

EVALUATING TAX INFORMATION SYSTEMS: IMPLICATIONS FOR MSME TAXPAYER COMPLIANCE AND THE ROLE OF TAX SOCIALIZATION



<https://journal.unpas.ac.id/index.php/jrak/index>

Diamonalisa Sofianty ✉¹, **Noraza Mat Udin**²

¹Accounting Department, Faculty of Economics and Business, Universitas Islam Bandung, Indonesia

²Tunku Puteri Intan Safinaz School of Accountancy, College of Business, Universiti Utara Malaysia, Malaysia

Corresponding Author: diamonalisas@gmail.com ✉¹

Jl. Tamansari No. 1 Bandung, West Java, Indonesia

Article Info

History of Article

Received: 21/3/2025

Revised: 24/3/2025

Accepted: 9/4/2025

Available Online: 28/4/2025


Jurnal Riset Akuntansi Kontemporer

Volume 17, No. 1, April 2025,

Page 175-187

ISSN 2088-5091 (Print)

ISSN 2597-6826 (Online)

 <https://doi.org/10.23969/jrak.v17i2.23628>

Keywords: tax socialization; information systems; taxpayer compliance; MSMEs; path analysis

Abstract

Tax compliance remains a persistent challenge for Micro, Small, and Medium Enterprises (MSMEs), primarily due to limited knowledge and inadequate access to tax information. This study investigates the effect of tax socialisation on taxpayer compliance, with tax information systems serving as a mediating variable. A quantitative approach was employed, with data collected from 90 MSME owners through purposive sampling. Path analysis using SmartPLS revealed that tax socialisation has a positive and significant effect on tax compliance. Furthermore, tax information systems were found to partially mediate this relationship by enhancing access to and understanding of tax-related content. These findings underscore the importance of combining socialisation initiatives with user-friendly digital systems to boost compliance. Governments are encouraged to strengthen outreach programs and develop accessible information platforms tailored to the specific needs of MSMEs. Such initiatives are expected to improve voluntary compliance and reduce administrative burdens in the long term.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in Indonesia's economic development. Data from the Ministry of Cooperatives and SMEs (2023) showed that MSMEs

contributed more than 60% to the Gross Domestic Product (GDP) and absorbed approximately 97% of the workforce. However, this significant potential has not been matched by optimal tax compliance levels. Data from the Directorate General of Taxes (DGT) showed that tax contributions from the MSME sector were still relatively low compared to other sectors. This condition indicates underlying issues in the tax compliance behavior of MSME business owners.

The issue of tax compliance disparity among Micro, Small, and Medium Enterprises (MSMEs) is a critical concern that demands serious attention. Despite their substantial contribution to the national Gross Domestic Product (GDP), MSMEs in Indonesia exhibit relatively low levels of tax compliance. According to data from the World Bank, only around 15% of MSMEs complied with their tax obligations (Nino & Tyas, 2022); (Ayumi, 2022). Several underlying factors contributed to this condition, including limited tax literacy, the complexity of tax administration, and the limited effectiveness of outreach programs implemented by tax authorities. Many MSME actors lacked an adequate understanding of tax regulations, did not practice proper bookkeeping, and often found socialization materials misaligned with their practical realities—particularly those operating in informal sectors or traditional markets (Lestari & Utomo, 2024).

The implementation of robust tax information systems further supports these socialization efforts by offering MSMEs user-friendly tools to fulfil their tax responsibilities efficiently. Such systems provide features like electronic filing, real-time tax calculations, and accessible records, which simplify the compliance process and reduce the likelihood of errors. Studies have shown that when MSMEs were both well-informed through targeted socialization and equipped with effective tax information systems, their compliance rates improved significantly. (Dwiadityo&Subiyanto, 2024). Moreover, the synergy between tax socialization and information systems creates an environment where MSMEs feel more confident and capable of managing their tax affairs. This integrated approach not only enhances compliance but also contributes to a more transparent and efficient tax administration system (Yudha et al, 2023).

Therefore, policymakers and tax authorities should prioritize the development and dissemination of comprehensive tax socialization programs, alongside the implementation of user-friendly tax information systems, to effectively support MSME compliance.

However, previous research produced mixed findings regarding the impact of tax socialization on tax compliance. Some studies suggested that tax socialization had a positive effect on compliance. For example, Kiptum et al., (2024); Appiah et al., (2024) and Anjelina et al., (2023) found that increased exposure to tax education programs significantly improved taxpayers' willingness to comply with regulations. Similarly, Che Azmi et al., (2016) and Andreas & Savitri, (2015) concluded that tax socialization shaped taxpayer attitudes and fostered a sense of responsibility for tax obligations.

On the other hand, other studies found no significant relationship between tax socialization and tax compliance. Kehelwalatenna & Soyza (2020) and Afriani et al. (2022) argued that while tax socialization efforts may have increased awareness, they did not necessarily translate into higher compliance levels especially when taxpayers perceived the tax system as complex or unfair.

The role of information technology in taxation has also increased. Tax information systems, such as e-filing and e-billing, are expected to make it easier for taxpayers to fulfil their obligations. However, technology adoption by MSMEs often faces obstacles such as limited resources and a lack of digital literacy. Research by Dwivedi et al., (2019) and Hesami, Jen et al., (2024) discussed the factors influencing the adoption of information technology among MSMEs, including in the context of taxation.

Over the past five years (2019–2023), tax compliance among Indonesian citizens has consistently increased. Data from the Ministry of Finance showed a steady rise in tax payments during this period, reflecting improved awareness and adherence to regulations. Government initiatives, such as digital tax systems and stricter enforcement, played a significant role in this trend. Additionally, economic stability and rising financial literacy encouraged individuals and businesses to fulfil their tax obligations more diligently. As a result, overall tax revenue grew, supporting national development and public services. The table below presents Indonesia's tax revenue from 2019 to 2023:

Table 1. Indonesia's tax revenue 2019-2023

Year	Tax Revenue (Rp Trillion)	Growth (%)
2019	1,332.67	1.5
2020	1,072.11	-19.6
2021	1,278.63	19.3
2022	1,716.77	34.3
2023	1,869.23	8.9

Source: <https://pajak.go.id>

The table illustrates the fluctuations in Indonesia's tax revenue over five years. In 2019, tax revenue amounted to Rp1,332.67 trillion, reflecting a modest growth of 1.5%. However, in 2020, tax revenue declined sharply to Rp1,072.11 trillion, with a negative growth of 19.6% due to the impact of the COVID-19 pandemic. The economy rebounded in 2021, with tax revenue increasing to Rp1,278.63 trillion, marking a 19.3% growth. This positive trend continued in 2022, with tax revenue surging by 34.3% to reach Rp1,716.77 trillion. In 2023, although tax revenue remained on an upward trajectory, growth slowed to 8.9%, with total revenue amounting to Rp1,869.23 trillion. This data highlighted the significant decline in tax revenue during the pandemic, followed by a strong recovery in 2021 and 2022, before stabilizing at a lower growth rate in 2023 (Oktaviyani, 2024).

Some of the theories underlying this research include the Theory of Planned Behavior (TPB), proposed by Ajzen, (1991). TPB suggests that individual behavior, including tax compliance, is influenced by intentions formed from attitudes, subjective norms, and perceived behavioural control. In this context, tax socialization can influence the attitudes of MSME business owners towards their tax obligations, while information systems can enhance their perceived control over fulfilling these obligations.

The Technology Acceptance Model (TAM), proposed by Davis, (1989) is relevant for explaining the adoption of information technology in taxation. This model suggests that user acceptance of technology is influenced by its perceived ease of use and usefulness. In the context of this research, a tax information system that is both user-friendly and beneficial can encourage MSME business owners to improve their compliance with tax obligations.

Recent research has further examined both theories in the context of tax compliance. For instance, a study by Bangun et al (2022) found that modern tax administration systems and taxpayer awareness positively affect compliance, viewed through both the TPB and TAM perspectives. Additionally, research by Tambun et al. (2020) showed that internet literacy moderates the effect of TAM and digital taxation on taxpayer compliance. The findings emphasize the importance of technological understanding in improving tax compliance through the implementation of digital taxation systems.

Another study by Dewantara, (2019) analyzed the acceptance of e-registration technology as support for tax administration. The results showed that although the e-registration system has been implemented, there are still obstacles that need to be addressed to enhance its ease of use and the benefits felt by prospective taxpayers.

Thus, these recent findings further reinforce the relevance of TPB and TAM in understanding the factors influencing tax compliance, particularly regarding the implementation of information technology and tax socialization for MSME owners.

Several studies related to this topic have been conducted, but most have focused on only one variable, either tax socialization or information systems. For example, research by Sa'adiyah et al., (2021) and Le et al., (2020) found that the use of tax information systems could increase MSME business owners' awareness of tax obligations. Research by Yulianti, (2022) showed that good tax socialization could increase the tax compliance of MSME business owners, though it remained limited in scope regarding the use of information systems.

Although many previous studies suggest that tax socialization and tax information systems contribute positively to MSME taxpayer compliance (Ortega-Gil *et al.*, 2024; Wahyudi, 2022), the results of this study show contrary findings. This study found that despite intensive tax socialization

through various media, including seminars, workshops, and digital platforms, the impact on improving MSME tax compliance was not significant. This suggests that other factors, such as perceptions of tax fairness, regulatory complexity, and the economic conditions of MSMEs, play a more dominant role in influencing their tax compliance.

In addition, the implementation of the tax information system, which was expected to increase efficiency and transparency, has created obstacles for most MSME players. Interviews with respondents revealed that many MSME taxpayers face difficulties in accessing and understanding the available tax information system. The mismatch between the system's design and the needs of MSMEs, along with their limited digital literacy, are factors that hinder the effectiveness of the system in improving tax compliance.

This study also found that although tax socialization increases understanding of tax obligations, it does not automatically encourage compliance. Some MSME owners still choose not to comply with tax regulations because they perceive the tax burden as too high compared to the benefits received. This finding aligns with a study by Okunola & Alabi (2024) in Nigeria, which emphasizes the importance of financial literacy, the regulatory environment, and the perceived fairness of the tax system. However, contrasting evidence emerges from a study by Bruce-Twum (2023), which examined the relationship between tax compliance costs and tax behavior among MSMEs in Ghana. The results indicate that MSMEs facing high compliance costs are less likely to fulfil their tax obligations, showing a significant inverse relationship between tax compliance costs and MSME tax compliance behavior. This study underscores the importance of understanding and managing compliance costs as a critical factor in improving tax compliance within the MSME sector.

Thus, this study confirms that the effectiveness of tax socialization and tax information systems in increasing MSME taxpayer compliance still depends on various external and structural factors. Therefore, tax policies for MSMEs need to consider more aspects of justice, simplification of rules, and a more adaptive approach to the conditions of MSME taxpayers so that tax compliance can increase significantly.

According to Heider, (1958), attribution theory concerns the way individuals explain the actions of others or themselves by establishing causal relationships (cause and effect) for events that occur. Over time, attribution theory has been divided into two types. The first, internal attribution theory, relates to factors that are within an individual's control and is also known as dispositional attribution Schmitt, (2014). The second, external attribution theory, pertains to factors outside an individual's control, also known as situational attribution Schmitt, (2014). James & Alley, (2002) defined tax compliance as the extent to which taxpayers adhere to tax regulations. Kirchler, (2007) further categorizes tax compliance into two areas: tax compliance and tax non-compliance. Tax compliance refers to the willingness of taxpayers to fulfil their tax obligations, while tax non-compliance refers to the failure of taxpayers to meet these obligations, whether the failure is intentional or unintentional.

Tax socialisation is an effort made by the taxation authority in a country to provide educational understanding, both in the form of regulations and tax procedures, using appropriate and persuasive methods to the public, especially taxpayers (Mardiasmo, 2018). From the taxpayer's perspective, socialisation is an external factor that can influence their intention to behave, particularly concerning tax compliance. Taxpayers will respond to tax socialisation carried out by tax authorities in a country as an external factor that encourages them to either comply or not with their tax obligations. Tax socialisation is a government effort, particularly by the taxation authority, to provide information, knowledge, and an understanding of taxes to taxpayers. Tax socialisation is expected to encourage taxpayers' confidence in fulfilling their tax obligations (Firmansyah et al., 2022). Kbarek et al., (2021), Devi & Purba, (2018) and Oladipupo & Obazee, (2016) found that tax socialisation positively affects individual taxpayer compliance. Taxpayers consider that tax socialisation can boost their confidence in fulfilling their tax obligations, driven by the fact that they can receive information, knowledge, and an overview of the application of taxes in a country.

Information systems are very fast and play a significant role across various fields today, including taxation. The use of information systems in taxation is a step in the modernization reform of tax administration carried out by the tax authorities in Indonesia (Istutik & Pertiwi, 2021). One important

aspect of tax modernization is the improvement of business processes, such as the use of information technology, which makes processes much more efficient Prastowo, (2017). Sa'adiyah et al., (2021) and Li, Wang & Wu, (2020) found that information technology encourages taxpayer compliance. The ease of implementing the technology system can influence individuals in fulfilling their tax obligations.

This research differs from previous studies that focused on tax evasion detection using data analysis techniques and deep neural networks. For example, Lin et al., (2020) developed TaxThemis, an interactive visual analysis system to detect suspicious tax evasion groups through tax-related data analysis. In addition, Zhang et al., (2020) used multimodal deep neural networks to detect transaction-based tax evasion activities on social media platforms. In contrast to these studies, this research combines tax socialisation and the role of information systems as mediators in improving MSME tax compliance, offering a new contribution to the literature on tax implementation in the MSME sector.

Therefore, this study aims at filling the research gap by analyzing the effect of tax socialisation on MSME taxpayer compliance, with information systems as a mediating variable. This research is expected to contribute to the development of more effective and relevant strategies for increasing MSME tax compliance in the current digital context. In this model, tax socialisation is assumed to have a direct influence on MSME taxpayer compliance. Additionally, information systems are assumed to act as mediating variables that strengthen the influence of tax socialisation on taxpayer compliance. This model is based on the Technology Acceptance Model (TAM) theory, which explains how technology acceptance affects user behavior Dwivedi et al., (2019), as well as the Theory of Planned Behavior (TPB), which is relevant to the psychological factors influencing business owners in tax compliance (Munga, 2021). The research framework consists of three key variables: tax socialisation as the independent variable, MSME taxpayer compliance as the dependent variable, and information systems as the mediating variable. The relationships between these variables are analyzed to determine the extent to which information systems enhance the effect of tax socialisation on tax compliance.

The study aims at providing meaningful insights to address these challenges. It sought to assess the effectiveness of current tax information systems in supporting MSME compliance, while also exploring how tax socialization programs influenced taxpayer awareness and behavior within this segment. The findings were expected to offer evidence-based policy recommendations, including the simplification of tax systems and the design of more inclusive, adaptive, and accessible socialization strategies. These improvements could play a pivotal role in fostering sustained tax compliance among MSMEs.

Based on the theoretical review and previous research, a research model or framework was compiled, as shown below.

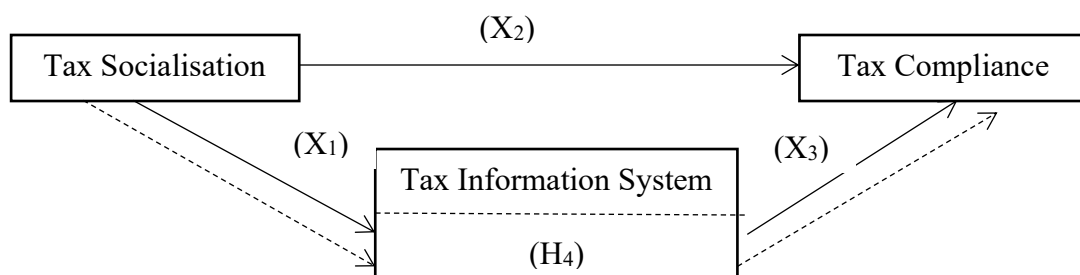


Figure 1. Conceptual Model

METHOD

This research used a quantitative design with a survey approach. The study aimed to examine the effect of tax socialisation on the compliance of MSME taxpayers, which is mediated by the tax information system. This research design is explanatory because it aims at explaining the cause-and-effect relationship between the independent variable (tax socialisation) and the dependent variable

(MSME taxpayer compliance), through the mediating role of the information system. The model used in data analysis was Structural Equation Modeling (SEM), which allowed for testing the relationship between variables simultaneously and identifying direct and indirect effects (Hair et al., 2017)

The population in this study was MSME business owners registered at the Bandung City Trade and Industry Office because they represented a formal segment of the local economy that directly interacted with government regulations, including taxation. Bandung, as a major urban centre with a dynamic MSME sector, provided a relevant context to examine tax compliance behavior. This focus allowed the study to generate practical insights that could inform policies not only for Bandung but also for other urban areas with similar economic characteristics. The sample in this study was drawn from MSME taxpayers in the working area of KPP Pratama Bandung Bojonganagara. This area was chosen because it represented an active economic zone with a high concentration of MSMEs, allowing the research to capture real interactions between taxpayers and tax authorities. The presence of digital tax services in this region also made it a suitable context for examining the impact of tax socialisation and information systems on tax compliance. This geographical focus may not have fully captured the diversity of MSME characteristics across Indonesia. As such, the generalizability of the findings may be constrained by regional economic, technological, and regulatory differences.

Given that the MSME population is quite large and spread across various sectors, this study used non-probability sampling with purposive sampling techniques. The number of samples used in this study was calculated using the Hair formula. Hair *et al.*, (2017) explained that the sample size in SEM (Structural Equation Modeling) analysis, when there are more than 20 indicators, should be between 100 and 200. Since the number of indicators in this study was 18, the sample size was 90. The calculation is as follows: Sample (n) = number of indicators \times 5 = 18 \times 5 = 90 respondents, consisting of owners or managers of MSMEs who have been registered and have tax obligations in Bandung City.

The inclusion criteria for respondents were: (1) MSME business owners who had registered as taxpayers, (2) Those who used or had access to tax information systems (such as e-filing or e-bupot), and (3) Those who were willing to provide the information needed for the study. Sample selection based on these criteria was carried out to ensure the relevance and quality of the data obtained.

Table 2. Operational Variable

Variable	Operational Definition	Indicator	Scale	Source/ Reference
Tax Socialisation	Tax socialisation refers to the structured efforts by tax authorities to educate, inform, and motivate taxpayers particularly MSME owners through various communication channels and outreach programs, aiming to improve tax understanding and encourage voluntary compliance.	1. Views on filling out tax returns	Ordinal	Alm & McClellan (2012)
		2. Socialisation as a means of conveying information		Torgler (2007)
		3. Socialisation as a means of motivation		Torgler (2007)
		4. Socialisation following the problem		Devos (2014)
		5. Frequency		Kirchler et al. (2008)
		6. Frequency of taxpayer participation		Kirchler et al. (2008)
		7. Information through print media		Saad (2014)
		8. Information through electronic media		Saad (2014)
		9. Direct information from officers		Saad (2014)
Tax Information System	The tax information system is defined as the digital infrastructure and tools used to facilitate taxpayer interactions with tax authorities, including systems for tax filing, data management, information security, integration with other platforms, and compliance monitoring.	1. User-friendliness and accessibility	Ordinal	Azmi & Bee (2010)
		2. Data processing and storage accuracy		Suryadi & Ramdhani (2012)
		3. Information security		Gelinas et al. (2018)
		4. System integration with other platforms		Romney & Steinbart (2018)
		5. Ability to generate reports for monitoring and decisions		Stair & Reynolds (2015)

Tax Compliance	Tax compliance refers to the extent to which taxpayers fulfil their tax obligations correctly and timely, including understanding tax laws, accurately completing forms, calculating dues, and paying taxes as required by regulations.	1. Knowledge and understanding of tax law 2. Filling tax forms correctly 3. Accurate tax calculation 4. Paying taxes on time	Ordinal	Palil (2010) Mohdali & Pope 2014) OECD(2010) OECD(2010)
----------------	---	---	---------	--

Sources: multiple peer-reviewed journals

The questionnaire used a 5-point Likert scale to measure respondents' responses, ranging from "Strongly Disagree" to "Strongly Agree," which included statements related to the three variables (Joshi et al., 2015). Data collection was conducted by distributing questionnaires both directly and online to MSME owners in Bandung City. The use of online questionnaires facilitated access and increased the response rate. In addition, the researcher also conducted brief interviews with several respondents to ensure a deeper understanding of the questionnaire responses and to obtain additional relevant data.

In this study, data analysis was conducted using Structural Equation Modeling-Partial Least Squares (SEM-PLS). SEM-PLS is a statistical analysis method used to examine the relationships between the independent, mediator, and dependent variables simultaneously, without the need to fulfil many of the classical assumptions required by traditional structural regression models (such as linear regression). Before conducting the SEM analysis, it was important to ensure that the instruments used (i.e., questionnaires) were valid and reliable. After confirming the measurement model's validity and reliability, the next step was to test the structural model that describes the relationships between latent variables. The structural model in this study examined both direct and indirect effects between variables based on the research hypothesis. The direct effect referred to the impact of tax socialisation on tax compliance, as well as its influence on the mediating variable, the information system. Meanwhile, the indirect effect was analyzed through mediation, assessing the extent to which the information system facilitated the relationship between tax socialisation and tax compliance. This mediation effect was measured by multiplying the path coefficients between tax socialisation and the information system, as well as between the information system and tax compliance.

RESULTS

Respondents in this study were Micro, Small, and Medium Enterprises (MSME) taxpayers. The questionnaire was distributed to 90 MSME taxpayers in the working area of KPP Pratama Bandung Bojonagara. The table below shows the response rate, or return rate, of the questionnaires that were distributed. The following section presents the demographic characteristics of the respondents.

Table 3. Demographic Characteristics of Respondents

Category	Number of Respondents	Percentage
Gender		
Male	24	26.67%
Female	66	73.33%
Age		
< 25 years	2	2.22%
25 - 40 years	33	36.67%
> 40 years	55	61.11%
Business Type		
Service	18	20.00%
Trade	37	41.11%
<i>Industrial</i>	5	5.56%
Culinary	23	25.56%
Fashion	5	5.56%
Crafts	2	2.22%
Business Criteria		
Micro	52	57.78%
Small	32	35.56%
Medium	6	6.67%

Source: Data Calculation Results, 2024

The study involved 90 respondents from Micro, Small, and Medium Enterprises (MSMEs) across various business sectors. The demographic characteristics reveal that 26.67% of the respondents are male, while 73.33% are female. The majority of respondents (61.11%) are over 40 years old, followed by 36.67% in the 25-40 age group. In terms of business type, most respondents (41.11%) operate in the trade sector, followed by 25.56% in the culinary sector. Regarding business size, 57.78% of respondents belong to the micro-enterprise category, 35.56% to small enterprises, and 6.67% to medium enterprises. These characteristics offer insights into the distribution of respondents in the study.

The results of the average respondent's answer obtained descriptive statistics for each research variable are as follows:

Table 4. Descriptive Statistics

Variable	N	Min	Max	Mean	Std. Dev
Tax Socialisation	90	3.83	3.93	3,88	0,0567
Information System	90	3.86	4.01	3,86	0,0626
Taxpayer Compliance	90	3.82	3.99	3,73	0,0924

Source: Data Processed, 2024

In general, the descriptive results indicate that respondents provided relatively positive assessments of tax socialisation and information systems, though there remains diversity in terms of taxpayer compliance. While both the information system and tax socialisation are considered to be relatively effective, the level of tax compliance could still be improved. Further analysis, such as regression analysis, is needed to examine the influence of these variables on taxpayer compliance.

Data obtained through the questionnaire items were tested for eligibility by conducting validity and reliability tests. Afterwards, descriptive statistics were used to summarize the information for each valid question item. Exogenous variables were tested against endogenous variables using structural equation modelling (SEM). Some question items were considered invalid if the loading factor was below 0.7. Discriminant validity ensures that each construct in the model is distinct from other constructs. One of the most commonly used methods to assess discriminant validity is the Fornell-Larcker Criterion. Based on the results of the discriminant validity test in this study, the square root of the Average Variance Extracted (AVE) was compared with the correlations between constructs. The results are presented in Table 5 below:

Table 5. Fornell-Larcker Discriminant Validity Test Results

Construct	Taxpayer Compliance	Information System	Tax Socialisation
Taxpayer Compliance	0.783	0.609	0.658
Information System	0.609	0.758	0.564
Tax Socialisation	0.658	0.564	0.720

Source: Data Processed, 2024

According to the Fornell-Larcker criterion, discriminant validity is established if the square root of AVE (bold diagonal values) is greater than the correlations between constructs (off-diagonal values in the same row). Since the square root of AVE for each construct is greater than the correlations between the constructs, it can be concluded that discriminant validity is achieved in this model. This indicates that each construct measures a unique concept and does not significantly overlap with other constructs.

Table 6 summarizes the reliability test. All latent variables used in this study are reliable because the Cronbach's alpha, Rho_A, and composite reliability values are above 0.7, and the AVE value is above 0.5.

Table 6. Summary of Reliability Test

Variable	Cronbach's Alpha	Rho_A	Composite Reliability	AVE
Tax Socialisation	0,789	0,792	0,864	0,613
Information System	0,751	0,780	0,842	0,575
Taxpayer Compliance	0,846	0,857	0,881	0,518

Source: Data Processed, 2024

Furthermore, the results of the direct effect hypothesis test show that

Table 7. Summary of Hypothesis Test Result

Main Test	Coeff.	T Stat.	Prob.	Sig. of level	R ² (Adj R ²)	Result
Direct Effect						
TS → IS	0,564	7,855	0,000	***	0,516 (505)	Supported
TS → TC	0,461	4,733	0,000	***		Supported
IS → TC	0,349	3,364	0,001	***		Supported
Indirect Effect						
TS → IS → TC	0,23	2,10	0,035	**	0,318 (0,310)	Supported

Source: processed data, 2024

Information: ***) 1% significance level, **) 5% significance level. TS = tax socialisation, IS = information system, TC = taxpayer compliance

DISCUSSION

Tax compliance among MSMEs was influenced by various factors, including tax socialisation and the use of information systems. Effective tax socialisation increased taxpayers' awareness and understanding, which in turn enhanced compliance. However, the role of information systems in this relationship remained crucial, as digital platforms could simplify tax-related processes and improve accessibility. This study explored whether tax socialisation directly affected MSME tax compliance or if the presence of an information system strengthened this influence. By analyzing both direct and indirect effects, this research aimed to determine whether information systems acted as a mediating factor in improving tax compliance.

The results of hypothesis testing showed that tax socialisation significantly affected taxpayer compliance. This finding was consistent with the Theory of Planned Behavior (TPB) by Ajzen (1991), which suggests that better knowledge and understanding of tax obligations increase compliance intentions and behavior. These results were supported by several studies, including T. N. Le et al., (2024), Dwiadityo & Subiyanto (2024), Firmansyah et al. (2022), Pujilestari et al. (2021), Obaid et al. (2020), Yulia et al. (2020), Nguyen et al. (2020), Boediono et al. (2018) and Lianty et al., (2017). However, they contrasted with Devi & Purba (2018), who found different results. Tax socialisation provided by tax authorities was an effort to equip taxpayers with necessary information and knowledge. As an external factor, it influenced intentions and beliefs, encouraging decisions to comply with tax obligations, especially among MSME owners and independent professionals.

The government has made efforts to improve tax socialisation through various media and information facilities, particularly in the KPP Pratama Bandung Bojonagara area. These efforts have proven effective in encouraging taxpayer compliance among MSME business owners in the region. Furthermore, hypothesis testing revealed that tax socialisation had a positive effect on information systems. This finding was in line with Firmansyah et al., (2022), who suggested that the effectiveness of tax socialisation influences the quality of tax information systems developed by tax authorities.

Tax authorities recognize that enhancing the quality of information systems alongside socialisation can increase cost efficiency and the benefits of system implementation. Additionally, they respond to society's increasing reliance on information technology in daily life. The easier access to technology encourages tax authorities to improve digital tax systems Gangodawilage, (2021), examined how the use of technology in taxation affects compliance decisions among digital economy entrepreneurs.

Another key finding is that information systems positively influenced taxpayer compliance. This supported research by Faisol & Norsain, (2024), Muslichah et al., (2023), Firmansyah et al., (2022), Ditaputri et al., (2023), Do et al., (2022), Sa'adiyah et al., (2021), and Lee, (2016), though it contrasted

with Annisah & Susanti, (2021). Improving digital systems related to taxation helped individual taxpayers especially MSME owners fulfil their obligations more easily. As such, tax information systems served as positive external factors that facilitated compliance.

Currently, web-based and mobile applications are widely used, and their integration into tax systems makes fulfilling tax obligations easier. These improvements reflect enhanced tax services and contribute to increased compliance. Hypothesis testing also showed that information systems mediated the effect of tax socialisation on tax compliance. This supported the Technology Acceptance Model (TAM) by Davis, (1989), which posited that ease of use and perceived benefits drive system adoption. Hence, information systems fully mediated the relationship between tax socialisation and taxpayer compliance.

Effective tax socialisation, when combined with user-friendly technology, can significantly boost tax compliance. Traditional methods alone may no longer suffice, especially in urban areas like Bandung, where digital literacy is relatively high. Information systems help taxpayers stay informed about updates, deadlines, and obligations. Platforms such as websites, apps, and social media make it easier for taxpayers to access relevant information, particularly regarding deadlines and tax return filing, as noted by Sa'adiyah et al., (2021). The adoption of modern information systems has enhanced the effectiveness of socialisation and supported tax modernisation.

This study suggests that tax authorities in Indonesia should further develop accessible, user-friendly digital systems to strengthen the impact of tax socialisation on compliance. These findings carry important implications for tax policy and MSME development. In the context of ongoing efforts to improve compliance, the research confirmed that socialisation needs to be supported by appropriate technological tools. Systems such as e-filing have already proven effective in promoting compliance.

Educational institutions and MSME organizations are also encouraged to conduct training and workshops to raise awareness of tax obligations and promote the use of digital tools. According to BPS (2023), many MSME owners still lack a full understanding of the tax system, which hampers compliance. Strengthening technology-based tax socialisation plays a critical role in addressing this gap.

CONCLUSION

Based on the results of the analysis and discussion, this study concludes that tax socialisation has a positive and significant effect on taxpayer compliance among MSME business owners. Furthermore, tax socialisation also influences the quality of information systems, which in turn positively affects taxpayer compliance. The study found that information systems mediate the relationship between tax socialisation and taxpayer compliance. Socialisation efforts that leverage digital platforms such as website-based media and mobile applications are more effective, as these tools help taxpayers better understand relevant tax information.

These findings highlight the crucial role of tax socialisation in improving MSME taxpayer compliance, particularly when supported by an efficient and user-friendly tax information system. Tax authorities in Indonesia are encouraged to enhance their socialisation efforts through digital platforms, including accessible websites and mobile applications. Simplifying tax systems through features like interactive guides, automatic tax calculators, and online support can significantly assist MSMEs in managing their tax responsibilities, thereby increasing compliance.

Although this study provides valuable insights, it is limited to MSME business owners in Bandung City. This geographical focus may not fully capture the diversity of MSME characteristics across Indonesia. As such, the generalizability of the findings may be constrained by regional economic, technological, and regulatory differences.

Future studies should broaden the scope to include MSMEs from various regions and sectors to provide a more comprehensive understanding of the relationship between tax socialisation, information systems, and taxpayer compliance. Additionally, future research could explore other influencing factors, such as tax education, economic motivations, and perceptions of government trust. A more holistic approach would support the development of targeted and inclusive tax policies that better meet the needs of MSMEs across Indonesia.

REFERENCES

- Afriani, V., Dewi, R. C., & Saputra, D. 2022. *Dampak Sosialisasi Perpajakan, Pemahaman Wajib Pajak, Tarif Pajak, Sanksi Pajak dan Kualitas Pelayanan Fiskus terhadap Kepatuhan Wajib Pajak. Journal of Business and Economics (JBE) UPI YPTK*, 7(2), 218–222. <https://doi.org/10.35134/jbeupiyptk.v7i2.142>
- Ajzen, I. 1991. The Theory of Planned Behaviour. *Organizational Behavior And Human Decision Processes*2, 179–211.
- Andreas, & Savitri, E. 2015. The Effect of Tax Socialization, Tax Knowledge, Expediency of Tax ID Number and Service Quality on Taxpayers Compliance with Taxpayers Awareness as Mediating Variables. *Procedia - Social and Behavioral Sciences*, 211(September), 163–169. <https://doi.org/10.1016/j.sbspro.2015.11.024>
- Anjelina, S., Frederica, D., & Iskandar, D. 2023. *Kepatuhan Wajib Pajak UMKM dengan Sosialisasi Pajak sebagai Variabel Moderasi. JRAK: Jurnal Riset Akuntansi dan Keuangan*, 11(1), 119–130. <https://doi.org/10.17509/jrak.v11i1.45644>
- Annisah, C., & Susanti, S. 2021. *Pengaruh Pemanfaatan Teknologi Informasi, Pengetahuan Perpajakan, Dan Sanksi Pajak Terhadap Kepatuhan Wajib Pajak Orang Pribadi. Jurnal Pendidikan Akuntansi (JPAK)*, 9(2), 262–272. <https://doi.org/10.26740/jpak.v9n2.p262-272>
- Appiah, T., Domeher, D., & Agana, J. A. 2024. Tax Knowledge, Trust in Government, and Voluntary Tax Compliance: Insights From an Emerging Economy. *SAGE Open*, 14(2), 1–13. <https://doi.org/10.1177/21582440241234757>
- Ayumi, L. 2022. *Optimalisasi Kepatuhan Pajak Pelaku UMKM di Sektor Digital : Tantangan, Peluang dan Rekomendasi*. https://news.ddtc.co.id/dongkrak-kepatuhan-pajak-umkm-peningkatan-literasi-jadi-kunci-43342?utm_source=chatgpt.com
- Bangun, S., Hasibuan, P. W., & Suheri, S. 2022. *Kepatuhan Wajib Pajak: Peran Sistem Administrasi Perpajakan Modern, Kesadaran Wajib Pajak dan Sanksi Manajemen Perpajakan Dalam Perspektif Technology Acceptance Model dan Theory of Planned Behavior. Tirtayasa Ekonomika*, 17(1), 152. <https://doi.org/10.35448/jte.v17i1.15707>
- Bruce-Twum, E. 2023. SMEs Tax Compliance Behaviour in Emerging Economies: Do Tax Compliance Costs Matter? Evidence from Ghana. *Journal of Accounting, Ethics & Public Policy*, 24(2), 27–51. <https://doi.org/10.60154/jaep.2023.v24n2p27>
- Che Azmi, A. A., Zainuddin, S., Mustapha, M. Z., & Naw, Y. 2016. The Mediating Effect of Tax Fairness on the Relationship Between Knowledge, Complexity and Voluntary Tax Compliance. *Asian Journal of Accounting Perspectives*, 9(1), 1–12. <https://doi.org/10.22452/ajap.vol9no1.1>
- Davis, F. D. 1989. *Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*. 13(3), 319–340. <https://doi.org/10.5962/bhl.title.33621>
- Devi, N., & Purba, M. A. 2018. *Pengaruh Sosialisasi Perpajakan dan Sanksi Perpajakan Terhadap Kepatuhan Wajib Pajak Orang Pribadi. Scientia*.
- Dewantara, R. Y. 2019. *Penerimaan Teknologi E-Registration Sebagai Dukungan Administrasi Perpajakan. Jambura Journal of Informatics*, 1(2), 89–97. <https://doi.org/10.37905/jji.v1i2.2654>
- Ditaputri, K., Ulil, ;, Tony, H. ;, & Aji, S. 2023. The Mediating Effect of Financial Performance on GCG and Firm Value: Evidence from Indonesian Listed Firms. *International Journal of Multicultural and Multireligious Understanding*, 10(9), 215–225. <http://ijmmu.comhttp://dx.doi.org/10.18415/ijmmu.v10i9.4970>
- Do, H. T. H., Mac, Y. T. H., Tran, H. T. Van, & Nguyen, T. T. Le. 2022. The impact of attitude towards an e-tax system on tax compliance of Vietnamese enterprises: Adoption of an e-tax system as a mediator. *Journal of Entrepreneurship, Management and Innovation*, 18(1), 35–64. <https://doi.org/10.7341/20221812>
- Dwiadityo, M. A., & Subiyanto, B. 2024. *The Effect of E- Filing , Tax Socialization , and Taxpayer Awareness on MSME Taxpayer Compliance with Tax Sanctions as Variable Moderation* (Nomor Icbmase 2023). Atlantis Press International BV. <https://doi.org/10.2991/978-94-6463-394-8>
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. 2019. Re-examining the

- Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model. *Information Systems Frontiers*, 21(3), 719–734. <https://doi.org/10.1007/s10796-017-9774-y>
- Faisol, M., & Norsain, N. 2024. Enhancing Tax Compliance Through Digital Transformation: Evidence From Corporate Taxpayers' Usage of E-Bupot. *Jrak*, 16(1), 159–168. <https://doi.org/10.23969/jrak.v16i1.12614>
- Firmansyah, A., Harryanto, & Trisnawati, E. 2022. *Peran Mediasi Sistem Informasi Dalam Hubungan Sosialisasi Pajak, Sanksi Pajak, Kesadaran Pajak dan Kepatuhan Wajib Pajak Orang Pribadi. Jurnal Pajak Indonesia*, 6 No. 1, 130–142.
- Gangodawilaga, D. 2021. Use of Technology to Manage Tax Compliance Behavior of Entrepreneurs in the Digital Economy. *International Journal of Scientific and Research Publications (IJSRP)*, 11(3), 366–371. <https://doi.org/10.29322/ijsrp.11.03.2021.p11150>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. 2017. *A Primer on Partial Least Square Structural Equation Modeling (PLS-SEM)*. Thousand Oaks Sage.
- Heider, F. 1958. *The Psychology of Interpersonal Relation*. John Wiley and Sons. <https://doi.org/10.1037/10.1037/10628-000>
- Hesami, S., Jenkins, H., & Jenkins, G. P. 2024. Digital Transformation of Tax Administration and Compliance: A Systematic Literature Review on E-Invoicing and Prefilled Returns. *Digital Government: Research and Practice*, September. <https://doi.org/10.1145/3643687>
- Istutik, & Pertiwi, D. S. 2021. *Pengaruh Penerapan Sistem E-Filing Terhadap Kepatuhan Wajib Pajak Orang Pribadi dengan Pemahaman Internet Sebagai Variabel Moderasi (Studi Pada Wajib Pajak Orang Pribadi di KPP Pratama Sumbawa Besar)*. *Jurnal Ilmu-ilmu Sosial*, 18(2), 524–534. www.Pajakku.com
- James, S., & Alley, C. 2002. Tax compliance, self-assessment and tax administration Munich Personal RePEc Archive. *Journal of Finance and Management in Public Services*, 2(2), 27–42. <https://mpira.ub.uni-muenchen.de/26906/>
- Joshi, A., Kale, S., Chandel, S., & Pal, D. 2015. Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/bjast/2015/14975>
- Kbarek, J. T., Hutadjulu, L. Y., & Seralurin, Y. C. 2021. *Pengaruh Sosialisasi Perpajakan Dan Kualitas Pelayanan Perpajakan Terhadap Kepatuhan Wajib Pajak Dengan Pengetahuan Perpajakan Sebagai Variabel Intervening (Studi Kasus pada Wajib Pajak Orang Pribadi di KPP Pratama Kota Jayapura)*. *Jurnal Akuntansi Dan Keuangan Daerah*, 16(2), 114–132. <https://doi.org/10.52062/jakd.v16i2.1901>
- Kehelwalatenna, S., & Soyza, B. 2020. Determinants of Tax Compliance Behaviour: The Case of Sri Lankan Taxpayers. *Global Review of Accounting and Finance*, 11(1), 42–61.
- Kiptum, A., Kapkiyai, C., & Kirui, D. 2024. *Tax Service Quality and Tax Compliance among Small and Medium Enterprises in North Rift Economic Block, Kenya: A Moderated Mediation Model of Government Trust and Social Value Orientation*. 24(10), 28–41.
- Kirchler. 2007. *No Title The Economic Psychology of Tax Behavior*. Cambridge University Press. [https://homepage.univie.ac.at/erich.kirchler/pu%0Ablikationen_pdf/Kirchler 2007 The economic%0Apsychology of tax behavior.pdf](https://homepage.univie.ac.at/erich.kirchler/pu%0Ablikationen_pdf/Kirchler%202007%20The%20economic%20psychology%20of%20tax%20behavior.pdf)
- Le, H. T. H., Tuyet, V. T. B., Hanh, C. T. B., & Do, Q. H. 2020. Factors affecting tax compliance among small-and medium-sized enterprises: Evidence from vietnam. *Journal of Asian Finance, Economics and Business*, 7(7), 209–217. <https://doi.org/10.13106/jafeb.2020.vol7.no7.209>
- Lee, H. C. 2016. Can Electronic Tax Invoicing Improve Tax Compliance? A Case Study of the Republic of Korea's Electronic Tax Invoicing for Value-Added Tax. *Can Electronic Tax Invoicing Improve Tax Compliance? A Case Study of the Republic of Korea's Electronic Tax Invoicing for Value-Added Tax, March*. <https://doi.org/10.1596/1813-9450-7592>
- Lestari, A. E., & Utomo, R. B. 2024. *Osialisasi Peningkatan Kepatuhan Pajak Bagi Pelaku Umkm Di Pasar Sidomukti Kota Magelang. Musyawarah*, 2, 45–56.
- Li, J., Wang, X., & Wu, Y. 2020. Can Government Improve Tax Compliance By Adopting Advanced Information Technology? Evidence from the Golden Tax Project III in China. *Economic*

- Modelling*, 93(July 2019), 384–397. <https://doi.org/10.1016/j.econmod.2020.08.009>
- Lianty, M., Hapsari, D. W., & K, K. 2017. *Pengetahuan Perpajakan, Sosialisasi Perpajakan, Dan Pelayanan Fiskus Terhadap Kepatuhan Wajib Pajak*. *Jurnal Riset Akuntansi Kontemporer*, 9(2), 55–65. <https://doi.org/10.23969/jrak.v9i2.579>
- Lin, Y., Wong, K., Wang, Y., Zhang, R., Dong, B., Qu, H., Zheng, Q., & Sep, H. C. 2020. *TaxThemis : Interactive Mining and Exploration of Suspicious Tax Evasion Groups*. <https://doi.org/https://doi.org/10.48550/arXiv.2009.03179>
- Lita Nova Yulianti. 2022. *Pengaruh Sosialisasi Perpajakan, Kesadaran Wajib Pajak, Dan Pemahaman Insentif Pajak Terhadap Kepatuhan Wajib Pajak Umkm Pada Masa Pandemi Covid-19*. *Manajemen*, 2(1), 46–53. <https://doi.org/10.51903/manajemen.v2i1.127>
- Mardiasmo. 2018. *Perpajakan* (Revisi). Andi.
- Munga, Y. 2021. *Effect Of Psychological Factors and Knowledge on Tax Compliance of Micro and Small Enterprise Owners in Nairobi Country-Kenya*. <https://icepp.gsu.edu/files/2015/03/ispwp0724.pdf>
- Muslichah, M., Bashir, M., & Arniati, T. 2023. the Impact of Tax E-Filing System Quality on Taxpayer Satisfaction: Perceived Usefulness As Mediator. *Jrak*, 15(2), 252–258. <https://doi.org/10.23969/jrak.v15i2.8715>
- Nino, V. R. M., & Tyas, A. M. 2022. *Pengaruh Sosialisasi Perpajakan dan Pemahaman Wajib Pajak Terhadap Kepatuhan Wajib Pajak UMK*. *Soetomo Accounting Review*, 1, 618–636.
- Oktaviyani, A. 2024. *Statistik Penerimaan Pajak Tahun 2023 dalam Angka*. <https://pajak.go.id/index.php/id/artikel/statistik-penerimaan-pajak-tahun-2023-dalam-angka>
- Okunola, A., & Alabi, F. 2024. *Tax Compliance and Its Determinants : A Study on Small and Medium Enterprises (SMEs)*. 1.
- Oladipupo, A. O., & Obazee, U. 2016. Tax Knowledge, Penalties and Tax Compliance in Small and Medium Scale Enterprises in Nigeria. *iBusiness*, 08(01), 1–9. <https://doi.org/10.4236/ib.2016.81001>
- Ortega-Gil, M., Pinto, F., Cabezas Ares, A., & Rodríguez-Iglesias, I. 2024. Corporate taxation in Spain: analyzing efficiency and revenue potential. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-03528-x>
- Prastowo, Y. 2017. *Modernisasi Administrasi Perpajakan : Upaya Penyempurnaan Pelayanan Pajak*. <https://www.online-jaka.com/tentang-efiling/modernisasi-administrasi-perpajakan-upaya-penyempurnaan-pelayanan-pajak-bagian-1-1>
- Sa'adiyah, H. H., Anggara, P. R. N., & Nugroho, M. R. 2021. Theory of Attribution dan Kepatuhan pajak Di masa Pandemi Covid-19. *Scientax - Jurnal Kajian Ilmiah Perpajakan Indonesia*, 3(1), 51–69.
- Schmitt, J. 2014. Attribution Theory. *Wiley Encyclopedia of Management*, 9, 1–3. <https://doi.org/https://doi.org/10.1002/9781118785317.weom090014>
- Yudha, C. K., Putra, G. S. A., & Putrawan, K. A. 2023. The Role of Tax Socialization in Strengthening Compliance Msme Taxpayers in Badung, Bali, Indonesia. *Asian Journal of Economics, Business and Accounting*, 23(13), 50–60. <https://doi.org/10.9734/ajeaba/2023/v23i13994>
- Zhang, L., Wales, N. S., Nan, X., & Huang, E. 2020. *Detecting Transaction-based Tax Evasion Activities on Social Media Platforms Using Multi-modal Deep Neural Networks*. i. <https://doi.org/https://doi.org/10.48550/arXiv.2009.03179>