

Village Government Accountability: Social Media Technology Adoption Using a Hybrid SEM-ANN Analysis

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ABSTRACT: Technology adoption is a crucial element in establishing organisational accountability. In addition, previous studies on social media technology adoption have overlooked public sector organisations, such as village governments. This study investigates the effect of technology competence, society readiness and top management support on social media technology adoption using a hybrid SEM-ANN analysis. Using forty-six village governments in Pariaman city, Indonesia, we employ the structural equation model (SEM) PLS. In this case, the smartPLS 3.3.3 was employed in this study. Two assessments are conducted: the measurement model and the structural model assessment. The result shows that two hypotheses are accepted. The technology competence and top management support are positively related to the social media technology adoption. Consistent with PLS-SEM's result, ANN analysis produces the research model with high precision. Top management support is the most important predictor of social media technology adoption among village governments. In addition, technology competence has the highest importance and performance, and is followed by top management support, as indicated by the important-performance map analysis (IPMA). This study has practical and theoretical implications.

KEYWORDS: village government *accountability*, social media technology adoption, society readiness, technology competence, top management support

I. INTRODUCTION

Low accountability in the public sector is not only well known but fairly documented (Eivani, Nazari, and Emami 2012). There are several definitions of accountability. For example, Steward (1984) defines accountability refers to the relationship between two parties: the one providing an account (the accountant) and the one receiving it (the accountee). It also reflects the duty to justify actions and decisions, particularly when authority from one party (the principal) is delegated to another (the agent) (Eivani et al., 2012). Accountability is an obligation of an organisation to provide an account to the community at large (Aribi, Arun, and Gao 2019). According to Steward (1984), accountability can be classified into five dimensions: probity and legality, process, performance, programme, and policy. In the public sector, accountability is vital because it strengthens organizational credibility, particularly for non-profit entities (Siswantoro, Rosdiana, and Fathurahman 2018). Strong accountability fosters stakeholder trust and encourages wider support, including donations (Kearns and Yankoski 2005). Accountability is one of the good governance principles (Monks and Minow 2004). Accountability promotes community trust (Sofyani, Pratolo, and Saleh 2021).

Indonesia's public government accountability is yet to be optimal (Wicaksono 2015). (Susan and Budirahayu 2018) It can be concluded that the village government still faces several problems, including the manipulation of village land, the collection of village funds, administrative service violations, the capture of central government aid funds, and the manipulation of village fund allocations. These problems would be hard for the village government to be accountable for. Social media technology is believed to develop government accountability (Sofyani, Pratolo, and Saleh 2021; Bertot, Jaeger, and Grimes 2010; 2012; Antlöv, Wetterberg, and Dharmawan 2016; Antlöv 2010). However, social media adoption among village governments in Indonesia is less established. Adoption of technology in other aspects has been well documented in Indonesia's context (Ilona et al. 2019; Ezra et al. 2018; Khairuddin et al. 2018; Zaitul et al. 2019; Puspa, Ilona, and Zaitul 2019; Pratimaratri, Ilona, and Zaitul 2019; Zaitul, Ramadhani, and Ilona 2018). Further, previous researchers paid less attention to the acceptance of social media technology among village governments. Although previous studies (Zhang and Xiao, 2017) have investigated the acceptance or assimilation of social media adoption, they have not analysed social media assimilation among municipal governments in China. Therefore, this study

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examines the predictors of social media assimilation among village governments in Indonesia. In this case, the village government being investigated is the village located in Pariaman city. This city is in West Sumatra province, one of Indonesia's provinces.

This study uses the technology-organisational-environmental (TOE) framework (Tornatzky and Fleischer 1990) to examine the organisational level adoption of social media technology. In addition, this study also uses the Technology Acceptance Model (TAM) (Davis 1993; Venkatesh and Davis 2000). There are two contextual variables used here: technology context and organisational context. Thus, the technology context proxy is technology competence, and meanwhile, the organisational context is measured by top management support. Technology competence is also known as technology readiness among organisations (Zhu, Kraemer, and Xu 2003; Zhu et al. 2006). This competence is related to the technology capability of the organisation and consists of information technology infrastructure and IT professionals (Zhang and Xiao 2017). If the organisation has a better technology infrastructure and IT professionals, it has a good technology readiness and is finally willing to adopt it. Therefore, there is a positive relationship between technology competence and the adoption of social media technology. Previous studies support this relationship, among others (Gangwar, Date, and Ramaswamy 2015; Zhang and Xiao 2017). The second predictor variable is top management support. Like technology, organisational context variables, such as top management support, have also been recognised in initiating, implementing, and adopting several technologies, like social media technology (Gangwar, Date, and Ramaswamy 2015). The perception and actions of top management regarding the usefulness of technology innovation in creating value for an organisation (Salwani et al. 2009). The form of support from top management could be (i) involvement, (ii) promoting, (iii) providing a guideline, and (iv) facilitating coalition (Matta 2008; Rai and Bajwa 1997).

The relationship between top management support and technology adoption has also been supported by previous studies (Gangwar and Ramaswamy 2015; Zhang and Xiao 2017). The last predictor is society readiness. Thus, Zhang and Xiao (2017) argue that societal readiness is a state of mind—a society's predisposition and likelihood to try new technology services. If the society's readiness is high, the village government has a strong intention to use the technology, and vice versa. Many previous studies have employed people's readiness in the context of technology as an independent variable, alongside partner or consumer readiness. Previous studies have documented that societal readiness has a positive impact on the adoption of social media technology (Zhang and Xiao, 2017). Based on the explanation above, this study develops two hypotheses:

H1: Technology competence is positively related to social media technology adoption among the village government.

H2: Top management support is positively related to social media technology adoption among the village governments.

H3: Society readiness is positively related to social media technology adoption among the village government.

II. METHODS

This research focuses on village governments in Pariaman City, with all 55 villages included as the sample. Primary data were collected through surveys conducted between September and October 2021. The study examines social media technology adoption as the dependent variable, while technology competence, top management support, and community readiness serve as independent variables. Each construct was measured using three items adapted from Zhang and Xiao (2017), assessed on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) (Likert, 1931). Data were analysed using Structural Equation Modelling (SEM) with SmartPLS 3.3.3. The analysis covered both measurement model assessment (MMA) and structural model assessment (SMA) (Hair et al. 2017). Convergent validity was tested through outer loadings, Cronbach's alpha, composite reliability, and average variance extracted (AVE), while discriminant validity was examined using the Fornell-Larcker criterion, cross-loadings, and the HTMT ratio (Vinzi et al. 2010). For SMA, predictive relevance (Q^2) and explanatory power (R^2) were assessed, and significance was determined using p-values and original sample estimates. Additionally, the study applied Artificial Neural Networks (ANN) (Simpson 1990) and Importance-Performance Map Analysis (IPMA) (Ringle and Sarstedt 2016) to enhance the findings.

III. RESULT

A total of 46 village governments participated in this study, representing 83.64% of the population. Questionnaires were completed by the head of general affairs, with one response per village. Three demographic characteristics were recorded. In terms of age, respondents were mainly 24–30 years old (43.48%), followed by 31–40 (32.61%), 41–50 (13.04%), and above 50 (4.35%). Most respondents were female (78.26%), while 21.74% were male. Regarding education, 19.57% held a senior high school degree, 13.04% a diploma, and 67.39% a bachelor's degree. Descriptive statistics for the research variables (Table 1) indicate high levels across all constructs. Technology competence, measured by three items (teco1–teco3), shows very high competency in social media use. Top management support also scored high, suggesting strong leadership backing for technology utilisation. Society readiness was found to be high as well. Finally, the social media technology adoption construct, measured by three items, reveals that adoption among village governments is already at a high level.

Table 1: Mean of the Research Variable and Its Category

Items	Mean	Mean (100)	category
teco1	4.50	90.00	very high
teco2	4.59	91.74	very high
teco3	4.59	91.74	very high
average	4.56	91.16	very high
tms1	4.59	91.74	very high
tms2	3.98	79.57	adequate
tms3	3.91	78.26	adequate
average	4.16	83.19	high
sore1	4.24	84.80	high
sore2	4.11	82.20	high
sore3	4.30	86.00	high
average			high
adop1	4.15	83.04	high
adop2	3.98	79.57	adequate
adop3	4.30	86.09	high
average	4.14	82.90	high

The measurement model assessment results are summarised in Table 2. For the social media technology adoption construct, only one item (adop3) is valid, with an outer loading above 0.70 (Hulland 1999). Reliability is confirmed by Cronbach's alpha and composite reliability (>0.70), and AVE exceeds 0.50 (Bagozzi and Yi 1988), meeting the convergent validity criteria. The society readiness construct shows all items valid (outer loadings >0.70), with reliability and AVE values also satisfying the requirements. For technology competence, two items (teco1 and teco3) are valid, supported by adequate Cronbach's alpha, composite reliability, and AVE. Lastly, top management support demonstrates two valid items, with reliability (CA and CR >0.70) and AVE above 0.50. Overall, all constructs fulfil the convergent validity standards.

Table 2: Convergent Validity

Construct	Item	outer loading	CR	CA	AVE
Social media technology adoption	adop3	1.00	1.00	1.00	1.00
society readiness	sore1	0.89	0.91	0.87	0.77
	sore2	0.90			
	sore3	0.84			
technology competence	teco1	0.86	0.88	0.73	0.79
	teco3	0.92			
top management support	tms2	0.94	0.95	0.89	0.90
	tms3	0.96			

Tables 3 and 4 show the results of the discriminant validity test. Table 4 is the result of the discriminant validity test using the Fornell-Lacker criterion. The bold value indicates the result of the square root of AVE's construct. For example, the square root of AVE's ADOP is 1. This value must be greater than the relationship between ADOP and SORE (0.15), TECO (0.31) and ADOP and TMS (0.33). Thus, it satisfies discriminant validity requirements using the Fornell-Lacker criterion (Henseler, Ringle, and Sarstedt 2015). The same procedure is used to assess another construct. In brief, all constructs achieve the assertion, and the discriminant validity is evidenced.

Table 3: Discriminant Validity: Fornell-Lacker Criterion

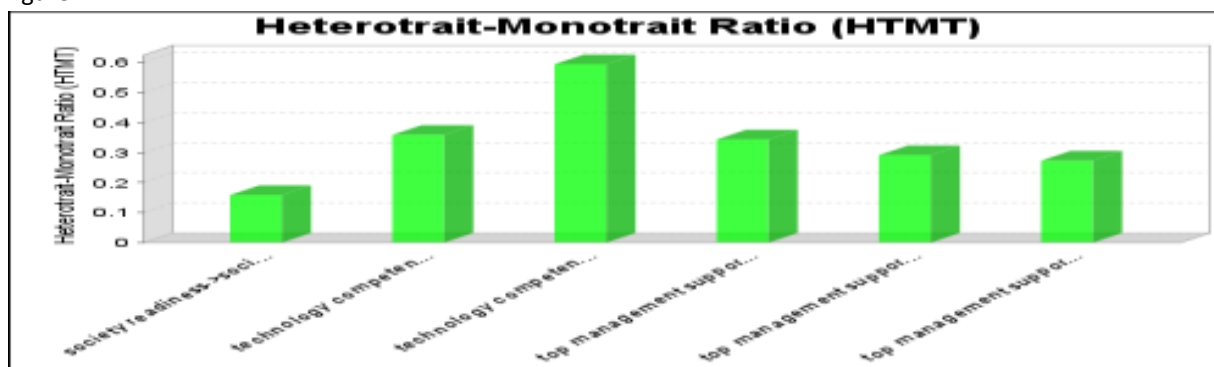
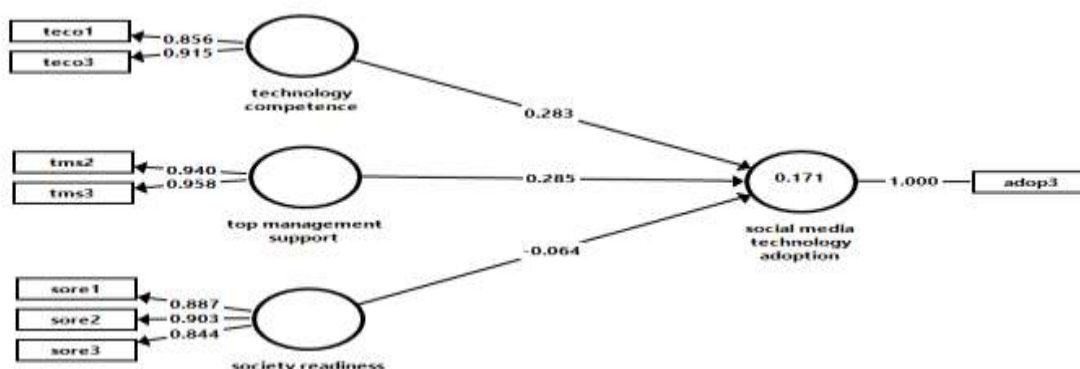
Construct	ADOP	SORE	TECO	TMS
social media technology adoption	1.00			
society readiness	0.15	0.88		
technology competence	0.31	0.50	0.89	
top management support	0.33	0.27	0.21	0.95

The second assessment for discriminant validity is cross-loading. Table 4 presents the results of cross-loading the items onto the construct. Items of TECO 1 (0.86) and TECO 2 (0.92) have a higher loading on TECO compared to other constructs. In addition, the top management team (TMS2 and TMS3) also has a higher loading on TMS's construct compared to other constructs. Therefore, the cross-loading test indicates that discriminant validity is achieved (Hair et al. 2017).

Table 4: Discriminant Validity: Cross-Loading

Items	ADOP	SORE	TECO	TMS
adop3	1.00	0.15	0.31	0.33
sore1	0.16	0.89	0.52	0.31
sore2	0.13	0.90	0.40	0.18
sore3	0.10	0.84	0.36	0.18
teco1	0.24	0.34	0.86	0.28
teco3	0.31	0.52	0.92	0.11
tms2	0.28	0.26	0.20	0.94
tms3	0.34	0.25	0.20	0.96

The third assessment for discriminant validity is the heterotrait-monotrait ratio (HTMT). This ratio should be higher or lower than 0.85 (Kline, 2011). As shown in Figure 1, all constructs have an HMT ratio lower than 0.85. For example, the HMT for social media technology adoption and technology competence is 0.36, and 0.34 for top management support. Therefore, it can be concluded that the ratio for all constructs is achieved and supports the discriminant validity requirement. The measurement model can be seen in Figure 2.


Figure 1. Heterotrait-monotrait ratio (HTMT)

Figure 2. Measurement model

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The assessment result for the structural model is demonstrated in Table 6. In Table 6, the Q-square test result (predictive relevance) is 0.001. Thus, the value is greater than 0. Therefore, it means that the exogenous variable (technology competence and top management support) has predictive relevance for the endogenous construct (social media technology adoption) under consideration. Further, Table 6 also indicates the predictive power of the model. R-squared is 0.17, and it is categorised as moderate predictive power (Cohen 1992). Moreover, the hypotheses are answered using the t-statistic or p-value and the original sample to see the direct effect. The effect of technology competence on social media technology adoption (see Table 6) is positively significant due to its p-value below 0.05, and its original sample direction is positive. Therefore, the first hypothesis is accepted. It means that the higher the technology competence of an organisation, the higher the social media technology adoption. The second hypothesis is also accepted due to its p-value below 0.05. The direction effect is also positive, indicating that high-level management support increases social media technology adoption. Finally, society readiness has a p-value greater than 0.05, which means that there is no significant effect on the adoption of social media technology. The structural model can be seen in Figure 3.

Table 6: Structural Model Assessment Result

Endogenous construct	Q square	decision	R square	decision
Social media technology adoption	0.001	low	0.171	moderate
Relationship	Original sample	t stat	p-value	decision
society readiness -> social media technology adoption	-0.064	0.382	0.702	not supported
technology competence -> social media technology adoption	0.283	2.030	0.043	supported
top management support -> social media technology adoption	0.285	2.564	0.011	supported

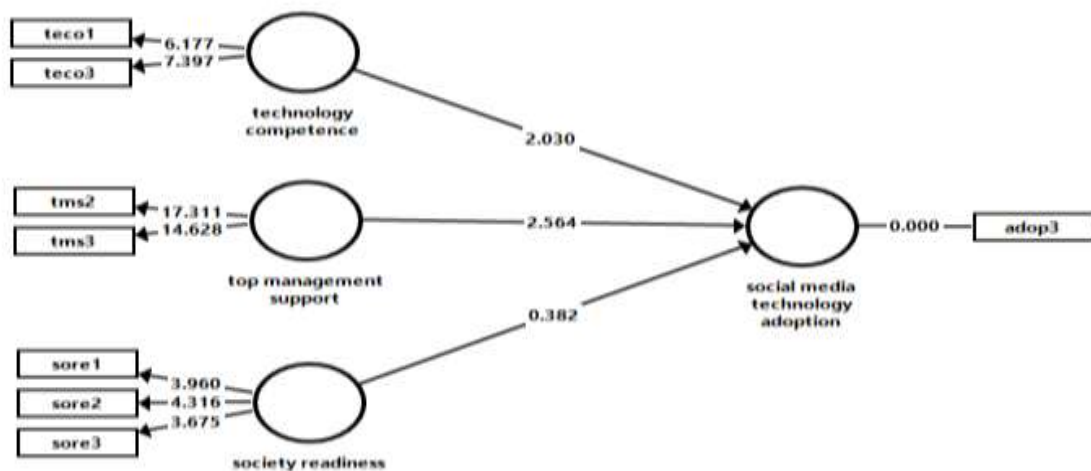


Figure 3. Structural model

Artificial neural network (ANN) analysis

Artificial Neural Network (ANN) analysis uses the only significant independent construct resulting from the SmartPLS bootstrapping output. Therefore, technology competence (TECO) and top management support (TMS) are included in this analysis. Figure 4 depicts the ANN model composed of an output neuron (ADOP) and two input neurons (TECO and TMS). The deep ANN procedure (one-layer) allowed deeper learning for each output neuron node (Lee et al. 2020). This study applied the sigmoid function as the output layer activation function for output and the hyperbolic tangent for the hidden layer activation function. The present study utilised a third-fold cross-validation method ($r=70:30$) for testing and training data to avoid ANN model overfitting (Sharma and Sharma 2019). The root mean square of error (RMSE) is assessed to see the accuracy of the neural network. The RMSE for training is 0.1496 and 0.0882 for testing. Based on the RMSE values, we can conclude that the research model achieves high precision in its application of ANN.

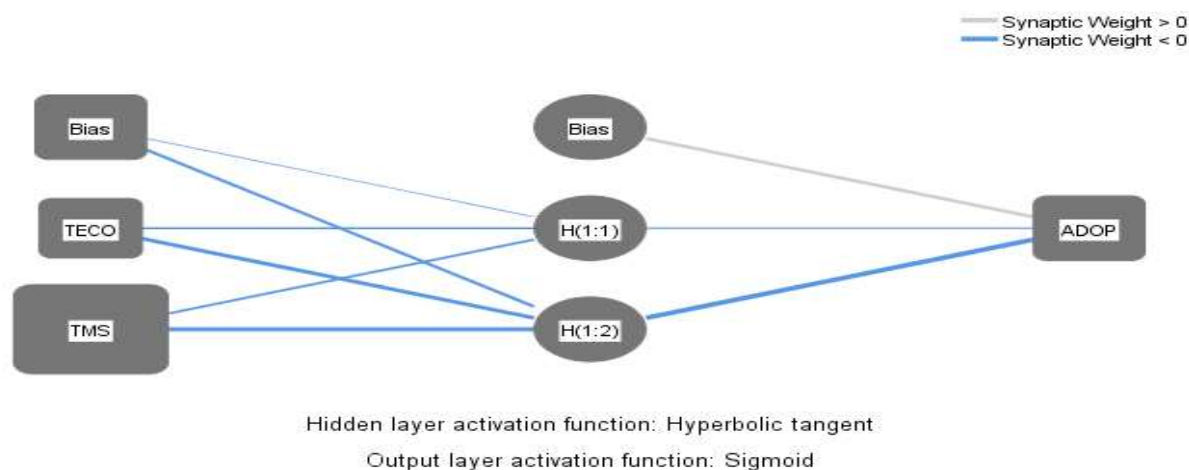


Figure 4. ANN model

Table 7 indicates the mean and normalised usefulness of the independent variable used in the ANN model. As shown in Table 9, top management support (TMS) has a higher mean (0.71) compared to technology competence (0.29). It can be concluded that top management support is the primary predictor of social media technology adoption (ADOP).

Table 7: Independent Variable Important

Independent Variable	Importance	Normalized Importance
TECO	0.29	40.1%
TMS	0.71	100.0%

Important-performance MAP (IPMA) analysis

This study also uses IPMA to evaluate the factors affecting social media technology adoption among village governments. (Ringle and Sarstedt 2016) argue that IPMA brings a better understanding of the PLS-SEM procedure. In addition, IPMA is an alternative path coefficient tester (an important measure), and it also comprises the latent construct and its measure of performance (Ringle and Sarstedt 2016). In the map, the total effects suggest the usefulness and performance of each construct in the social media technology adoption framework. Based on Figure 5, technology competence has the highest importance and performance, followed by top management support.

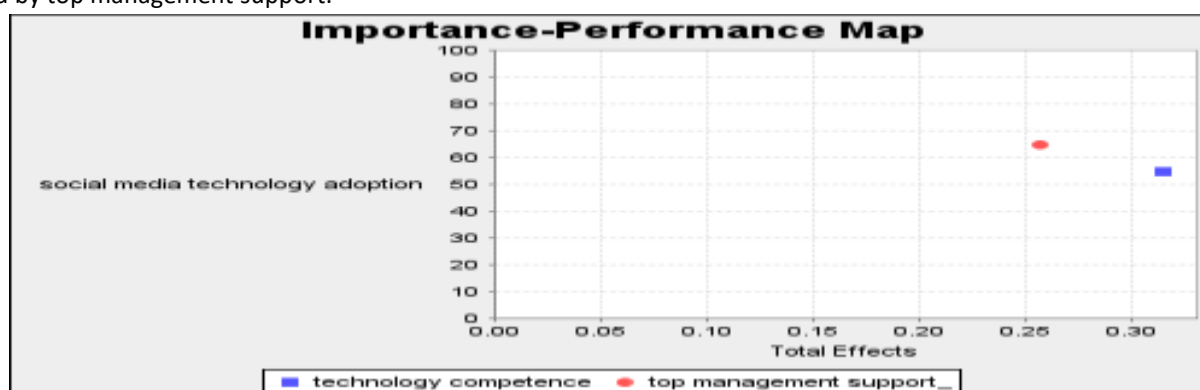


Figure 5. IPMA result

Discussion

This study's result is that technology competence positively affects social media technology adoption among village governments. Second, the top management support is positively associated with social media technology adoption among village governments. A previous study supports the first finding (Gangwar, Date, and Ramaswamy 2015; Zhang and Xiao 2017). To increase the adoption of social media technology among village governments, they must provide access to technology infrastructure, educate staff on technology, and offer support with a strong understanding of technology. The second finding, "a positive relationship between top management support and social media technology adoption," aligns with a previous study (Matta 2008; Rai and Bajwa 1997; Gangwar, Date, and Ramaswamy 2015; Zhang and Xiao 2017). The third independent variable (society readiness) does not significantly affect social media technology adoption, and it differs compared to previous studies (Zhang and Xiao, 2017). In this

case, the village government head participates using social media technology, including technology in the mission, strategic objectives, and strategy of the village government

IV. CONCLUSIONS

Previous studies have recognised technology adoption among organisations. However, they fail to pay their dues to public sector organisations, such as village governments. Therefore, this study investigates (i) the relationship between technology competence and social media technology adoption and (ii) the relationship between top management support and social media technology adoption. Based on the result, we conclude that technology competence and top management support are associated with social media technology adoption. This study has practical and theoretical implications. Practically, technology adoption can be increased through technology competence. Technology competence can be developed by building the information technology infrastructure and IT professionals. Technology adoption can also be improved through top management support. This support can be initiated by implementing and adopting several technology platforms to support the business process. Theoretically, this study contributes to the technology-organisational-environmental (TOE) framework (Tornatzky and Fleischer 1990). This study has several limitations and avenues for future investigation. First, this study involves a limited number of village governments, and future investigations can expand the sample size. The prospective researcher can add another city or village governance from the urban government. Second, this study only uses two latent independent variables as determinants of social media technology adoption. The next research can consider another variable, such as technology readiness. Finally, this study uses the technology-organisational-environmental (TOE) framework to underpin this relationship. Future research can employ other theories or perspectives.

REFERENCES

- 1) Antlöv, H. (2003). Village government and rural development in Indonesia: the new democratic framework. *Bulletin of Indonesian Economic Studies*, 39(2), 193–214. <https://doi.org/10.1080/00074910302013>
- 2) Antlöv, H., Wetterberg, A., & Dharmawan, L. (2016). Village governance, community life, and the 2014 village law in Indonesia. *Bulletin of Indonesian Economic Studies*, 52(2), 161–183. <https://doi.org/10.1080/00074918.2015.1129047>
- 3) Aribi, Z. A., Arun, T., & Gao, S. (2019). Accountability in Islamic financial institutions: The role of the Shari'ah supervisory board reports. *Journal of Islamic Accounting and Business Research*, 10(1), 98–114. <https://doi.org/10.1108/JIABR-10-2015-0049>
- 4) Bagozzi, R. R., & Yi, Y. (1988). On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Science*, 16(1), 74–94.
- 5) Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27(3), 264–271. <https://doi.org/10.1016/j.giq.2010.03.001>
- 6) Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2012). Promoting transparency and accountability through ICTs, social media, and collaborative e-government. *Transforming Government: People, Process and Policy*, 6(1), 78–91. <https://doi.org/10.1108/17506161211214831>
- 7) Cohen, J. (1992). Quantitative methods in psychology. *Psychology Bulletin*, 112(1), 155–159.
- 8) Davis, F. D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioural impacts. *Int. J. Man-Machine Studies*, 38, 475–487.
- 9) Eivani, F., Nazari, K., & Emami, M. (2012). Public accountability and government financial reporting. *African Journal of Business Management*, 6(29), 8475–8482. <https://doi.org/10.5897/AJBM12.072>
- 10) Ezra, A., Nengah, T. I., Nursyam, S., Desi, I., & Zaitul. (2018). Understanding the behavioural intention to use a university web-portal. *MATEC Web of Conferences*, 248, 1–5. <https://doi.org/https://doi.org/10.1051/mateconf/201824805004>
- 11) Gangwar, H., Date, H., & Ramaswamy, R. (2015). Understanding determinants of cloud computing adoption using an integrated TAM-TOE model. *Journal of Enterprise Information Management*, 28(1), 107–130.
- 12) Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modelling (PLS-SEM)*. SAGE Publications. <https://doi.org/10.1017/CBO9781107415324.004>
- 13) Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *J. of the Acad. Mark. Sci.*, 43, 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- 14) Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic Management Journal*, 20, 195–204.

- 15) Ilona, D., Melmusi, Z., Pratiwi, H., & Zaitul. (2019). Technology context and social media adoption among small and medium enterprises. *Journal of Physics: Conference Series*, 1339, 1–7.
<https://doi.org/10.1088/1742-6596/1339/1/012101>
- 16) Kearns, K., & Yankoski, L. (2005). Comparing Faith-Based and Secular Community Service Corporations in Pittsburgh and Allegheny County, Pennsylvania. *Nonprofit and Voluntary Sector Quarterly*, 34(2), 206–231.
<https://doi.org/10.1177/0899764004269306>
- 17) Khairuddin, Herawati, S., Ilona, D., & Zaitul. (2018). Antecedents of intention to use e-learning. *MATEC Web of Conferences*, 248, 1–5. <https://doi.org/https://doi.org/10.1051/mateconf/201824805006>
- 18) Kline, R. B. (2011). *Principles and Practice of Structural Equation Modelling*. The Guilford Press.
<https://doi.org/10.1038/156278a0>
- 19) Lee, V. H., Hew, J. J., Leong, L. Y., Tan, G. W. H., & Ooi, K. B. (2020). Wearable payment: A deep learning-based dual-stage SEM-ANN analysis. *Expert Systems with Applications*, 157(1 November 2020), 113477.
<https://doi.org/10.1016/j.eswa.2020.113477>
- 20) Matta, V. A. (2008). *Predicting the adoption of radio frequency identification systems in the supply chain* [Unpublished PhD thesis, Ohio University].
https://etd.ohiolink.edu/apexprod/rws_etd/send_file/send?accession=ohiou1210423255&disposition=inline
- 21) Monks, R. A. G., & Minow, N. (2004). *Corporate Governance* (3rd Ed). Blackwell Publishing.
- 22) Pratimaratri, U., Ilona, D., & Zaitul. (2019). Digital medical data protection compliance among medical staff. *Journal of Physics: Conference Series*, 1339, 1–7. <https://doi.org/10.1088/1742-6596/1339/1/012100>
- 23) Puspa, D. F., Ilona, D., & Zaitul. (2019). Behavioural Intention to Use MYOB Accounting Application among Accounting Students. *Journal of Physics: Conference Series*, 1339(1). <https://doi.org/10.1088/1742-6596/1339/1/012126>
- 24) Rai, A., & Bajwa, D. S. (1997). An Empirical Investigation into Factors Relating to the Adoption of Executive Information Systems: An Analysis of EIS for Collaboration and Decision Support. *Decision Sciences*, 28(4), 939–974.
- 25) Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results. *Industrial Management & Data Systems*, 116(9), 1865–1886. <https://doi.org/10.1108/imds-10-2015-0449>
- 26) Salwani, M. I., Marthandan, G., Norzaidi, M. D., & Chong, S. C. (2009). E-commerce usage and business performance in the Malaysian tourism sector : empirical analysis. *Information Management & Computer Security*, 17(2), 166–185.
<https://doi.org/10.1108/09685220910964027>
- 27) Sharma, S. K., & Sharma, M. (2019). Examining the role of trust and quality dimensions in the actual usage of mobile banking services : An empirical investigation. *International Journal of Information Management*, 44(February 2019), 65–75. <https://doi.org/10.1016/j.ijinfomgt.2018.09.013>
- 28) Simpson, P. P. (1990). *Artificial neural systems*. Pergamon Press.
- 29) Siswanto, D., Rosdiana, H., & Fathurahman, H. (2018). Reconstructing accountability of the cash waqf (endowment) institution in Indonesia. *Managerial Finance*, 44(5), 624–644. <https://doi.org/10.1108/MF-05-2017-0188>
- 30) Sofyani, H., Pratolo, S., & Saleh, Z. (2021). Do accountability and transparency promote community trust? Evidence from the village government in Indonesia. *Journal of Accounting & Organisational Change*, 18(3), 397–418.
<https://doi.org/https://doi.org/10.1108/JAOC-06-2020-0070>
- 31) Stewart, J. D. (1984). The role of information in public accountability. In *Stewart, J.D., Hopwood, A., Tomkins, C., and Allen, P. (Eds.), Issues in Public Sector Accounting*, Oxford University Press, New York, NY (p. 1984).
- 32) Susan, N., & Budirahayu, T. (2018). Village Government Capacity in the Implementation of Village Law No. 6 of 2015 in Indonesia. In B. McLellan (Ed.), *Sustainable Future for Human Security* (pp. 17–27). Springer.
- 33) Tornatzky, & Fleischer, M. (1990). *The processes of technological innovation*. Lexington Books.
- 34) Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model : Four Longitudinal Field Studies. *Management Science*, 46(2), 186–204.
- 35) Vinzi, V. E., Chin, W. W., Henseler, J., & Wang, H. (2010). *Handbook of Partial Least Squares: Concepts, Methods and Applications*. Springer. <https://doi.org/10.1007/978-3-540-32827-8>
- 36) Wicaksono, K. W. (2015). Akuntabilitas Organisasi Sektor Publik. *JKAP (Jurnal Kebijakan Dan Administrasi Publik)*, 19(1), 1–15. <https://doi.org/10.22146/jkap.7523>
- 37) Zaitul, Ramadhani, F., & Ilona, D. (2018). Determinants of web-user satisfaction : using the technology acceptance model. *MATEC Web of Conferences*, 248, 1–5. <https://doi.org/https://doi.org/10.1051/mateconf/201824805009>
- 38) Zaitul, Rizki Mulyani, S., Ridwan, M., & Ilona, D. (2019). Statistical software adoption behaviour among Indonesia's undergraduate students. *Journal of Physics: Conference Series*, 1339, 1–7.

<https://doi.org/10.1088/1742-6596/1339/1/012125>

- 39) Zhang, H., & Xiao, J. (2017). Assimilation of social media in local government: An examination of key drivers. In *Electronic Library* (Vol. 35, Issue 3). <https://doi.org/10.1108/EL-09-2016-0182>
- 40) Zhu, K., Kraemer, K. L., & Xu, S. (2003). Electronic business adoption by European firms: A cross-country assessment of the facilitators and inhibitors. *European Journal of Information Systems*, 12(4), 251–168.
- 41) Zhu, K., Kraemer, K. L., & Xu, S. (2006). The Process of Innovation Assimilation by Firms in Different Countries : A Technology Diffusion Perspective on E-Business. *Management Science*, 52(10), 1557–1576.
<https://doi.org/10.1287/mnsc.1050.0487>



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