



Trust and its Effect on Behavioral Intention through Technology Acceptance Model on e-SPPT online Taxpayer Service of Samarinda City

Della Olivia Caterina Kalangit*, Kristin Wulansari
Business Administration Department
Politeknik Negeri Samarinda
Samarinda, Indonesia

dellaolivia@polnes.ac.id, kristinwulansari@polnes.ac.id

Sailawati
Accounting Department
Politeknik Negeri Samarinda
Samarinda, Indonesia
sailawati@polnes.ac.id

Abstract—e-SPPT is an online application for PBB-P2 (Rural and Urban Land and Building Taxes) which is used to register new data, mutations for combining tax objects, mutations for splitting tax objects, printing copies of SPPDT (Regional Tax Returns Payable), and data correction. There are not too many users of the e-SPPT application, so this study was conducted to measure the confidence of taxpayers in accepting the e-SPPT application. The model used in this study is the Technology Acceptance Model (TAM) with the addition of the trust variable. The data used are primary data obtained through distributing questionnaires to 180 respondents using e-SPPT in Samarinda City, where the implementation of the results of the research on the main respondents aged 35-45 years. The questionnaire was designed with a Likert scale of 1 to 5, namely 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. The data were analyzed by multivariate linear regression using the AMOS program package. There are five variables used in this study, namely perceived usefulness, perceived ease of use, intention to use, application use, and trust. The results obtained are Perceived Usefulness and Perceived Ease of Use have a significant influence on Attitude Toward Using to use the e-SPPT application. The Attitude Toward Using variable has a significant effect on Behavioral Intention To Use, and the Trust variable has a significant influence on Perceived Usefulness, Perceived Ease of Use, and Behavior Intention to Use. This means that Trust affects the use of e-SPPT online services every day and in the future.

Keywords—trust, TAM Model, Online Service, e-SPPT

I. INTRODUCTION (HEADING 1)

Along with the advancement of Technology Information, also the rapid development of the internet, many people's daily activities are more helpful. The development of the internet has directly or indirectly affected the business system, transactions and money circulation so far, including providing convenience to the community in managing local taxes, namely the PBB-P2 tax (Rural and Urban Land and Building Tax).

e-SPPT is one of the online service applications provided by the Samarinda City Revenue Agency for people who need PBB-P2 services, where online services from e-SPPT include: (1) registration of new PBB-P2 data, (2) merger mutations PBB-P2 tax object, (3) transfer of PBB-P2 tax object, print a copy of (4)

PBB-P2 SPPDT (Regional Tax Return), and (5) correction of PBB-P2 data consisting of incorrect data and double data. service can be accessed on the website of the Regional Revenue Agency of Samarinda City on the PBB-P2 Online Services menu (<https://bapenda.samarindakota.go.id/formulir-online-pbb-p2/>)

Although the online service can be accessed anywhere quickly and easily, there is an important factor that should be considered, namely Trust, because public trust in PBB-P2 online services will have an impact on the use of PBB-P2 online service applications that have been provided by the Regional Revenue Agency. Samarinda City.

This study was conducted to analyze the behavior of taxpayers in Samarinda City as users of the e-SPPT online service application using the technology acceptance model (TAM) with the addition of an external variable, namely the Trust variable. Reinforcement of the results is done by testing the validity and reliability. The objectives of this study are: (1) to determine the effect of TAM on the use of e-SPPT online service applications, (2) to determine the effect of the Trust variable on the use of e-SPPT online service applications.

II. LITERATURE REVIEW

A. Technology Acceptance Model (TAM)

Davis first presented the Technology Acceptance Model (TAM) in 1989; it was first used in Jogiyanto (2007). TAM is a theory of information systems that develops a model for how users accept and use technology. This model illustrates how users' decisions regarding the how and when to use an information system are influenced by a variety of factors.

The Theory of Reasoned Action (TRA) model, specifically the theory of reasoned action created by Fishben and Ajzen (1975), is the source of the TAM model, which was based on the idea that a person's response and perception of something will shape that person's attitude and behavior. According to this idea, a person's conduct can be modeled as a function of their behavioral goals. The attitude toward the conduct determines the behavior's goal.

It can be concluded that the reactions and perceptions of IT users will affect their attitudes in accepting the use of IT. the use

of IT makes the person's actions acceptable to the use of IT. The TAM model consists of the following variables:

1. Perceived Usefulness: is the degree to which a person believes that using a particular system can provide usefulness for the user in doing something. In other words, using a system can be useful to improve the work performance of that person. Perceived Usefulness indicators are Fast, Easy, Advantage.
2. Perceived Ease of Use: is the perception that someone believes that using a certain system makes it easier to do something. Indicators of Perceived Ease of Use are Easy to Learn, Easy to Become Skillful, Clear and Understandable, Flexible, Easy to Apply.
3. Attitude Toward Using: attitude towards the use of something according to Aakers and Myers (1997) is an attitude of liking or disliking the use of a product. The attitude of liking or disliking a product can be used to predict the behavior of a person's intention to use a product or not to use it. Attitude Toward Using, defined as the evaluation of the user about his interest in using technology (Davis, 1989). Indicators of Attitude Toward Using are the convenience of interacting, happy to use, enjoy using, simple
4. Behavioral Intention to Use: is a behavioral tendency to continue using a technology (Davis, 1989). The level of use of a computer technology in a person can be predicted from the attitude of the user's attention to the technology, for example the desire to add supporting peripherals, the motivation to keep using it, and the desire to motivate other users. Arief Hermawan (2008) in Suseno (2009) defines behavioral intention to use as a person's interest (desire) to perform certain behaviors. Behavioral intention to use indicators are having helpful features, always trying to use, continuing use in the future.

B. Trust

Trust is a central aspect in many economic transactions because of the deep human need to understand the social environment, that is, to identify what, when, why, and how other people behave [2]. Lack of trust can prevent consumers from engaging in online transactions. Trust indicators are Belief, Keep Promises and Commitment, Meet The Expectations.

C. Pelayanan Online e-SPPT

The e-SPPT Online Service is one of the online service applications provided by the Samarinda City Revenue Agency for people who need PBB-P2 services, where online services from e-SPPT include: (1) registration of new PBB-P2 data, (2) mutation of the amalgamation of PBB-P2 tax objects, (3) mutation of the breakdown of PBB-P2 tax objects, printed copies of (4) SPPDT (Regional Tax Returns Payable) PBB-P2, and (5) correction of PBB-P2 data consisting of incorrect data and double data. The e-SPPT online service can be accessed on the website of the Samarinda City Regional Revenue Agency on the service menu.

(<https://bapenda.samarindakota.go.id/formulir-online-pbb-p2/>)

III. RESEARCH METHOD

This study uses a survey research method with a quantitative research approach. The survey research in question is to explain causal relationships and test hypotheses. This type of survey research focuses on the disclosure of causal relationships

between variables, namely a study directed at investigating causal relationships based on observations of the effects that occur, with the aim of separating the direct and indirect effects of a causal variable on the effect variable. The causal variables are Trust (X1), Perceived Usefulness (X2), Perceived Ease of Use (X3), Attitude Toward Using (Y1) on Behavior Intention (Y2).

A. Types of Data

The primary data used in the study comes from PBB-P2 taxpayers who use the e-SPPT online service application, and was gathered through the distribution of questionnaires to respondents. sample determination utilizing the Hair theory with a 5% error rate. The sample size is set at 180 responders, which is equal to 18 indicators times a 10-point scale, or 180 responses. A maximum of ten times the number of indications are used to determine the sample. Data will be gathered via a survey with a Likert scale of 1 to 5 with the following response options: 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree, and 5 for strongly agree.

B. Analysis Method

The collected data was then analyzed by multivariate linear regression using the Structural Equation Model (SEM) which was operated through the AMOS 23 program with the following stages:

- The result of $r > 30$ indicates the instrument's validity and reliability when utilizing a valid measure. If an instrument's reliability coefficient is at least 0.60, it is considered dependable. According to the opinion stated above, it is possible to draw the conclusion that an instrument is deemed dependable if the value of negligence is greater than 0.60 and is deemed unreliable if the value of negligence is less than 0.60.
- The normality, linearity, and multicollinearity tests are all included in the structural equation model (SEM) assumption test. The most dominating factor in a group of variables is identified using a confirmatory analysis test on SEM. Test the model's applicability and the hypothesis.

C. Variables and Indicators

The first exogenous variable used in this study is the Trust variable (X1), which refers to the Belief indicator (X1.1), Keep Promises and Commitment (X1.2), and Meet The Expectations (X1.3). The second exogenous variable is Perceived Usefulness (X2) with indicators Fast (X2.1), Easy (X2.2), Advantage (X2.3). The third exogenous variable is Perceived Ease of Use (X3) with indicators Easy to Learn (X3.1), Easy to Become Skillful (X3.2), Clear and Understandable (X3.3), Flexible (X3.4), Easy to Apply (X3.5). While the intervening variables are Attitude Toward Using (Y1) with indicators of comfort interacting (Y1.1), happy to use (Y1.2), enjoy using (Y1.3), simple (Y1.4). The endogenous variables are Behavioral intention to use (Y2) as measured by indicators having helpful features (Y2.1), always trying to use (Y2.2), continued use in the future (Y2.3).

IV. RESULTS AND ANALYSIS

A. Validity and Reability

With a sample of 30 respondents, a trial was undertaken to evaluate the accuracy and dependability of the research

instrument. The test results show that on average the three Trust indicators have a correlation coefficient of 0.624 which is greater than 0.30. Additionally, the correlation coefficient value for the three Perceived Usefulness indicators as a whole is 0.804, which is higher than 0.30. The correlation coefficient value for the average of the five Perceived Ease of Use indicators is 0.862, which is higher than 0.30. While the average correlation coefficient for the indicator of Attitude Toward Use (0.810) is higher than 0.30 and the average correlation coefficient for the indicator of Behavior Intention (0.876) is higher than 0.30. As a result of each instrument's correlation coefficient being more than 0.30, it is determined that they accurately represent the variables employed in this study.

Each research tool is trustworthy due to its Cronbach alpha value of greater than 0.60. According to the established sample size, the instrument can represent the study variables, allowing the questionnaire to be administered to up to 180 additional samples.

B. Assumption SEM Model Test

The Monte Carlo Sig (2-tailed) test results using the One-Sample Kolmogorov-Smirnov test reveal a value of Sig > 0.05, indicating that the data is normally distributed. This value is 0.264. Consider the variance inflation factor (VIF) for each of the following variables: trust (2.626), perceived usefulness (2.310), perceived ease of use (2.420), attitude toward use (2.701), and behavioral intention to use (3.462), where each number is greater than 10.00, indicating that there is no multicollinearity between the variables.

While the Linearity Test results between the variables Trust, Perceived Usefulness, Perceived Ease of Use, and Attitude Toward Using on Behavior Intention show a Sig value of 0.490 where the Sig value is > 0.05, this indicates that there is a linear relationship between the studies variable and behavior intention. The data are therefore normally distributed, there is no multicollinearity between exogenous factors, and the relationships between study variables are linear, according to the results of the SEM assumption test. This demonstrates that it has done all necessary to keep using multivariate linear regression to test the hypothesis.

C. Goodness of fit Model Test

According to the test results, the GFI model's goodness fit value is 0.788, or nearly 1.00, and a cut of 0.90 indicates an excellent fit. The cut is good if RMSEA is less than 0.08, AGFI is near to 1.00 at 0.90, TLI is close to 1.00 with a cut-off of 0.95, and CFI is close to 1.00 with a cut-off of 0.95, all of which indicate that the cut is adequate. The test findings show that the research model developed is appropriate for evaluating and demonstrating the relationship between the variables under investigation. The findings of the AMOS analysis demonstrate that the path coefficients and the loading factor of each interaction between the variables have an impact on one another. The influence between variables is shown in Table 1.

Table 1 : The influence among Research Variables

| Influence of variables | Standard Path Coefficient | CR (Critical Ratio) | Probability | Explanation |
|------------------------|---------------------------|---------------------|-------------|-------------|
| X1 → X2 | 0,509 | 4,532 | *** | Significant |
| X1 → X3 | 0,402 | 3,268 | 0.025 | Significant |
| X1 → Y1 | 0,531 | 4,938 | *** | Significant |
| X2 → Y1 | 0,678 | 6,570 | *** | Significant |
| X3 → Y1 | 0,962 | 8,204 | *** | Significant |
| X2 → X3 | 0,318 | 3,210 | 0.038 | Significant |
| Y1 → Y2 | 0,668 | 6,226 | *** | Significant |

Source: Data processed by researchers, 2022

On the basis of Table 1, it is clear that the influence between variables can be employed to address the study's hypothesis. According to the results of the hypothesis testing, one of the seven hypotheses that were put up has been shown to have a substantial positive impact.

H1 : Trust has a significant effect on Perceived Usefulness, as evidenced by the CR value of 4.532 which is greater than CR-table 2.26 and with a probability value of 0.000 less than 0.05.

H2: Trust has a significant effect on Perceived Ease of Use, as evidenced by the CR value of 3.268 which is greater than the CR-table of 2.26 and with a probability value of 0.025 which is smaller than 0.05.

H3: Trust has a significant effect on Attitude Toward Using, as evidenced by the CR value of 4.938 which is greater than CR-table 2.26 and with a probability value of 0.000 less than 0.05.

H4: Perceived Usefulness has a significant effect on Attitude Toward Using, as evidenced by the CR value of 6.570 which is greater than CR-table 2.26 and with a probability value of 0.000 less than 0.05.

H5: Perceived Ease of Use has a significant effect on Attitude Toward Using, as evidenced by the CR value of 8.204 which is greater than CR-table 2.26 and with a probability value of 0.000 less than 0.05.

H6: Perceived Usefulness has a significant effect on Perceived Ease of Use, as evidenced by the CR value of 3.210 which is greater than CR-table 0.038 and with a probability value of 0.025 which is smaller than 0.05.

H7: Attitude Toward Using has a significant effect on Behavior Intention, as evidenced by the CR value of 6.226 which is

greater than CR-table 2.26 and with a probability value of 0.000 less than 0.05.

In this study, the relationship between Trust, Perceived Usefulness, and Perceived Ease of Use with Behavior Intention is significantly mediated by Attitude Toward Using. The effect of exogenous and endogenous variables can be effectively moderated by Attitude Toward Using, which also contributes significantly to the overall effect. This suggests that Trust, Perceived Usefulness, and Perceived Ease of Use encourage taxpayers to use the Samarinda City Regional Revenue Agency's e-SPPT online service application and feel interested in doing so in the future. This condition is expected to increase the number of taxpayers' interest in accessing online services. The modified research model is illustrated in Figure 1.

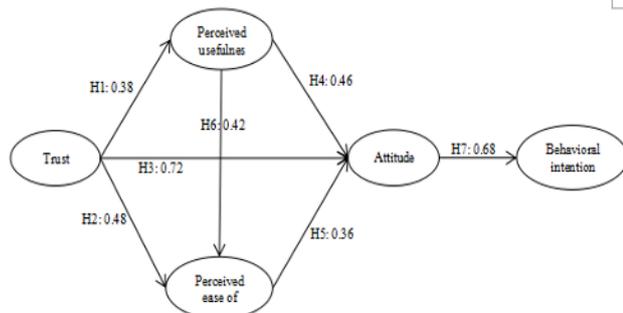


Figure 1. Research Model Modification

V. CONCLUSION

Based on the results of this study, it can be concluded that the e-SPPT application can create positive behavior from users as an application that can be used to make payments for Rural and Urban Land and Building Tax payments online. This is evident from the results of testing Hypotheses 1 to 7, there is a significant positive effect of each relationship being tested, as evidenced by the calculated value of CR 1.96 and probability value 0.005.

This means that behavioral intention will be created and shown by the attitude of users of the e-SPPT application. Attitude here is then built by a sense of perceived usefulness and perceived ease of use. These variables are formed from the trust that arises from the minds of application users to make online payment transactions.

It can be concluded that the results of this study support the TAM theory which has been tested by previous researchers.

ACKNOWLEDGMENT

This research received financial support from the Politeknik Negeri Samarinda, for which the research team would like to thank the director of the Politeknik Negeri Samarinda.

REFERENCES

- [1] Davis, F. D., Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, *MIS Quarterly*, 1989
- [2] Gefen, D., Karahana, E., & Straub, D. W., (2003), Trust and TAM in Online Shopping: An Integrated Model, *MIS Quarterly*, Vol.27
- [3] Bouteraa, M., AH Al-Aidaros. (2020). The Role of Attitude as Mediator in the Intention to Have Islamic Will. *International Journal of Advanced Research in Economics and Finance (IJAREF)*. v. 2, n. 1, p. 22-37, mar. 2020. ISSN 2682-812X. <https://mjims.mohe.gov.my/index.php/ijaref/article/view/7770>
- [4] Danurdoro, K., & Wulandari, D. (2016). The Impact of Perceived Usefulness, Perceived Ease of Use, Subjective Norm, and Experience Toward Student's Intention to Use Internet Banking. *Jurnal Ekonomi & Studi Pembangunan*.
- [5] Ghozali, I. (2001). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Badan Peneliti Universitas Diponegoro.
- [6] Gunter, B., & Furnham, A. (1998). *Children as consumer : A psychological analysis of the young People's market*. London. UK: Routledge.
- [7] Hair, J., Black, W., Babin, B., & Anderson, R. (2010). In *Multivariate Data Analysis 7th Edition* (pp. 661-662). Harlow. England: Pearson Education Limited.
- [8] Holdack, E., Stoyanov, K. L., & Fromme, H. F. (2020). The role of perceived enjoyment and perceived informativeness in assessing the acceptance of AR wearables. *Journal of Retailing and Consumer Services*, 1-11.
- [9] Hum, D. P. S., Agus, B., & Iip, S. S. (2017). Hak cipta dan penggunaan kembali : Lisensi ini mengizinkan setiap orang untuk menggubah , memperbaiki , dan membuat ciptaan turunan bukan untuk kepentingan komersial , selama anda mencantumkan nama penulis dan melisensikan ciptaan turunan dengan syarat ya. *Journal of Experimental Psychology: General*, 136(1), 23–42. <https://doi.org/10.1136/jep.2010.029629>
- [10] Kanchanatanee, K., Suwanno, N., & Jarernvongrayab,A. (2014). Effectsof Attitude toward Using, Perceived Usefulness, Perceived Ease of Use and Perceived Compatibility on Intention to Use E-Marketing. *Journal of Management Research*, 6(3), 1. <https://doi.org/10.5296/jmr.v6i3.5573>
- [11] Jogiyanto. (2007). *Sistem Teknologi Keperilakuan*. Yogyakarta : Andi.
- [12] Lim, Yi Jin., Bin Osman, A., & Suberi Bin AB Halim, M. (2014). Perceived Usefulness And Trust Towards Consumer Behaviors: A Perspective Of Consumer Online Shopping *Journal of Asian Scientific Research*. *Journal of Asian Scientific Research*, 4(10), 541–546. Retrieved from http://www.aessweb.com/journal_s/5003
- [13] Kotler, P., & Keller, K. L. (2016). *Marketing Managemen*, 15th Edition. New Jersey: Pearson Pretice Hall, Inc.
- [14] Kulviwat, S., Bruner II, G., & Al-Shuridah, O. (2009). *Journal of Business Research*. The role of social influence on adoption of high tech innovations: The moderating effect of public/private consumption, 709-712 doi:10.1016/j.jbusres.2007.04.014.
- [15] Ismail, H. A. (2016). Intention to Use Smartphone Through Perceived Compatibility, Perceived Usefulness, and Perceived Ease of Use. *Jurnal Dinamika Manajemen*, 7(1), 1-10.
- [16] M.Ramli, A. (2020, 11 09). *Dirjen PPI: Survei Penetrasi Pengguna Internet di Indonesia Bagian Penting dari Transformasi Digital*. Retrieved from <https://www.kominfo.go.id/>
- [17] Mowen, J., & Minor, M. (2002). *Perilaku konsumen jilid 1 edisi kelima*. Jakarta: Erlangga.
- [18] Revels, J., Tojib, D., & Tsarenko, Y. (2010). Understanding consumer intention to use mobile services. *Australasian Marketing Journal*, 74-80 doi:10.1016/j.ausmj.2010.02.002.
- [19] Sathye, S., Prasad, B., Sharma, D., Sharma, P., & Sathye, M. (2018). Factors influencing the intention to use of mobile value-added services by women-owned microenterprises in Fiji. *The Electronic Journal Of Information Systems In Developing Countries*, 1-10 Volume 84, Issue 2 <https://doi.org/10.1002/isd2.12016>.
- [20] Schierz, P. G., Schilke, O., & Wirtz, B. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications*, 209-216.
- [21] Sumardi, Davin Hundson, & Fransisca Andreani. (2021). Pengaruh Perceived Usefulness Dan Perceived Ease of Use Terhadap Usage Behavior Melalui Intention to Use Pada Konsumen Online Shop Sayurbox Di Surabaya. *AGORA*, Vol 9 No 1
- [22] Sugiyono, P. D. (2010). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.

- [23] Sugiyono, P. D. (2012). *Metodelogi Penelitian Bisnis*, Cetakan 16. Bandung: Alfabeta.
- [24] Ponte, Enrique Bonsón, Elena Carvajal-Trujillo & Tomás Escobar-Rodríguez. (2015). Influence of Trust and Perceived Value on Intention to use travel online: integrating the effects of assurance on trust antecedents. *Tourism Management*, Vol 47, Issue C, 286-302. <https://econpapers.repec.org/scripts/redir.pf?u=http%3A%2F%2Fwww.sciencedirect.com%2Fscience%2Farticle%2Fpii%2FS026151771400209X:h=repec:eee:touman:v:47:y:2015:i:c:p:286-302>
- [25] Teo, T., C.B. Lee, dan C.S Chai. (2007). Understanding Pre-Service Teachers' Computer Attitudes: Applying and Extending The Technology Acceptance Model. *Journal Compilation*; 128-143.
- [26] Vankatesh, M., & Davis, F. (2002). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, Vol. 46 No. 2: pp. 186-504.
- [27] Wang, E. S.T., & Chao, N. P.-Y. (2014). Consumer Characteristics, Social Influence, and System Factors on Online Group Buying Repurchasing Intention. *Journal of Electronic Commerce Research*, VOL 15, NO 2, 2014
- [28] Wang, Z., & Li, H. (2016). Factors influencing usage of third-party mobile payment services in China: An empirical study. *Journal of Business Management*, 23(11), 14-32.
- [29] Yanti, Wella K.D., Martini, L.K.B. and Sapta, I.K.S. 2019. The Effect of Social, Individual, and Materialism Factors on the Purchase of Purchasing Luxury Mixed Bags and Consumer Attitudes as a Mediation Variable (Behavior Study in Career Women in Denpasar). *International Journal of Contemporary Research and Review*. 10, 02 (Feb. 2019), 21297–21308. DOI:<https://doi.org/10.15520/ijcrr.v10i02.659>.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

