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Article

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MARKETING | RESEARCH ARTICLE

Taxpayers' adoption of online tax return reporting: extended meta-UTAUT model perspective

Asep Heri Hermanto¹*, Nila Armelia Windasari¹ and Mustika Sufiati Purwanegara¹

Abstract: This research examines dominant technology adoption paradigms to discover vital underlying variables in online tax return reporting behavior. This research aims to develop and empirically test a hypothetical model based on data collected from Indonesia's existing online tax return reporting users. This research was conducted by distributing an online questionnaire nationwide and obtaining 486 taxpayer data for further analysis. The findings show that trust, effort expectancy, and performance expectancy positively and significantly impact taxpayers' attitudes towards online tax return reporting. Facilitating conditions and attitudes positively and significantly impact the taxpayer intention to adopt online tax return reporting. However, the intention of taxpayers to use online tax return reporting is unaffected by social influence. Taxpayers' behavioral intentions positively and significantly impact their user behavior. At the same time, grievance redressal and anxiety had a significant influence as moderating variables. Implications for practice and research are also discussed.

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Subjects: Attitudes & Persuasion; Consumer Psychology; Services Marketing; Consumer Behaviour

Keywords: adoption; e-filing; meta-UTAUT; online tax return reporting; use behavior

1. Introduction

With the rapid advancement of information and communication technologies, the world is entering a new era. The introduction of Industry 4.0 alters human behavior patterns and fundamentally alters today's system and business underpinnings. Tax authorities have recognized the need to incorporate technology into tax reform. The Indonesian tax authorities (Directorate General of Taxes or "DJP"), for example, built the DJP Online website (https://djponline.pajak.go.id) to combine

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all tax reporting and payment services under one system in 2014. Furthermore, DJP online access services are combined into the Directorate General of Taxes website (http://www.pajak.go.id).

Online tax reporting first appeared in the United States, marked by The Internal Revenue Service (IRS) Restructuring and Reforming Act of 1998, which emphasizes electronic filing (or e-filing). The IRS targets total taxpayers who use e-filing (online tax return reporting) to reach 80% in 2007. However, this target could only be achieved in 2012 (Bai et al., 2019). Online tax return reporting has become a global innovation in many nations due to the rapid development of information and communication technology and benefits taxpayers and tax authorities. The researchers (Andriani et al., 2017; Azmi et al., 2012; Bai et al., 2019; Carter et al., 2011; Carter & Schaupp, 2009; Chaouali et al., 2016; Kumar & Anees, 2014; Ojha et al., 2009; Sahu & Gupta, 2008; Schaupp et al., 2010; Sijabat, 2020; Veeramootoo et al., 2018; Wang & Doong, 2010) examine the adoption of this phenomenon.

From the taxpayer's perspective, online tax return reporting allows for greater flexibility in time and location. Taxpayers can use the online tax return reporting application at any time; it isn't limited to working days and hours any longer because it is still available on weekends and after office hours. Taxpayers don't have to queue and waste time at the tax office to get their annual tax return receipt. Taxpayers do not need to use paper to complete their tax forms when utilizing this application. Using e-Filing concurrently enhances the efficiency of paper consumption compared to when taxpayers manually file their tax returns.

Several researchers mention the advantages of using online tax returns: filing costs, reporting errors, preparation time, and the requirement for audits are all reduced (Anderson et al., 2005; Bankman, 2008; Boynton et al., 2008; Wang, 2003). According to Bai et al. (2019), online tax return reporting advantages are faster tax refunds, no need to mail paper returns, more accurate returns, confirmation of receipt of e-filing faster, and safe entry of highly personal return information. For tax authorities, online tax return reporting allows obtaining tax return reporting information in digital form. Substantially, it will reduce processing costs such as printing, transportation, archiving, and other expenses incurred when processing manual tax return reports.

Kumar and Anees (2014) stated that the benefits of using e-filing are as follows. Convenience: taxpayers can file their returns at any time (day or night). Faster refunds—It helps taxpayers who are due a refund to receive it sooner. Taxpayers also receive an immediate acknowledgement of receipt. Value-added services include the ability to examine Form 26AS, track refunds, and receive email and SMS updates about the status of processing and refunds. Assurance of delivery and prompt confirmation— gives immediate assurance from the IRS that returns have been received. Before submitting their Income Tax Return (ITR) form for the last time, taxpayers can amend their mistakes or make and save changes in their ITR form as many times as they choose. Error warnings from tax administrations are no longer sent due to data entry errors; Increased prospects for freelancing work as a Tax Consultant and TRPs, among other things; Document handling and storage space are reduced. Reduced tax administration running expenses by reducing the cost of taking paper returns and eliminating unneeded staff Accessibility is accessible seven days a week, 24 hours a day; online support and user guides.

Following the massive use of online tax reporting globally, several other developing countries also started to adapt it to increase the tax reporting performance (Bird & Zolt, 2008). Indonesia is also one of the countries which started to launch its online tax reporting system, DJP Online, in 2014. Despite its eight years debut, many people, however, continue to file their tax forms manually. Despite its features and ease of submitting the tax form online, taxpayers were still using a courier service or directly delivering it to the tax office. Many taxpayers go straight to the Tax Office to file their taxes online. Even amid the present pandemic, taxpayers visit the tax office to fill out and report online tax returns. It subsequently increases the load of tax offices and officers and the possibility of decreased service quality and human error.

Table 1. Indor	esian taxpayers	compliance (20	016–2020)		
Fiscal Year	Taxpayer	Not	Re	porting Tax Ret	urn
	Must Submit Tax Return	Reporting	Manual	Online	Total
2016	20.315.038	7.803.983	3.057.040	9.454.015	12.511.055
2017	16.598.809	4.039.331	2.173.185	10.386.293	12.559.478
2018	17.653.963	4.274.118	1.287.340	12.092.505	13.379.845
2019	18.887.432	5.679.246	955.964	12.252.222	13.208.186
2020	19.006.794	7.141.117	525.504	11.340.173	11.865.677

Source: Directorate of Tax Data and Information, Directorate General of Taxes.

Based on Table 1 in 2020, it can be seen that 19.006.794 taxpayers have to submit their tax return reports. However, only 11.865.677 taxpayers report their obligation. Only 59.66% of taxpayers submit their tax returns using online tax return reporting among all the reports. On the other hand, 525.504 (2.76%) of taxpayers reported their tax returns using manual tax return reports, and 7.141.117 (37.57%) of taxpayers did not report their responsibility. Therefore, almost half of the taxpayers did not use an online tax return reporting in 2020, even after five years of its launch. Consequently, it is essential to understand the taxpayers' adoption of online tax returns.

Several researchers have researched online tax return reporting. Several studies employed Technology Acceptance Model (TAM) as a theoretical lens (Azmi et al., 2012; De Clercq, 2019; Fauziati et al., 2017; Ilias et al., 2009; Malkawi, 2020; Sahu & Gupta, 2008; Sijabat, 2020; Sondakh, 2017; Tahar et al., 2020; Tjen et al., 2019). Another researcher deployed the Unified Theory of Acceptance and Use of Technology (UTAUT) as a theoretical research background (Aziz & Idris, 2016; Carter et al., 2011; Carter & Schaupp, 2009; Chaouali et al., 2016; Mas'ud & Umar, 2019; Schaupp et al., 2010). In addition, some researchers combine TAM or UTAUT with other theoretical bases in researching online tax returns, such as the theory of reasoned action (TRA), theory of planned behavior (TPB), Technology Readiness Index (TRI), perceived characteristics of innovating (PCI), and diffusion of innovation (DOI; Ambali, 2009; Andriani et al., 2017; Aziz & Idris, 2015; Dorasamy et al., 2010; Hussein et al., 2011; Mas'ud & Umar, 2019; Ojha et al., 2009; Tallaha et al., 2014).

This study uses meta-UTAUT as a theoretical research background. Meta-UTAUT is a metaanalysis-based modified unified theory of technology acceptance and usage. The UTAUT model was developed by adding attitude as a mediating construct and significantly boosted the exploratory power on behavioral intention from 38% to 45%. (Dwivedi et al., 2019).

Furthermore, individual intention to conduct the underlying behavior, particularly in technology adoption, is influenced by attitude. As a result, the meta-UTAUT model will be the most helpful tool for analyzing online tax return reporting adoption. This model is an integrated model using a new mediating variable, namely attitude, on the one hand. However, it's a more extensive model than UTAUT. Therefore, the author researched online tax return reporting using meta-UTAUT as a theoretical research background.

First, this study reviews popular technology adoption models to find appropriate underlying theories and constructs for studying Indonesian online tax return reporting use behavior. Second, this study aims to empirically test the proposed conceptual model by gathering data from Indonesia's actual online tax return reporting users. By conducting this research, the Directorate General of Tax (DGT) would develop a strategy to boost the interactivity of online tax return reporting for taxpayers. For example, if all taxpayers have used the online tax return reporting, the DGT no longer needs to print the tax return form and reduce procurement and file maintenance costs. In addition, the tax officer, whose function is to provide services and record manual data for tax return reports, can be converted into a tax officer whose role is to explore tax potential, supervise, and enforce the law on taxpayers. So that state revenue from the tax sector will increase, which can be used for the development and welfare of all Indonesian people.

2. Literature review and hypothesis development

Online tax return reporting is a computer system that assists taxpayers in filling and submitting tax return forms online (Tahar et al., 2020). According to Andriani et al. (2017), an online tax return is an information system that allows taxpayers to file their tax returns online in real-time utilizing the internet. In Indonesia, based on the regulation of the director-general of tax number KEP-05/PJ/2005, online tax return reporting refers to electronically submitting tax returns done online and in real-time via the internet on the website of the tax return portal or tax application service providers. These services take advantage of the internet's speed and cost-effectiveness (Purba et al., 2020). Therefore, online tax return reporting is an application of e-Government in tax administration, especially tax reporting.

2.1. Emergence of online tax returns

According to a literature review on online tax return reporting, most research has concentrated on developing countries like Malaysia (Ambali, 2009; Aziz & Idris, 2015, 2016; Azmi & Aziz, 2015; Azmi et al., 2012; Dorasamy et al., 2010; Hussein et al., 2011; Ilias et al., 2009; Lai & Choong, 2010; Santhanamery, 2019; Santhanamery & Ramayah, 2012, 2015; Seng, 2013; Tallaha et al., 2014), Indonesia (Andriani et al., 2017; Djajadikerta & Susan, 2017; Fauziati et al., 2017; Jingga et al., 2019; Sijabat, 2020; Sondakh, 2017; Tahar et al., 2020; Tjen et al., 2019), India (Kumar & Anees, 2014; Ojha et al., 2009; Paramashivaiah & Ramya, 2019; Sahu & Gupta, 2008), Nigeria (Mas'ud & Umar, 2019; Umar & Mas'ud, 2020), South Africa (De Clercq, 2019; Mpinganjira, 2015), Taiwan (Hung et al., 2006; Wang & Doong, 2010), Pakistan (Arshad & Khurram, 2021), and Jordan (Malkawi, 2020). However, research on online tax return reporting has also been found in developed countries such as the USA (Bai et al., 2019; Carter et al., 2011; Carter & Schaupp, 2009; Koong et al., 2019; Pigatti, 2005; Schaupp & Carter, 2010; Schaupp et al., 2010; Walsh & White, 2000), UK (Lymer et al., 2012) and Singapore (Lim et al., 2012).

Walsh and White (2000) researched the current state of affairs and the approaches required to make e-filing more widely adopted. It was one of the earliest studies on online tax return reporting. This study used a quantitative method by analyzing the tax return report using multiple regression analysis. According to this study, the number of refund claims and the number of returns completed on a computer significantly impact e-filing utilization. The weekly percentage of e-filed returns is inversely proportional to that of practitioner-filed returns. It is uncertain whether e-filing is favorably or negatively connected with paid-preparer usage, interaction refund, and practitioner. Furthermore, many researchers began to research online tax returns. In the early stages, the researchers (Azmi et al., 2012; De Clercq, 2019; Fauziati et al., 2017; Ilias et al., 2009; Malkawi, 2020; Sahu & Gupta, 2008; Sijabat, 2020; Sondakh, 2017; Tahar et al., 2020; Tjen et al., 2019) using the technology acceptance model (TAM) as the theoretical basis. Meanwhile, Hung et al. (2006) and Koong et al. (2019) use TPB as the theoretical basis. In addition, some researchers combine TAM with other theoretical bases in researching online tax returns. Ambali (2009) combines TAM with UTAUT and TRA. Ojha et al. (2009) and Tallaha et al. (2014) combined TAM with TPB. Dorasamy et al. (2010) combined TAM with TRI and DOI. Hussein et al. (2011) combined TAM, DOI, and perceived characteristics of innovating (PCI).

Meanwhile, the first research that appeared on online tax returns that used UTAUT as a theoretical basis was the work of Carter and Schaupp (2009) which examined the relationship between acceptance and optimism to e-file (Electronic tax filing) adoption in the USA. Other researchers use UTAUT as a theoretical basis for researching online tax returns in Malaysia (Aziz & Idris, 2016). Some researchers integrate UTAUT with other theoretical bases in researching online tax returns. Schaupp et al. (2010) studied e-file adoption in the USA by combining UTAUT, trust, perceived risk, and optimism bias. Carter et al. (2011) researched the adoption of online tax filing in the USA by integrating UTAUT, Trust, efficacy, and security. Aziz and Idris (2015) analyzed the participation of tax e-filing in Malaysia, which combines

UTAUT with TAM3. Chaouali et al. (2016) and Mas'ud and Umar (2019) researched the electronic tax filing adoption and acceptance in the Middle East and Africa by integrating UTAUT with trust. Andriani (2017) studied user acceptance of e-filling systems in Indonesia by combining UTAUT with the Information systems success model.

In the last three years (2019–2021), research on online tax returns has been dominated by research in developing countries (Arshad & Khurram, 2021; De Clercq, 2019; Jingga et al., 2019; Malkawi, 2020; Mas'ud & Umar, 2019; Paramashivaiah & Ramya, 2019; Santhanamery, 2019; Sijabat, 2020; Tahar et al., 2020; Tjen et al., 2019; Umar & Mas'ud, 2020). It is possible because online tax return reporting in developing countries is still relatively new compared to developed countries. However, based on a review of online tax return reporting literature, researchers have not found any research that discusses the adoption of online tax return reporting by measuring the user behavior of taxpayers using the meta-UTAUT theory base. Therefore, understanding the driving factors and barriers to implementing online tax return reporting can provide input for a more appropriate application of online tax returns in developing countries.

2.2. Hypothesis development

2.2.1. Performance expectancy (PE)

Performance expectancy is the level of individual belief that using technology or application will help them gain an advantage or optimal performance in their activities (Venkatesh et al., 2012). PE has been determined to be the best predictor of a consumer's belief in and intention to embrace technology by a previous study (Venkatesh et al., 2012). Bailey et al. (2017) and Schierz et al. (2010), who conducted research in USA and Germany, found that perceived usefulness and customer attitude positively and significantly affect mobile payment adoption. Several previous studies regarding online tax return reporting (Aziz & Idris, 2015; Carter & Schaupp, 2009; Carter et al., 2011; Chaouali et al., 2016; Mas'ud & Umar, 2019; Ojha et al., 2009; Prawati & Dewi, 2018).; Sahu & Gupta, 2008; Schaupp et al., 2010) stated that PE affects the adoption of online tax return reporting positively and significantly. Therefore, this research formulates the following hypotheses:

H1. Performance expectancy will positively influence taxpayers' attitudes on using online tax return reporting.

2.2.2. Effort expectancy (EE)

Effort expectancy is the level of comfort and convenience expected when someone uses an application or system (Venkatesh et al., 2012). Everyone expects that a new application or system does not require great effort. EE has a significant influence on attitude and behavioral intention (Bailey et al., 2017; Patil et al., 2020; Schierz et al., 2010). According to this study, the impact of EE on customer attitudes would be significant. In the context of research on online tax return reporting, EE has a significant influence on taxpayers' attitudes toward using online tax return reporting (Aziz & Idris, 2016; Carter et al., 2011; Chaouali et al., 2016; Mas'ud & Umar, 2019; Sahu & Gupta, 2008;). Therefore, this research formulates the following hypotheses:

H2. Effort expectancy will have a positive and significant impact on taxpayers' attitudes to use online tax return reporting.

2.2.3. Social influence (SI)

Social influence is how people considered essential to a person (such as coworkers, friends, and family) influence that person to use a particular application or technology (Venkatesh et al., 2012). SI combines three comparable constructs: social factors (Model of Personal Computer Utilization/ MPCU), subjective norm (TPB, TRA, Decomposed TPB, and TAM2), and image (Innovation Diffusion Theory/IDT). Under the influence of gender, experience, and age as moderating variables, these attributes became significant predictors of behavioral intention in UTAUT2 and UTAUT. However, Dwivedi et al. (2019) used the meta-UTAUT model to establish the effect of social influence on behavioral intentions without moderating variables. Several researchers have researched online tax return reporting (Aziz & Idris, 2016; Carter et al., 2011; Carter & Schaupp, 2009; Chaouali et al., 2016; Hussein et al., 2011; Mas'ud & Umar, 2019; Sahu & Gupta, 2008; Schaupp et al., 2010;) found a positive and significant effect of SI on the taxpayer intends to report their taxes with online tax return reporting. Therefore, this research formulates the following hypotheses:

H3. Social influence will have a positive and significant impact on the taxpayer intends to online tax return reporting.

2.2.4. Facilitating conditions (FC)

Facilitating conditions are the extent to which an individual believes in the availability of resources that support someone to do something (Venkatesh et al., 2012). It includes both organizational and technical infrastructure. It implies that the behavioral intention to adopt online tax return reporting will increase if the infrastructure, including physical infrastructure, system stability, and support assistance, are available to the taxpayer to facilitate the smooth process of online tax return reporting. It is evidenced by several studies (Ambali, 2009; Chaouali et al., 2016; Hung et al., 2006; Sahu & Gupta, 2008), which reveal that FC has a significant influence on taxpayer intention to adopt online tax return reporting. Therefore, this research formulates the following hypotheses:

H4. Facilitating conditions will have a positive and significant impact on the taxpayer intention to adopt online tax return reporting.

2.2.5. Trust (TR)

Trust is a subjective perception of the fulfilment of a promise by a party and is essential, especially in electronic transactions, which have a greater risk due to an uncertain environment and something that cannot be controlled (Lu et al., 2011). In other terms, trust ensures that customers get a good experience when using applications offered by service providers in terms of ability, honesty, and goodwill. Several studies found a positive effect of trust on taxpayers' attitude toward using online tax return reporting (Carter & Schaupp, 2009; Chaouali et al., 2016; Hung et al., 2006; Hussein et al., 2011; Mas'ud & Umar, 2019; Schaupp & Carter, 2010; Schaupp et al., 2010; Tjen et al., 2019).

There are various perspectives for defining trust, from the psychological approach to emotional trust to the computer science discipline on system trust. In tax reporting, not only the government institutions, trust is a belief that the government will provide the effective managerial and technical resources required to implement and secure these online systems (Alzahrani et al., 2017). Acceptance of online tax returns depends on the taxpayer's belief that the tax authority can provide electronic services effectively and confidently as a service provider (Carter & Schaupp, 2009). Thus, taxpayer trust in the system's reliability is crucial for online tax return reporting adoption. Therefore, this research formulates the following hypotheses:

H5. Trust in an online tax return reporting system will positively and significantly affect taxpayer attitude.

2.2.6. Attitude (AT) toward use behavior of online tax return reporting systems (UB) Attitude is a positive or negative evaluation of consumer behavior towards something (Ajzen, 1991). Meanwhile, Ilias et al. (2009) define attitude as an individual's interest and preference in using the filing system. Several theorists such as TRA, TAM, and Decomposed TPB have used this construct to analyze their effect on behavioral intention. Although attitude is essential, the UTAUT model does not include this construct. Meta-UTAUT stated that this was a significant deviation and reintroduced attitudes into the model to understand better consumer adoption of technology (Dwivedi et al., 2019). Several researchers (Hung et al., 2006; Sahu & Gupta, 2008; Sondakh, 2017) who researched online tax returns found that attitude had a positive and significant influence on taxpayers' intention to use online tax return reporting applications. Therefore, this research formulates the following hypotheses:

H6. Attitude towards using online tax return reporting will positively and significantly affect taxpayers' intention to use the application.

2.2.7. Behavioral intentions (BI) to use behavior of online tax return reporting systems (UB) Behavioral intentions represent the degree to which a person's willingness and effort to perform the underlying behavior is part of the UTAUT2 model. Researchers believe that intention can capture various motivating elements that influence people's behavior. In a previous study, the behavioral intention was proposed as a good proxy for user behavior. For example, Venkatesh et al. (2012) employed several measurement items from the UTAUT2 model (mobile email, ringtones, Java games, logo downloads etc.). Meanwhile, Sivathanu (2019) utilized regular Likert scale items to assess user behavior. In the context of online tax return reporting, Andriani et al. (2017) found that taxpayers' behavioral intentions positively and significantly influenced their user behavior on using online tax return reporting. Because there is still limited research that looks at the impact of behavioral intentions on user behavior on the application of online SPT reporting, and there is plenty of evidence that behavioral intentions significantly affect user behavior in technology adoption, this research formulates the following hypotheses:

H7. Taxpayers' behavioral intention to adopt an online tax return reporting system will positively and significantly influence their use behavior.

2.2.8. Grievance redressal (GR)

Grievance redressal is a mechanism for handling and resolving customer complaints and disputes from customers established by legal authorities or service providers (A. Kumar et al., 2018). It will be beneficial for consumers to solve problems when using the application (Rana et al., 2016). A. Kumar et al. (2018) and Patil et al. (2020) found that GR has a positive and significant influence on consumers' user behavior in mobile payment adoption. Researchers have not found any research on this relationship in online tax return reporting adoption, especially in the interaction between facilitating conditions and grievance redressal.

Taxation is a very sensitive issue for individuals and organizations. Taxpayers demand a transparent and efficient tax reporting process, either using a fully-online system or through tax officers. Grievance redressal provides a legal and social guarantee that users have the authority to deal with fraud services, and it creates a positive trust (A. Kumar et al., 2018). Users tend to rely less on the facilitating resources when they intend to use a certain system, especially when they feel safe and transparent with the current support of the grievance redressal mechanism. Therefore, this research formulates the following hypotheses

H8. Grievance redressal shows moderating impact on facilitating condition and behavior intention, such that the effect will be lower when the grievance redressal is high.

2.2.9. Anxiety (AN)

Anxiety is a person's worry, fear, and apprehension when using a computer technology application (Simonson et al., 1987; Tsai et al., 2020). Meanwhile, Venkatesh and Davis (2000) define anxiety as worrying about significant errors and data loss when accessing a technology application. Lin (2003)

indicated that individual emotional reactions of fear and nervousness during using or planning to use computers would affect the attitude towards computer products. This anxiety is described as excessive fear in the user's thoughts while utilizing a technology application leads to a reluctance to use the technology application.

Although research on the effect of anxiety on attitudes toward adopting technology has been widely carried out, the limited study explored this relationship in the context of online tax return reporting adoption. However, a study on anxiety in e-government services that are identical to online tax return reporting services shows that technology anxiety is a predictor of e-government adoption in individuals (Kaushik & Mishra, 2019). Rana and Dwivedi (2015) also found a negative and significant effect of anxiety on behavioral intention to adopt an e-government system. It indicates that a higher level of anxiety can result in a lower intention to adopt an e-government system. However, it should be understood that anxiety could be along the user's journey, appearing before, during, and even after using the new technology (Sammephet & Wanphet, 2013). Individuals could have confidence in the beginning and possess anxiety in the middle due to personal factors and several ongoing incidents creating a sense of uncertainty and ambiguity (Randall & Thornton, 2001). In this context, it is believed that worry and fear of making mistakes and losing data when accessing the online tax return reporting application can modulate the relationships between taxpayer intention into their actual behavior. The worry and fear of making mistakes and losing data might further hinder the taxpayer's behavior in online tax return reporting. They may not report their tax returns through the online application. Most likely, taxpayers with higher anxiety will still report their tax returns manually, even when they have some desire and intention to adopt online tax reporting. As a consequence, the following hypothesis is proposed in this study.

H9. Anxiety shows a moderating impact on behavior intention and use behavior, such that the effect will be lower for users with higher anxiety.

Based on the previously described study objectives, research questions, and hypothesis development, the conceptual framework of this study is developed, as shown in Figure 1.

3. Research methodology

3.1. Data collection and sample

This study used an online survey with the Google Form platform. The population taken in this study is Indonesian taxpayers. Respondents were selected using purposive sampling, with the sample criteria being active Indonesian taxpayers who had used an online tax return reporting in reporting their tax returns. Participants who did not fulfil this criterion will be automatically excluded. The researchers distributed this research questionnaire online by broadcasting messages containing requests for filling out research questionnaires along with a Google Form link to fill out the questionnaire. In addition, the researcher asked the help of tax officers from several areas and regions in Indonesia to distribute online questionnaires to the taxpayers. This survey stated that the inclusion of participants is voluntary and will only be used for study purposes and will never affect their tax payment or taxpayer status.

This study got 519 respondents. Five respondents were not willing to participate in this study voluntarily, and 28 respondents did not pass the attention check, so they were not included as a sample in this study. Based on the description above, 486 usable respondents were verified for further analysis in this study. The demographic characteristics of the sample are represented in Table 2.

The proportion of male samples (65.64 %) is higher than that of female samples (34.36 %). Most of the respondents (57.20%) are middle-aged (the 30–40 age group). With 63.17 % of respondents, civil servants were the most common occupation, followed by private-sector employees with 24.48 %. Government employees have a strict obligation to report their tax returns through an online tax



Figure 1. Conceptual framework.

return reporting application. This obligation follows the regulation of the Indonesian Minister of Administrative Reform and Bureaucracy Reform number 8 of 2015. Undergraduate education became the primary education level with 61.32 %, followed by postgraduate with 18.93 %. Java became the domicile that contributed the highest percentage of respondents with 49.79%, followed by Bali-Nusra in the second position with the percentage of respondents at 22.02%. A plausible explanation for these demographic proportions actually mimics the current situation of Indonesian taxpayers. Government employees, undergraduates, and living in Java made up a large proportion of Indonesian taxpayers compared to other demographic profiles. Most respondents knew about DJP online (online tax return) from DGT's official website and official social media accounts (46.91 %), followed by socialization in second place (26.95 %). It shows that the official media from DJP still dominates major sources of information believed by the taxpayers compared to other media, such as social media.

3.2. Measurement scales

A preliminary list of measurement items was generated after an extensive literature review concerning the individual acceptance and use of information systems, including TAM, UTAUT, and Meta-UTAUT models. This study uses a questionnaire that has been validated by previous studies and made adjustments to the context of online tax reporting to measure the construct of the proposed research model (see Table A1). This study utilized survey instruments with a seven-point Likert scale with values ranging from 1 (="Strongly disagree") to 7 (="Strongly agree"), and latent components were indirectly evaluated through the measurement items. To ensure the content validity of the survey instrument, besides adopting validated items from previous studies, we conducted a pilot test by asking two associate professors, fifteen graduate students of SBM ITB, and ten tax officers to review the questionnaire.

3.3. Common method bias

Respondents filled out the questionnaire anonymously and were told there were no correct or incorrect responses to circumvent common technique variation issues. According to the Fornell and Larcker criteria (1981), all construct correlations with the latent component did not surpass the square root of AVE (see, Table 4). Based on Table 3, the VIF value is no more than 5 (Hair et al., 2019). Therefore, our findings show that common method bias is not an issue in this research.

4. Model estimations and results

Survey results were analyzed using structural equation modelling (SEM). According to Hair et al. (2019), SEM can calculate incorrect measurements of the observed variables. Because this study intends to evaluate a suggested model (using numerous dependent variables) and match hypotheses with a high level of rigour, it was decided to use SEM for advanced inferential analysis. This study used a two-step approach to structural equation modelling in structural equation modelling, including confirmatory factor analysis and the structural model's path analysis.

We choose PLS-SEM with SmartPLS 3.3.3 software to test the proposed hypothesis. Due to the model's complexity, soft distributional assumptions, and the study's ease of interpretation, model formulation, and exploratory nature. PLS-SEM is becoming more well-known for its capacity to handle numerous dependency relationships simultaneously with greater statistical efficiency (Ringle et al., 2018). If the number of items in the measurement scale is small (Barclay et al., 1995), there is no limit on the data distribution (Chin, 1998), then this model is suitable for use.

4.1. Measurement model estimates: scale validity and reliability

This study used a principal component-based estimating with PLS to calculate a first-order measurement model that included all reflective elements as latent constructs (Chin et al., 2013). Afterwards, we used composite reliability and Cronbach's alpha to analyze the reliability of the measurement scale and internal consistency. As shown in Table 3, all the first-order constructs have a value of more than 0.7, according to the minimum value required by Hair et al. (2019).

We were able to verify that all measurement items exceed the minimum factor loading threshold of 0.7 and hence contribute significantly to their respective constructs, as shown in Table 3 (Ringle et al., 2018). Regarding the measurement of convergent validity, the analysis results show that all variables have an AVE value greater than 0.5 and all standard loadings of the observed items are significant. Similarly, According to Fornell and Larcker's (1981) criteria to check discriminative validity in Table 4, all construct correlations with latent components do not exceed the square root of the AVE. Furthermore, the highest heterotrait-monotrait correlation ratio (HTMT) was 0.815, less than 0.9, as Henseler et al. (2015) required. We may infer that our modelling is appropriate because the SRMR fit index is 0.061, lower than 0.08 as required by Hu and Bentler (1999). Moreover, worries about multicollinearity were not a problem in our investigation, as all VIF values were less than the permissible limit of 5. (Hair et al., 2019).

4.2. Structural model estimation

We use bootstrap with 5000 resampling to test our research hypotheses and measure the significance and causal relationships between constructs. T-statistics and standard error are provided to evaluate the significance of structural coefficient at this level of bootstrapping (Henseler et al., 2015). Figure 2 and Table 5 show the path coefficients/direct effects results and several fit indexes.

Eight of the nine hypotheses provided in this study were approved. Table 5 shows that performance expectancy had a significant and positive affect taxpayer's attitudes towards using the online tax return reporting (p < 0.05, t > 1.96, Path coefficient = 0.471), confirming hypotheses H1. We may state that effort expectancy has a positive and significant influence on taxpayers' attitudes to using online tax return reporting (p < 0.05, t > 1.96, Path coefficient = 0.256), confirming hypotheses H2. Meanwhile, social influence had a negative and no significant effect on influence the taxpayer intention to online tax return reporting (p > 0.05, t < 1.96, Path

Table 2. Demographic characte	eristics of the sample	
Variable	Frequency	Percentage
Gender		
Male	319	65.64
Female	167	34.36
Total	486	100.00
Age (Years)		
< 20	1	0.21
20-30	122	25.10
30-40	278	57.20
40-50	64	13.18
> 50	21	4.32
Total	486	100.00
Occupation		
Employee	119	24.48
Civil Servant	307	63.17
Professional	10	2.06
Entrepreneur	43	8.85
Freelance	7	1.44
Total	486	100.00
Education		
High School	44	9.05
Diploma	51	10.49
Undergraduate	298	61.32
Post graduate	92	18.93
PhD	1	0.21
Total	486	100.00
Domicile		
Sumatra	69	14.20
Jawa	242	49.79
Bali-Nusra	107	22.02
Kalimantan	16	3.29
Sulawesi	34	7.00
Maluku	6	1.23
Papua	12	2.47
Total	486	100.00
Source of DJP online information		
Social Media	82	16.88
Mass media	28	5.76

(Continued)

Table 2. (Continued)		
Variable	Frequency	Percentage
DGT's official website and/or officialsocial media accounts	228	46.91
Socialization	131	26.95
Other	17	3.50
Total	486	100.00

coefficient = -0.017); hence H3 was not supported. In addition, facilitating conditions have a positive and significant effect on the taxpayer intention to adopt online tax return reporting (p < 0.05, t > 1.96, Path coefficient = 0.307), confirming hypothesis H4. Trust in an online tax return reporting system positively and significantly effect taxpayer attitude (p < 0.05, t > 1.96, Path coefficient = 0.218), confirming hypothesis H5. We can conclude that attitude towards online tax return reporting had a significant and positive effect on taxpayers' intention to use it (p < 0.05, t > 1.96, Path coefficient = 0.561), confirming hypotheses H6. Our data show that taxpayers' behavioral intention to adopt an online tax return reporting system positively and significantly influence on their use behavior (p < 0.05, t > 1.96, Path coefficient = 0.430) H7 was accordingly supported. Grievance redressal had a significant influence as a moderating variable that moderated the facilitating condition on behavioral intention (p < 0.05, t > 1.96, Path coefficient = -0.073), confirming hypothesis H8. Finally, anxiety had a significant effect as a moderating variable that moderated behavioral intention on user behavior (p > 0.05, t < 1.96, Path coefficient = -0.291); therefore, H9 was supported.

With path coefficients of 0.430, behavioral intention was the most significant predictor of Indonesian taxpayer usage toward online tax return reporting. As expected, with a path coefficient value of 0.561, the attitude was the best predictor of behavioral intention. Meanwhile, with a path value of 0.471, performance expectancy emerged as the most significant predictor of Indonesian taxpayer attitudes about online tax return filing.

5. Discussion

This research used a meta-UTAUT model that extended several variables as a theoretical basis to explore Indonesian online tax return reporting behavior. The suggested model consists of five exogenous factors (performance expectancy, facilitating conditions, social influence, effort expectancy, and trust), three endogenous variables (attitude, behavioral intentions, and user behavior), and two moderating variables (grievance redressal and anxiety) related through research hypothesis (H1-H9). Eight of the nine presented hypotheses received support from structural equation modelling, confirming some of the existing meta-UTAUT correlations in taxpayer usage behavior on online tax return reporting.

Based on the results of hypothesis testing, performance expectancy (H1), effort expectancy (H2), and Trust (H5) had a significant and positive impact on Indonesian taxpayers' attitudes toward using online tax return reporting. It indicates that the attitude of Indonesian taxpayers in using online tax return reporting is influenced by the performance expectancy, effort expectancy, and trust of taxpayers towards online tax return reporting applications. This finding is in line with earlier studies that taxpayers' attitudes are influenced by performance expectancy (Aziz & Idris, 2015; Carter & Schaupp, 2009; Carter et al., 2011; Chaouali et al., 2016; Mas'ud & Umar, 2019; Ojha et al., 2009; Prawati & Dewi, 2018; Sahu & Gupta, 2008; Schaupp et al., 2010), effort expectancy (Aziz & Idris, 2016; Carter et al., 2011; Chaouali et al., 2016; Mas'ud & Umar, 2019; Sahu & Gupta, 2008;), and trust (Carter & Schaupp, 2009; Chaouali et al., 2016; Hung et al., 2006; Hussein et al., 2011; Mas'ud & Umar, 2019; Schaupp & Carter, 2010; Schaupp et al., 2010; Tjen et al., 2019). Based on the discussion of the three constructs above, performance expectancy

Table 3. Measu	irement model				
Construct	Factor Loading	Cronbach's alpha	Composite Reliability	AVE	VIF
Use Behavior		0.974	0.983	0.950	Endogenous
UB1	0.959				
UB2	0.986				
UB3	0.978				
Performance Expectancy		0.934	0.953	0.835	2.466
PE1	0.921				
PE2	0.890				
PE3	0.905				
PE4	0.939				
Effort Expectancy		0.951	0.963	0.837	2.537
EE1	0.917				
EE2	0.942				
EE3	0.932				
EE4	0.908				
EE5	0.876				
Social Influence		0.928	0.965	0.932	1.170
SI1	0.971				
SI2	0.960				
Facilitating Conditions		0.831	0.888	0.666	2.484
FC1	0.821				
FC2	0.887				
FC3	0.715				
FC4	0.831				
Behavioral Intention		0.898	0.937	0.831	1.891
BI1	0.935				
BI2	0.918				
BI3	0.881				
Attitude		0.937	0.952	0.798	2.516
AT1	0.895				
AT2	0.904				
AT3	0.897				
AT4	0.879				
AT5	0.893				
Trust		0.933	0.957	0.882	1.947

(Continued)

Table 3. (Cont	inued)				
Construct	Factor Loading	Cronbach's alpha	Composite Reliability	AVE	VIF
TR1	0.917				
TR2	0.940				
TR3	0.959				
Anxiety		0.947	0.962	0.864	1.160
AN1	0.907				
AN2	0.926				
AN3	0.945				
AN4	0.939				
Grievance		0.839	0.895	0.740	1.093
GR1	0.763				
GR2	0.898				
GR3	0.912				
Moderating (FC*GR)	1.000	1.000	1.000	1.000	1.102
Moderating (BI*AN)	1.007	1.000	1.000	1.000	1.686

AVE = Average Variance Extracted; VIF = Variance Inflation Factor.

becomes the most robust predictor with a path coefficient value of 0.471, among other antecedents. It indicates that the tax authorities must be able to create and develop a strong and reliable online tax return reporting system that can meet and even exceed the expectations of taxpayers.

As a mediating variable of user behavior, the behavioral intention has three antecedents: attitude, facilitating conditions, and social influence. Facilitating conditions (H4) and attitude (H6) positively and significantly affect the taxpayer's intention to adopt online tax return reporting. This finding follows several studies that confirmed the positive and significant effect of facilitating conditions on taxpayer intention to adopt online tax return reporting (Ambali, 2009; Chaouali et al., 2016; Hung et al., 2006; Sahu & Gupta, 2008). In addition, this finding is also consistent with several studies that found a positive and significant effect of attitude on taxpayers' intention to use online tax return reporting applications (Hung et al., 2006; Sahu & Gupta, 2008; Sondakh, 2017). In terms of facilitating conditions, we can interpret that better technical quality, resources, and institutional infrastructure can help taxpayers better understand and use online tax return reporting applications.

Meanwhile, social influence (H3) had a negative with no significant effect on the taxpayer's intention to do online tax return reporting. It shows that hypothesis 3, which states that social influence will have a positive and significant effect on the taxpayer's intent to online tax return reporting, was not supported. This finding is in line with the research results of Aziz and Idris (2015), who conducted research in Malaysia. They found that social influence did not significantly affect taxpayer intention to use online tax return reporting. However, these findings differ from those of Carter et al. (2011), Carter and Schaupp (2009), and Schaupp et al. (2010), who conducted research in the USA. They found that social influence had a positive and significant influence on taxpayer intention to use online tax return reporting. A plausible explanation is that differences in research locations caused the differences in research findings. Research conducted in the USA (developed countries) with western culture and a well-established tax system shows that social

Table 4. Dis	criminant ve	alidity assess	ment (fornel	ll-locker crite	erion)							
VAR	AN	АТ	BI	EE	FC	GR	Mod1	Mod2	H	SI	TR	UB
AN	0.929											
AT	0.302	0.893										
BI	0.348	0.815	0.912									
Ш	0.347	0.749	0.691	0.915								
FC	0.399	0.760	0.747	0.734	0.816							
GR	0.042	0.274	0.259	0.170	0.261	0.848						
Mod1	-0.119	-0.487	-0.629	-0.424	-0.438	-0.076	1.000					
Mod2	-0.040	-0.281	-0.295	-0.150	-0.201	-0.107	0.154	1.000				
PE	0.304	0.801	0.786	0.742	0.704	0.180	-0.562	-0.237	0.914			
SI	0.044	0.300	0.262	0.313	0.361	0.053	-0.061	0.023	0.285	0.965		
TR	0.344	0.690	0.659	0.657	0.624	0.192	-0.448	-0.173	0.644	0.334	0.939	
UB	0.290	0.593	0.663	0.529	0.590	0.144	-0.596	-0.204	0.663	0.118	0.485	0.975
The square roc	its of AVE are s	hown as numbe	ers along the dic	agonal axis (in t	old). Correlatio	ns between late	ent constructs c	ire shown in the	remaining eler	ments.		

Figure 2. Inner and outer

model.



influence positively and significantly affects the taxpayer's intention to do online tax return reporting. Meanwhile, research conducted in developing countries (Indonesia and Malaysia) with eastern cultures and a tax system that is not yet well-established shows that social influence does not significantly influence the taxpayer's intention to use online tax return reporting. Following the research context, for taxpayers in Indonesia as users of the online tax return application (public service applications or e-government services), the intention to adopt the online tax return reporting system does not require references from other people because the usage of online tax return reporting applications does not increase its users' prestige or social status. According to the previous description of the three constructs, attitude is the strongest predictor, with a path coefficient of 0.561, among other antecedents. It shows the important role of attitude in understanding user adaptation of a technology application where the meta-UTAUT model is the theoretical basis for this research.

As an outcome variable in this study, user behavior has one antecedent, namely behavioral intention. Taxpayer behavioral intention (H7) to adopt an online tax return reporting system positively and significantly influence on their user behavior with a path coefficient of 0.430. It shows the important behavioral intention in increasing taxpayer use behavior in online tax return reporting.

Grievance redressal (H8) had a significant influence as a moderating variable that moderated the facilitating condition on behavioral intention. It shows that hypothesis 8 was supported. The

Table 5. Result of stru	ictural model (hypothese	s test results)				
Hypothesis	Hypothesis Explanation	R2	Path Coefficient	t-values	p-values	Hypothesis Support?
H1	PE = > AT	0.719	0.471	8.117	0.000	Yes
H2	EE = > AT		0.256	4.107	0.000	Yes
H5	TR = > AT		0.218	3.490	0.000	Yes
H3	SI = > BI	0.708	- 0.017	0.623	0.533	No
H4	FC = > BI		0.307	5.577	0.000	Yes
H6	AT = > BI		0.561	9.471	0.000	Yes
H7	BI = > UB	0.502	0.430	6.004	0.000	Yes
H8	Moderating GR: $FC = > BI$		-0.073	2.088	0.037	Yes
6Н	Moderating AN: BI = > UB		-0.291	3.891	0.000	Yes

findings show that grievance redressal has a negative moderating effect on facilitating conditions and behavioral intention. The moderating effect on facilitating condition and behavioral intention will be lower when the grievance redressal is high. Grievance redressal provides an assurance for the taxpayer and protects taxpayers with legal mechanisms in carrying out their tax obligations. It implies that the expected facilitating conditions will be less for taxpayers to adopt the online tax reporting when the grievance redressal is deemed sufficient and appropriate. Grievance redressal already gives taxpayers a prudent safety net to adopt online tax reporting applications with less technical and organizational infrastructure.

Finally, anxiety (H9) had a significant effect as a moderating variable that moderated behavioral intention on use behavior. It shows that H9 was supported. This finding is in line with the research results of Jeng et al. (2022), who found that anxiety shows moderating effects on actual behavioral intention to use. Anxiety negatively influences the adoption of e-government (Kaushik & Mishra, 2019). So that the findings in our study also show that anxiety has a negative moderating effect on behavior intention and use behavior. It indicates that if taxpayer anxiety about online tax returns is high, the moderating effect on the intention to use online tax returns will be low. Therefore, the tax authority as an online tax return reporting service provider must be able to reduce anxiety so that the level of use of online tax return reporting increases.

5.1. Theoretical contributions

The theoretical contribution of this research is to empirically validate the meta-UTAUT model with three extended variables, namely trust, grievance redressal and anxiety. This research further explains the meta-UTAUT model Whetten (2009) described as a cross-context framework with unique attributes for taxpayers adopting online tax return reporting. The meta-UTAUT model has not been validated in any existing study on online tax return reporting adoption. As a result, conducting an empirical evaluation of this model becomes a significant contribution as a theoretical basis for research on customer adoption, focusing on the acceptance of online tax return reporting.

A literature review on the adoption of online tax return reporting shows that no external construct is more specific to the meta-UTAUT model that fits the research context. It could better represent the various aspects of online tax return reporting acceptance, especially in the context of developing countries. Hence, trust as exogenous variables, grievance redressal and anxiety as moderating variables were added to the meta-UTAUT model as a new variable in this study. It refers to the relationship between meta-UTAUT endogenous variables (usage, intention, and attitude) and external variables. The three additional variables are included in the meta-UTAUT model because they follow research conducted on the use and adoption of online tax filings. It relates to adding additional association variables to the exogenous and endogenous variables in the existing meta-UTAUT model. These novel extension mechanisms contribute to the current theory in other ways. They can assist future researchers in comprehending the usage of such a model to validate the implementation of online tax return reporting in other developing nations with socioeconomic characteristics comparable to Indonesia.

The addition of trust and moderating roles of grievance redressal and anxiety in meta-UTAUT is a novelty in online tax reporting, especially in developing countries where the facilitating conditions are less, and citizens' trust is relatively low for new systems. Extended meta-UTAUT with anxiety, trust, and grievance redressal as additional variables are suitable to explore the online tax reporting phenomenon, which is utilitarian-driven and involves government institutions which are highly regulated and coercive in nature.

Furthermore, despite online tax return filing becoming a more mature research field, no prior empirical research has used the behavior constructs to investigate the adoption of online tax return reporting. This study takes it a step further by contributing to the online tax return reporting literature by integrating user behavior as the dependent variable and verifying the meta-UTAUT model for taxpayers as users of online tax reporting in developing countries.

5.2. Implications for practice

Our research model provides a comprehensive knowledge of the numerous drivers and inhibitors that influence Indonesian taxpayers' adoption of online tax return reporting and various practical implications for practitioners and policymakers. For example, a significant effect of performance expectations on attitudes suggests that socialization and advertising messages aimed at Indonesian taxpayers should emphasize the use of online tax return filing (Bailey et al., 2017). These connections also point to the need for tax authorities to implement a solid and dependable online tax return reporting system to meet taxpayer expectations. Because usability is a deciding element in whether or not to utilize online tax return reporting systems, tax authorities should be encouraged to build the system based on users' experiences and go above and beyond their expectations. Tax authorities should consider how functional the system is and make it more useful (Schierz et al., 2010).

Meanwhile, because effort expectancy substantially impacts attitude, system designers should create user-friendly online tax return reporting apps. The goal is to increase taxpayer confidence in using online tax return reporting to file their tax return via an Internet connection (Bailey et al., 2017). This crucial relationship provides direction to tax authorities looking to improve the usability of online tax return reporting applications. They should emphasize making online tax return reporting more convenient and user-friendly.

Furthermore, because favorable conditions positively impact behavioral intentions, tax authorities should provide training and assistance programs to help taxpayers better comprehend and use online tax return submission apps. Thus, it will reduce the number of taxpayers who come to the tax office only to report their annual tax returns online. Tax authorities can also provide online training packages so that taxpayers can get guidance in using the online tax return application and filling out their tax returns, especially during a pandemic like now, without coming to the tax office. Taxpayers with adequate resources to use online tax return reporting tools find the system more accessible and are more likely to use it. Furthermore, tax authorities might devote greater resources to user participation and training to help taxpayers become more comfortable with online tax return systems (Venkatesh & Bala, 2008).

Because trust significantly affects attitudes, tax authorities must foster taxpayer trust by providing guarantees for the security of user privacy data and quality application security system-level certification. (Giovannini et al., 2015). They should emphasize trust-building activities, especially regarding new tax return reporting techniques with online tax return reporting software, which will assist lower customer risk perceptions.

Grievance redressal and anxiety had significant moderating roles. The tax authority must be able to provide good grievance redressal to satisfy complaints from taxpayers who use online tax returns. One of them is opening a special online tax return reporting complaint hotline. Because so far, the complaint hotline for online tax returns is combined with the complaint hotline for tax issues in general. In addition, the tax authority can increase the complaint channel by using chatbots, live chat, WhatsApp chat and others so that taxpayers can quickly get treatment for the problems they face. Providing sufficient grievance redress or exceeding expectations will reduce high investment costs to improve facilitating conditions and reduce taxpayers' anxiety who will use online tax return reporting.

5.3. Limitations and future research directions

As with most studies, readers should interpret the findings in light of the study's limitations. This study has identified several limitations and future research directions. First, this study measures usage behavior through a self-reported use scale. To avoid potential bias, we ensure respondent confidentiality, explain that there is no right or wrong answer, and adapt the measurement scale that has been validated by previous research to the context of online tax return reporting following the recommendations of Podsakoff and Organ (1986) and Podsakoff et al. (2003). For future research, it would be better if it could combine and analyze actual usage data. Second, this study exclusively included answers from Indonesians who had used online tax return submission tools. Further study should include non-adopters

to explore why they are hesitant to use online tax return reporting. It will help tax authorities formulate strategies to increase online tax return reporting. Third, most of the respondents (57%) were of productive age, between 30–40 years old. Although this age range represents many taxpayers in Indonesia, it is still necessary to explore generational cohort differences, especially concerning their technology efficacy and risk calculus. Lastly, this research was conducted in a single-country study, and thus the generalizability of our findings may be limited. Further research could conduct cross-country, and cross-cultural research could better assess the taxpayer behavior in different taxation systems and cultural backgrounds.

6. Conclusions

One of the tax reform items is online tax return reporting, which allows taxpayers to record tax returns without going to the tax office and waiting in line. Taxpayers can submit their tax return reports at any time and from any location by just using a device and an internet connection. However, some taxpayers have not used the online tax return reporting application to submit their tax return reports. Taxpayers have also filed tax return reports, but they are still filed at the tax office. This research investigates the numerous elements that influence taxpayers' adoption and online tax return reporting usage. This study used the meta-UTAUT as a theoretical basis. We added trust, anxiety, and grievance redressal to the model to make it more relevant to the online tax return reporting context.

Trust, effort expectancy, and performance expectancy positively and significantly impact taxpayers' attitudes towards online tax return reporting. Facilitating conditions and attitudes positively and significantly impact the taxpayer intention to adopt online tax return reporting. However, the intention of taxpayers to use online tax return reporting is unaffected by social influence. At the same time, grievance redressal and anxiety had a significant influence as moderating variables. The role of trust, anxiety, and grievance redressal points out an essential contribution to online tax reporting adoption in developing countries where the system is not yet well-established or where the citizens still have low trust and high anxiety in their government. Further research should focus on applying the extended conceptual framework in other countries with different taxation systems, e-government maturity, and cultural backgrounds.

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Appendix

Table A1. Operationa	l definitions of the me	asures	
Construct	Code	Operational Definition	Source
Use Behavior	UB1	I use online tax return reporting systems.	Sivathanu (2019)
	UB2	I report my tax return report using online tax return reporting systems.	
	UB3	I use online tax return reporting systems when doing tax return reports.	
Performance Expectancy	PE1	Using online tax return reporting systems helps me accomplish tax return reports more quickly.	Venkatesh et al. (2012)
	PE2	Using online tax return reporting systems increases my productivity.	
	PE3	Using online tax return reporting systems makes it easier for me to do tax return reports.	
	PE4	Using online tax return reporting systems improves my overall tax return report.	
Effort Expectancy	EF1	I find online tax return reporting systems easy to use.	Patil et al. (2020)
	EF2	My interactions with online tax return reporting platforms are straightforward and easy to comprehend.	
	EF3	It's simple for me to learn how to use online tax return reporting.	
	EF4	I find online tax return reporting systems flexible to interact with.	
	EF5	I find it easy to get online tax return reporting systems to do tax return reports.	

(Continued)

Construct	Code	Operational Definition	Source
Social Influence	SI1	People around me who use online tax return reporting systems have more prestige than those who do not.	Patil et al. (2020)
	S12	Using online tax return reporting tools is considered a status symbol among my peers.	-
Facilitating Conditions	FC1	I have the requisite resources to use online tax return filing systems.	Patil et al. (2020)
	FC2	I have the skills required to use online tax return filing systems.	
Behavioral Intention	FC3	I can seek assistance from others When I am having trouble using online tax return reporting systems.	
	FC4	Specialized instructions concerning use of online tax return reporting systems are available to me.	
	BI1	I will always try to use online tax return reporting systems in reporting my tax return.	Venkatesh et al. (2012)
	BI2	I plan to use online tax return reporting systems frequently.	
	BI3	I will recommend others to online tax return reporting systems.	
Attitude	AT1	Using online tax return reporting systems is a wise idea.	Schierz et al. (2010)
	AT2	I like the idea of using online tax return reporting systems.	
	AT3	Using online tax return reporting systems is pleasant.	
	AT4	Using online tax return reporting systems is beneficial.	
	AT5	Using online tax return reporting systems is interesting.	

(Continued)

Table A1. (Continued)			
Construct	Code	Operational Definition	Source
Trust	TR1	I trust online tax return reporting systems to be reliable.	Lu et al. (2011); Srivastava et al. (2010)
	TR2	I trust online tax return reporting systems to be secure.	
	TR3	I believe online tax return reporting systems to be trustworthy.	
Anxiety	AN1	I feel nervous about using online tax return reporting systems.	Rana et al. (2017)
	AN2	It scares me to think that I can lose personal information by wrongly using online tax return reporting systems.	
	AN3	I hesitate to use online tax return reporting systems in fear of making mistakes I cannot correct.	
	AN4	Using online tax return reporting systems is somewhat scary to me.	
Grievance	GR1	There should be some authority to approach in the case of failed online tax return reporting transactions.	Kumar et al. (2018)
	GR2	There should be transparency in settling claims for failed online tax return reporting transactions.	
	GR3	Legal disputes about online tax return reporting should be resolved in a timely manner.	



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