

# The Role of Tax Planning and Tax Knowledge on Tax Compliance With Tax Digitalization as a Mediating Variable in the MSME Sector

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**Abstract:** Tax planning and tax digitalization have received special attention in the context of taxation, especially in the taxpayer due to its important role in enhancing a tax compliance. This study aims to identify the role of tax planning on tax compliance with tax digitalization as a mediating variable in the MSME sector. This study used a survey method with 180 respondents. We analyzed the data using Smart-PLS (Partial Least Square) for Structural Equation Modelling (SEM). The results show that tax planning and tax digitalization positively affect tax compliance. Furthermore, tax digitalization as a mediator between them. This research provides further suggestions on how tax planning can improve tax digitalization in their tax compliance.

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**Keywords:** Tax Planning; Tax Knowledge, Tax Digitalization; Tax Compliance.

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## A. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) significantly impact the economies of many countries, especially those in developing nations, as stated by the World Bank (Asian Development Bank, 2020). Most firms globally are categorized as MSMEs, which substantially impact employment (International Labour Organization (ILO), 2019). MSMEs comprise around 90% of all enterprises and contribute to over 50% of total employment. Formal micro, small, and medium enterprises (MSMEs) have the potential to contribute up to forty per cent of the Gross Domestic Product (GDP) in developing nations. The figure might significantly increase if informal MSMEs are taken into account. Due to their substantial economic impact and extensive workforce, several governments have prioritized the examination of MSMEs (Dash, 2018; Kumar & Gajakosh, 2021; Nadaf & Kadakol, 2017). MSMEs may preserve their present goods' market advantage by effectively deploying specialized marketing resources and capabilities in tandem (Quaye & Mensah, 2018).

MSMEs play a significant role in Indonesia's national economy and have the potential to contribute significantly to the country's GDP. However, their growth is hindered by challenges in business management, financial management, human resource management, and entrepreneurship. The competencies, skills, and knowledge of human resources are deficient compared to those of significant firms (Muliadi, Darma, & Kasuma, 2020; P. E. Prasetyo, 2020; P. Prasetyo & Kistanti, 2020), but in its development, it is still faced with various obstacles in terms of business management, financial management, human resource management and entrepreneurship (Hernita, Surya, Perwira, Abubakar, & Idris, 2021; Mayr,

Mitter, Kücher, & Duller, 2021; Salamzadeh & Dana, 2021; Sarvari, Chan, Alaeos, Olawumi, & Abdalridah Aldaud, 2021). Human resource competencies, skills, and knowledge are still weak compared to large enterprises (Hernita et al., 2021; Purnamawati, Jie, Hong, & Yuniarta, 2022; Surya et al., 2021). The human resource practices of numerous MSMEs frequently do not foster an environment that promotes the generation and sharing of knowledge. Typically, small and medium-sized enterprises (MSMEs) participate in less management development activities compared to big organizations (Alhusen & Bennat, 2020; Demirkan, Srinivasan, & Nand, 2022; Heenkenda, Xu, Kulathunga, & Senevirathne, 2022; Madrid-Guijarro, Martin, & García-Pérez-de-Lema, 2021).

Semarang City is a popular tourist destination and a hub for farming and manufacturing activities. Furthermore, it serves as a hub for several commercial endeavours, retail establishments, and gastronomic and transportation hubs connecting West Java and East Java. These diverse factors can potentially attract local and international tourists to Semarang City. The rise of MSMEs is closely linked to the growth of home industries in Semarang City. According to the Dinas Koperasi Usaha Kecil dan Menengah Provinsi Jawa Tengah, the number of MSMEs in Semarang City rose by 40% from 2017 to 2022 (Dinas Koperasi Usaha Kecil dan Menengah Provinsi Jawa Tengah, 2022). The expansion of MSMEs in Semarang City surpasses that of consumers. As a result, there is now intense rivalry among MSMEs to attract clients. The rise in MSMEs has resulted in a more competitive MSME sector in Semarang City. This rivalry is a formidable task for the MSME business, which must enhance its tax planning and tax digitalization strive to outperform in delivering to tax compliance.

Night & Bananuka (2019) examined the mediating effect of adopting an e-tax system on the association between the attitude toward the e-tax system and tax compliance in small and medium-sized business enterprises in Africa. The results suggested that the adoption of an e-tax system and the attitude toward the e-tax system are significant predictors of tax compliance. Improving tax procedures in general and the tax-filing system in particular would improve the efficiency of the tax system and, consequently, increase tax compliance (Drobyshevskaya, Vylegzhanina, Grebennikova, & Mamiy, 2021; Utama, Nimran, Hidayat, & Prasetya, 2022). The improved efficiency and effectiveness of the government would lead to lower corruption (Pan, Mu, setescu, Pană, & Voicu, 2019) and, consequently, lower tax evasion (Uyar, Nimer, Kuzey, Shahbaz, & Schneider, 2021).

It is believed that to determine the booster of Tax Compliant Behavior, another factor is needed, namely the planning. However, carrying out knowledge management practices, is not only formed by this but also requires an adequate planning. E-Filing, especially Simplicity of the System should be a major concern to further develop knowledge management practices and increase tax compliant intention. The novelties are the development of the Theory of Planned Behavior by involving other variables that affect taxpayer compliance behavior, namely Tax Planning. In addition, this research involves the Tax Digitalization variable as a mediating variable.

The study seeks to understand more about how caring about tax planning, the need to make a positive impact, and having a positive tax planning and tax digitalization on tax compliance can help encourage people to tax knowledge. Considering the above background,

this research tries to achieve the following objectives, which would help in tax planning and tax digitalization on tax compliance into their daily lifestyles:

RO1. To understand whether tax planning and tax knowledge directly tax digitalization when purchasing SMSEs products.

RO2. Determine whether tax digitalization has a direct impact on tax compliance when purchasing SMSEs products.

RO3. To understand the direct and indirect effects of tax planning and tax knowledge on tax compliance while tax digitalization when purchasing SMSEs products.

Overall, we contribute by building, testing, and empirically validating a framework that examines the influence of factors required for digital marketing literacy. First, this research contributes to establishing the significance of tax planning and tax knowledge also directly tax digitalization in improving SMSE tax compliance. Second, it finds evidence to support the significant role of tax planning and tax knowledge towards tax compliance. Third, the research found that tax planning further strengthens the tax digitalization constructs towards tax compliance. Fourth, there is still a lack of tax planning research on MSMEs, lack of tax digitalization on MSME tax compliance, and adding MSME's owner tax digitalization variables as mediation. Our study is organized as follows: The next section covers the theoretical background, followed by a discussion that establishes the theoretical relationships between the constructs and hypotheses based on the relationships. Next, the findings are explained and analyzed, followed by a discussion of the findings from theoretical and practical perspectives. Finally, we close by discussing results and analyzed.

Tax planning refers to activities of restructuring transactions to increase after-tax income and/or after-tax cash flows. As such activities involve significant uncertainty, tax planning is often viewed as a long-term investment (James, 2020). Tax planning is an area where we expect board risk oversight to play a vital role in ensuring the firm is pursuing appropriately risk-balanced tax reduction strategies (Beasley, Goldman, Lewellen, & McAllister, 2021). Tax planning called (transfer pricing) because of its tremendous growth, especially in the field of international taxation where it is considered the biggest problem in taxing multinationals. Tax planning by transferring income from subsidiaries in different tax jurisdictions is a source of concern for the tax authorities, as it has several negative consequences (Ftouhi & Ghardallou, 2020). Tax planning refers to the ability of enterprises to plan and structure their tax affairs involving a range of mechanisms to reduce tax legally (Cooper & Nguyen, 2020).

The Scholes-Wolfson (SW) framework defines effective tax planning as "considering not only the role of taxes when implementing the decision rule of maximizing after-tax returns, but also consideration of other costs that arise in a world of costly contracting where implementation of tax-minimizing strategies may introduce significant costs along non-tax dimensions (Schwab, Stomberg, & Williams, 2022). Firms' tax planning indirectly affect through their impact on executive equity incentives, corporate governance, or information environment (Chen, Huang, Li, & Shevlin, 2019). Tax planning often involves the use of financial instruments such as loans, repurchase agreements, and derivatives, and these instruments are largely obtained from banks (Gallemore, Gipper, & Maydew, 2019).

Tax knowledge is everything that is known and understood in relation to tax law, both material tax law and formal tax law (Mardiasmo, 2016). Tax knowledge is the ability of a taxpayer to know tax regulations, both regarding tax rates based on the law that will be paid, as well as tax benefits that will be useful for his life (Handoko, Toni, & Simorangkir, 2020). Taxpayers must have knowledge of general provisions and tax procedures. This plays an important role in growing tax compliance behavior because how can taxpayers be asked to comply if they do not know the tax regulations.

Knowledge of taxation is not only limited to taxpayers paying, reporting, and depositing taxes, but taxpayers must understand tax penalties and sanctions. If taxpayers understand tax regulations and tax sanctions in Indonesia, then taxpayers will be more willing to pay taxes (Sumianto & Kurniawan, 2016). In addition, taxpayer knowledge of taxation can make taxpayers pay their taxes. Because they know the procedures and sanctions that will be imposed if the tax is ignored. A high level of understanding of tax compliance will carry out tax obligations better (Wadesango, Mutema, Mhaka, & Wadesango, 2018). High taxpayer knowledge and understanding makes taxpayers comply with tax provisions (Oladipupo & Obazee, 2016; Sumianto & Kurniawan, 2016).

Tax digitalization is a form of tax modernization in the aspect of tax administration through the use of information technology systems that can provide benefits and practicality for taxpayers in fulfilling their obligations (Martini & Mulyati, 2023). The emergence of tax digitalization as a form of tax modernization affects the Directorate General of Taxes (DGT) environment to be more technical, focused, and dynamic (Yosefin & Anjelika, 2022). The application of tax digitalization helps services related to good and practical tax management for citizens who are taxpayers. The Digitalization System is changing many aspects of our daily lives and the structure of our economy and society. The scope and speed of change brought about by digital transformation are crucial and address a wide range of public policy issues, including taxation. There are different tax implications for digitization. Digitalization influences policy and taxation at the domestic and international levels, introducing new instruments and regulations (Sulistiyono & Mappanyukki, 2023). As the organizer of Indonesian taxation, the DGT also faces digital disruption problems in improving tax infrastructure.

Compliance, as it pertains to taxpayers, is the behavior of taxpayers who fulfill their tax duties in line with applicable rules and regulations (Sulistiyono & Mappanyukki, 2023). Compliance with tax legislation comprises (1) accurate reporting of the tax base, (2) accurate computation of liabilities, (3) prompt tax reporting, and (4) timely payment of any tax due. Tax compliance is the act of submitting an income tax return form, stating all actual taxable income, and paying all taxes (Night & Bananuka, 2019). Taxpayer compliance is the action of taxpayers who have carried out their tax responsibilities in calculating, reporting, and depositing taxes correctly based on the legal basis implemented in Indonesia (Martini & Mulyati, 2023). Tax compliance principle forces taxpayers to understand the laws and regulations regarding taxation so that they can carry out tax administration duties (Oktaviani, Hardiningsih, & Srimindari, 2017). Based on the Regulation of the Minister of Finance Number 192/PMK.03/2007, compliant taxpayers are taxpayers who are determined

by the Director General of Taxes as taxpayers who meet certain criteria. In measuring the Tax Compliant Intention variable, two approaches are needed the tendency and the decision to comply. Concerning tax compliance, the intention is described as the Taxpayer's desire to perform tax compliance or non-compliance behavior. However, not all taxpayers' non-compliance is caused by the intention not to comply. The complexity of tax law also determines the occurrence of tax non-compliance in general in many places, so that tax non-compliance can occur due to non-intentional or unintended factors.

The influence of entrepreneurial efforts made towards tax compliance is higher than the burden of the tax itself (Pan et al., 2019). The Tax Compliant Intention Theory in this study is a development of the Intention variable in the Theory of Planned Behavior. The Big Indonesian Dictionary states that Intention is the goal or purpose of an action and the will or desire from the heart to do something. The intention is not always static; intention can change over time. The theory of Reasoned Action (TRA) assumes that humans behave consciously, taking into account the available information, and implicitly and explicitly considering the consequences of their actions. The TRA theory also suggests that a person's intention to behave is predicted by their attitude towards that behavior and how they think others will judge them if they behave as such (Utama et al., 2022). We propose the below hypotheses based on the theoretical foundations of the constructs and the conceptual model:

- H1: Tax planning has a positive effect on tax digitalization.
- H2: Tax knowledge has a positive effect on tax digitalization.
- H3: Tax digitalization has a positive effect on tax compliance.

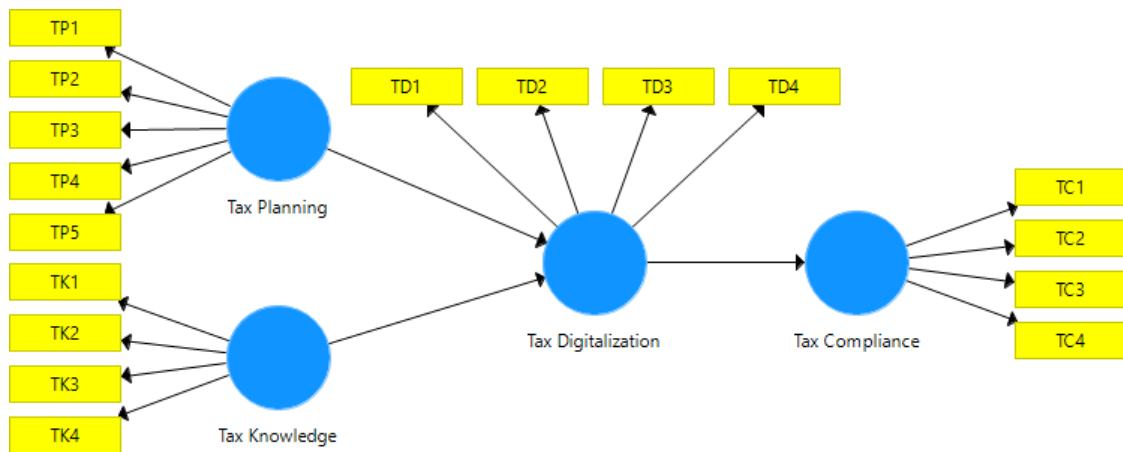


Figure 1. Conceptual Model

## B. METHOD

### 1. Research Design

This study develops a conceptual model to explore how the digital investment decision is influenced by two types of constructs, which are determined by tax planning and tax digitalization. A structured survey questionnaire was constructed around the conceptual model – 180 responses from various respondents via Google Form from 9 Tax Service Offices (KPP) in Semarang City area. A convenience sample, which is frequently effective at gathering data from customers in a commercial or market setting, was used for the research.

An efficient research method is choosing a sample of participants or responses from a community. Accessible people are included in this group. The instrument aids users in comprehending their thoughts and emotions. The research was done between January to August 2023. Structural equation modelling was investigated using suitably cleansed and validated data (Sondhia, Chawlaa, & Iqbalb, 2023).

## **2. Instrument**

The construct of tax planning has five indicators; the construct of tax knowledge has four indicators; the construct of tax digitalization has four indicators; and the construct of tax compliance has four indicators. Each survey attribute was calculated using a five-point Likert scale (from 1, i.e., strongly disagree, to 5, i.e., strongly agree) as proposed. This study employed a 5-point Likert scale since it takes less time and effort and allows respondents to stay neutral by voting for the "neither agree nor disagree" option. In addition, a five-point Likert scale was used in this study since earlier research has demonstrated the benefits of employing this strategy (Chatterjee, Chaudhuri, González, Kumar, & Singh, 2022; Dubey et al., 2019; Gupta, Justy, Kamboj, Kumar, & Kristoffersen, 2021). The validity of the theoretical model offered is validated using cross-sectional data. The information was gathered by procedures based on a survey of the target population.

## **3. Data Analysis**

Research findings on tax digitalization as a mediator in tax planning and tax compliance using Smart PLS software. Based on the conceptual framework of this study, we did data analysis utilizing Structural Equation Modeling (SEM) using Smart-PLS (Partial Least Square) software. After identifying the measurement parameters and structural model in the first step, the researcher constructed an appropriate bootstrap estimation. This study aimed to assess the total and direct impacts of the tax planning and tax digitalization constructs and the indirect effects via mediators to understand the relationship between the two variables.

## **C. RESULTS AND DISCUSSION**

### **1. The Validity Test**

Table 1 displays the convergent validity. Indicator reliability, and construct reliability and validity. The reliability test results are shown in Table 3 which are achieved by calculating Cronbach's Alpha, Composite Reliability, and Average Variance Extracted. The reliability test results are presented in Table 1. The researcher found that the numbers ranged  $> 0.7$  which were the highest reported values. Cronbach's Alpha was used to analyse the data collected, and this is the conclusion it yields according to the suggestions given by some researchers (Bjekić, Strugar Jelača, Berber, & Aleksić, 2021; Taber, 2018). The construct composite dependency values vary  $> 0.7$  which is the highest value recorded for composite dependency. Researchers argue that an adequate Critical Composite (CR) threshold should be set at no less than 0.7, and this should be considered acceptable. As result of the results shown in the Table found below, researchers can conclude that the CR criterion has been met. This allows us to draw the conclusion that the CR criterion is met. Composite reliability can be used as an alternative to Cronbach Alpha because the CR value is somewhat higher than

the Cronbach Alpha value, but the difference between the two is not very significant (Peterson & Kim, 2013).

Evaluation of validity convergence is done by testing the average variance obtained (AVE). The AVE values are shown in Table 3. The results are > 0.5 which are the highest numbers ever recorded. The absolute minimum value of AVE that may be considered satisfactory is 0.5 (Rouf & Akhtaruddin, 2018). It has been determined that the acceptability threshold has been reached and consequently that convergent validity has been met across all four dimensions (Ab Hamid, Sami, & Mohamad Sidek, 2017). The information presented in the Table that can be seen above serves as the basis of these findings.

**Table 1.** Correlations, Measures of Reliability, and Validity

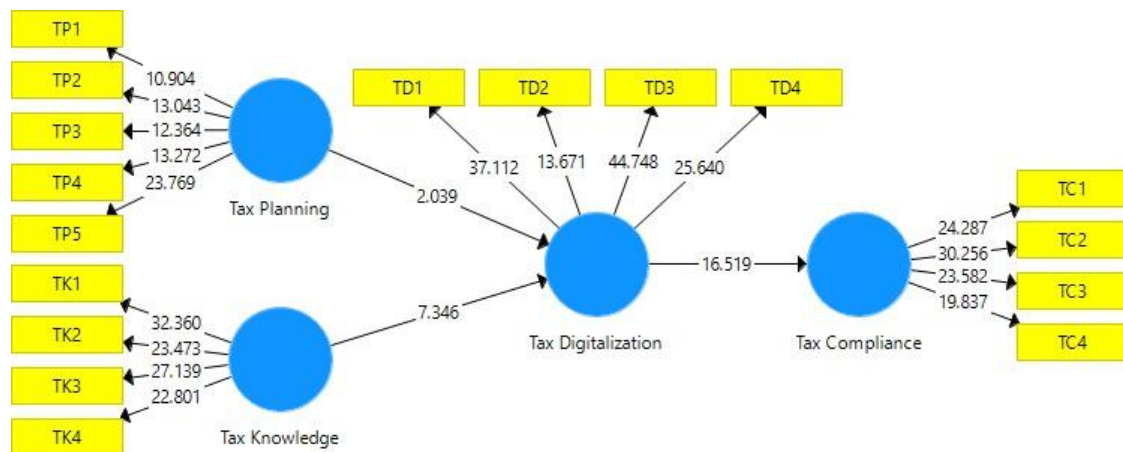
<b>Constructs</b>	<b>Items</b>	<b>Loadings</b>	<b>Cronbach's Alpha</b>	<b>CR</b>	<b>AVE</b>
Tax Planning (TP)	TP1	0.729	0.823	0.868	0.568
	TP2	0.767			
	TP3	0.722			
	TP4	0.723			
	TP5	0.822			
Tax Knowledge (TK)	TK1	0.828	0.811	0.876	0.638
	TK2	0.786			
	TK3	0.816			
	TK4	0.763			
Tax Digitalization (TD)	TD1	0.850	0.839	0.892	0.675
	TD2	0.740			
	TD3	0.872			
	TD4	0.818			
Tax Compliance (TC)	TC1	0.865	0.841	0.893	0.677
	TC2	0.832			
	TC3	0.843			
	TC4	0.745			

## 2. Structural Relationships

Information about model variables can be found in Table 2. This table includes the structural relationships variable such as means, standard deviations, T-statistics, and p-values. Based on the information presented in Table 2, the researcher can draw the following conclusions: There is a positive and significant influence between TP and TD ( $\beta = 0.138$ ;  $T = 2.039$ ;  $p < 0.05$ ); there is a positive and significant influence between TK and TD ( $\beta = 0.550$ ;  $T = 7.346$ ;  $p < 0.01$ ); and there is a positive and significant influence between TD and TC ( $\beta = 0.690$ ;  $T = 16.519$ ;  $p < 0.01$ ).

**Table 2.** Structural Relationships

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	p Values	Results
TP -> TD	0.138	0.150	0.068	2.039	0.042	Accepted
TK -> TD	0.550	0.550	0.075	7.346	0.000	Accepted
TD -> TC	0.690	0.694	0.042	16.519	0.000	Accepted



**Figure 2.** Structural Model

This study evaluates the relationship between tax planning and tax knowledge also tax digitalization, and their effect on tax compliance. The study seeks to understand more about how caring about tax compliance, the need to make a positive impact, and having a positive tax planning and tax knowledge also tax digitalization on tax compliance can help encourage MSME's owners to tax compliance. The research is motivated by tax planning. Tax digitalization must be influenced by tax planning. The results indicate that the hypotheses' relationships are supported. The model supports the direct association between tax planning and tax digitalization, as owners, particularly those who live in Semarang City areas, have become more receptive to MSME's taxation in Semarang City because of their increased concern people to tax digitalization using E-Filing. This is consistent with H1. The results of this study are supported by the results of previous studies that tax planning has a positive effect on tax digitalization (Sari, 2023; Siregar, Saputri, Nowindra, Farhanah, & Darmawati, 2022).

The structural model demonstrates a considerable association between tax knowledge and tax digitalization. Understanding the tax knowledge and the variables that have a positive impact on it has a beneficial effect tax digitalization. Tax knowledge options in the taxation digitalization. As a result, H2 is supported. The results of this study are supported by the results of previous studies that tax knowledge has a positive effect on tax digitalization (Istoyib & Yushita, 2020; Purba & Yusuf, 2022). The structural model demonstrates a significant association between tax digitalization and tax compliance. The desire to transition to a more sustainable compliance has a beneficial effect on tax compliance. As a result, MSME's owners who previously compliant taxation are now adjusting their routines and digitalization to tax compliance. MSME's owners frequently associate a



compliance and happy with conscious tax digitalization. As a result, the findings support H3. The results of this study are supported by the results of previous studies that tax digitalization has a positive effect on tax compliance (Dwianika & Biasini, 2021; Henriette & Erasashanti, 2023; Yohana, 2023).

The constructs in this study, tax planning, tax knowledge, tax digitalization, and tax compliance, are similar to constructs social norm, personal norm, perceived worth, attitude, trust, and information used in other studies on tax compliance. Behavior is the strongest generator of financial. A good planning with digitalization creates positive attitudes, increases MSME's owners behavior, and influences future compliances, while a bad behavior might have exactly the opposite effects. Compliance, as it pertains to taxpayers, is the behavior of taxpayers who fulfill their tax duties in line with applicable rules and regulations (Sulistyono & Mappanyukki, 2023). Tax compliance is the act of submitting an income tax return form, stating all actual taxable income, and paying all taxes (Night & Bananuka, 2019). Taxpayer compliance is the action of taxpayers who have carried out their tax responsibilities in calculating, reporting, and depositing taxes correctly based on the legal basis implemented in Indonesia (Martini & Mulyati, 2023).

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The theory that underlies this research is the Theory of Planned Behavior (TPB). Based on the concept of subjective norm belief in the TPB theory, the behavior of taxpayers is to comply or not in fulfilling their tax obligations which influenced by the norms they believe in. These norms come from the environment where the taxpayer is located. Located or originating which is often referred to as social norms (Arham & Firmansyah, 2021; Idrus,

Lalo, Tenreng, & Badruddin, 2020). Based on the TPB theory, taxpayer compliance is formed by the taxpayer's willingness to pay taxes. If the Taxpayer does not have the intention or willingness, then the Taxpayer's compliance with the applicable tax provisions will not be formed (Permatasari, Najihah, & Mutoharoh, 2021; Putra & Osman, 2019).

This study also uses attribution theory. Attribution theory assumes that people try to determine why people do what they do, that is, attributions cause behavior (Arham & Firmansyah, 2021; Mulya, 2020; Mulyati & Mulya, 2021a, 2021b; Negara & Supadmi, 2020; Pertiwi, Iqbal, & Baridwan, 2019; Rachmiyantono, 2021). Attribution theory explains taxpayer behavior which caused by internal attribution (the income level of each taxpayer and taxpayer awareness) and external attribution (tax sanctions) that change a person's attitude, namely the attitude to pay taxes (Maharani & Merkusiwati, 2020).

#### **D. CONCLUSIONS AND SUGGESTIONS**

Based on the study's results, the Tax Planning and Tax Knowledge variables directly influences Tax Digitalization and contributes to its success. In addition, Tax Digitalization directly affects Tax Compliance. Tax Digitalization as a Mediator in the correlation of Tax Planning and Tax Knowledge to Tax Compliance. This research contains practical implications for implementing Tax Digitalization to improve Tax Compliance. These implications can be found in the potential to develop Tax Compliance. This is important because almost every MSME's owners, not much has been done in the tax compliance has recognized the most significant challenges. Using this research approach and data analysis, this study is one of the first in Indonesia to address the issues of Tax Planning, Tax Knowledge, Tax Digitalization, and Tax Compliance. Therefore, the findings of this study have the potential to be a starting point for the development of Tax Compliance and flexible work program actions, as well as their proper implementation.

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