The Usage of Cashless Transaction in University Community in Pengkalan Chepa City

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Abstract. Cashless technology is a new development technology introduced in Malaysia. Though the goal of the government is to increase the use of e-payment by 200 transactions per person, the value and the usage shows imbalance figures. The purpose of this study is to observe the preference of cashless transactions among the local community in the university. This study used a quantitative method to analyze the data. This study is based on the primary data which is collected by using an online structured questionnaire from a sample of 357 respondents at the University of Malaysia Kelantan (UMK) in Pengkalan Chepa city. SPSS software is used to run the correlation analysis. The result indicates there is a significant positive relationship between the cashless transaction and independent variables which are fast and convenient, security and privacy and social influence. It is also revealed that fast and convenient has the highest connection to the preference of cashless transactions among this community.

Keywords: Cashless · Financial technology · Cybercrime · Social influence

1 Introduction

Cashless transaction can be defined as a virtual payment that does not using the physical cash (Donohue et al. 2020). Regardless so, cashless does not necessarily mean no cash transaction at all, but the money-based transaction is minimized at the lowest level (Rahadi et al. 2020). In Malaysia, traditional transaction of using cash in hand to make payment is a popular medium of exchange but the growing popularity of cashless payments will change the trends in tandem with Bank Negara’s vision to make e-payment as a preferred medium payment of economic transaction in Malaysia (TheStar 2020).

Cashless technology is a new development technology introduced in Malaysia. Though the goal of government to increase the use of e-payment by 200 transactions per person, the volume and the value shows imbalance totals whereby in Malaysia the use of internet banking is way much larger than e-money. The latter usually practiced
for small-value payments compared to the former which widely applied for high-value payments (Fintech 2019).

The use of financial technology is not yet comprehensive in the country, irrespective of its affordable option and cost-effective, somehow still less favorable in emerging market (Kachathan and Chaichotchuang 2020). Cashless transaction is also reflected to the economic well-being since the transactions do not require people to bring any physical coins or banknotes.

Despite its privilege to the nation, the rising cybercrime is very distressing nowadays and it is one of the costs incurred for adopting this kind of transaction (Fabris 2019). As a consumer, they need to follow the trend in business dealings and cope with financial technology (Chougule et al. 2020). The growth of technology is an indicator towards economic growth (Ishak 2020). Kelantan is chosen since it is categorized as one of the lowest Growth Domestic Product (GDP) contribution (2.6%) in 2018. Thus, the aim of this study is to investigate the relationship of the fast and convenience, security and privacy and social influence on the preference of cashless transaction among the university community.

2 Literature Review

2.1 Cashless Transactions

According to Donohue et al. (2020), cashless transaction is a type of transaction that used without physical money given from one person to another in order to purchase or anything else. Kachathan and Chaichotchuang (2020) examined on how people react to cashless transactions when it is a better option than the traditional transaction. Technology Acceptance Model (TAM) is being used in this study to further explain on how financial technology spreads at university level (Chan 2020). The use of non-cash payment methods can be seen as below whereby the highest category of payment method is being made through plastic money or debit card (63%), then followed by online banking method (57%), then the rests are as stated.

USE OF NON-CASH PAYMENT METHODS IN MALAYSIA

Source: Malaysia Payment Landscape 2018

Following to a study conducted by Chougule et al. (2020), cashless economy is maintaining the flow of cash in the economy since it drives customer spending power through
other simple transactions such as e-banking, debit card, credit card, card swipe, machines and e-wallet. The plastic money is preferable by the customer than cash and paper money. Even so, Fintech (2019) in a statement said, the amount of cash in circulation is still on the rise despite efforts for cashlessness.

2.2 Fast and Convenient Transaction

In a study investigated by Fabris (2019), one of the benefits of cashless transaction is due to its convenient means of payment. In earlier study by Ragaventhar (2016) who revealed that majority of card and users in India are afraid of being charged if making payment by card, but the benefits of speed is undeniably to the society. Besides, in purview to the study, Singh et al. (2020), the result indicated that there is a significant impact among the variables which are; perceived usefulness, attitude to use, perceived ease of use and attitude. However, Jain and Jain (2017), who studied on the use of cashless instruments found that easy is a significant predictor, but not fast.

In the meantime, Novitasyari and Widiastuti (2019) who examined a different scope of study on cashless in online transportation among services business and the result found that cashless has transformed the seller’s life easier.

Ho: There is no significant relationship between fast and convenient transaction to the preference of cashless transaction
H1: There is a significant relationship between fast and convenient transaction to the preference of cashless transaction.

2.3 Security and Privacy

Security is always the important problem in consumers’ decision in using internet banking. Some customers realize there is a higher risk in financial transaction by using internet since the monetary transaction is being done virtually. Ishak (2020), suggested government and non-government to educate the society on the benefits of using cashless transaction and the potential risk behind its pleasure.

Meanwhile, Bezhovski (2016) clarified that customers tend to be exposed in security risks such as privacy concerns, fraud, data theft and device authentication. Jumba and Wepukhulu (2019) claimed that, “as many customers are concerned about security of a cashless payment system, the greater the risk and less trustworthiness they would perceive in using the cashless payments and the less their intention to adopt the system”. On the other hand, Yong et al. (2018) found that there is no significant of security risk to the adoption of e-wallet among students. In a report published by Roubini ThoughtLab (2017), security risk and privacy concerns are the leading barriers for some customers to totally adopt digital payment.

Ho: There is no significant relationship between security and privacy to the preference of cashless transaction
H1: There is a significant relationship between security and privacy to the preference of cashless transaction.
2.4 Social Influence

According to Rahadi et al. (2020), social influence can be defined as “the level at which individuals perceive that it is important for others to believe that they must use certain technologies”. In a study explored by Yong et al. (2018), it is proven that social influence is correlated to the adoption of E-payment. In tandem to the study, Sarika and Vasantha (2019) found that social influence is a reason for adoption of cashless transaction. This factor is also discussed by Ejiobih et al. (2019) that social influence have impact on an individuals’ intention to use the new system.

H₀: There is no significant relationship between social influence and preference of cashless transaction
H₁: There is a significant relationship between social influence and preference of cashless transaction.

3 Research Methodology

The research design for this study is descriptive in nature. In conducting this research, quantitative analysis was adopted by using Statistical Package for Social Science (SPSS) software version 26 as this method will help researcher to find the relationship between variables throughout the analysis. As the data collected were quantitative, the survey conducted to the local community in Kelantan.

Convenience sampling that is non-probability method was adopted in this study for easy to reach the sample. The main purpose is easily accessible for researcher collects the respondents’ information. There were 357 questionnaires which have been distributed based on Krejcie and Morgan’s rule (see Table 1). Nominal scale is used for close-ended format for personal information while interval scale which is Likert-type scale are applied for the respondent’s opinion relating to their perception into based on five points where; 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree. There are several variables involved to prove the objective of this study can be achieved; fast and convenience transaction, security and privacy and social influence as follows;
Table 1. Krejcie and Morgan’s determining sample size table

| N  | S  | N   | S  | N  | S  |
|----|----|-----|----|----|----|
| 10 | 10 | 120 | 140| 1200| 291|
| 15 | 14 | 230 | 144| 1300| 297|
| 20 | 19 | 240 | 148| 1400| 302|
| 25 | 24 | 250 | 152| 1500| 306|
| 30 | 28 | 260 | 155| 1600| 310|
| 35 | 32 | 270 | 159| 1700| 313|
| 40 | 36 | 280 | 162| 1800| 317|
| 45 | 40 | 290 | 165| 1900| 320|
| 50 | 44 | 300 | 169| 2000| 322|
| 55 | 48 | 320 | 175| 2200| 327|
| 60 | 52 | 340 | 181| 2400| 331|
| 65 | 56 | 360 | 186| 2600| 335|
| 70 | 59 | 380 | 191| 2800| 338|
| 75 | 63 | 400 | 196| 3000| 341|
| 80 | 66 | 420 | 201| 3500| 346|
| 85 | 67 | 440 | 205| 4000| 351|
| 90 | 73 | 460 | 210| 4500| 354|
| 95 | 76 | 480 | 214| 5000| 357|
| 100| 80 | 500 | 217| 6000| 361|
| 110| 86 | 550 | 226| 7000| 364|
| 120| 92 | 600 | 234| 8000| 367|
| 130| 97 | 650 | 242| 9000| 368|
| 140| 103| 700 | 248| 10000|370|
| 150| 108| 750 | 254| 15000|375|
| 160| 113| 800 | 260| 20000|377|
| 170| 118| 850 | 265| 30000|379|
| 180| 123| 900 | 269| 40000|380|
| 190| 127| 950 | 274| 50000|381|
| 200| 132|1000 | 278| 75000|382|
| 210| 136|1100 | 285|100000|384|

3.1 Research Framework
(See Fig. 1).

Fig. 1. Research framework on perception of cashless transaction


4 Findings

4.1 Reliability Coefficient Alpha

This study relies on Cronbach’s Alpha to measure of the consistency of test scores which the result of reliability analysis for each item under the variables. The alpha value of 0.65 to 0.95 is considered satisfactory range. If $\alpha$ coefficient is less than 0.65, it shows the low reliability lies in the items in the research instrument. However, if $\alpha$ is greater than 0.95, the alpha value is too high which means the items are overlapping to each other. So, it is not ideal to have $\alpha$ lower or greater than the satisfactory range (Table 3).

| Range for Cronbach’s alpha | Strength of internal consistency |
|---------------------------|---------------------------------|
| $\times < 0.6$            | Poor                            |
| $0.6 < \times < 0.7$      | Moderate                        |
| $0.7 < \times < 0.8$      | Good                            |
| $0.8 < \times < 0.9$      | Very good                       |
| $0.9 < \times$            | Excellent                       |

Table 2. Scale of Cronbach’s alpha

| Variable                        | Number of items | Cronbach’s alpha |
|---------------------------------|-----------------|------------------|
| Adoption of cashless transaction| 5               | 0.799            |
| Fast and convenience            | 5               | 0.860            |
| Security and privacy            | 5               | 0.827            |
| Social influence                | 5               | 0.826            |
| Overall variables               | 20              | 0.928            |

As depicted in the Table 2 above, all the items are within the satisfactory range, which means the strength of internal consistency is either good or very good. The lowest strength is under the items of dependent variable that is 0.799. The rests are relatively 0.928 which is acceptable for the study.

4.2 Demographic Profile

Adoption of cashless according to gender proportionally 1:2. The male is 38.9% (139 male) and 60.9% (216 female) which that female community are much easier and has a higher adoption of cashless influence perception than male (see Table 1). Majority of the respondents were in between 19–25 years old (86%) is the highest number for our respondents and the lowest number is the age above 38 years old which is 2.5%.
Meanwhile, the age from 26–31 years old is 7.8% and the age from 32–37 years old is 3.4%. From Table 1, the highest percentage of the race is Malay which is 80.7% and the lowest percentage is from others which is only 3.1%. The other respondents for this study are Chinese and Indian are 8.4% and 7.8% respectively from the total.

| Information               | Frequency | Percentage (%) | Valid percent | Cumulative percent |
|---------------------------|-----------|----------------|---------------|--------------------|
| Gender                    |           |                |               |                    |
| Female                    | 216       | 60.5           | 60.5          | 61.1               |
| Male                      | 139       | 38.9           | 38.9          | 100.0              |
| Age                       |           |                |               |                    |
| Below 25 years old        | 307       | 86.0           | 86.0          | 86.3               |
| 26–30 years old           | 28        | 7.8            | 7.8           | 94.1               |
| 31–35 years old           | 12        | 3.4            | 3.4           | 97.5               |
| Above 38 years old        | 9         | 2.5            | 2.5           | 100.0              |
| Race                      |           |                |               |                    |
| Indian                    | 28        | 7.8            | 7.8           | 16.2               |
| Malay                     | 288       | 80.7           | 80.7          | 96.9               |
| Others                    | 11        | 3.1            | 3.1           | 100.0              |
| Frequency                 |           |                |               |                    |
| 0–1 transaction           | 65        | 18.2           | 18.2          | 19.9               |
| 2–4 transactions          | 112       | 31.4           | 31.4          | 51.3               |
| Above 5 transactions      | 174       | 48.7           | 48.7          | 100.0              |
| Method payment            |           |                |               |                    |
| Cheque                    | 7         | 2.0            | 2.0           | 2.5                |
| Credit/debit card         | 76        | 21.3           | 21.3          | 23.8               |
| E-Wallet                  | 15        | 4.2            | 4.2           | 28.0               |
| Online transfer internet  | 257       | 72.0           | 72.0          | 100.0              |

In Table 4, the result presented that 98.3% of the respondents had applied the cashless transactions in their transactions, but the remaining is still not aware of the usage of cashless transactions. The highest percentage for the time is above 5 times which is 48.7% and the lowest is 18.2% followed by the percentage of respondents that have used 2–4 times is 31.4%. Then, the result of payment methods that used by respondents which the highest percentage to make transactions is online transfer internet banking (72.0%) while the lowest is payment through cheque (2.0%). Subsequently, for credit or debit card and e-wallet is 21.3% and 4.2%, respectively.
4.3 Pearson Correlation Coefficient

Table 5. Strengths of correlation

| Correlation strength | Correlation coefficient size (r) |
|----------------------|---------------------------------|
| Very strong          | 0.91 to 1.00 or −0.91 to 1.00   |
| Strong               | 0.71 to 0.91 or −0.71 to −0.90  |
| Average/medium       | 0.51 to 0.70 or −0.51 to −0.70  |
| Weak                 | 0.31 to 0.50 or −0.31 to −0.50  |
| Very weak            | 0.01 to 0.30 to −0.01 to −0.30  |
| No correlation       | 0.00                            |

Table 5 revealed the strength of the correlation measured by coefficient (r) to identify the relationship between dependent and independent variables. The value of r is between +1 and −1 as explained in the above table. A positive r value shows a positively shaped graph and vice versa.

Table 6. Results of the pearson inter-correlation test

| Correlations                  | Adoption of cashless transaction |
|-------------------------------|----------------------------------|
| Fast and Convenience          | Pearson Correlation: .723**     |
| Sig. (2-tailed)               | .000                             |
| N                             | 352                              |
| Security and Privacy          | Pearson Correlation: .697**     |
| Sig. (2-tailed)               | .000                             |
| N                             | 351                              |
| Social Influence              | Pearson Correlation: .529**     |
| Sig. (2-tailed)               | .000                             |
| N                             | 351                              |

**. Correlation is significant at the 0.01 level (2-tailed).

As can be seen in the result in Table 6, fast and convenience has stronger relationship of 0.723, followed by security and privacy, 0697. Then, social influence has moderate relationship of 0.529, the lowest among others.
5 Discussions

i. Relationship of fast and convenient transaction to the preference of cashless transaction

Based on the result above, it appears the relationship between adoption of cashless transaction with fast and convenient. The p-value of (H1) is 0.000 which is lower than 0.01 and it shows fast and convenient transaction has significant relationship to the preference of cashless transaction at among community in the university. The Pearson Correlation is 0.723 which signifies a strong strength of correlation between the variables. Simply put, it means that there is 72.3% of dependent variable (adoption of cashless) influenced by the independent variable (fast and convenient). The finding thus in line to the study analyzed by Singh et al. (2020) that cashless payment has becoming way faster and convenient to the users. Therefore, H1 is accepted.

ii. Relationship of security and privacy to the preference of cashless transaction

By referring to the result in the Table 6, it literally implies the positive relationship of preference of cashless to the privacy and security variable based on the coefficient value of 0.697. The p-value of (H2) is 0.000 which is lesser than 0.05 which means the result of the test explains that there is a significant relationship between security and privacy with adoption of cashless transaction. In other words, the average strength of correlation of 69.7% preferring cashless transaction basically due to the security and privacy. Therefore, the finding is seen against the statement of Roubini ThoughtLab (2017) that security risk is one of the barriers that hold back the an individual to use the system. Thus, H2 is accepted.

iii. Relationship of social influence to the preference of cashless transaction

Based on the result attained, the p-value of (H3) is 0.000 and it simply reflect the connection of social influence to the preference of cashless transaction among university community. The significant result has similarity to the study led by Yong et al. (2018). The result for Pearson Correlation is 0.529 which suggests a medium positive strength of the variables. Hence, 52.9% of prefers cashless transaction believe it is inclined by social influence. Yet again, H3 is accepted.

6 Conclusion, Implications and Limitations

It is a hope that this research will improve perception of community at every level on the cashless transaction. Furthermore, the feature lays on the cashless transaction is undeniably change the lifestyle of an individual as one can be more efficient when making the deals. Apart from that, government needs to enhance the law of enforcement against cybercrime to educate every parties while at the same time boosting their confidence to continue adopt cashless method.
The usage of cashless transactions in university communities should be proactive and improve the standard practice of securing this newly adopted technology to safeguard against financial cyber-crimes. To do so, governments can create special protections for consumers who actively rely on cashless to do the transaction and avert themselves from cyber attackers who misuse the advantage of technology. Hence, the government’s initiative to transform this nation into a digital hub can be realized.

The limitation of this study is relating to small sample size; thus, it cannot be generalized to the entire population in the country. So, it is suggested for future research to widen the scale to give more significant to the development of cashless society as it contributes to the growth of a nation. Lastly, cashless transactions prove to be one of the initiatives to create a shadow economy and improve efficiency in the country.

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