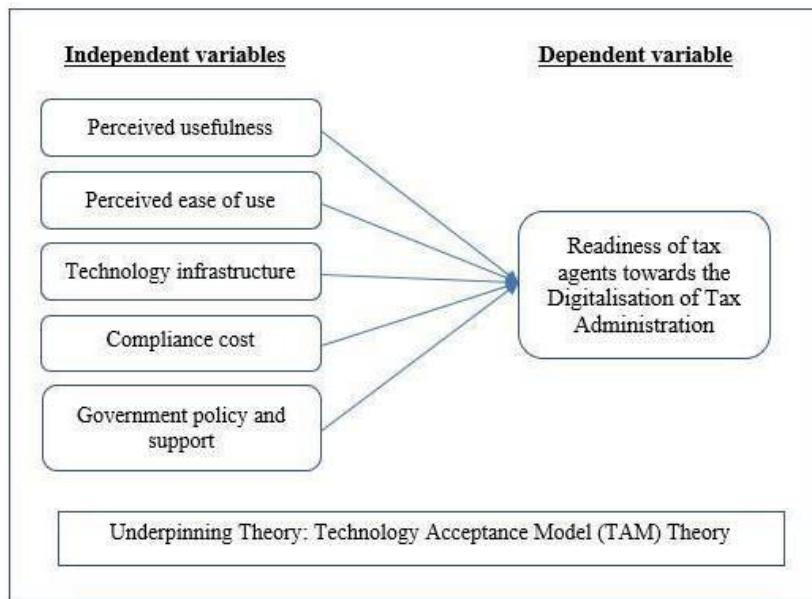


Fig. (2). Research Framework.

top five considerations taken in determining how new devices are used.

Technology Infrastructure

Technology infrastructure is deemed effortless and something that modern society can or must use; nonetheless, digital devices and software are often used without considering the impacts of digital technologies (Dufva & Dufva, 2019). While a deeper knowledge of digitalisation might lead to more democratic digitalism paths (Anderson & Rainee, 2018) technology infrastructure does not only encompass technical support as it may likewise include the necessary and suitable human resource capacity to run and manage the system (Weill, Subramani, & Broadbent, 2002).

Digital infrastructure and online services may serve as more than a mere convenient and direct resource in the collaboration between tax authorities and tax service users, which improves transparency and lessens information burden on taxpayers (Pogorletskiy & Bashkirova, 2015). Besides, technology infrastructure implies faster response times and reduced administrative costs. Any situations in which a tax authority demands a taxpayer-generated document or other information can also be made simpler and handled with ease by the tax agents (Bores, 2016) in addition to reducing bribery and enhancing tax discipline through understandable and transparent procedures. Therefore, the need for high-tech digital infrastructure outweighs any legal responsibility to uphold the law (Pogorletskiy & Bashkirova, 2015).

Compliance Costs

Compliance costs are the costs that taxpayers or third parties (e.g., businesses) incur in complying with the requirements of a particular tax structure (Pavel & Vitek, 2014). Although compliance costs may increase upon the implementation of a new system, these costs may still vary according to various factors, for instance, tax laws and tax changes (Palil, Ramli, Mustapha, & Hassan, 2013; Muduli et al., 2022; Basha,

2022; Opeyemi et al., 2022). Ariff and Pope (2002) categorised tax compliance costs into economic costs (monetary costs and time costs) and non-economic costs (psychological costs, e.g., stress and anxiety). Specifically, according to Pope and Abdul-Jabbar (2008) monetary costs include the amount spent on tax professionals and tax guide, communications, books, and other incidental costs, while time costs are mainly incurred for tax record keeping, preparation of tax details or processing of tax returns, and the time spent to communicate with tax authorities. Meanwhile, psychological costs denote the anxiety in dealing with complex tax issues such as disruption in the tax system or difficulty with supporting technology. Overall, compliance costs also include other related concerns to taxpayers such as security, compatibility with existing systems, multiple cloud management, governance, inadequate expertise, performance, face compliance costs, and other issues (Serrano, Gallardo, & Hernantes, 2015).

Government Support and Policy

Governments and regulatory authorities play a crucial role in encouraging digital innovations and developments as they are not only responsible for effective governance to the public but also for the detailed implementation of policies and public services as determined by parliament (Kiow, Salleh, & Kassim, 2017). To protect the interests of the public and consumers, governments and regulatory authorities should develop a set of broad regulations that reflect societal values while limiting the possible negative effects; however, regulatory frameworks often have insufficient flexibility due to the increase in technological trends (Organisation for Economic Co-operation and Development (OECD), 2018a). Hence, government assistance is crucial for promoting development while preparing the future generation (Organisation for Economic Co-operation and Development (OECD), 2017).

In addition to perceived usefulness and perceived ease of use in new technology adoption and digitalisation, the current

study also includes technology infrastructure, compliance costs, and government policy and support (Sternad & Bobek, 2013) (see Fig. 2). In general, the framework of this study is contingent on several resources such as Ernst and Young (2019) research, (Klynveld Peat Marwick Goerdeler (KPMG), 2019) the Organisation for economic Co-operation and Development (OECD) (2019b) that focuses on the global digitalisation of tax administration, and a report from the Asia Development Bank (2019) on the risks and success of digitalisation as well as the tax agents' roles in utilising the strategies towards digitalisation.

Research Methodology

This study aims to examine tax agents' readiness towards the digitalisation of tax administration in Malaysia. By using the probability sampling technique, a list of tax agents was obtained from the Inland Revenue Board Malaysia (IRBM)'s website and data were collected from the structured questionnaires distributed to the IRBM-registered tax agents in Malaysia. The questionnaire for this study consists of three sections (Section A, Section B, and Section C).

Section A focuses on the personal information and demographic background of the respondents such as their gender, age, and work experience.

- Section B focuses on the respondents' reactions to the five independent variables influencing tax agents' readiness towards digitalisation and the questions for Section B were adopted from Hashim, Hamid, and Rashid (2018); Rahimi, Nadri, Afshar, and Timpka (2018) and World Bank (2019).
- Section C focuses on the tax agents' readiness towards digitalisation and the questions were adopted from Walczuch, Lemmink, and Streukens (2007) and Parasuraman and Colby (2007).

A nominal scale was used in the first section of the questionnaire to categorise the respondents into mutually exclusive or collectively exhaustive groups (Sekaran & Bougie, 2016) while the next two sections are based on a five-point Likert scale (Alsabawy, Cater-Steel, & Soar, 2013; Chandra, 2015; Thattil & Shaheetha, 2018; Musumbani et al., 2022; Pratama, 2022): 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. Finally, the last section is optional in which the respondents were asked to recommend or comment on the digitalisation of tax administration in Malaysia. Overall, the entire questionnaire includes a total of 40 questions to be answered by the respondents; the questions were adapted from past studies (Hashim et al., 2018; Parasuraman & Colby, 2007; Rahimi et al., 2018; Walczuch et al., 2007; World Bank, 2019; Markonah & Manrejo, 2022; Tambun & Haryati, 2022) and modified to suit the present study.

Data Analysis

The questionnaires were distributed to all respondents through email and WhatsApp application. Within two months, a total of 173 usable questionnaires were gathered successfully based on the sample size formula of $\pm 10\%$ precision levels with a 95% confidence level and $p = 5$. Besides descriptive analysis, Quadrant Analysis was also em-

ployed to identify the related factors or challenges of tax agents' readiness towards the digitalisation of tax administration in Malaysia as it enables variables to be specified according to priority and urgency. Additionally, Pearson's Product-Moment Correlation Coefficient was used to indicate any relationship between variables.

RESULTS AND DISCUSSION

This section discusses the descriptive results on the perceptions of tax agents' readiness towards the digitalisation of tax administration that includes perceived usefulness, perceived ease of use, technology infrastructure, compliance costs, governments policy and support, and tax agents' readiness towards the digitalisation of tax administration in Malaysia.

Perceptions of Tax Agents' Readiness Towards the Digitalisation of Tax Administration

Table 2. Depicts the Mean and Standard Deviation Scores for Tax Agents' Readiness Towards the Digitalisation of Tax Administration in Malaysia.

Statement	Mean	Standard Deviation
Technology gives me more freedom of mobility.	4.02	0.690
Technology makes me more efficient in my occupation.	3.98	0.719
I consider myself relatively proficient in embracing and at work	3.91	0.746
Technology gives people more control over their daily lives.	3.88	0.787
I feel confident doing business even though the place can only be reached online.	3.75	0.824
I can usually identify high-tech products and services without any help from others.	3.69	0.853
In general, I am among the first in my circle of friends to explore new technology when it appears.	3.44	0.917
New technology is often too complicated to be useful.	3.34	1.013
Tax Agents' Readiness Towards Digitalisation (TRD)	3.75	0.614

Out of the eight statements, the statement "Technology gives me more freedom of mobility" (Mean = 4.02) recorded the highest mean score, followed by "Technology makes me more efficient in my occupation" (Mean = 3.98) and "I consider myself relatively proficient in embracing and using new technologies for accomplishing goals in my personal life and at work" (Mean = 3.91). However, the statement "New technology is often too complicated to be useful" (Mean = 3.34) recorded the lowest mean score. In line with the literature, leveraging the digital platform in tax administration would enable the tax agents to be more flexible in performing their jobs, especially in engaging with the taxpayers (Floetgen et al., 2021). Furthermore, digital adoption also offers huge opportunities to tax agents and tax authorities to improve their services.

Perceived Usefulness (PU)

Table 3. Depicts the Mean and Standard Deviation Scores for Perceived Usefulness.

Statement	Mean	Standard Deviation
Saves time when I use it.	4.38	0.658
Accomplishes tasks more quickly.	4.37	0.648
Increases productivity.	4.34	0.640
Makes the information useful for my tasks.	4.32	0.698
Improves my job performance.	4.32	0.705
Increases effectiveness.	4.27	0.722
Makes the things I want to accomplish easier.	4.23	0.724
Gives me more control over the activities in my tasks.	4.14	0.737
Perceived Usefulness (PU)	4.29	0.598

Out of the eight statements, the majority of the respondents agreed with the statement “Saves time when I use it” (Mean = 4.38), which is followed by “Accomplishes tasks more quickly” (Mean = 4.37) and “Increases productivity” (Mean = 4.34). However, the statement “Gives me more control over the activities in my tasks” (Mean = 4.14) recorded the lowest mean score. Overall, based on the average mean score of 4.29 for perceived usefulness, the respondents agreed that perceived usefulness is one of the factors influencing tax agents' readiness towards the digitalisation of tax administration (Davis, 1989; Floetgen et al., 2021) in Malaysia.

Perceived ease of use (PEOU)

Table 4. Depicts the Mean and Standard Deviation Scores for Perceived Ease of Use.

Statement	Mean	Standard Deviation
User-friendly for my tasks.	4.18	0.709
Easy and simple for my tasks.	4.17	0.736
Effortless for my tasks.	4.16	0.689
Clear and understandable.	4.15	0.723
Requires the fewest steps possible to accomplish what I want to do.	4.09	0.734
Flexible to interact with taxpayers.	4.08	0.753
Errors can be fixed quickly and easily.	4.02	0.845
Successfully used every time.	4.01	0.788
Perceived Ease of Use (PEOU)	4.10	0.637

Out of the eight statements, most of the respondents agreed with the statement “User- friendly for my tasks” (Mean = 4.18), which is followed by “Easy and simple to be used for my tasks” (Mean = 4.17), “Effortless to be used for my tasks” (Mean = 4.16) and “Clear and understandable” (Mean

= 4.15). However, the statement “Successfully used every time” (Mean = 4.01) recorded the lowest mean score. In general, based on the average mean score of 4.10 for perceived ease of use, all of the respondents agreed that perceived ease of use is another factor influencing tax agents' readiness towards the digitalisation of tax administration in Malaysia.

Technology Infrastructure (TI)

Table 5. Depicts the Mean and Standard Deviation Scores for Technology Infrastructure.

Statement	Mean	Standard Deviation
Speed of communication through the IT network is satisfactory for internal users.	4.05	0.754
Data backups are adequately kept.	3.98	0.723
The organisation provides multiple interfaces for data sharing.	3.97	0.717
Data can be shared across applications and operating systems.	3.95	0.711
I consider myself relatively proficient in embracing and using new technologies for accomplishing goals at work.	3.95	0.744
The staff in the organisation are able to quickly learn and apply new technologies.	3.93	0.706
The staff in the organisation are knowledgeable and able to plan for future challenges.	3.91	0.697
Hardware and software can be easily upgraded on existing IT infrastructure.	3.89	0.790
Technology Infrastructure (TI)	3.95	0.609

Out of the eight statements, the respondents mostly agreed with the statement “Speed of communication through the IT network is satisfactory for internal users” (Mean = 4.05), which is followed by “Data backups are adequately kept (Mean = 3.98)” and “The organisation provides multiple interfaces for data sharing” (Mean = 3.97). However, the statement “Hardware and software can be easily upgraded on existing IT infrastructure” (Mean = 3.89) recorded the lowest mean score. Overall, based on the average mean score of 3.95 for technology infrastructure, the respondents likewise agreed that technology infrastructure is one of the factors influencing tax agents' readiness towards the digitalisation of tax administration in Malaysia.

Compliance Costs (CC)

Table 6. Depicts the Mean and Standard Deviation Scores for Compliance Costs.

Statement	Mean	Standard Deviation
Training will enhance the tax agents' professional development.	4.22	0.664
Adequate training should be regularly held for	4.20	0.700

technological development and advancement.		
Digitalisation requires extra time to learn and understand.	3.99	0.755
Digitalisation will reduce error rates in tax preparation.	3.92	0.787
Digitalisation will reduce the costs of preparing tax returns and materials.	3.87	0.794
Digitalisation will reduce the amount of stress and anxiety.	3.72	0.873
Digitalisation will reduce staff costs and focus more on computerised resources.	3.80	0.818
Digitalisation is too costly in terms of resources, time, and the effort to understand and apply new technology.	3.69	0.909
Compliance Costs (CC)	3.91	0.572

Out of the eight statements, the majority of the respondents agreed with the statement “Training will enhance the tax agents’ professional development” (Mean = 4.22), which is followed by “Adequate training should be regularly held for technology development and advancement” (Mean = 4.20) and “Digitalisation requires extra time to learn and understand” (Mean = 3.99). However, the statement “Digitalisation is too costly in terms of resources, time, and the effort to understand and apply new technology” (Mean = 3.69) recorded the lowest mean score. In general, based on the average mean score of 3.91 for compliance costs, all of the respondents were in agreement with compliance costs as another factor influencing tax agents’ readiness towards the digitalisation of tax administration in Malaysia.

Government Policy and Support (GPAS)

Table 7. Depicts the Mean and Standard Deviation Scores for Government Policy and Support.

Statement	Mean	Standard Deviation
The IRBM should have a well-trained officer to ensure the efficiency of the tax administration digitalisation process.	4.32	0.708
The IRBM should provide adequate and updated tax information on their website.	4.29	0.731
The government should provide fast and reliable connectivity infrastructure together with a dense grid of data centre to support the success of the digitalisation of tax administration.	4.28	0.746
I believe that digitalisation will reduce the waiting time at tax offices and on the phone that can lead to frustration.	4.23	0.797
I believe that the digitalisation of tax administration will facilitate tax communication and compliance.	4.02	0.725

I believe that the speed of services (e.g., responses from the officers and the tax refund process) will be more efficient after digitalisation.	3.94	0.796
I have confidence that the IRBM will successfully manage the digitalisation of tax administration.	3.89	0.762
For digitalisation to be successful, the use of an online system and paperless should be mandatory.	3.83	0.900
Government Policy and Support (GPAS)	4.10	0.600

Out of the eight statements, most of the respondents agreed with the statement “The IRBM should have a well-trained officer to ensure the efficiency of the tax administration digitalisation process” (Mean = 4.32), which is followed by “The IRBM should provide adequate and updated tax information on their website” (Mean = 4.29) and “The government should provide fast and reliable connectivity infrastructure together with a dense grid of data centre to support the success of the digitalisation of tax administration” (Mean = 4.28). However, the statement “For digitalization to be successful, the use of an online system and paperless should be mandatory” (Mean = 3.83) was the lowest. Overall, based on the average mean score of 4.10 for government policy and support, government policy and support was also deemed a factor influencing tax agents’ readiness towards the digitalisation of tax administration in Malaysia.

Quadrant Analysis of the Digitalisation of Tax Administration in Malaysia

In this section, the variables influencing tax agents’ readiness towards the digitalisation of tax administration in Malaysia were analysed using quadrant analysis, which is most appropriate for identifying the elements requiring immediate attention based on the strengths and weaknesses of the organisation. In quadrant analysis, the first division constitutes the weaknesses quadrant, which is the highest priority and requires immediate attention. The second division constitutes the strengths quadrant, while the third division constitutes the satisfaction beyond priority quadrant and the fourth division constitutes the weakness, but not a priority quadrant.

Fig. (3) illustrates the three variables outlined in the first quadrant (technology infrastructure, perceived ease of use, and government policy and support). Based on the figure, perceived ease of use is the key factor influencing the readiness of tax agents towards the digitalisation of tax administration in Malaysia. Tax agents usually serve as the taxpayers’ front liners when it comes to delivering tax advice on a new tax system. Therefore, tax agents who are new to the system should expect that innovations are integrated into user-friendly templates and interfaces so that the users understand how the system can be used responsively (Sidek, 2015).

Since tax authorities must be prepared to use the digital platform to successfully implement the digitalisation of tax administration in Malaysia, technology infrastructure is, therefore, crucial for incorporating this process into organisational activities (Xue, Zhang, Ling, & Zhao, 2013). In the same vein, government policy and support are important for tax agents to acquire not only state-of-the-art technology but

also security, fast access to the internet, and reliable data in their digital transition. Overall, while the need for advanced, long-term technology infrastructure guarantees that a tax system is perceived to be used with ease, government policy and support are likewise important to ensure that perceived ease of use and technology infrastructure can successfully elevate Malaysia into the advanced tax administration digitalisation levels.

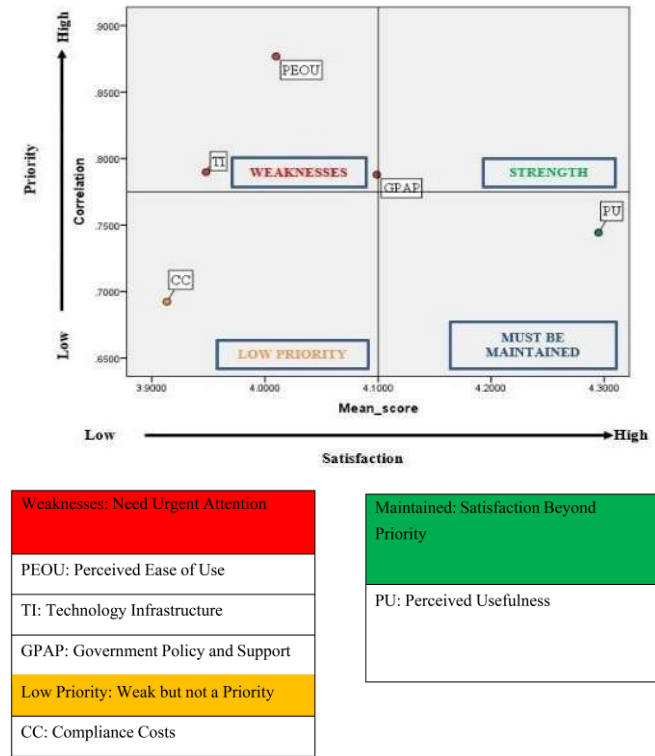


Fig. (3). Quadrant Analysis of the Digitalisation of Tax Administration in Malaysia.

Although no variable precisely fits into the second quadrant, the third quadrant, however, constitutes perceived usefulness as the satisfaction and beyond priority element that must be maintained. This shows that the tax agents are interested to leverage the digitalisation of tax administration in Malaysia to ease their daily tasks while lessening their workloads and managing their tax concerns. Finally, the fourth quadrant constitutes compliance costs as a weakness but not a priority. Similar to other variables, compliance costs are also crucial for tax professionals to educate their clients about the new system. Hence, tax professionals do not only need rigorous training, workshops, and seminars but they must also modernise and simplify the tax system by investing in new technologies and security (Sidek, 2015). In this regard, the tax professionals are prepared to incur compliance costs to gain access to pertinent data.

Reliability Test

Table 8. Cronbach's Alpha by Dimension.

Dimension	No of Statements	Cronbach' Alpha
PU	8	.951

PEOU	8	.940
TI	8	.924
CC	8	.831
GPAS	8	.895
TRD	8	.884

Source: IBM SPSS Software Package.

Based on the reliability test results, the high Cronbach's alpha values from .831 (compliance costs) to .951 (perceived usefulness) suggest that the statements used for measuring the respondents' perceptions of the six dimensions towards the digitalisation of tax administration in Malaysia are reliable. Hence, the results suggest that these items can be replicated since they have met the acceptable minimal requirement (Sekaran & Bougie, 2016).

Normality Test

Table 9. Summary of Skewness and Kurtosis Values.

Variable	Skewness Value	Kurtosis Value
PU	-0.660	0.260
PEOU	-0.205	-0.356
TI	-0.130	-0.107
CC	-0.097	0.133
GPAS	-0.374	-0.191
TRD	-0.327	0.643

Source: IBM SPSS Software Package.

Based on the normality test results, all of the skewness and kurtosis values are ranging from - 2 to 2; hence, they are deemed acceptable for psychometric purposes (George & Mallery, 2010; Khan, 2015) and this shows the normal distribution of the mean scores for the variables. Correspondingly, the parametric statistical tool in the subsequent analysis was employed.

Relationship Between Technology Readiness Level and Factors Influencing Readiness

Table 10. Correlation Analysis between Technology Readiness Level and Factors Influencing Readiness.

Technology Readiness Level		
Variable	Pearson Coefficient of Correlation (r)	p-value
Perceived Usefulness (PU)	0.336	0.000**
Perceived Ease of Use (PEOU)	0.588	0.000**
Technology Infrastructure (TI)	0.599	0.000**
Compliance Costs (CC)	0.568	0.000**
Government Policy and(GPAS)	0.586	0.000**

** Significant at 0.01.

In general, the level of technology readiness has positive and moderate correlations with perceived ease of use ($r = 0.588$; $p < 0.01$), technology infrastructure ($r = 0.599$; $p < 0.01$), compliance costs ($r = 0.568$; $p < 0.01$), and government policy and support ($r = 0.586$; $p < 0.01$). Thus, the increase in perceived ease of use, technological infrastructure, compliance costs, and government policy and support are moderately related to the increase in the level of technology readiness and vice versa. Nonetheless, the level of technology readiness has a positive but low correlation with perceived usefulness ($r = 0.336$; $p < 0.01$); hence, the increase in technology readiness, to a small extent, leads to the increase in perceived usefulness and vice versa.

CONCLUSION

Digitalisation is deemed useful to tax agents as the traditional tax administration model is replaced with a new model that applies vast online information with systemic resources. The benefits of digitalisation are capitalised on through automated processes, reduced costs, increased efficiency, constant competitiveness, compulsive innovation, and new business models. Although digitalisation in tax administration will be the tax agents' top priority, the strongest value-added for managing tax administration and considering the needs and wants of many stakeholders in the tax system will also be important. Therefore, it can be inferred that most of the tax agents are ready to learn and be involved in the digitalisation of tax administration in Malaysia towards Industry 4.0; however, more time is needed for them to adapt to the transition.

While past studies have focused on e-filing, tax compliance, and other relevant topics, studies on the digitalisation of tax administration, especially in terms of tax agents' readiness are rather scarce. Hence, the factors influencing the readiness of tax agents in this study may help the IRBM recognise some of the systemic flaws that have been overlooked by other scholars and avoid any unnecessary government spending in the enhancement of tax administration. This study also develops a platform that tax agents and practitioners can utilise. Since the readiness of tax agents is crucial for offering the best services to taxpayers, digitalisation can, therefore, facilitate not only the tax agents' workflow but also encourage tax compliance among taxpayers, which reduces the tax gap and increases government revenue. As a result, the tax agents can professionally represent their clients while abiding by necessary deadlines and regulations.

Since the Industrial Revolution 4.0, the digitalisation of tax administration in Malaysia has significantly contributed to not only the government and related agencies but also academics and practitioners. Therefore, to acquire a better understanding of the acceptance and readiness of tax agents towards digitalisation, future researchers can extend this study by increasing the sample size. Theoretically, future researchers can also use the factors identified in this study as a guideline that facilitates the transition of the digitalisation process to the next level, besides expanding the tax field through a detailed investigation of the technological aspects.

DECLARATION OF CONFLICTING INTERESTS

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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REFERENCES

- Alsabawy, A. Y., Cater-Steel, A., & Soar, J. (2013). IT infrastructure services as a requirement for e-learning system success. *Computers & Education*, 69, 431-451. <https://doi.org/10.1016/j.compedu.2013.07.035>
- Anderson, J., & Rainee, L. (2018). The future of well-being in a tech-saturated world, concerns about the future of people's well-being. Pew Research Centre. <https://www.pewresearch.org/internet/2018/04/17/concerns-about-the-future-of-peoples-well-being>
- Ariff, M., & Pope, J. (2002). *Taxation and compliance costs in Asia pacific economies*. Sintok: University of North Malaysia.
- Asia Development Bank. (2019). *The digital revolution in Asia and its macroeconomic effects*. ADB Institute. Retrieved from <https://www.adb.org/publications/digital-revolution-asia-macroeconomic-effects>
- Bores, R. (2016). E-governance in the digital economy era. *Ecoforum Journal*, 5(1), 365-372.
- Burton-Jones, A., & Hubona, G. S. (2006). The mediation of external variables in the technology acceptance model. *Information & Management*, 43(6), 706-717. <https://doi.org/10.1016/j.im.2006.03.007>
- Basha, M. H. (2022). Evaluating the impact of direct taxes on economic growth: Empirical Evidence from Jordan. *Asian Economic and Financial Review*, 12(8), 627-635. <https://doi.org/10.55493/5002.v12i8.4573>
- Chandra, P. (2015). The influence of perceived system quality and perceived information quality towards continuance intention of tax e-filing system in Malaysia. *Journal of Technology and Operations Management*, 10(2), 52-63.
- Chong, A. Y.-L., Chan, F. T., & Ooi, K.-B. (2012). Predicting consumer decisions to adopt mobile commerce: Cross country empirical examination between China and Malaysia. *Decision Support Systems*, 53(1), 34-43. <https://doi.org/10.1016/j.dss.2011.12.001>
- Clark, R. E. (2000). Evaluating distance education: Strategies and cautions. *International Journal of Educational Policy, Research, and Practice: Reconceptualizing Childhood Studies*, 1(1), 3-16.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319-339. <https://doi.org/10.2307/249008>
- Deloitte. (2018). *Deloitte digital business obstacle: Digitisation - how can I make the most of my organisation's digital transformation?*, Deloitte Insights, . Retrieved from <https://www2.deloitte.com/lu/en/pages/technology/articles/deloitte-digital-business-obstacle-organisation-digitisation.html>
- Dufva, T., & Dufva, M. (2019). Grasping the future of the digital society. *Futures*, 107, 17-28. <https://doi.org/10.1016/j.futures.2018.11.001>
- Ernst, & Young. (2017). *Tax technology and transformation, tax functions 'go digital'*. Retrieved from https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/digital/ey-tax-technology-transformation.pdf.
- Ernst, & Young. (2019). *How tax administration is going digital*, EY Global. Retrieved from https://www.ey.com/en_gl/tax/how-tax-administration-is-going-digital
- Esen, M., & Erdoğan, N. (2014). *Effects of technology readiness on technology acceptance in E-HRM: Mediating role of perceived usefulness*. Paper presented at the 7th International Strategic Management Conference, Paris, France.

- Fagan, A. A., Hanson, K., Hawkins, J. D., & Arthur, M. W. (2008). Bridging science to practice: Achieving prevention program implementation fidelity in the community youth development study. *American Journal of Community Psychology*, 41(3-4), 235-249. <https://doi.org/10.1007/s10464-008-9176-x>
- Floetgen, R. J., Strauss, J., Weking, J., Hein, A., Urmetzer, F., Böhm, M., & Kremer, H. (2021). Introducing platform ecosystem resilience: Leveraging mobility platforms and their ecosystems for the new normal during COVID-19. *European Journal of Information Systems*, 30(3), 304-321. <https://doi.org/10.1080/0960085x.2021.1884009>
- George, D., & Mallery, P. (2010). SPSS for Windows step by step. A simple study guide and reference. In (10th ed., Vol. 10, pp. 152-165). GEN, Boston, MA: Pearson Education, Inc.
- Hashim, N., Hamid, N., & Rashid, N. (2018). Assessing job performance of tax agents via e-filing system. *International Journal of Academic Research in Business and Social Sciences*, 8(11), 1369-1378. <https://doi.org/10.6007/ijarbss/v8-i11/5196>
- Hu, P. J., Chau, P. Y., Sheng, O. R. L., & Tam, K. Y. (1999). Examining the technology acceptance model using physician acceptance of telemedicine technology. *Journal of management information systems*, 16(2), 91-112. <https://doi.org/10.1080/07421222.1999.11518247>
- Institute of Chartered Accountants in England and Wales (ICAEW). (2018). *Tax and digitalisation*. Retrieved from <https://www.oecd.org/tax/beps/tax-and-digitalisation-policy-note.pdf>
- Khan, A. (2015). Using films in the ESL classroom to improve communication skills of non-native learners. *Elt Voices*, 5(4), 46-52.
- Kiow, T. S., Salleh, M. F. M., & Kassim, A. A. B. M. (2017). The determinants of individual taxpayers' tax compliance behaviour in peninsular Malaysia. *International Business and Accounting Research Journal*, 1(1), 26-43. <https://doi.org/10.15294/ibarj.v1i1.4>
- Klynveld Peat Marwick Goerdeler (KPMG). (2019). *Digitalisation of tax*. Retrieved from <https://home.kpmg/xx/en/home/insights/2019/08/digitisation-in-tax.html>
- Kudrle, R. (2021). Moves and countermoves in the digitisation challenges to international taxation. *Technology in Society*, 64, 101453. <https://doi.org/10.1016/j.techsoc.2020.101453>
- Loebbecke, C., & Picot, A. (2015). Reflections on societal and business model transformation arising from digitization and big data analytics: A research agenda. *The Journal of Strategic Information Systems*, 24(3), 149-157. <https://doi.org/10.1016/j.jsis.2015.08.002>
- Lu, J., Yao, J. E., & Yu, C.-S. (2005). Personal innovativeness, social influences and adoption of wireless Internet services via mobile technology. *The Journal of Strategic Information Systems*, 14(3), 245-268. <https://doi.org/10.1016/j.jsis.2005.07.003>
- Lucas Jr, H. C., & Spitzer, V. (1999). Technology use and performance: A field study of broker workstations. *Decision sciences*, 30(2), 291-311. <https://doi.org/10.1111/j.1540-5915.1999.tb01611.x>
- Min, S., So, K. K. F., & Jeong, M. (2019). Consumer adoption of the Uber mobile application: Insights from diffusion of innovation theory and technology acceptance model. *Journal of Travel & Tourism Marketing*, 36(7), 770-783. <https://doi.org/10.1080/10548408.2018.1507866>
- Markonah, M. & Manrejo, S. (2022). Tax compliance model based on planned behavior of taxpayers mediating intention to pay taxes. *International Journal of Applied Economics, Finance and Accounting*, 14(1), 60-66. <https://doi.org/10.33094/ijaefa.v14i1.649>
- Muduli, D. K., Rout, S. K., & Khan, N. (2022). Nexus between tax structure and income inequality in India. *Asian Development Policy Review*, 10(2), 88-105. <https://doi.org/10.55493/5008.v10i2.4484>
- Musumbani, T., Lovemore, S., & Newman, W. (2022). An empirical study of the impact of lockdown measures on the presumptive taxation of Zimbabwe: A case study of ZIMRA. *International Journal of Innovative Research and Scientific Studies*, 5(4), 269-280. <https://doi.org/10.53894/ijriss.v5i4.687>
- Opoku, M. O., & Francis, E.-K. (2019). Relevance of the technology acceptance model (TAM) in information management research: A review of selected empirical evidence. *Research Journal of Business and Management*, 7(1), 34-44. <https://doi.org/10.17261/pressacademia.2020.1186>
- Organisation for economic Co-operation and Development (OECD). (2017). *Tax challenges of digitalisation*. Retrieved from <https://www.oecd.org/tax/beps/tax-challenges-digitalisation-part-2comments-on-request-for-input-2017.pdf>
- Organisation for economic Co-operation and Development (OECD). (2018a). *Tax and digitalisation, OECD going digital policy note*. Paris: OECD.
- Organisation for economic Co-operation and Development (OECD). (2018b). *Tax challenges arising from digitalisation – interim report 2018*. Retrieved from <https://www.oecd.org/ctp/tax-challenges-arising-from-digitalisation-interim-report-9789264293083-en.htm>
- Organisation for economic Co-operation and Development (OECD). (2019b). *Tax and digitalisation*. Retrieved from <https://www.oecd.org/going-digital/tax-and-digitalisation.pdf>
- Omodero, C. O., & Iyoha, F. O. (2022). The nexus between foreign direct investment, open commerce, ICT taxation and climate change in a developing country. *The Economics and Finance Letters*, 9(2), 180-190. <https://doi.org/10.18488/29.v9i2.3103>
- Opeyemi, A., Stephen, O., Samuel, F., Olokoyo, F., & Damilola, E. (2022). Tax reforms, digitalization and government revenue in Nigeria. *Asian Economic and Financial Review*, 12(9), 800-815. <https://doi.org/10.55493/5002.v12i9.4609>
- Palil, M. R., Ramli, R., Mustapha, A. F., & Hassan, N. S. A. (2013). Elements of compliance costs: Lesson from Malaysian companies towards goods and services tax (GST). *Asian Social Science*, 9(11), 135-147.
- Parasuraman, A., & Colby, C. L. (2007). *Techno-ready marketing: How and why your customers adopt technology*. New York, USA: The Free Press.
- Parviainen, P., Tihinen, M., Kääriäinen, J., & Teppola, S. (2017). Tackling the digitalization challenge: how to benefit from digitalization in practice. *International Journal of Information Systems and Project Management*, 5(1), 63-77. <https://doi.org/10.12821/ijispm050104>
- Pavel, J., & Vítek, L. (2014). *Tax compliance costs: selected post-transitional countries and the Czech Republic*. Paper presented at the Enterprise and the Competitive Environment 2014 Conference, 6-7 March 2014.
- Pogorletskiy, A. I., & Bashkirova, N. N. (2015). The dynamics of tax system and tax administration development in the Russian Federation. *Journal of Tax Reform*, 1(1), 4-24. <https://doi.org/10.15826/jtr.2015.1.1.001>
- Pope, J., & Abdul-Jabbar, H. (2008). Small and medium-sized enterprises and tax compliance burden in Malaysia: Issues and challenges for tax administration. *Small Enterprise Research*, 16(1), 47-60. <https://doi.org/10.5172/ser.16.1.47>
- Power, B. (2016). *Acuity magazine*. Retrieved from <https://www.acuitymag.com/finance/the-roleof-accountants-in-a-digitalised-tax-system>
- Pratama, A. (2022). Is tax accounting information relevant to users? The case of Indonesia. *International Journal of Applied Economics, Finance and Accounting*, 14(1), 77-90. <https://doi.org/10.33094/ijaefa.v14i1.658>
- Rahimi, B., Nadri, H., Afshar, H. L., & Timpka, T. (2018). A systematic review of the technology acceptance model in health informatics. *Applied clinical informatics*, 9(03), 604-634. <https://doi.org/10.1055/s-0038-1668091>
- Ruiz-Mafé, C., Aldás-Manzano, J., Lassala-Navarré, C., & Sanz-Blas, S. (2009). The role of consumer innovativeness and perceived risk in online banking usage. *International Journal of Bank Marketing*, 27(1), 53-75. <https://doi.org/10.1108/02652320910928245>
- Sánchez-Prieto, J. C., Migueláñez, S. O., & García-Peñalvo, F. J. (2015). *Behavioral intention of use of mobile technologies among pre-service teachers. Implementation of a technology adoption model based on tam with the constructs of compatibility and resistance to change*. Paper presented at the 2015 International Symposium on Computers in Education (SIE).
- Saruji, S. C., & Hamid, N. A. (2020). *Tax agents' acceptance of the digitalisation of tax administration in Malaysia*. Paper presented at the International Conference of Economics, Business & Entrepreneurship (ICEBE) 2020, European Alliance for Innovation (EAI).
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (7th ed.). United Kingdom: John Wiley & Sons Ltd.
- Serrano, N., Gallardo, G., & Hernantes, J. (2015). Infrastructure as a service and cloud technologies. *IEEE Software*, 32(2), 30-36. <https://doi.org/10.1109/ms.2015.43>

- Sidek, N. (2015). *Determinants of electronic payment adoption in Malaysia: The stakeholders' perspectives*. Thesis of Doctor of Philosophy, University of Queensland, Australia.
- Sternad, S., & Bobek, S. (2013). Impacts of TAM-based external factors on ERP acceptance. *Procedia Technology*, 9, 33-42. <https://doi.org/10.1016/j.protcy.2013.12.004>
- Subramanian, G. H. (1994). A replication of perceived usefulness and perceived ease of use measurement. *Decision sciences*, 25(5-6), 863-874. <https://doi.org/10.1111/j.1540-5915.1994.tb01873.x>
- Suki, N. M., Ramayah, T., & Suki, N. M. (2008). Internet shopping acceptance. *Journal of Research in Interactive Marketing*, 2(2), 97-110. <https://doi.org/10.1108/17505930810881752>
- Tabrizi, B., Lam, E., Girard, K., & Irvin, V. (2019). Digital transformation is not about technology, harvard business review.
- Tan, E., & Leby, L. J. (2016). Behavioural intention to adopt mobile banking among the millennial generation. *Young Consumers*, 17, 18-31.
- Thattil, S. B., & Shaheetha, K. S. (2018). Individual tax payers' attitude towards e- filing of income tax return with reference to Thrissur districts. *Journal of Social Welfare and Management*, 10, 551-556.
- The Star. (2019). *Taxpayers urged to report income*. Retrieved from <https://www.thestar.com.my/news/nation/2019/09/21/taxpayers-urged-to-report-income>
- Tambun, S., & Haryati, A. (2022). The influence of nationalism's attitude and tax morals on taxpayer compliance through tax awareness. *Journal of Accounting, Business and Finance Research*, 14(1), 1-7. <https://doi.org/10.20448/2002.141.1.7>
- Tarmidi, D., Alfia, Y. D., & Umar, H. (2022). Analyzing owner's role in influencing corporate tax policy. *Humanities and Social Sciences Letters*, 10(4), 428-439. <https://doi.org/10.18488/73.v10i4.3107>
- Tsou, H.-T., & Hsu, S. H.-Y. (2015). Performance effects of technology-organization-environment openness, service co-production, and digital-resource readiness: The case of the IT industry. *International Journal of Information Management*, 35(1), 1-14. <https://doi.org/10.1016/j.ijinfomgt.2014.09.001>
- Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information systems research*, 11(4), 342-365. <https://doi.org/10.1287/isre.11.4.342.11872>
- Walczuch, R., Lemmink, J., & Streukens, S. (2007). The effect of service employees' technology readiness on technology acceptance. *Information & management*, 44(2), 206-215. <https://doi.org/10.1016/j.im.2006.12.005>
- Weill, P., Subramani, M., & Broadbent, M. (2002). Building IT infrastructure for strategic agility. *MIT Sloan Management Review*, 44(1), 57-65.
- World Bank. (2019). *Doing business 2019: Training for reform* (16th ed.). Washington, DC: World Bank.
- Xue, L., Zhang, C., Ling, H., & Zhao, X. (2013). Risk mitigation in supply chain digitization: System modularity and information technology governance. *Journal of management information systems*, 30(1), 325-352. <https://doi.org/10.2753/mis0742-1222300110>

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