ANALYSIS OF E-PAYMENT APPLICATIONS: A CASE STUDY OF ONE OF THE ZAKAT INSTITUTIONS IN MALAYSIA

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ABSTRACT

Payment is the heart of businesses. For an online business, electronic-payment (e-payment) plays a significant role to expedite the transaction. Online or e-payment system is not crafted for business as merely profit-oriented but it is offered to all, including government and other non-profit organisation institutions. Nowadays, it can be witnessed that there are various types of e-payment systems available to facilitate online selling and buying transactions. However, e-payment system at philanthropy institutions has received fairly little attention from the public. This is happening even though these institutions have invested a lot of money on e-payment systems. Thus, this study attempts to identify types of e-payment systems at one of the Islamic philanthropic institutions in Malaysia and analyse the performance of e-payment in that institution. The result of this study is hoped to contribute to the body of knowledge particularly in terms of information technology and performance measurement in Islamic philanthropy institutions.

Keywords*: e-payment, performance, Islamic philanthropic institution*

1.0 INTRODUCTION

Payment is a pulse of business, especially for business-to-consumer models. Money flow is considered as one of the critical success factors for e-commerce as well as information and product flow (Tsiakis et al., 2007). For an online transaction, among the payment tools available are credit card, charge card, check, debit card and e-wallet. However, the most common payment option for online transactions is the credit card (Hsieh; 2001, Paynter & Lim; 2001; Jan Wong, 2013). In fact, purchasing via e-commerce does not mean that buyers have to directly pay online during the transaction. Besides, they can also use automated teller machines (ATMs) to make payments and transfer the payment information digitally.

The application of IT tools such as e-payment is not merely grasped by businesses or profit-oriented firms, but other non-profit organisations including government agencies and philanthropic institutions for various reasons such as improving service quality, money collection, performance and reputation. Interestingly, the application of IT tools in these organisations is not only fundamental in performing office and administrative tasks, but also in dealing with customers in terms of finance. Through random observations of several Zakat

institutions' websites in Malaysia, these institutions have introduced various types of online payment as an alternative for Zakat payers to perform their religious obligations. The e-payment applications by this institution include online banking, short messaging system (SMS), phone banking, ATMs and credit cards. The applications of online payment in these institutions are believed to benefit both parties, be it receivers or payers.

However, there are limited studies conducted on online payment and philanthropic activities, specifically in Islamic philanthropic activities such as Zakat and Waqf. There is no evidence that indicates the phenomenon and its contribution to these alms giving collections to the philanthropic institutions. These benefits of online payment would be likely to increase the collection of Zakat and cash Waqf as the Zakat payment system and computerized Zakat system are among determinants that affect the efficiency of Zakat institutions (Abd. Wahab & Abdul Rahman, 2013)

Thus, this paper is conducted in order to explore the types of e-payment offered by one of Zakat institutions (Islamic philanthropy institutions) in Malaysia. Secondly, it aims to analyse the Zakat collection under each type of e-payment method. Information was gathered through the institution's website, Facebook and feedback from this institution. The study is hoped to provide input for other non-profit organisations especially in utilizing internet tools to increase their Zakat collection. Besides, it is hoped to enrich the current literature in terms of e-payment for non-profit organisations.

2.0 LITERATURE REVIEW

2.1 Introduction to E-Payment

The concepts for e-payment can be basically explained as transferring money from the payer to the payee by an electronic medium. E-payment involves an exchange of funds initiated through an electronic communication channel (Shon & Swatman, 1998). As a prerequisite, the electronic signals must exist to enable a direct link to the depositor or creditor bank's account (Gans & Scheeling, 1999). Normally, e-payment is performed during online purchase, where verification, validity and approval are present simultaneously, whereby most of the transactions apply internet/online banking and credit cards. However, e-payment is not restricted to credit cards, debit cards, e-money and internet banking only. Payment via ATM or bank counters is also considered e-payment, as long as the customer is using electronic mechanism to transfer their money.

Despite the many types of e-payment options available as mentioned above, , credit cards have overwhelmed other instruments for online transactions all over the world besides for certain countries such as Germany and China. In Germany, people prefer to use direct debit and bank cards while in China, people prefer to use debit cards (Turban, et.al, 2011). In Nigeria, three common e-payment methods are digital cash, credit card and electronic fund transfer. However, a disparity exists between the usage and preference for payment, where more respondents used prepaid/debit cards even when they prefer direct payment to the sellers' account due to fraud risk (Adeyeye, 2008).

In Malaysia, the payment system is growing rapidly with the encroachment of information technology and major retail e-payment systems such as Financial Process Exchange (FPX) and Interbank GIRO (IBG) (Mohammad, 2008). Basir (2009) claimed that the e-payment systems which are highly used by Malaysians are credit card, internet banking and interbank

GIRO (IBG) while charge card, debit cards and e-money are low in terms of usage level. This is supported by Abdullah et al. (2012) as he claimed that 90% of all e-commerce transactions were paid via credit card. Thus it can be said Malaysians are more familiar with credit cards compared to the other methods even though there are other payment methods available.

According to Basir (2009), payment systems in Malaysia are categorized under 4 major groups, the Real-Time Electronic Transfer of Funds and Securities (RENTAS); the National Image-based Check Settlement System, *Sistem Penjelasan Imej Cek Kebangsaan* (SPICK); ATMs and other retail payment networks; the Clearinghouse operating under the control of the Malaysia Securities Exchange Berhad and the Malaysia Derivatives Exchange Berhad. In 2006, the e-payment system in Malaysia started with internet banking, mobile banking and MEPS cash.

The development of the e-payment system in Malaysia can be divided to 3 main periods beginning 1970s to mid 2000s as illustrated in Figure 1. At the early stage, which was the late 1970s, the payment system started with the deployment of credit cards. Then in the late 1990s, the network and internet based payment system were applied. The newest, mobile-based payment system appeared in mid 2000.

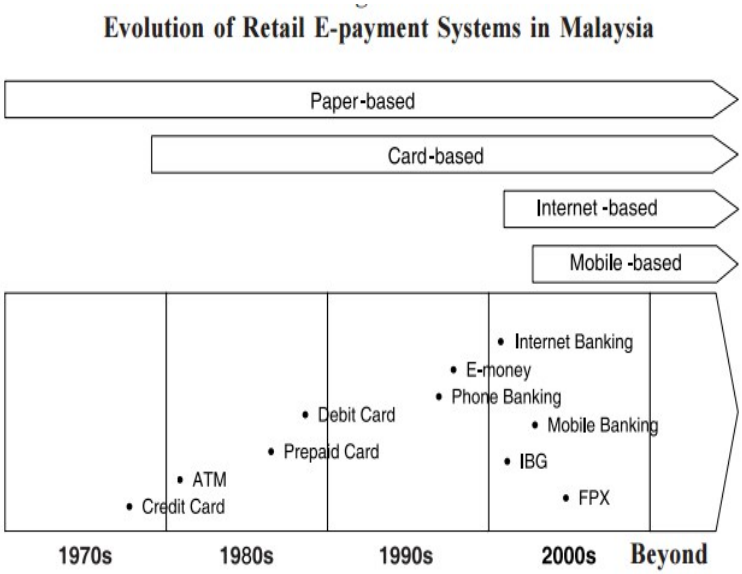

Figure 1: Evolution of the Retail E-Payment System in Malaysia
(source: Mohammad, 2008)

2.2 Zakat Institutions in Malaysia

Principally, Zakat institutions are non-profit organisations which are established to manage the Zakat system, particularly in terms of collection and distribution (Abdul Lateff et al., 2014; Wahid et al., 2008). In Malaysia, there are 14 Zakat institutions. Uniquely, each Zakat institution is assigned under the governance of State Islamic Religious Councils (SIRCs). Thus, there are some differences between Zakat practices in different states.

As mentioned earlier, one of fundamental functions of these institutions is to collect Zakat from Muslims who are eligible to pay various types of Zakat. Traditionally, the customer (Zakat payer) pays Zakat to the 'amil (person who is officially appointed by Zakat institutions to collect Zakat) or a Zakat center. Others prefer to pay directly to the asnaf

(persons who are entitled to receive Zakat) (Ahmad et al., 2006). At a glance, the amount of Zakat collections made by each state increases every year (Abdul Lateff et al., 2014). For instance, Pusat Zakat Negeri Sembilan (PZNS) collected RM13.3 million in 2013 which was a 21.8% increase compared to the Zakat collection made in 2012. This is consistent with the increase in the number of Zakat payers (PZNS, 2014).

Despite the increased amount of Zakat collections in Malaysia, the number of eligible payers who pay Zakat is still low (Abu Bakar & Abdul Rashid, 2010); BH online, 2014). The location of Zakat counters which are far away from the Zakat payers' location, time constraints, traffic jams and limited parking space are the most common barriers for Zakat payers (PZNS, 2014). To cater to this problem, the government and SIRCs have executed various incentives such as privatising Zakat institutions and offering various payment facilities such as salary deduction, money order and money post (Saad et al., 2010). Nor Ghani et al (as cited by Ahmad et al., 2006) found that event privatisation has contributed to the increment in Zakat collections but it also added other factors such as an increasing awareness among Zakat payers, increasing individual income and increasing country income.

After reviewing the literature, it was found that no studies focused on e-payment for Zakat institutions especially in terms of the impact of epayment towards Zakat collection.

3.0 RESEARCH METHODOLOGY

This study primarily focused on one of the Zakat institutions in Malaysia. The authors used secondary data. Kumar et al. (2013) explained that secondary data refer to information that have been compiled by other parties and are available to the researcher. This data can be internal or external and can be accessed through the internet or perusal of recorded or published information. Therefore, the data were collected through information available at the institution's website, Facebook and leaflets. In addition, the data were directly provided by the officer of this organisation. For analysis purposes, this study utilised a quantitative research approach.

4.0 FINDINGS

For the purpose of Zakat collections, this Zakat institution offers twelve types of payment options to Zakat payers, either online or offline. An offline or manual Zakat payment is available at this institution; counters which are located in several districts in the state, by post, salary deduction, bank counters, temporary/moving counters and through Certified 'Amils. For e-payments, there are six options offered by the institution including internet banking, short messaging system (SMS), phone banking, kiosk machines, credit card and bank card ATMs. An analysis of e-payment and Zakat collections for a period of five years, from 2009 till 2014, is presented in Table 1 to Table 4.

4.1 Zakat Collection According to Types of E-Payment

Table 1 presents information about the number of Zakat payers for each type of e-payment. Overall, the number of Zakat payers using internet banking, bank card ATM and credit card increases every year. It shows that internet banking has overwhelmed other types of e-payment every year, with a total 7,304 payers for five years; representing 61.2% of online payment. This is followed by bank card ATM (3,165 payers) and credit card (1,225 payers). For this period also, there were no Zakat payers for phone banking. Since kiosk machines

were just introduced in 2014, the total number of Zakat payers was only 228. However, compared to SMS and phone banking method, kiosk machines fare much better and have the potential to upsurge in future.

Table 1: Number of payers according to type of e-payment

	Internet Banking	SMS	BankCard ATM	Phone Banking	Credit Card	Kiosk Machine (Quick Pay)
2009	678	1	278	0	0	0
2010	826	0	451	0	88	0
2011	1,012	0	507	0	179	0
2012	1,237	0	550	0	266	0
2013	1,590	0	733	0	344	0
2014	1,961	1	646	0	348	228
Total	7,304	2	3,165	0	1,225	228

The number of Zakat payers was found to be consistent with the amount of Zakat collection as presented in Table 2. Internet banking had the highest collection among all e-payment types, with a total value of RM7,831,573.21, followed by bank card ATM (RM4,236,252.67) and thirdly, credit card amounting to RM3,303,059. The table also shows that the Zakat amount paid via internet banking, bank card ATM and credit card increased annually from 2009 till 2014. For SMS, the amount sharply decreased from RM20 in 2009 to RM1 in 2014.

Table 2: Amount of Zakat collection according to type of e-payment

	Internet Banking	SMS	BankCard ATM	Phone Banking	Credit card	Kiosk Machine (Quick Pay)
	RM	RM	RM	RM	RM	RM
2009	596,131.55	20.00	286,955.40	0	0	0
2010	707,152.40	0	484,718.37	0	163,115.61	0
2011	1,037,629.95	0	636,038.29	0	372,081.02	0
2012	1,386,620.85	0	724,138.55	0	723,166.43	0
2013	1,712,700.65	0	1,037,404.43	0	1,017,978.74	0
2014	2,391,337.81	1.00	1,066,997.63	0	1,026,697.70	10,210.00
Total	7,831,573.21	21.00	4,236,252.67	0	3,303,039.50	10,210.00

Comparing between manual and online payments, both payment types showed a yearly increment for a 5-year period. Yet, the number of Zakat payers using e-payment was still low compared to the manual mode. For a total of five years, online Zakat payers represented only 4.4% (11,696 Zakat payers) from the total number of Zakat payers. Meanwhile, analysis by percentage revealed that the number of Zakat payers through online payment shows a persistent increment from 2.8% in 2009 to 5.5% in 2014. For manual payment, there was an opposing trend.

Table 3: Comparison between the number of manual and e-payment Zakat payers

	Manual	Percentage (%)	Online	Percentage (%)	Total
2009	33,786	97.2	957	2.8	34,743
2010	36,976	96.4	1,365	3.6	38,341
2011	39,665	95.9	1,698	4.1	41,363
2012	43,938	95.5	2,053	4.5	45,991
2013	46,765	94.6	2,667	5.4	49,432
2014	50,612	94.5	2,956	5.5	53,568
Total	251,742	95.6	11,696	4.4	263,438

Analysis on the data in Table 4 shows a similar trend with Table 3, in terms of amount and percentage. For five years, the amount collected via a manual approach has increased to RM306, 157,239.97 or 812.4% from year 2009. Interestingly, Zakat collection through e-payment increased by 1641.7% even though the amount only increased to RM14, 497,989.43. Analysis on the percentage revealed that the amount of Zakat collected manually slightly decreased from 97.7% in 2009 to 95% in 2014 while the amount paid through e-payment increased from 3% to 5% in 2014.

Table 4: Comparison between Zakat collected manually and Zakat collected through e-payment

	Manual (RM)	Percentage (%)	E-payment(RM)	Percentage (%)	Total
	RM		RM		
2009	37,686,743.44	97.7	883,106.95	2.3	38,569,850.39
2010	45,059,563.35	97.1	1,354,986.38	2.9	46,414,549.73
2011	51,974,590.52	96.2	2,045,749.26	3.8	54,020,339.78
2012	58,533,668.04	95.4	2,833,925.83	4.6	61,367,593.87
2013	70,995,613.30	95.0	3,768,083.82	5.0	74,763,697.12
2014	79,593,804.76	94.7	4,495,244.14	5.3	84,089,048.90
Total	343,843,983.41	95.7	15,381,096.38	4.3	359,225,079.79

5.0 DISCUSSION

The findings demonstrated that the e-payment system is becoming more popular in Malaysia (Mohammad, 2008). Even though the amount of Zakat collected and the percentage of increment remains low compared to offline payment, there is still room for improvement as IT is growing tremendously coupled with the fact that tax payers nowadays are more IT literate. Besides, the findings also support a study done by Basir (2009) and Abdullah et al (2012) where they claimed that Malaysians prefer to use credit cards and internet banking when they do online payment. Compared to other countries, bank card is among the most popular e-payment methods among Muslims in Malaysia which is similar to the situation in Germany (Turban, et.al, 2011). The authors found that even though their clients preferred to pay Zakat directly to this institution, they choose to pay by credit card for e-payment. This trend is similar with the findings by Adeyeye (2008) who conducted a research on e-payment in Nigeria and other researchers including Hsieh (2001), Paynter and Lim, (2001) and Jan Wong (2013).

This study has also confirmed the study done by Abdul Lateff et al. (2014) and data provided PZNS (2014) where Zakat collection increased yearly from 2009 till 2014 even though they did not elucidate the method of payment. Nevertheless, even though the contribution of e-payment is not significant, it can be one of the factors for Zakat collection augmentation other than privatization, increasing awareness among zakat payers, increasing individual income and increasing country's income as suggested by Nor Ghani et al. (as cited by Ahmad et al., 2006). Finally, analysis on the findings also supports research done by Abd. Wahab and Abdul Rahman (2013) where they stated that online payment would increase the collection of Zakat and cash waqf as the Zakat payment system and computerized Zakat system are among the determinants that affect the efficiency of Zakat institutions.

6.0 CONCLUSION

Nowadays, there are a lot of choices in terms of online or offline payment methods available to Zakat payers in Malaysia. With the advancement in e-payment mode, there are no more reasons for Muslims to escape Zakat. E-payment is believed to be able to overcome most of the constraints in Zakat payment such as distance, time and parking problems.

The findings of this study revealed that internet banking, bank cards and credit cards are among the most preferred e-payment systems among the institution's customers. Even though the amount of Zakat collection and the number of payers are low compared to the offline method, there has been a gradual improvement. In addition, the authors believe that e-payment can be considered as one of the factors which contribute to the boost of Zakat collections in Malaysia and other non-profit organisations since e-payment offers various benefits to both the payers and the recipients.

Last but not least, since the study in this area is very limited, this paper is hoped to shed light to the body of knowledge especially in terms of Zakat and e-payment. In addition, this paper provides input for other non-profit organisations especially in utilizing e-tools to increase their collection.

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