CONSUMER INTENTION OF USING E-WALLET SYSTEM AMONG STUDENTS IN PUBLIC HIGHER INSTITUTION

Roslina Binti Ahmad, Nor Laila Binti Hassan, Rozita Halina Binti Rosli Politeknik Sultan Salahuddin Abdul Aziz Shah

ABSTRACT

The cashless technology known as e-Wallet or electronic wallet is new and increasingly popular among consumers in Malaysia especially among the student. They are heavy smartphones users and always like to adopt new technology and system. Through e-wallet system, user just need to have the application in their smartphones and it help them to spend without having to carry any credit card and cash in hand. Therefore, this study aims to determine the factors that influence consumer intentions of using e-wallet system among public higher institution student in Shah Alam, Malaysia by applying Unified Theory of Acceptance and Use of Technology (UTAUT). The UTAUT model consists of performance expectancy, effort expectancy, social influence, culture and perceived risk. Data were collected from 380 respondents from Politeknik Sultan Salahuddin Abdul Aziz Shah (PSA) and Universiti Teknologi MARA (UiTM) and quantitative research was conducted by means of a structured questionnaire. Simple random sampling technique as chosen in collecting data of this study. Pearson correlation analysis showed that performance expectancy, efford expectancy, social influence, culture and perceived risk were positively influential with the consumer intention towards e-wallet. For future researches, a proposition of sampling in other areas is advised for expansion of e-wallet user and gaining a more in-depth view in the significance of factors affecting consumer behavior to use e-wallet system in Malaysia.

Keywords: Consumer intention, e-wallet, UTAUT Model, performance expectancy, effort expectancy, social influence, culture and perceived risk

INTRODUCTION

The evolution of the industry towards digital technology is now leading to a paradigm shift in the technology world including the global payments service industry. While cash is the payment method of choice among consumers in the world, shifting dynamics have opened up opportunities for digital payment adoption (John, 2017). A rise in smartphone penetration, increased internet access, and government fraud prevention efforts have all played a role in streamlining digital payments. Base on Bank Negara Malaysia report, Malaysia nowadays are in three waves of reform measures for payment system since 2018 which focus on mobile payment rather to cash and cheque (Li, 2018). Its mean that Malaysia still needs to jump further to achieve cashless society status. The cashless society is a situation where cash flow in society is minimal and all transactions are performed through electronic media channels such as direct debit, credit and debit cards, and electronic wallets (John, 2017). According to YAB Prime Minister, Tun Dr. Mahathir Mohamad ,being a cashless society, its reduces the risk of carrying hard cash, reduce instances of tax evasion, reduce corruption and keeps the record of all transactions which will help to reduce illegal monetary transaction (Commission, 2018).

E-wallet is one of the technologies through smart phones to enable users to perform safe and secured payment transaction. It's like a physical wallet which used to store many customer information such as owner identity, telephone number, credit card number, debit card number including customers address and etc. However, e-wallet adoption within the Malaysian consumers are still at the beginning stage. The adoption rate in Malaysia is comparatively lower compared with other countries such as China, India and Singapore (Li, 2018). Mobile payment services or e-wallet represents a tremendously interesting paradox in the telecommunication world. Although, they are convenient, quick and easy but there is not still enough evidence on how successful this practice is. Based on research by Malaysian Communications and Multimedia Commission (Commission, 2018), the percentage of online shoppers among Internet users in Malaysia increased, from 48.8% in 2016 to 53.3% in 2018. The e-commerce market in Malaysia is showing a positive trend, with e-commerce gross value added contributed 6.3% to nation's gross domestic product (GDP) in 2017 compare with 4.6% in 2010. The adoption of electronic and mobile wallet has also contributed to the increasing number of online shoppers and banking users.

In European Journal of Scientific Research (Soomro, 2013), state that many university students use smartphones widely whether for business, education, health and social life. (Teh, 2014) in his research also said that growth of smartphones also gives positive impact to the university student and have transformed people's lifestyles by allowing them to digitally connect with their digital live. The traditional ways of making and receiving payments, doing shopping, paying bills etc. were already changing especially through mobile wallets. Students belong to Generation-F has grown up in a world with technology, connected with social media networks using their smart phones and tablets (Rana S. S., 2017). Hence, this study aims at narrowing the gap in prior literature and providing a perspective on increasing knowledge and understanding the factors that influencing consumer intention to use e-wallet system in Malaysia. This study applies The Unified Theory of Acceptance and Use of Technology (UTAUT) (Viswanath Venkatesh, 2003) to determine the factors influencing consumer intention of using E-Wallet among students in public higher institution in Shah Alam, Selangor.

3. METHODOLOGY

3.1 Data Collection

This was a correlation study (S.Sekaran, 2016) which attempted to investigate the statistical relationship between the consumer intention to use e-wallet system with few independent variables such as performance expectancy, effort expectancy, social influence, culture and perceived risk. According to (Stephanie, 2017), sampling frame is a list of all target in the selected population. It is a complete list of everyone or everything wanted to be studied. The main difference of population and sampling frame is population is more general which include every single person in the population while sampling frame is more specific. 380 samples of students were attained from the student population. Based on (John T. Roscoe. Holt, 1975), the following rules of thumb for determining sample size is that the sample sizes must be larger than 30 and less than 500 which are appropriate for most research. The sample size also determine based on the Krejcie and Morgan's sample size calculation using the Krejcie and Morgan's sample size determination table (Krejcie, 1970). As for this study, the respondents were used survey online and distributed questionnaires. The questionnaires survey were posted randomly using Google Form or distributed manually and respondents were encouraged to complete the form. The reliability test was conducted to ensure that each of the scales employed are being assessed to establish the internal consistency of the present study. Cronbach's alpha for the scales are presented in Table 2.

Table 2 : Reliability Analysis

| NO | CONSTRUCTS | CRONBACH'S ALPHA | NO OF ITEMS |
|----|------------------------|------------------|-------------|
| 1 | Performance Expectancy | 0.903 | 5 |
| 2 | Effort Expectancy | 0.907 | 6 |
| 3 | Social Influence | 0.904 | 5 |
| 4 | Culture | 0.842 | 4 |
| 5 | Perceived risk | 0.864 | 4 |

According to (Nunnally, 1978), the reliability coefficient of not less than 0.7 is usually acceptable. As shown in Table 2, the reliability coefficient of the study variables exceeded the minimum acceptable level of 0.70.

3.2 Data Analysis

Statistical Package for Social Sciences (SPSS) was used for descriptive analysis in order to identify the level of mean for each variable and Pearson Correlation analysis was tested in order to examine the five variables in relation to the consumer intention to use e-wallet among students in public higher institutions in Shah Alam, Selangor. A Pearson Correlation (r) will indicate the direction, strength and significance of the bivariate relationship. The (r) between 1.0 which indicate positive relationship and (r) -1 indicate negative correlation.

4. RESULTS AND DISCUSSION

Table 1 shows 55% of the respondents were male whereas 45% of the respondents were female. Other than that, table 1 also show 51% of the respondents were at 21 years old to 23 years old, 28% between 18 years old to 20 years old and 21% between 24 years old to 26 years old. In education level, 54% were diploma holder, 36% were degree holder and 10% were master holder. 60% of them were student from Politeknik Sultan Salahudddin Abdul Aziz Shah (PSA) and 40% were from University Teknologi MARA (UiTM), Shah Alam Selangor. In level of respondent income, 64% were had RM500 and below, 28% were RM501 to RM999 and 8% were RM1000 and above.

Table 1: Summary of Respondents' Demographics

| Response | | Frequency | Percentage (%) | |
|-----------------|------------------|-----------|----------------|--|
| Gender | Male | 208 | 55 | |
| | Female | 172 | 45 | |
| Age Group | 18-20 | 108 | 28 | |
| | 21-23 | 194 | 51 | |
| | 24-26 | 78 | 21 | |
| Education Level | Diploma | 136 | 36 | |
| | Degree | 206 | 54 | |
| | Master | 38 | 10 | |
| Institution | PSA | 229 | 60 | |
| | UiTM Shah Alam | 151 | 40 | |
| Income | RM500 and below | 244 | 64 | |
| | RM501-RM999 | 106 | 28 | |
| | RM1000 and above | 29 | 8 | |

Table 3 shows the level of mean interpretation according to Landell, (Landell, 2007). Factors that influencing respondents intention either strongly agree, agree, neutral, disagree or strongly disagree are based on the table.

Table 3: Level of Mean Interpretation

| Interpretation | Low Moderate Hig | | High |
|----------------|------------------|-----------|-----------|
| Mean | 100-2.33 | 2.34-3.67 | 3.68-5.00 |

Table 4 perform that the performance expectancy of e-wallet. Most respondent felt satisfied high that performance expectancy by e-wallet with mean score 4.18. Meanwhile, the achievement relatively low mean score 3.89 is I believe e-wallet services are useful for buying products. The average on mean for performance expectancy is 4.07.

Table 4: Mean Analysis: Level of Consumer Intention of Performance Expectancy

| ltem | N | Mean | Level |
|---|-----|------|-------|
| I believe e-wallet services are useful for buying products. | 380 | 3.89 | High |
| Using e-wallet services would make me better customers | 380 | 4.04 | High |
| Using e - wallet service improves my efficiency as a customers. | 380 | 4.11 | High |
| It would be easy to purchase products using e - wallet service | 380 | 4.18 | High |
| E-wallet service would help me to save time while shopping. | 380 | 4.15 | High |
| Average Mean | | 4.07 | |

Table 5 perform that the effort expectancy of e-wallet. Most respondent felt satisfied high that effort expectancy by e-wallet with mean score 4.27. Meanwhile, the achievement relatively low mean score 4.10 is use of e - wallet would not require a lot of mental effort. The average on mean for performance expectancy is 4.19.

Table 5: Mean Analysis: Level of Consumer Intention of Effort Expectancy

| ltem | N | Mean | Level |
|---|-----|------|-------|
| Use of e - wallet would not require a lot of mental effort. | 380 | 4.10 | High |
| E - wallet would be easy to use. | 380 | 4.16 | High |
| I would find it easy to use e - wallet service in buying what I want. | 380 | 4.24 | High |
| I think that I am able to use e - wallet service without the help of an expert. | 380 | 4.17 | High |
| It would be easy for me to become skilful at using e - wallet services. | 380 | 4.18 | High |
| E - wallet service gives me cash back/rebate/points. | | 4.27 | High |
| Average Mean | | 4.19 | |

Table 6 perform that the social influence of e-wallet. Most respondent felt satisfied moderate that effort expectancy by e-wallet with mean score 4.08. Meanwhile, the achievement relatively low mean score 3.97 is I would use e - wallet service because my friends do so. The average on mean for performance expectancy is 4.04

Table 6: Mean Analysis: Level of Consumer Intention of Social Influence

| ltem | N | Mean | Level |
|--|---|------|-------|
| People important to me think I should use e - wallet services. | | 4.02 | High |
| People who influence my behaviour think I should use e - wallet services. | | 4.08 | High |
| Using e - wallet service would reflect my personality to others. | | 3.92 | High |
| I would use e - wallet service because my friends do so. | | 3.97 | High |
| will use e - wallet services if the service is widely used by people in society. | | 4.20 | High |
| Average Mean | | 4.04 | |

Table 7 perform that the culture of e-wallet. Most respondent felt satisfied high that culture by e-wallet with mean score 4.17. Meanwhile, the achievement relatively low mean score 3.95 is use of e - wallet would not require a lot of mental effort. The average on mean for performance expectancy is 4.06.

Table 7: Mean Analysis: Level of Consumer Intention of Culture

| ltem | N | Mean | Level |
|---|-----|------|-------|
| I believed that I am able to use E-wallet without having any experience in using computer. | 380 | 3.95 | High |
| The government encouragements make me think the best way to make payment is through using e-wallet payment service. | 380 | 4.06 | High |
| Social media make me aware of the concept of e-wallet payment. | 380 | 4.17 | High |
| People who are important to me would recommend using e - wallet payment service. | 380 | 4.16 | High |
| Average Mean | | 4.06 | |

Table 8 perform that the perceived risk of e-wallet. Most respondent felt satisfied high that perceived risk by e-wallet with mean score 4.17. Meanwhile, the achievement relatively low mean score 4,02 is the risk of an unauthorized third parties overseeing the payment process low. The average on mean for perceived risk is 4.08.

Table 8 : Mean Analysis: Level of Consumer Intention of Perceived Risk

| ltem | N | Mean | Level |
|---|-----|------|-------|
| The risk of abuse of confidential information is low when using e - wallet payment service. | 380 | 4.05 | High |
| The risk of an unauthorized third parties overseeing the payment process low. | | 4.02 | High |
| I would find e - wallet payment service secure in conducting my payment transaction. | | 4.13 | High |
| I believed the risk when making payment using e-wallet is low. | | 4.13 | High |
| Average Mean | | 4.08 | |

4.2 Pearson Correlation Analysis

Pearson's correlation analysis was used to examine the bivariate relationships among the variables

Table 9: Pearson Correlation Analysis

| | | PE | EE | SI | CL | PR |
|-----------------|------------------------------------|---------------|--------|--------|--------|-----|
| | Pearson Correlation | 1 | | | | |
| PE | Sig. (2-tailed) | | | | | |
| | N | 380 | | | | |
| | Pearson Correlation | .639** | 1 | | | |
| EE | Sig. (2-tailed) | .000 | | | | |
| | N | 380 | 380 | | | |
| | Pearson Correlation | .531** | .637** | 1 | | |
| SI | Sig. (2-tailed) | .000 | .000 | | | |
| | N | 380 | 380 | 380 | | - |
| | Pearson Correlation | .521** | .602** | .680** | . 1 | |
| CL | Sig. (2-tailed) | .000 | .000 | .000 | | |
| | N | 380 | 380 | 380 | 380 | |
| | Pearson Correlation | .487** | .504** | .501** | .571** | 1 |
| PR | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| | N | 380 | 380 | 380 | 380 | 380 |
| **. Correlation | on is significant at the 0.01 leve | l (2-tailed). | | | | 7.4 |

Table 3 shows the correlation between independent variables which include performance expectancy, effort expectancy, social influence, culture and perceived risk with dependent variable which was consumer intention toward using e—wallet in purchasing. Overall all the variables above had positive linear relationship whereby all the values were less than 0.9 which indicates that there is no multicollinearity problem. The correlation between independent variables is less than 0.9 which was between 0.487 and 0.639. According to Cohen (Cohen, 1988) an absolute value of r of 0.1 is classified as small, an absolute value of 0.3 is classified as medium and of 0.5 is classified as large.

5. CONCLUSIONS

This study was conducted with the purpose of measuring consumer intention in using e-wallet system. The objective was to examine the relationship between consumer intention in using e-wallet system and performance expectancy, effort expectancy, social influence, culture and perceive risk aspects. As the result, all the independent variables have significant relationship with the consumer intention in using e-wallet among the public higher institution's student in Shah Alam Selangor. Thus, it is suggested that researchers to do research more on other relevant factors that might affects consumer intention in using e-wallet among all the Malaysian

ACKNOWLEDGEMENT

The author would like to express thank you to the Center of Research, Politeknik Sultan Salahuddin Abdul Aziz Shah, Shah Alam, Selangor, Malaysia.

REFERENCES

- AI, F. L.-C. (2014). Intention to Use e Mobile Payment Systems : A Comparative Analysis of SMS and NFC Payment. 892-910.
- Bagchi PK, V. P. (1998). Logistical Alliances Trends and Prospects in Integrated Europe. Journal of Business Logistics, 19: 191-213.
- Batra, S. I. (2000). Consumer Level Factors Moderating the Success of Private Label Brands. Journal of Retailing, 76(2), 175-191.
- Cohen, J. (1988). Statistical Power Analysis for the behaviour Sciences. Hillsdale: NJ:Erlbaum.
- Commission, M. C. (2018). Internet Users Survey 2018. Retrieved from https://mcmc.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018.pdf
- Day, R. &. (1977). Toward a theory of consumer complaining behavior. Consumer and Industrial Buying Behavior.
- Dharmesti, M. D. (2012). The Antecedents of online customer satisfaction and customer. The Business &Management Review, , 7(2), 57-68.
- Dubrovski, D. (2001). The role of consumer satisfaction in achieving business excellence. Total Quality Management.
- Guo, X. L. (2012). Evaluating factors influencing customer satisfaction towards online shopping in China. Asian Social Science, 8 (13), 40-50.
- John C. Mowen, &. M. (1997). Consumer behaviour: A Framework: 1997.
- John O'Connor, E. G. (2001). Marketing in the Digital Age. Financial Times Prentice Hall, 2001- Business & Economics.
- John T. Roscoe, Holt, R. a. (1975). Fundamental research statistics for the behavioral sciences.
- John, D. G. (2017). Paradigm Shift in The Payment System. Journal of Recent Trends in Engineering and research, 2455-1457.
- Jusoh, H. A. (2014). Smartphones Usage Among Unuversity Students: Najran University Case. International Journal of Academic Research, 6(2), 321-326.
- K, M. R. (1998). The internet as a marketing tool. Journal of Marketing Theory and Practices, 6 (3).
- Keramati, A. e. (2012). Adoption of Electronic Payment Services by iranian Customers: Relationship Management Programs and Technologies Issues and Trends. 18, 268-285.
- Khatibi, A. H. (2007). The Impact of internet marketing on customer satisfaction: A study Malaysian perspective. Journal of Mobile communication, 1(1) 29-35.
- Khristianto, W. K. (2012). The influence of information, system and service on customer satisfaction and loyalty in online shopping. International Journal of Academic Research, 28-32, 4 (2).
- Krejcie, R. &. (1970). Determining Sample Size for Research Activities. In Educational and Phychological Measurement, (pp. 607-610).

- Landell, K. (2007). Management By Menu. London: John Wiley & Sons Inc.
- Li, Y. T. (2018). Banking on The e-Wallet in Malaysia. Retrieved June 1, 2019, from https://www.pwc.com/my/en/assets/blog/pwc-my-deals-strategy-banking-on-the-ewallet-in-malaysia.pdf/
- Liu, X. H. (2008). An empirical study of online shopping customer satisfaction in China: A holistic perspective. International Journal of Retail and Distribution Management,, 36(11), 919-940.
- Lucking RD, S. D. (2004). Business-To-Business Electronic Commerce. Journal of Economic Perspectives, 15:55-68.
- Malaysia, S. K. (2017). Internet Users Survey 2017,1-52.
- Mustafa, I. (2011). Determinants of e-commerce customer satisfaction, trust, and loyalty in Saudi Arabia. Journal of Electronic Commerce Research, 12(1), 78-93.
- Nelson, R. (2012). The importance of customer satisfaction. Retrieved from http://www.wparesearch.com/uncategorized/the-importance-of-customer-satisfaction/.: http://www.wparesearch.com/uncategorized/the-importance-of-customer-satisfaction/.
- Nunnally, J. (1978). Psychometric theory (2nd Ed.). New York: McGraw Hill.
- P, H. F. (2007). Decision Factors for The Adoption of an Online Payment System by Customers. International Journal of E-Business Research, 3(4), 1-34.
- P, K. F. (2013). Factors Influencing E-Commerce Growth: A Comparative Study of Central Asian Transition Economies. Adoption of Virtual Technologies for Business, Education and Government Advancements, 1-17.
- Philip T. Kotler, K. L. (2006). Marketing Management, 12th Edition. Dartmouth College.
- Rana, S. S. (2017). A Study of Preference Towards The Mobile Wallets Among The University Students In Lucknow City. Scholedge International Journal of Management & Development, 04(06), 46-57.
- Rana, S. S. (2017). A Study Of Preference Towards The Mobile Wallets Among The University Students In Lucknow City. 04(06), 45-57.
- Roya Gholami, A. O. (2010). Factors Affecting e-payment Adoption in Nigeria. Journal of Elecronic Commerce in Organizations, 8(4), 51-67.
- Rudansky-Kloppers, S. (2014). Investigating Factors Influencing Customer Online. International Business & Economics Research Journal (IBER),, 13(5), 1187.
- S, A. M. (2008). Enabling Privacy -Preserving E-Payment Processing. Institute for Infocomm Research, 4947, 596-603.
- S.Sekaran, R. J. (2016). Research Methods For Business : A Skill Building Approach. United States: John Wiley Sons Inc.
- Schaupp, L. a. (2005). A conjoint analysis of online customer satisfaction. Journal of Electronic Commerce Research,, 6(2), 95-111.
- Sfenrianto, J. &. (2015). A Model of Factors Influencing Consumer's Intention To Use E Payment System in Indonesia. Conference on Computer Science abd Computation Intelligence Procedia Computer Science(2015), 214-220.
- Shankar, V. S. (2003). Customer satisfaction and loyalty in online and offline. International Journal of Research in Marketing, 20(2), 153-175.

- Soomro, M. S. (2013). Impact of Smartphone's On Society. European Journal of Scientific Research, 98, 216-226.
- Srisuwan, P. &. (2008). Predicting online channel use for an online and print magazine: a case study. Journal of Retail & Distribution Management, pp 122-132.
- Stephanie. (2017, October 15). statisticshowto.com: http://www.statisticshowto.com/sampling-frame/.
 Retrieved from http://www.statisticshowto.com/sampling-frame/
- Teh, e. a. (2014). Smartphone Effectiveness Among The Youth People. Liverpool, UK. Smart Published Ltd.
- Tsu, L. Z. (2018). E Transforming Mobile Phones Into E-Wallets in malaysia. Retrieved July 1, 2019, from http://www.bnm.gov.my/files/publication/qb/2018/Q2/p7.pdf
- Ueno, M. (2012). http://www.thestar.com.my/story. aspx?sec=bandfile=%2F2012%2F26%2Fbusiness%F11695234. Retrieved from http://www.thestar.com. my/story.aspx?sec=bandfile=%2F2012%2F26%2Fbusiness%F11695234
- Uma S. Sekaran, R. J. (2016). Research Methods For Business: A Skill Building Approach. New York, United States: John Wiley Sons Inc.
- Viswanath Venkatesh, M. G. (2003, September). User Acceptance Of Information Technology: Toward A Unified View. MIS Quartely, pp. 425-478.