Business & Social Science
IJRBS

Research in Business & Social Science

IJRBS VOL 9 NO 1 ISSN: 2147-4478

Available online at www.ssbfnct.com
Journal homepage: <https://www.ssbfnct.com/ojs/index.php/ijrbs>

Influence of TAM and UTAUT models of the use of e-filing on tax compliance

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ARTICLE INFO

Article history:

Received 11 November 19

Received in revised form 12 Dec 19

Accepted 18 December 19

Keywords:

Tax Compliance

TAM

Theory of Planned Behaviour

UTAUT

JEL Classification

E7; H2; M41

ABSTRACT

This study aims to examine and prove empirically the effect of perceived usefulness, perceived ease of use, social influence, facilitating conditions on tax compliance. The sample selection technique uses convenience sampling obtained 100 samples taxpayers in Directorate General of Taxation III East Java. Data analyzed using partial least square. The result shows that (i) perceived ease of use does not affect tax compliance. (ii) Perceived usefulness has a positive effect on tax compliance. (iii) Social influence has a positive effect on tax compliance. (iv) Facilitating conditions does not affect tax compliance.

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Introduction

Tax compliance contributes to revenue and development in Indonesia. The principle of tax compliance is the act of taxpayers in fulfilling their tax compliance by legislation and tax regulations in a country (Rahayu, 2013). Tax compliance is a reflection of the self-assessment system that applies in Indonesia. According to Government Regulation No. 74 of 2011, a self-assessment system is a system that provides taxpayers with the opportunity to calculate, deduct and report their tax payable. Rahayu in her study states that the fulfillment of duty in the tax self-assessment system is carried out entirely by taxpayers and tax authorities only conduct supervision by the procedures (Rahayu, 2013). However, OECD states that the self-assessment system did not show good results. Indonesia's tax ratio still far lower than in other Asian countries, which is 11.5% (OECD, 2019). Moreover, Indonesia's tax ratio when compared to the OECD tax-to-GDP ratio of 34.2%, Indonesia is still far behind.

The theory of Planned Behavior (TPB) focuses to analyze a situation when individuals do not have their control over behavior (Jogiyanto, 2008). A person will do an action if others want him to do these actions and are confident of being able to do it. These factors are known as attitudes, subjective norms and behavior control (Fishbein and Ajzen, 1977). These factors together will determine the consistency of one's intentions with their behavior. The intention will be consistent with behavior when the environment provides sufficient motivation and opportunity (Ajzen, 1991). Jogiyanto claim that behavioral intention is a good prediction of the use of technology by system users (Jogiyanto, 2008).

Directorate General of Taxes (DJP) began to do various kinds of ways to increase tax compliance in Indonesia, one of them with an approach through digitalization. The efforts are to use e-filing. The use of e-filing is basically to provide convenience in paying and

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Peer review under responsibility of Bussecon International Academy.

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<https://doi.org/10.20525/ijrbs.v9i1.576>

reporting taxes. E-filing is also expected to be able to increase tax compliance on time in reporting and paying taxes (Mardlo, 2019). This research using the TAM and UTAUT model to examine the use of e-filing.

This study developed research of (Ermawati and Delima, 2016); (Zaidi et al., 2017) found that the higher of user's trust that an e-filing system improves business performance, the higher the interest in using e-filing. The use of e-filing provides directly the benefits of using e-filing. (Pantow et al., 2016) and (Pratama et al., 2016) found that perception of ease of use does not affect the intention to use e-filing technology. Taxpayers tend to do an evaluation first before using the e-filing system.

Research (Dewi and Yadyana, 2017) found that social influences and conditions that facilitate influencing e-filing behavior. (Syanditha and Setiawan, 2017) found that social influences (e.g. friends, family) will affect the intention of using e-filing continuously. (Carter et al., 2011) conducted a study of taxpayers in the United States found that facilitating conditions the use of online tax filing has a positive effect on tax compliance. (Nugroho et al., 2018) found that facilitating conditions do not affect the use of e-billing systems. Taxpayers do not care about facilitating conditions such as technical support, training, and infrastructure.

This research is a development of the research of Setiawan et al. (2018) and Dewi and Yadyana (2017) regarding the impact of using e-filing on tax compliance. In contrast to previous studies, this study decomposes TPB theory with constructs contained in the TAM and UTAUT models. This study uses the main constructs of TAM, that is ease perspective and usefulness perception. Also besides, this study uses two constructs of UTAUT that are the social influence and facilitating conditions. Based on the phenomena, theories, and inconsistencies of previous research, researchers are interested in examining the influence of perceptions of usability, perceived convenience, social influence, and conditions that facilitate the application of e-filing to taxpayer compliance.

Literature Review

Theory Planed Behavior (TPB)

Theory of Planned Behavior (TPB) is a model based on intentions which explain that behavior displayed by individuals because of the intention to behave (Ajzen, 1991). The main factor of this theory is the intention of individuals to take certain actions. The intention is an indication of a person's efforts to be willing to try various ways to take action (Ajzen, 1991). Thus, the intention is assumed to be a direct antecedent of behavior (Ajzen, 1991). The stronger the intention, the more likely the behavior will be carried out.

(Ajzen, 1991) in his study states that behavioral intentions are determined by three determinants namely attitudes, subjective norms and perceived behavioral control. (Ajzen, 1991) also mentions that a person will consider these three factors in building their intention to obey the rules. Attitudes represent one's feelings of favoritism toward objects, actions, or events (Fishbein and Ajzen, 1977). Someone will appreciate a behavior positively so he will do the behavior. Subjective norms refer to the social pressure felt by someone to take certain actions (Ajzen, 1991). Perceived behavioral control is perceived ease or difficulty in performing a behavior (Ajzen, 1991).

This research decomposed 3 factors in the TPB model, i.e. attitudes, subjective norms and perceived behavioral control with the constructs in the TAM and UTAUT models. Decomposition in the TPB model is relevant to study the behavior of e-filing users as well as the attitudes, norms, and control of perceived behavior of e-filing users towards the intention to obey to pay and report their tax obligations. This study decomposed attitudes with perceived ease of use by the TAM model. This study also decomposed perceived behavioral control with perceived usefulness by the TAM model and facilitating conditions by the UTAUT. This study decomposed subjective norm with social influence by the UTAUT model.

Perceived Ease of Use

Perceived ease of use refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). Ease means doing something freedom from difficulty or greater effort. Based on this, perceived ease of use refers to the belief that the system is not troublesome or does not require a large effort when used.

One factor that forms intentions in the theory of planned behavior is the attitude. Attitude is a construct of attitude decomposed by the construct of perceived ease. the amount of affection (feeling) a person feels to accept or reject an object or behavior (Fishbein and Ajzen, 1977). The attitude of the taxpayer is not a behavior, but a tendency to behave, to perceive certain ways towards the object of attitude. The attitude of the taxpayer will be formed through the perception of the ease of the e-filing system to take action to comply with the obligations to report and deposit taxes.

H1: There is a positive effect of perceived ease of use using e-filing on tax compliance

Perceived Usefulness

Perceived usefulness defined as the degree to which a person believes that using a particular system would enhance his or her job performance (Davis, 1989). The TAM model shows that individuals accept a system if individuals believe in the system. The construct of perceived ease is believed to be a significant construct affecting the adoption of a system (Sondakh, 2017).

Perceived usefulness is a construct that is decomposed from a perceived behavioral control construct on a theory of planned behavior. Ajzen in his study states that behavior influences intention based on the assumption that control of perceived behavior by individuals will have motivational implications for that person (Ajzen, 1991). The perception of the use of taxpayers towards the use of e-filing motivates to be more obedient in paying taxes. The stronger the perceived behavioral control is projected with the perception of usefulness, the stronger the taxpayer to bring up the taxpayer compliance behavior.

H2: There is a positive effect of perceived usefulness using e-filing on tax compliance

Facilitating Condition

Venkatesh in his study defined that facilitating conditions are the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system (Venkatesh et al., 2003). The infrastructure must include technical and organizational infrastructure. Facilitating conditions such as the availability of infrastructure, adequate knowledge, and compatibility of e-filing systems with other technologies affect the use of e-filing.

Facilitating conditions are constructs that are decomposed from perceived behavioral control constructs on the theory of planned behavior. Perceived behavior control is a belief about the existence of things that support or inhibit the behavior that will be displayed and the perception of how strong the things that support and inhibit the behavior. Infrastructure and technical facilities using e-filing will support the intention of taxpayers to pay and deposit their taxes. The intention of the taxpayer will be in line with his behavior. The stronger the perceived behavioral control is projected to facilitate conditions, the stronger the taxpayer to bring the taxpayer compliance behavior.

H3: There is a positive effect of facilitating condition using e-filing on tax compliance

Figure 1: Research model, Source: Ajzen, 1991 (TPB Decomposition modified)

Social Influence

Social influence is defined as the degree to which an individual perceives that important others believe he or she should use the new system (Venkatesh et al., 2003). The encouragement of the surrounding environment and the people closest will increase one's interest in using the new system. Based on the UTAUT model that individual behavior is influenced by they trust others who will see it as a result of using technology.

The theory of planned behavior declared that subjective norms as one of the determinants informing one's intentions. Ajzen in his study states that subjective norms are expectations that individuals perceive when one or more people around them approve certain behaviors and motivate the individual to follow them (Ajzen, 1991). Subjective norms are decomposed with social influence. The influence of people around taxpayers in using e-filing will motivate taxpayers to pay and report taxes.

H4: There is a positive effect of social influence using e-filing on tax compliance

Research and Methodology

This study uses a population of personal taxpayers and corporate taxpayers who are in the Directorate General of Taxation region III East Java. The sampling technique used is non-probability sampling. The selection of respondents in this study was based on convenience sampling. The number of samples needed is at least 10 times that of the arrow on the dependent variable (Hair et al., 2017). This study has 4 independent variables, so the minimum sample needed is 40 respondents. The type of data used is quantitative data. The data source of this research is primary data obtained from respondents. The data was obtained by filling out a questionnaire given to respondents. Analysis of the data used is the Partial Least Square-Structural Equation Model (PLS-SEM) using the help of the SmartPLS ver 3.0 application.

Result and Discussion

Convergent Validity

Below is the result of validity and reliability test from the variables of tax compliance, perceived ease of use, perceived usefulness, facilitating condition and social influence:

Table 1: Validity and Reliability Test

Construct	AVE	Composite Reliability	R Square	Cronbach's Alpha
Tax compliance	0,76	0,94	0,73	0,92
Perceived ease of use	0,71	0,94		0,98
Perceived usefulness	0,63	0,92		0,90
Facilitating condition	0,62	0,87		0,80
Social influence	0,71	0,94		0,86

Source: Primary Data (2019)

Based on the data on the table above, the result shows that all constructs have score AVE > 0,50.

Discriminant Validity

Based on the result of cross loading factors score shows that all indicators have cross loading scores > 0,70.

Reliability

Based on the data on the table above, the result shows that cronbach's alpha > 0,60 and composite reliability > 0,70. Thus, declare the data are valid and reliable.

Inner Model

Based on tabel above shows that R square score is 0,73. It is mean that the independent variable of this study is able to describe the dependent variable by 73%, while the remaining 27% is influenced by other factors beyond the scope of this research

Hypothesis Test

Based on the table above, it is discovered that the variable of perceived ease of use obtained t value (1,73) > (1,64) which leads the conclusion that perceived ease of use does has positive effect on taxpayer compliance. This shows that this study support the theory of planned behavior which states a person's intentions will get stronger when considering 3 factors one of which is an attitude. Attitude is the amount of affection (feeling) felt by someone to accept or reject an object or behavior. Perceived ease of use in this study was decomposed by attitude construct. Taxpayers already feel the ease in paying and reporting taxes so that the intention of taxpayers to comply will be even higher. The intention to pay taxes will be in line with behavior.

Table 2: Total Effect Test

	Nilai t
Perceived ease of use > Tax complaince	1,73
Perceived usefulness > Tax complaince	2,28
Facilitating conditions > Tax complaince	0,15
Social influence > Tax complaince	2,16

Source: Primary Data (2019)

Second hypothesis testing results obtained t value $(2,28) > (1,64)$ which lead the conclusion that perceived usefulness has a positive effect on tax compliance. This shows that this study support TPB which states that perceived usefulness are constructs that can be decomposed into TPB. Perceived usefulness is also an important internal control factor. Perceived behavioral control in planned behavior theory is an additional construct from the previous theory. Perceived behavioral control makes a strong construct to affect one's intentions. Taxpayers have opportunities to carry out their tax obligations through e-filing means will form a strong taxpayer intention to do tax reporting.

The third hypothesis result obtained t value $(0,15) < (1,64)$ which lead the conclusion that facilitating conditions does not affect tax compliance. The results of this study do not support TPB which states a person's intentions will be strong when considering 3 factors, one of which is perceived behavioral control. Perceived behavioral control is the ease or difficulty of perceived behavior (Ajzen, 1991). Individuals who believe that they do not have the resources available or do not have the opportunities to carry out certain behaviors may not form strong behavioral intentions to do so.

The fourth hypothesis result obtained t value $(2,16) > (1,64)$ which lead to the conclusion that the social influence of using e-filing has a positive effect on taxpayer compliance. This empirical evidence implies that taxpayers who have the perception that there are social-environmental pressures on tax compliance will be more intent on complying with their tax obligations than taxpayers who do not have the perception that there is social-environmental pressure on tax compliance. Thus, the existing taxation system should encourage the community around taxpayers (e.g. family, friends and colleagues) to have the spirit to create tax compliance.

Conclusions

The results of this study indicate that taxpayers do not consider the conditions that facilitate the use of e-filing systems to improve tax compliance. Furthermore, this study found that perceived ease of use of e-filing affected tax compliance. The findings further state that the perception of the use of taxpayers e-filing affects the taxpayer compliance. This study also found that social influences affect taxpayer compliance.

The findings of this study support the theory of planned behavior which states that one's intention will be stronger if the individual considers three factors namely attitudes, perceived behavioral control and subjective norms. This study decomposes the constructs in the theory of planned behavior with the constructs in the TAM and UTAUT models.

The limitations in this study are how to obtain data through questionnaires. Data acquisition by questionnaire method causes the respondent's point of view regarding taxpayer compliance is limited to the statement given only. Also, this study only took respondents from personal taxpayers and corporate taxpayers in DGT III East Java in Indonesia.

Based on the limitations that have been described, suggestions that can be given for further research is that further research can combine the way to obtain data with questionnaires and written statements. Besides, further research can use a qualitative approach through interviews with taxpayers. Suggestions for further research to research a wider area. This is done so that research results can be generalized.

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