Factors Influencing the Use of E-Wallet among Millennium Tourist

Sharina Osman*

*Corresponding author, Senior Lecturer, Business School, Universiti Kuala Lumpur, 1016, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia. Email: sharina@unikl.edu.my.

Norhayati Jabaruddin
Business School, Universiti Kuala Lumpur, 1016 Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia.

Aisya Suria Zon
Business School, Universiti Kuala Lumpur, 1016 Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia.

Amir Aizzat Jifridin
Business School, Universiti Kuala Lumpur, 1016 Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia.

Anis Khalidah Zolkepli
Business School, Universiti Kuala Lumpur, 1016 Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia.

Abstract

The development of information and communication technologies changes how many industries and services operate. Those changes are also concerning all sectors of the travel industry, although some more than others. Mobile access to the internet allows consumers to purchase through transaction-based applications such as e-ticketing, QR-code services, Bitcoin, E-wallet, and using a third party like PayPal. E-Wallet is predicted to be one of the future's most successful payment modes but has achieved limited acceptance in developed countries to date. Similarly, this service is considered new in Malaysia. Utilizing Davis' Technology Acceptance Model, this study examines the factors contributing to E-Wallet's adoption among the millennial tourist in Kuala Lumpur. Using the self-administered questionnaires, data from 100 respondents were collected and analyzed using SPSS. The finding revealed that perceived ease of use of E-Wallet among millennial tourists proved to be the most substantial cause besides the significant positive relationships found from other variables such as perceived usefulness and social influence in the context of millennium tourists. However, perceived credibility was found not
related to the adoption of E-Wallet. These findings have important theoretical and practical implications, particularly for the development and marketing of E-Wallet service, which will support the long-term success of mobile commerce.

**Keywords:** E-Wallet, Smart Tourism, Mobile Commerce, Technology Application.

**Introduction**

In the new era of the industrial revolution, there are drastic novel technological advancements, exciting innovations, and business practices; changes in the financial information system and technology (ICT) have played an essential role in driving and shaping these innovations (Liu, Kauffman, & Ma, 2015). E-Wallet (Electronic Wallet) is one of the technology-based business innovations shaping the financial services landscape in the late 2000s up to the present (Aldridge, 2013).

E-Wallet is usually defined as payment processed and received electronically (Trivedi, 2016). Global trends allow individuals to carry out online transactions anywhere and anytime, hence reinforcing domestic and international trade. Its popularity is mainly due to flexibility and convenience, thanks to rapid technological development in the market. E-Wallet is another form of e-payment that utilizes communication technology by enabling smartphone users to make payment using Internet-connected smartphone devices (Junadi & Sfenrianto, 2015). It further intensifies the ease of online transaction (Seetharaman, Kumar, Palaniappan, & Weber, 2017).

Past studies have shown that time and location independence is the main attribute influencing the adoption of smartphone technologies and services (Teng, Ling, & Seng, 2018). Due to its usefulness, smartphone users are found to be increasingly in favour of E-Wallet methods.

The most recent generation to enter the workforce is Millennials, who are born between 1980 and 2000. They are called Millennial because of their closeness to the new millennium and being raised in a digital age (Kaifi, Nafei, Khanfar, & Kaifi, 2012). This generation was influenced by computers and a greater acceptance of non-traditional families and values (Andert, 2011). Millennial enjoy utilizing technology. The Millennial generation became dependent on technology at an earlier age than other generations. The found, much like learning a new language, people who utilize technology at an earlier age become more proficient than people who understand later in their life. It is thought that as more Millennial begin taking over the workplace, the more integrated technology will be in work processes (Kaifi et al., 2012).

Today, financial technologies have become increasingly adopted, but E-Wallet services are surprisingly not frequently applied in Malaysia, yet based on past studies (Pooi, Khalid, &
Nadarajah, 2018). Pooi et al. (2018) said that E-Wallet services are considered in their infancy stage and still entirely new to Malaysia's consumers, including tourists. This research will help E-Wallet service providers develop better consumers acceptance, specifically the millennial in using E-Wallet services and provides insights to entrepreneurs using E-Wallet service as a strategy for competitive advantage with regards to relationship marketing.

**Problem Statement and Research Gap**

Nowadays, E-Wallet is the trend of payment service used by most Malaysian organizations, especially in urban cities such as in Kuala Lumpur. Even though there is evidence from past researcher Teng, Ling, & Seng (2018) that shows, E-Wallet is fast (Seetharaman et al., 2017) and convenient (Lai, 2018) but still there is not enough evidence on how successful this practice is amongst millennial in particularly travelers. This is because E-Wallet service is still considered early and still relatively new to the consumers (Pooi et al., 2018). Hence, this study examines the factors influencing the intention to use the E-Wallet amongst millennial tourists.

**Research Objective**

To examine if perceived usefulness, ease of use, credibility and social influence intend to use the E-Wallet among millennial tourists.

**Research Question**

What is the relationship between perceived usefulness, ease of use, credibility, and social intend to use E-Wallet amongst the millennial tourist?

**Literature Review**

**Technology Acceptance Model (TAM)**

Technology Acceptance Model, or TAM, is used as a point of departure in this research (Davis, 1989). This is because TAM used to examine the behavioural intention to use information technology application such as E-Wallet (Hanudin, 2009). Many researchers worldwide use TAM Model widely (Davis, 1989; Wiedemann & Pousttchi, 2007). This is because TAM is easy to apply to different technologies. Hence, E-Wallet as one type of latest technologies is also practicable to adopt TAM to examine further factors influencing the intention to use E-Wallet (Kumar S, Sivashanmugam, & Venkataraman, 2017). In this research, TAM is a starting model of the study and extend it with additional constructs, which is essential to behavioural intention to use E-Wallet payment services (Pooi et al., 2018).

**Behavioral Intention**

Behavioural intention is defined as a person's intentions to perform various behaviours (Fishbein & Ajzen, 1975). The construct originally developed in TPB and TRA is widely used in subsequent models related to technology acceptance. The TPB suggests that behavioural
intention is the most influential predictor of behaviour (Fishbein & Ajzen, 1975). Evidence in prior studies shows that behavioural intention correlates with actual behaviour (Al-Maghrabi & Dennis, 2011; Venkatesh, Thong, & Xu, 2012). In this study, behavioural intention is taken as a dependent variable intended to use E-Wallet among millennial tourists.

Perceived usefulness

Based on diffusion theory (Rogers, 1995), one of the determinants that can be concluded as E-Wallet payment failure is slow diffusion to explain more advantages to the prospects in using E-Wallet. Through the diffusion theory, the users are willing to accept the innovations if the innovations have certain benefits compared to the existing solution. Based on TAM's context (Technology Acceptance Model), it can be related to the construct of perceived usefulness.

TAM by Davis (1989), perceived usefulness can best be defined as the degree of a person's belief that using a system will increase their job performance level. Based on the other research before Usman Shah et al. (2014), perceived usefulness is the primary key factor in determining consumers' intention in using E-Wallet in Malaysia and indicated it also affects the behavioural intention of implementing innovation technology. Other than that, Pooi et al. (2018) also agreed that the extent to which a person believes that mobile payment will improve their performance in daily activities in their study as the perceived usefulness. This construct would show how E-Wallet payment services can benefit tourists in achieving their task-related goals, such as effectiveness and efficiency.

H1: Perceived usefulness is significantly related to intention to use E-Wallet among millennium tourists.

Perceived ease of use

Perceive ease of use basically can be defined as users-friendly towards the product or services. Davis (1989) defines ease of use as the degree to which a person believes that using a particular system would be free of effort. Perceive ease of use can also be described as people's perception about using technology people would not need to allocate much of their time and efforts while using the technology (Raza, Umer, & Shah, 2017).

Focused on E-Wallet or E-payment or mobile payment, Al-Amri et al. (2016) stated that an ease of use mobile payment with well-designed interfaces and robust navigation would reflect service providers' ability and benevolence, thus affecting user trust. Besides, research by Kim, Mirusmonov, & Lee (2010) found that m-payment knowledge had positive impacts on perceived ease of use of m-payment services. Consumers with adequate m-payment services are more likely to find that the m-payment systems are easier to use. Similarly, if a system is relatively easy to use, individuals will be more willing to learn about its features and finally intend to continue using it (Abd, Zaidi, Razak, Abu, & Salihin, 2016). Kim et al. (2010) also support that perceived ease of use becomes an important driver of adopting m-payment services. In this
context, perceived ease of use is expected to positively influence millennium tourists in their interaction with mobile payment systems.

**H2: Perceived ease of use is significantly related to intention to use E-Wallet among millennium tourists.**

**Perceived credibility**

According to Pooi et al. (2018), perceived credibility is defined as the consumer's perception of the safety issues in using mobile payment services. It can be categorized into three areas: system security, transaction, and legal. However, Wang et al. (2003) stated that security and privacy are what perceived credibility is. Although they have a slightly different view on the area, involve in perceived credibility. Still, both agree that perceived credibility is the perception of how far security is the mobile wallet system. Therefore, it can be stated that it is the most important thing concern by the consumer. It is because of mobile wallet is beyond their control as it is controlled by the system. It is also supported by Wu & Yen (2014) as they stated that perceived credibility strongly influences consumers' intention to use mobile payment. Moreover, their finding revealed that perceived credibility is the most concern by the consumer than perceived usefulness and Perceived ease of use. Thus, businesses must use a good quality mobile wallet system to ensure it is safe to be used by the consumer.

**H3: Perceived credibility is significantly related to intention to use E-Wallet among millennium tourists.**

**Social Influence**

According to Venkatesh et al. (2003), social influence is defined as how individuals feel that important others believe they use the new system. It reflects environmental factors such as the ideas of the user's friends, relatives and a good advisor. This also supported by Chong et al. (2013) that social influence happens when the consumer's behaviour is influenced by others such as peers, family and media, affect the individual in the decision to adopt in mobile commerce. People use mobile services in a public social context in which they discover other activities in which they need to adjust to others interaction.

Nysveen, Pedersen et al. (2005, p.260) define social influence as "the person's perception that most people who are important to him think he should or should not perform the behaviour in question". This is shown that people use mobile services in a public social context in which they observe other activities and in which they must adapt to others interaction. Moreover, previous studies mostly show that social influence can determine the behaviour of the individual. Shin (2007) found that the mobile internet's unique feature determines social influence via mobile phone.

**H4: Social influence is significantly related to intention to use E-Wallet among millennium tourists.**
**Methodology**

This research employed quantitative analysis. The data was collected through survey questionnaires distributed to the tourist in Klang Valley. The survey questions' structure is designed as close-ended questions whereby the respondents are given a list of choices to choose from. Therefore, the survey questions' wordings and language must be understandable for the respondents since there would be limited face-to-face interactions between the researcher and the respondents.

The sample for this study is the tourists in the millennial age group. The target sample comprises tourists aged 23 to 38 who make holidays in Kuala Lumpur, Malaysia, and smartphone users. Only allowing smartphone users is that they could provide a better outlook regarding the information and be the existing users of E-Wallet services. According to Roscoe (1975), the appropriate rule of thumb sample size is greater than 30 and smaller than 500 for most research. Therefore, this study's selected sample size is 150 millennial tourists around Kuala Lumpur who were randomly selected to participate in the survey. This research used a non-probability sampling technique since it is difficult to obtain accurate information regarding the Kuala Lumpur area's millennial population size. Specifically, this research has used the convenience-sampling technique in the collection of data because it is fast, economical, easy, and subjects are readily available.

As mentioned above, the questionnaire technique was used for the data collection of this study. The questionnaire was adapted from past research. This research used Likert-Scales to examine the Factors Influencing Behavioural Intention to Use the E-Wallet Amongst Millennial in Kuala Lumpur. We have distributed 150 questionnaires but only received 100 usable questionnaires. The data was analyzed using Statistical Package for the Social Sciences (SPSS) version 20.

**Results and Discussion**

**Respondent Demographic Profile**

As shown in Table 1, the demographic analysis reveals that most of our survey participants were male. There were 48 female respondents and 52 male respondents. The majority of the respondents were from the age group of 23 to 36 years old (74%), while the respondents' least contribution to this questionnaire survey is from the age group of 35 to 38 years old (4%). The researchers also examined the respondents' contribution to this questionnaire survey based on their level of education. 76 out of 100 respondents participated in the questionnaire survey from the degree level data (76%). At the same time, the second-highest is the Diploma level. Sometimes is the highest frequency of using E-Wallet by the respondents followed by very often.
Table 1. Summary of Demographic Profile of Respondents

<table>
<thead>
<tr>
<th>Demographic Factors</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>48</td>
<td>48%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>52</td>
<td>52%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>23 - 26 years old</td>
<td>74</td>
<td>74%</td>
</tr>
<tr>
<td></td>
<td>27 - 30 years old</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>31 - 34 years old</td>
<td>7</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>35 - 38 years old</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td>Diploma</td>
<td>12</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>76</td>
<td>76%</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>8</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td>Frequently to use E-Wallet</td>
<td>Always</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Very Often</td>
<td>28</td>
<td>28%</td>
</tr>
<tr>
<td></td>
<td>Sometime</td>
<td>34</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Very rarely</td>
<td>28</td>
<td>28%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100</strong></td>
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</table>

This study aims to determine the factors influencing intention to use the E-Wallet amongst millennial tourist. The intention to use E-Wallet was measured using 20 quantitative questions according to the independent variables in which respondents are required to indicate the extent to which they agree or disagree with each of the statement by indicating numbers that best describe their perception. All the 20 questions were Likert scales using five points ranging between 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree. The responses were analyzed and described by using Cronbach Alpha which to know it is reliable or not reliable, as shown in Table 4.2.

Table 2, the highest Cronbach Alpha of intention to use E-Wallet is Perceive Ease of Use at (α=0.860), which shows that interpretation of this variable is reliable. The second highest Cronbach Alpha, Perceive Usefulness (α=0.854), has a reliable interpretation. Conversely, Perceive credibility is the third highest and reliable interpretation, where the Cronbach Alpha at (α=0.848). Lastly, Social Influence also shows a reliable interpretation where Cronbach Alpha at (α=0.829). This independent variable's overall total is (α=0.928), which means the intention to use E-Wallet amongst millennial tourists is reliable. The reliability shows that perceived ease of use can be concluded as the highest factor interpretation of the E-Wallet's intention.

Table 2. Description of the Cronbach Alpha of Independent Variable

| Perceived usefulness (5 items) | 0.854 | Reliable |
| Perceived ease of use (5 items) | 0.860 | Reliable |
| Perceived credibility (5 items) | 0.848 | Reliable |
| Social Influence (5 items) | 0.829 | Reliable |
| **Overall total (20 items)** | **0.928** | **Reliable** |

Source: Primary Data, 2019
Besides, the level of intention to use E-Wallet amongst millennial tourists was measured by using 5 questions which by using Likert-scaled of five points ranging from strongly disagree to strongly agree. The responses were described by using Cronbach Alpha, as summarized in Table 3. The result shown in Table 3 reveals that the interpretation of E-Wallet's behavioural intention is reliable, which the Cronbach Alpha at (α=0.89). This shows that the dependent variables are useful and have intention amongst millennial tourist.

<table>
<thead>
<tr>
<th>Table 3. Description of the Cronbach Alpha of Dependent Variable</th>
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<tbody>
<tr>
<td><strong>Behavioural intention (5 items)</strong></td>
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<tr>
<td>--------------------------------------</td>
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</table>

The Multiple Linear Regression results in Table 4.4 indicate that reliability with perceived usefulness and perceived ease of use are positively and significantly related (sig=0.000). Social Influence also positively and significantly related at (sig=0.002). Therefore, hypothesis 1, 2 and hypothesis 4 are supported.

However, Table 4 indicates that reliability and perceived credibility are negatively and insignificantly related (sig=0.404). Therefore, hypothesis 3 are not supported.

According to Table 5, the dependent variable (behavioral intention) aspects account for 65.4% variation in the independent variables (perceived usefulness, perceived ease of use, perceived credibility, and social influence) indicated by a high adjusted r-square 0.65.

<table>
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<tr>
<th>Table 4. The coefficient result between Perceived Usefulness, Perceived Ease Of Use, Perceived Credibility, Social Influence and Behavioral Intention</th>
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</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
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<tr>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
</tr>
<tr>
<td>PU</td>
</tr>
<tr>
<td>PEOU</td>
</tr>
<tr>
<td>PC</td>
</tr>
<tr>
<td>SI</td>
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</table>

<table>
<thead>
<tr>
<th>Table 5. Model summary of Perceived Usefulness, Perceived Ease Of Use, Perceived Credibility, Social Influence and Behavioural Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

<sup>a</sup> Predictors: (Constant), SI, PC, PU, PEOU
The TAM model used helps this research explain millennial tourists' acceptance of E-wallet service as a transaction mode. However, additional features such as culture, demonetization, personal innovativeness, and others can be added to reflect this system better. The special intention that the respondents gave to the effect of perceived credibility implied whereby it is important for the E-Wallet service providers to provide a reliable and trustable construct of security features installed in the E-Wallet system to make sure it is safe to be used by the tourists. Furthermore, tourists seem to be willing to use E-Wallet services if they find out the service provided is easy to navigate and useful for them in terms of the transaction and purchasing instead of influencing others in the environment.

**Conclusion**

In this subsection, the researcher concludes the study findings of the study objectives. The objective was to determine the perceived usefulness, perceived ease of use, perceived credibility and social influence with the behavioural intention.

The relationship between perceived usefulness, perceived ease of use, perceived credibility, and social influence to use the E-Wallet amongst millennial tourists, only perceived usefulness, perceived ease of use, and social influence has positively and significantly affected behavioural intention. Meanwhile, the perceived credibility has a negatively and insignificantly relationship. Therefore, only hypothesis 1, 2 and 4 are supported. While hypothesis 3 are not supported.

This research shows that users are still not confident with the credibility of E-Wallet. This would probably be because the technology is still new, and users are still skeptical about the security level in using E-Wallet. Overall, the research result should guide any organization to influence tourists to use the E-Wallet. For future research, it is suggested to determine the type of purposes of using by the tourist. However, the result of this study able to help in improving the performance of E-Wallet.

**Conflict of interest**

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

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LA Global Mobility Round Table.

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