“Model acceptance and use of e-banking with Javanese philosophical approach: An effort to create less-cash society”
MODEL ACCEPTANCE AND USE OF E-BANKING WITH JAVANESE PHILOSOPHICAL APPROACH: AN EFFORT TO CREATE LESS-CASH SOCIETY

Abstract

Indonesia is a developing country with many local cultures trying to continue increasing electronic transactions with e-Banking. UTAUT2 is the one of acceptance and use of the technology model. This study focuses on investigating the effect of Javanese cultural philosophy (local culture in Indonesia) on banking customer behavior in accepting and using banking transactions. This paper is supported by qualitative information, although it uses a quantitative approach. The Javanese cultural philosophy “Ojo Gumunan, Ojo Kagetan” was the main information before distributing the questionnaire as primary data. This model uses UTAUT2 and data analysis using PLS-SEM with SmartPLS. The main results reinforce the theory that the Javanese cultural philosophy “Ojo Gumunan, Ojo Kagetan” is a significant dominant factor in influencing behavior intention. The results of applying the UTAUT2 model show a variance of 86.4% for the endogenous variable behavioral intention and 72.4% for the endogenous variable use behavior to e-banking, which exceeds the value of the original model. Findings revealed that the variables of Javanese philosophy and promotion conditions have a significant effect on behavioral intentions. The facilitating condition variables, habit variables, and behavioral intentions variables on behavior using e-banking proved to affect significantly. This study aims to evaluate the model of acceptance and use of e-banking with a Javanese philosophical approach. The contribution of this study can provide insights for practitioners and researchers that increasing non-cash banking transactions (less-cash society) through e-banking can use a local-cultural philosophical approach.

Keywords

acceptance of technology, Javanese philosophy, less-cash society, use of e-banking

JEL Classification

G20, G21

INTRODUCTION

The advancement of technology has created a cashless society marked by the reduced use of physical money because it has been replaced by electronic or digital money. However, facts in the field show that many people are not aware of being part of a cashless society. Toll payment transactions, public transportation payments, and groceries using credit or debit cards have further strengthened the cashless society. How quickly the use of cash decreases will depend on various factors, including technological developments, consumer preferences, and government policies (John, 2019). In addition, banks must play a role in dealing with the conditions of the Covid-19 pandemic and actively face new norms to help people provide education and facilities to make digital payments due to limited outside activities.
There are many factors in the acceptance and utilizing of technology related to electronic banking (e-banking). Venkatesh et al. (2012) proposed one comprehensive model that is widely used to test the technology acceptance concerning behavior – the unified theory of acceptance and use of technology (UTAUT) model. The UTAUT model has changed from the previous four core constructs: effort expectancy, performance expectancy, facilitating conditions on behavior’s intention to apply technology, and social influence. The UTAUT model uses seven core constructs because there are three new constructs: price value, habit, and hedonic motivation. Indonesia has more than 300 ethnic groups. Javanese are the largest group in Indonesia, with 41% of the total population (Pitoyo & Triwahyudi, 2017). Javanese culture in Indonesia has many philosophies that contain character values; one of the perspectives is “Ojo Gumunan, Ojo Kagetan.” This means of the attitude [We should] not to be shocked, amazed, and easily surprised by something, not spoiled (Sevtyan et al., 2018). The philosophy of “Ojo Gumunan, Ojo Kagetan” teaches about the importance of having solid self-principles, having a spirit of independence in yourself (Suprapto, 2015). One of the core constructs used in the UTAUT model is social influence. Therefore, the discussion of the acceptance and use of the UTAUT e-banking model is suitable for analysis in Indonesia with the core construct of Javanese philosophy as a subjective norm.

The movement for cash shortages in financial transactions in Indonesia was started by Bank Indonesia with a campaign for the National Non-Cash Movement, termed the Gerakan Nasional Non-Tunai (GNNT), on August 14, 2014. This program is intended to increase public awareness, thereby forming a community group accustomed to using non-cash instruments. The Indonesian banking authority released data that the number of transactions using electronic money reached 490,218,726 transactions, an increase compared to the beginning of 2019 as many as 274,687,548 transactions. The higher quantity of transactions was also followed by an increase in transaction volume, starting at the beginning of 2019 by 5,886,152 million rupiahs to 13,820,413 million rupiahs (Bank Indonesia, n.d.). The discourse of a cashless society has not been fulfilled even though the development of transactions rates and volumes rates has increased very rapidly. This is proven based on data on the money supply in the community, 99% is still in physical form. This means that the road to a cashless society is still very long. Many things make it difficult to switch to a cashless society. The phenomenon that is believed to be the main obstacle to the development of a cashless society is the low level of public financial literacy and knowledge of non-cash financial systems. The next obstacle is that it is difficult for traditional markets to adopt a cashless transaction system. For that, the public must be given education first. The most accessible education can be provided through traditional cultural approaches and cashless movement programs offered by the government.

The Indonesian Internet Service Providers Association (2018) report explains that the penetration of internet users in Indonesia increases by around 8% to 143.26 million people, which is almost 55% of the total population out of 262 million banking transaction services. This is only 7.39%, the smallest of all services used. Indonesia is ranked 31st and 32nd, respectively, in innovation and business sophistication, placing Indonesia as a top innovator among developing countries. However, Indonesia lags significantly behind in technological readiness (ranked 80th) despite making steady progress in this area over the past decade (Shwab, 2018).

There have been many previous studies that discuss the cashless society phenomenon. Still, not many have revealed how the actual use and acceptance of e-banking with a cultural approach reduce cash transactions. Rahi et al. (2018) showed related internet banking adoption using a UTAUT model and electronic service (e-service) quality. However, this study does not include the socio-cultural elements, which influence the use and acceptance of technology. Pertiwii and Ariyanto (2017) and Putri and Suardikha (2020) used the socio-cultural construct of the Balinese Indonesian people. Tri Hita Karana (THK) culture is understood as teaching to achieve life happiness through harmony, balance, and togetherness in various life contexts, revealing that socio-cultural does not affect behavioral intention. This study emphasizes the discussion of the influence of the Javanese cultural philosophy “Ojo Gumunan”
and “Ojo Kagetan” on the acceptance and use of e-banking, distinguishing it from other studies to support the cashless society program.

This study analyzes how much the Javanese cultural philosophy “Ojo Gumunan, Ojo Kagetan” as a local culture in Indonesia influence banking customer behavior in accepting and using banking transactions to support a cashless society. The main focus to be achieved in this study: (1) check the influence of Javanese philosophy and facilitating conditions on intention behavior; (2) check the influence of facilitating conditions, habits, and behavior intention on the use behavior of e-banking. The contribution of this paper can provide insights for bank customers, banking practitioners, and financial service authorities that increasing non-cash banking transactions (less-cash society) through e-banking can be achieved via local-cultural philosophical approach. A model acceptance and use of e-banking with a Javanese philosophical approach is a novelty of this study.

1. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

A well-known and widely used theory in information technology research is UTAUT by Venkatesh et al. (2003). UTAUT theory was developed based on eight ideas that have preceded them (Alghatrifi & Khalid, 2019), namely: theory of planned behavior (TPB), technology acceptance model (TAM), C-TAM-TPB developed by Taylor and Todd (1995), motivational model (MM), diffusion of innovation theory (DOI), model of PC (MPCU), theory of reasoned action (TRA), and social cognitive theory (SCT). The four keys of UTAUT theory include effort expectancy (EE), performance expectancy (PE), facilitating condition (FC), and social influence (SI), and four moderating variables that directly influence behavioral intention and technology use. Considering social influence, Venkatesh et al. (2003) explained that three mechanisms can impact individual behavior, namely: compliance, internalization, and identification. Separate obedience mechanisms will change a person’s intention in response to social pressure. Social factors include laws, family, references, social class, and culture.

Basel Committee on Banking Supervision (Basel Committee, 1998) explained that electronic banking refers to providing banking products offered and services such as account management, savings, loans, payment of bills, financial advice, and other retail and small value conditions through electronic channels. Daniel (1999) defined e-banking as distributing banking services and data among clients through different sources that can be accessed via PCs or other devices. Keivani et al. (2012) explained that e-banking is a general notion for a process where customers can conduct banking transactions electronically without visiting a branch office. Commonly, such services are provided 24 hours a day, 7 days per week through this sophisticated information system. Electronic banking is a way for bank clients to obtain information, communicate, and conduct transactions using electronic media, namely ATMs, phone/internet/mobile/SMS bankings, electronic data capture (EDC)/point of sales (POS), e-commerce, and video banking (Nelson et al., 2015).

Kotler et al. (2018) argued that culture is a factor that underlies a person’s desires and behavior. Culture is a belief, values, and habits observed, leading a person to a building or service (Sumarwan, 2015). One form of culture that humans use is language. Language is a mean of communication with others that can be done in writing, orally, and in gestures to convey intentions or desires (Sulasman & Gumilar, 2013). In addition, the family environment habits shape consumers’ values and personalities to have perceptions, attitudes, and opinions about the brand or products (Armstrong et al., 2014). Suseno (2001) explained that the Javanese in Indonesia adhere to their language and customs as a divine culture that must be preserved; even though they have moved and lived outside the island of Java, they still maintain Javanese traditions and language. One of the Javanese languages that is very much adhered to is Ojo...
Gumunan, Ojo Kagetan, according to Adji (2017), which means “don’t be easily surprised and don’t be easily amazed”. Suprapto (2015) defined the “don’t be easily shocked and don’t be easily surprised” concept, meaning the importance of having a solid self-principle, not being easily swayed wherever the waves drag you to deceive you. Maryono (2015) provides a review of the meaning of Ojo Kagetan quoted from opinions on Facebook about the lessons that can be learnt from this philosophy, namely the teachings to be alert, introspective, flexible, and not reactive. Suppose it is interpreted more deeply in the philosophy of “Ojo Gumunan, Ojo Kagetan” conveyed by parents. In that case, it means a lot for individuals to behave calmly in the face of change (Susetyo, 2013). Quiet behavior does not mean being slow but makes individuals mature in their behavior, including being more careful, conscientious, and not reckless, especially in dealing with technology that is always renewable (Susetyo, 2013). Pitutur Becik (2011) conveys the meaning of Ojo Gumunan: first, as teaching to behave in living life events with a wise attitude and wisdom, avoiding prejudice that is not good, it is expected to take a reasonable attitude following proportions and not excessive. Second, as teaching to stay away from greedy thoughts and follow lust. Third, the teaching not to be easily disappointed. Based on the literature on the philosophical meaning of “Ojo Gumunan, Ojo Kagetan,” the focus group discussed this meaning with humanist experts.

The study uses local cultural constructs in Indonesia, from Bali with “Tri Hita Karana” (THK). The Tri Hita Karana philosophy is intended as three harmonious relationships between humans and God, other humans, and nature to lead to the safety and tranquility of the universe. THK cultural philosophy is implemented in several research models such as the accounting information system (SIA) by Kassandra et al. (2016), resource management and performance by Aditya and Kusuma (2019), UTAUT by Ariyanto et al. (2017), and UTAUT2 by Pertiwi and Ariyanto (2017). The Javanese cultural philosophy that has been part of the study is the “ewuh pakewuh” culture, which means the attitude of being reluctant, feeling reluctant, and promoting respect for superiors or seniors (Soeharjono, 2011). Javanese culture “ewuh pakewuh” is implemented in the study, such as internal control systems (Indrajit, 2013; Soeharjono, 2011), government bureaucracy (Wati, 2014), and marketing (Wibowo, 2020). Many studies discuss the use and acceptance of electronic banking based on the UTAUT or UTAUT2 concepts (Venkatesh et al., 2012, 2003), such as Alalwan et al. (2017), Arenas Gaitán et al. (2015), Farah et al. (2018), Oliveira et al. (2016), Rahi et al. (2018), Gharaibeh and Arshad (2018), Owusu et al. (2019), Wong et al. (2014), Mahfuz et al. (2016), and Megadewandaru et al. (2016).

According to Rahi et al. (2017), acceptance of new technologies is a complex phenomenon and there is a need for several models. Thus, the model suggested in this paper reconstructs the social influence with the Javanese cultural philosophy of “Ojo Gumunan, Ojo Kagetan.” Following UTAUT2 (Venkatesh et al., 2012), the model uses such variables: hedonic motivation, Javanese philosophy, effort expectancy, performance expectancy, habit, facilitating conditions, and price value.

The construct Javanese philosophy replaces the social influence construct (Pertiwi & Ariyanto, 2017; Putri & Suardikha, 2020; Venkatesh et al., 2012), image (Moore & Benbasat, 1991), and social factors (Thompson et al., 1991). According to Venkatesh et al. (2003), there is no significant social influence construction in a voluntary context; however, each becomes significant when its use is mandated. Venkatesh and Davis (2000) concluded that this effect can be associated with adherence in the context of mandatory causes that social influence directly impacts intention. Conversely, social influence in a voluntary context works by influencing perceptions of technology, using identification and internalization. However, this study uses different variables, including social and cultural influences on intention behavior.

Based on the comprehensive literature reviews, the UTAUT2 conceptual model has been developed with modified social influences in the Javanese cultural philosophy “Ojo Gumunan, Ojo Kagetan” to predict the correlation related to the dimensions of this study. Figure 1 shows the effect of JP (Javanese philosophy), PV (price value), and SO (social influence) on the dependent variable, attitude toward online banking (AOWB), which is predicted by the UTAUT2 model. The model suggests that social influence, cultural philosophy, and technology acceptance factors influence individual behavior towards online banking.
value), EE (effort expectancy), PE (performance expectancy), HM (hedonic motivation), FC (facilitating conditions), HB (habit) on BI (behavioral intention) as well as HB, FC and BI on UB (use behavior to e-banking). Figure 1 also shows formative indicators for the Javanese philosophy variable and reflective indicators for each other variable. Thus, it can be hypothesized that:

- Increased Javanese philosophy can boost behavioral intention. 
- Increased performance expectancy can boost behavioral intention. 
- Increased effort expectancy can boost behavioral intention. 
- Increased facilitating conditions can improve behavioral intentions. 
- Increased facilitating conditions can boost use behavior. 
- Increased hedonic motivation can improve behavioral intentions. 
- Increased price value can improve behavioral intentions. 
- Increased price value can improve behavioral intentions. 
- Increased habit can improve behavioral intentions. 
- Increasing habits can boost use behavior to e-banking. 
- Increasing behavioral intention can boost use behavior to e-banking.

This study refers to qualitative information to support quantitative analysis. Qualitative information was obtained from Indonesian cultural experts about the meaning of the Javanese cultural philosophy “Ojo Gumunan, Ojo Kagetan.” The results of interviews with cultural experts then become material for discussion on the focus group discussion.

Source: Venkatesh et al. (2012).

**Figure 1. The model based on UTAUT2**
2. METHODS

The study population are users of e-banking services in Central Java, Indonesia. Central Javanese are mostly Javanese with various economic and social backgrounds. A non-probability sampling approach is used to select e-banking users. The sampling method considered appropriate is purposive sampling because it allows obtaining reliable data. It also enables the selection of respondents who can share perspectives on the Javanese philosophy of “Ojo Gumunan, Ojo Kagetan” and the use of e-banking.

The paper uses primary data from respondents who are distributed through a questionnaire survey (Appendix A). The items and questionnaire scales used are based on the UTAUT2 model except for the Javanese philosophy variable built based on FGD and cultural experts. The Likert scale is used to measure items, ranging from strongly agree (5) to strongly disagree (1). Of the questionnaires that were distributed, 228 questionnaires were returned and filled out. However, there are 226 responses declared valid.

The partial least squares (PLS) and structural equation model (SEM) are helpful for the analysis being an approach developed by Hair et al. (2014). Chin (2010) recommends that the reporting of PLS results use a two-step approach, namely: the measurement model (external model) and the structural model (inner model). The statistical tool used is the partial least squares (PLS-SEM) to help explain the theory in exploratory research. Hair et al. (2014) stated that PLS-SEM helps explain the causal relationship between the dependent and independent variables. The SEM procedure is carried out in two steps, namely the outer model and the inner model. The outer model is an analysis of measuring the validity and reliability of the instrument. PLS-SEM can also overcome different construct models, namely reflective and formative measured constructs, in evaluating measurement models. Evaluation of measurement models for reflective and formative measurable constructs is separate so that it requires consideration before choices are made. The formative variable measurement model is eligible if (Hair et al., 2014): first, the significant weight is greater than 1.65 for the considerable level of 10% or greater than 1.96 for the 5% significant level, and if the significant level is 1%, it must be more than 2.58. Second, multicollinearity is considered, if the VIF value is less than 5, and the tolerance level is more significant than 0.20. Another method often used to assess discriminants is the cross-loading measurement, the steps to be taken in cross loading by comparing the external loading of the related construction indicators. The size obtained must be greater than all loading on other constructions (Henseler et al., 2016).

3. RESULTS

The statistical package for social sciences and PLS were used to estimate the validity and reliability of the constructs. The PLS analysis technique is not too complicated, and the sample used is small. The first essential criterion for testing the goodness of measure is validity and reliability. In non-parametric conditions, PLS can model latent constructs (Cohen, 2013). The respondents from this study were 226 people who used e-banking, consisting of 39.82% men and 60.18% women.

Convergent validity is the certainty of the size of the item to be measured. Table 2 shows that the reflective indicator values are in the range from 0.7 to 0.9. The values resulting from the analysis are more than 0.5, the cut-off point suggested by Hair et al. (2014), and are considered to have significant cross-loading. Reliability is measured using composite reliability (CR), and Table 1 shows that the CR value is more than the recommended value of 0.7 (Hair et al., 2014). The results showed that the constructs are valid and within the suggested range sizes. For formative indicators (Javanese philosophy construct), validity and reliability are indicated by the VIF value (less than 5), the significance of weights/T-statistic (greater than or equal to 1.96,) and P-value (less than 0.05). Table 2 shows the corresponding value of formative indicators.

Discriminant validity is used to measure whether the constructs are different. This test looks to see if the item didn’t accidentally measure something
### Table 1. Convergent validity and reliability for the reflective indicators

| Indicators                  | Convergent validity | Reliability          |
|-----------------------------|---------------------|----------------------|
|                             | Loading factor | AVE | ρA | Cronbach’s alpha | Composite reliability |
| Performance expectations (PE) | > 0.70       | > 0.50 | > 0.7 | > 0.70 | > 0.70 |
| PE1                         | 0.856        | 0.691 | 0.855 | 0.851 | 0.899 |
| PE2                         | 0.864        | 0.864 | 0.857 | 0.853 | 0.901 |
| PE3                         | 0.816        | 0.793 | 0.854 | 0.853 | 0.901 |
| PE4                         | 0.787        | 0.787 | 0.854 | 0.853 | 0.901 |
| Effort expectancy (EE)      | > 0.70       | > 0.50 | > 0.7 | > 0.70 | > 0.70 |
| EE1                         | 0.828        | 0.694 | 0.855 | 0.853 | 0.901 |
| EE2                         | 0.851        | 0.851 | 0.857 | 0.853 | 0.901 |
| EE3                         | 0.857        | 0.857 | 0.857 | 0.853 | 0.901 |
| EE4                         | 0.793        | 0.793 | 0.857 | 0.853 | 0.901 |
| Facilitating conditions (FC)| > 0.70       | > 0.50 | > 0.7 | > 0.70 | > 0.70 |
| FC1                         | 0.845        | 0.743 | 0.885 | 0.885 | 0.921 |
| FC2                         | 0.881        | 0.881 | 0.859 | 0.859 | 0.921 |
| FC3                         | 0.859        | 0.859 | 0.859 | 0.859 | 0.921 |
| FC4                         | 0.862        | 0.862 | 0.862 | 0.862 | 0.921 |
| Hedonic motivation (HM)     | > 0.70       | > 0.50 | > 0.7 | > 0.70 | > 0.70 |
| HM1                         | 0.893        | 0.764 | 0.849 | 0.845 | 0.907 |
| HM2                         | 0.88         | 0.88  | 0.88  | 0.88  | 0.907 |
| HM3                         | 0.848        | 0.848 | 0.848 | 0.848 | 0.907 |
| Price value (PV)            | > 0.70       | > 0.50 | > 0.7 | > 0.70 | > 0.70 |
| PV1                         | 0.881        | 0.789 | 0.871 | 0.867 | 0.918 |
| PV2                         | 0.886        | 0.886 | 0.886 | 0.886 | 0.918 |
| PV3                         | 0.899        | 0.899 | 0.899 | 0.899 | 0.918 |
| Habit (HB)                  | > 0.70       | > 0.50 | > 0.7 | > 0.70 | > 0.70 |
| HB1                         | 0.867        | 0.736 | 0.825 | 0.821 | 0.893 |
| HB2                         | 0.873        | 0.873 | 0.873 | 0.873 | 0.893 |
| HB3                         | 0.833        | 0.833 | 0.833 | 0.833 | 0.893 |
| Behavioral intention (BI)   | > 0.70       | > 0.50 | > 0.7 | > 0.70 | > 0.70 |
| BI1                         | 0.817        | 0.694 | 0.783 | 0.779 | 0.872 |
| BI2                         | 0.812        | 0.812 | 0.812 | 0.812 | 0.872 |
| BI3                         | 0.869        | 0.869 | 0.869 | 0.869 | 0.872 |

### Table 2. Formative indicators

| Indicators                  | VIF | Significance of weights/T-Statistic | P-Value |
|-----------------------------|-----|-------------------------------------|---------|
|                             | < 5 | > 1.96 (5%)                         | <0.05   |
| Javanese philosophy (JP)    |     |                                     |         |
| JP1                         | 1.83 | 2.640 | 0.009 |
| JP2                         | 2.168 | 2.416 | 0.016 |
| JP3                         | 1.941 | 3.266 | 0.001 |
| JP4                         | 1.707 | 2.149 | 0.032 |
| JP5                         | 1.694 | 3.239 | 0.001 |
| JP6                         | 2.054w | 2.215 | 0.027 |
| JP7                         | 2.001 | 2.833 | 0.005 |
| JP8                         | 2.477 | 2.348 | 0.019 |
| JP9                         | 2.304 | 2.873 | 0.004 |
| JP10                        | 1.985 | 4.703 | 0.000 |
else. According to Fornell and Larcker (1981), discriminant validity exists when the construct item itself is targeted is higher than the construct item belonging to others. For example, Table 3 shows the correlation matrix for the construction, and it can be seen that the diagonal element (bold) is taller than the off-diagonal element.

Table 4 is a recording of assessing collinearity, shows the results of VIF values greater than 0.2 and smaller than the threshold of 5, including Javanese philosophy, performance expectations, value behavior intention, behavioral intention variables, and facilitating conditions for user behavior. However, the variables of effort expectations, facilitation conditions, habits, hedonic motivation for behavioral intention, and facilitating conditions for use behavior show values above 5. Therefore, it is suspected that this multicollinearity occurs because of the very close kinship relationship between respondents. In Javanese society, culture or cultural values serve as guidelines and drivers for human behavior, influencing meaning and behavior. This function is achieved by translating it into a more concrete rule of thumb, namely positive norms and harmful norms; most values are obeyed because truth has become an individual conviction. Therefore, it should be presumed that multicollinearity occurs due to similarities in attitudes caused by cultural norms. A social factor is a group of people who view equal status or respect in society which is carried out continuously, both formally and informally (Lamb et al., 2011).

Furthermore, a path analysis was conducted to test the hypotheses. The hypotheses were tested by running a bootstrap procedure with a 5,000 repeat sample, consistent with Hair et al. (2014). The results are shown in Table 5. The findings indicate that the relationship between Javanese philosophy and facilitation conditions significantly affects behavioral intention in using electronic banking. The same results suggest that the facilitating conditions, habits, and behavioral intention of using electronic banking are significant for the use of electronic banking. The effects of significance can be observed by looking at the results of the p-value not exceeding 0.05. However, it is different from the idea that effort expectations, performance expectations, price value, hedonic motivation, and

### Table 3. Loading and cross-loadings

|     | PE   | EE   | HB   | FC   | HM   | PV   | BI   | USE |
|-----|------|------|------|------|------|------|------|------|
| PE1 | 0.856| 0.694| 0.719| 0.728| 0.704| 0.663| 0.702| 0.648|
| PE2 | 0.864| 0.689| 0.713| 0.702| 0.718| 0.656| 0.659| 0.622|
| PE3 | 0.816| 0.661| 0.647| 0.665| 0.664| 0.643| 0.588| 0.550|
| PE4 | 0.787| 0.641| 0.669| 0.689| 0.654| 0.682| 0.615| 0.616|
| EE1 | 0.719| 0.828| 0.689| 0.725| 0.721| 0.674| 0.659| 0.630|
| EE2 | 0.674| 0.851| 0.683| 0.690| 0.693| 0.665| 0.645| 0.624|
| EE3 | 0.684| 0.857| 0.694| 0.703| 0.718| 0.668| 0.659| 0.664|
| EE4 | 0.610| 0.793| 0.664| 0.639| 0.667| 0.602| 0.593| 0.651|
| HB1 | 0.777| 0.731| 0.867| 0.804| 0.800| 0.728| 0.732| 0.711|
| HB2 | 0.723| 0.710| 0.873| 0.741| 0.759| 0.698| 0.712| 0.670|
| HB3 | 0.620| 0.664| 0.833| 0.636| 0.681| 0.625| 0.617| 0.625|
| FC1 | 0.728| 0.716| 0.742| 0.845| 0.808| 0.719| 0.729| 0.725|
| FC2 | 0.750| 0.716| 0.744| 0.881| 0.770| 0.689| 0.747| 0.719|
| FC3 | 0.705| 0.716| 0.731| 0.859| 0.759| 0.672| 0.727| 0.669|
| FC4 | 0.705| 0.709| 0.720| 0.862| 0.730| 0.715| 0.761| 0.680|
| HM1 | 0.752| 0.758| 0.788| 0.830| 0.893| 0.739| 0.752| 0.704|
| HM2 | 0.721| 0.735| 0.788| 0.776| 0.880| 0.717| 0.677| 0.717|
| HM3 | 0.687| 0.710| 0.712| 0.723| 0.848| 0.698| 0.673| 0.639|
| PV1 | 0.682| 0.680| 0.666| 0.682| 0.711| 0.881| 0.601| 0.626|
| PV2 | 0.703| 0.680| 0.716| 0.703| 0.721| 0.886| 0.656| 0.674|
| PV3 | 0.730| 0.727| 0.744| 0.770| 0.756| 0.899| 0.692| 0.701|
| BI1 | 0.608| 0.629| 0.636| 0.662| 0.649| 0.564| 0.817| 0.608|
| BI2 | 0.608| 0.623| 0.638| 0.711| 0.641| 0.575| 0.812| 0.651|
| BI3 | 0.712| 0.666| 0.730| 0.771| 0.714| 0.689| 0.869| 0.700|
| USE | 0.734| 0.770| 0.781| 0.810| 0.786| 0.753| 0.786| 1.000 |
habit do not significantly affect behavioral intention to use e-banking.

The measurement model is the structural model (inner model) with $R^2$ 0.864 for behavioral intention and 0.724 for use behavior (Table 6). Overall $R^2$ results are in a strong category (Chin, 1998). Changes in the $R^2$ value can explain the effect of exogenous latent variables on endogenous latent variables, whether they substantially impact. This result is commonly referred to as the effect size ($f^2$), and the values, according to Cohen (2013), are categorized into 0.02 (small), 0.15 (moderate), and 0.35 (large). Table 7 shows the results of coefficients of determination ($R^2$), predictive relevance ($Q^2$), effect size ($f^2$), and decision. Tenenhaus (2004) developed a goodness of fit (GoF) model to calculate the overall structural model. The GoF index validates performance between measurement and structural models. GoF values ranged from 0 to 1 with interpreted values: 0.1 (small), 0.25 (medium), and 0.36 (large). The GoF value generated in this study showed that 0.762 to be categorized as large.

### Table 4. Collinearity statistics (VIF)

| Variable | Behavioral intention | Use behavior to e-banking |
|----------|----------------------|----------------------------|
| JP → BI  | H1 | 0.564 | 0.571 | 0.061 | 9.231 | 0.000 | Supported |
| PE → BI  | H2 | 0.043 | 0.047 | 0.065 | 0.661 | 0.509 | Not supported |
| EE → BI  | H3 | 0.028 | 0.028 | 0.067 | 0.411 | 0.681 | Not supported |
| FC → BI  | H4 | 0.349 | 0.336 | 0.082 | 4.270 | 0.000 | Supported |
| FC → UB  | H5 | 0.360 | 0.359 | 0.086 | 4.189 | 0.000 | Supported |
| HM → BI  | H6 | -0.084 | -0.074 | 0.081 | 1.040 | 0.298 | Not supported |
| PV → BI  | H7 | 0.000 | -0.001 | 0.047 | 0.000 | 1.000 | Not supported |
| HB → BI  | H8 | 0.055 | 0.053 | 0.069 | 0.807 | 0.420 | Not supported |
| HB → UB  | H9 | 0.245 | 0.245 | 0.080 | 3.077 | 0.002 | Supported |
| BI → UB  | H10 | 0.240 | 0.237 | 0.085 | 2.832 | 0.005 | Supported |

### Table 5. Hypotheses testing

| Indicator | Hypothesis | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T-Statistics (|O/STDEV|) | P-Values | Result |
|-----------|------------|---------------------|-----------------|---------------------------|------------------------|----------|--------|
| JP → BI   | H1         | 0.564               | 0.571           | 0.061                     | 9.231                  | 0.000    | Supported |
| PE → BI   | H2         | 0.043               | 0.047           | 0.065                     | 0.661                  | 0.509    | Not supported |
| EE → BI   | H3         | 0.028               | 0.028           | 0.067                     | 0.411                  | 0.681    | Not supported |
| FC → BI   | H4         | 0.349               | 0.336           | 0.082                     | 4.270                  | 0.000    | Supported |
| FC → UB   | H5         | 0.360               | 0.359           | 0.086                     | 4.189                  | 0.000    | Supported |
| HM → BI   | H6         | -0.084              | -0.074          | 0.081                     | 1.040                  | 0.298    | Not supported |
| PV → BI   | H7         | 0.000               | -0.001          | 0.047                     | 0.000                  | 1.000    | Not supported |
| HB → BI   | H8         | 0.055               | 0.053           | 0.069                     | 0.807                  | 0.420    | Not supported |
| HB → UB   | H9         | 0.245               | 0.245           | 0.080                     | 3.077                  | 0.002    | Supported |
| BI → UB   | H10        | 0.240               | 0.237           | 0.085                     | 2.832                  | 0.005    | Supported |

### Table 6. Evaluating coefficients of $R^2$, $Q^2$, $f^2$, and decision

| Constructs | Exogenous | Endogenous | $R^2$ | $Q^2$ | $f^2$ | Decision |
|------------|-----------|------------|-------|-------|-------|----------|
| Performance expectancy | | | | | | |
| Effort expectancy | | | | 0.007 | Small |
| Javanese philosophy | | | | 0.026 | Medium |
| Habit | | Behavioral intention | | 0.864 | 0.528 | |
| Facilitating conditions | | | | 0.016 | Medium |
| Hedonic motivation | | | | 0.012 | Small |
| Price value | | | | 0.014 | Small |
| Facilitating conditions | | | | 0.083 | Small |
| Habit | | Use behavior | | 0.724 | 0.671 | |
| Behavioral intention | | | | 0.057 | Small |
4. DISCUSSION

This study aims to evaluate the acceptance and use of e-banking using the Javanese cultural philosophy approach “Ojo Gumunan, Ojo Kagetan” following the UTAUT2 model (Venkatesh et al., 2012); this aim has been achieved.

First, the application results of the UTAUT model show a variance of 86.4% for the endogenous variable behavioral intention and 72.4% for the endogenous variable use behavior to e-banking, exceeding the values found by Venkatesh et al. (2012). Thus, the UTAUT model, which is universal, can be applied at the local level.

Second, the results of the study were statistically found, two factors were significant on behavioral intention, and three factors were substantial on use behavior to e-banking. More specifically, it was found that the Javanese cultural philosophy factor “Ojo Gumunan, Ojo Kagetan” is the primary antecedent. This shows that Kotler et al.’s (2018) statement about the dominant factor affecting behavior is culture, statistically proven. The findings of Pertiwi and Ariyanto (2017), and Putri and Suardikha (2020) showed the opposite results, perhaps due to differences in the culture applied (Balinese and Javanese) and the type of sample used. Other important antecedents such as effort expectancy (EE), performed expectancy (PE), hedonic motivation (HM), price value (PV), and habits (HB) on behavior intention (BI) are significant, according to Arenas et al. (2015), Farah et al. (2018), Gharibeh and Arshad (2018), Mahfuz et al. (2016), Oliveira et al. (2016), Owusu et al. (2019), Rahi et al. (2018), Venkatesh et al. (2012), and Wong et al. (2014). However, Van der Heijden (2004) argued that the perceived utility will be more useful when the technology is related to work. In addition, the use of technology will be increased significantly if it is required or following a condition of the activities carried out (Taylor & Todd, 1995; Venkatesh et al., 2003). The results suggest that the critical factor in e-banking use behavior is determined by the facilitating conditions; this concurs with Venkatesh et al. (2003).

In theoretical implication, this study has tested the UTAUT2 model by reconstructing the social influence using the Javanese philosophy in Indonesia. The results prove that facilitating conditions are the main factors in increasing users’ intention to adopt electronic banking in Central Java, Indonesia. Findings indicate that the Javanese philosophy of “Ojo Gumunan, Ojo Kagetan” is the most influential factor among all the other UTAUT2 factors. Thus, the proposed model contributes to the e-banking literature, especially regarding electronic banking adoption.

Managerial implications for this study indicate that the cultural approach is a fundamental factor and the organizational concept’s facilitating conditions factor. Apart from that, to increase e-banking, facilitating conditions factors, habits, and behavioral intentions become determinants. Therefore, the suggestion is put for electronic banking service providers to pay attention to local cultural factors so that e-banking can increase and the objectives of a cashless society can be achieved. It should also be noted that facilitating conditions, habits, and behavioral intentions are vital for this process.

This study has certain limitations. It is hoped that it can become a reference for future research. First, this study uses nonprobability sampling so that the results cannot be generalized. Second, this study is cross-sectional, and at one point in time, it cannot be used for longitudinal studies.

CONCLUSION

In summary, something new in this study succeeds in uncovering the influence of the Javanese cultural philosophy “Ojo Gumunan, Ojo Kagetan” as a local culture in Indonesia on banking customer behavior in the acceptance and use of banking transactions as an effort to support a cashless society. Efforts to implement a cashless society considered only a utopia through a cultural approach have proven feasible.

Results revealed that the dimensions of Javanese philosophy and facilitating conditions significantly affect intention behavior; secondly, facilitating conditions, habits, and behavior intention affect the use
behavior of e-banking. The main statement from the results of this study is that the Javanese cultural philosophy “Ojo Gumunan, Ojo Kagetan” is a significant dominant factor in influencing behavior intention of acceptance and use of banking transactions to support a cashless society.

Recommendations for further studies are expanded by adding other variables in the UTAUT2 model, such as the level of trust, the electronic banking website’s design, to gain insight into the factors that can increase the customer intention to use e-banking.

**AUTHOR CONTRIBUTIONS**

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**APPENDIX A – QUESTIONNAIRE**

**INDICATORS**

*Javanese philosophy (JP)*
- I use e-banking services wisely.
- I use e-banking services, far from prejudice.
- I use an excellent e-banking service as needed.
- I use e-banking services, adjusting the situation when there is a service change.
- I use e-banking services calmly, not in a rush.
- I use e-banking services, not greedy.
- I am not a person who is quickly disappointed in using e-banking services.
- I use e-banking services carefully.
- I use e-banking services with caution.
- I am not reactive in using e-banking services.

*Performance expectations (PE)*
- In my opinion, e-banking helps me every day in making transactions and financial information.
- In my opinion, e-banking increases transactions and financial information more quickly.
- In my opinion, e-banking increases productivity.
- In my opinion, e-banking improves performance.

*Effort expectancy (EE)*
- In my opinion, my interaction with e-banking will become more precise and more understandable.
- In my opinion, becoming an expert in using e-banking is easy.
- In my opinion, e-banking is easy to use.
- In my opinion, learning to operate e-banking is easy.

*Facilitating conditions (FC)*
- I have the appropriate resources to use e-banking.
- I have the necessary knowledge to use e-banking.
- I use e-banking compatible technology.
- I can get help from other people when I have trouble using e-banking.

*Hedonic motivation (HM)*
- Using e-banking is fun.
- Using e-banking is enjoyable.
- Using e-banking is very entertaining.

*Price value (PV)*
- Affordable e-banking prices.
- The e-banking price is a good value for money.
- At current prices, e-banking shows a good value.

*Habit (HB)*
- I use e-banking as a habit.
- I am addicted to using e-banking.
- I have to use e-banking.

*Behavioral intention (BI)*
- I intend to continue using e-banking in the future.
- I will always try to use e-banking in my daily transactions.
- I plan to continue using e-banking frequently.

*Use behavior to e-banking* (usage frequency from never to many times per month).