

Technology Adoption among Zakat Institutions in Malaysia: An Observation

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ABSTRACT

This research observes technology adoption among zakat institutions in Malaysia. To achieve the said objectives, qualitative methodology approach is adopted in this research where primary data is collected via observation of website or any related materials that support technology application among Zakat institutions in Malaysia which including website, online collection or payment system and others. Findings from the observation indicate that majority of the Zakat institutions have started to utilise technology system in their organization especially with regards to zakat payment. However, there is still lacking of technology usage for zakat distributions, awareness as well as Zakat fund reporting to public. Overall, as zakat collection and distribution have involved millions of records and its management is still questionable by all parties, it is believed that technology will enhance the operations of Zakat institutions to become more efficient and effective to distribute wealth to the needy. This will at the end increase public trust towards the institutions.

Keywords: Zakat, Technology, Malaysia, zakat collection, zakat distribution

INTRODUCTION

Zakat is one of the Islamic pillar that among the aim is to solve an economic problem in a society by way of wealth sharing between the rich and the poor according to rules set in the Quran and also guidelines prepared by the Muslim authority (Surah An-Nur, verse 56; At-Taubah, verse 60). In addition, the hikmah behind Zakat is to enlighten human life by admitting that all the fund received is not solely for themselves as it should be shared with other who are in need (Surah At-Taubah, verse 103). As Zakat collection is becoming a serious matter in a Muslim world, its' should be managed professionally to ensure fair treatment for both Zakat givers and recipients. It is observed that people nowadays still questioning the management of *zakat* where quiet number of researchers have found that there was low satisfaction among *zakat* givers on the zakat fund management due to high amount of undistributed zakat fund every year. This matter is however having

certain reasons when asked to the zakat institutions. It is believed that they have done their best to perform their duty as Zakat trustee.

In Malaysia, *Zakat* institutions is under purview of the State Islamic Religious council. Every state has their own enactment on how to manage Zakat fund accordingly. Parallel to the industrial technology movement, the adoption of technology is appearance among the Malaysian Zakat institutions. Previously, everything is done manually, and all record related to Zakat collection, distribution, and management is done using 100 percent by human resources. Hence, there is lack of efficiency to ensure all data and documents are recorded properly without having any issues of mis-recorded or loss of data. Now, technology has assisted the Zakat institution in keeping record of Zakat collection, reaching asnaf for Zakat distribution and managing Zakat fund for investment purposes.

This research basically observes the adoption of technology among Zakat institutions in Malaysia especially in the context of Zakat collection and distribution. It is believed that public trust and satisfaction is very crucial for the institution to sustain in future to ensure all the Zakat contribution reach the needy and indirectly alleviate the property level in the country. The paper is structured based on following sequence, literature review, methodology, findings, and discussion.

LITERATURE REVIEW

Malaysian Zakat Institutions

The Federal Constitution of Malaysia has concluded that matters relating to Islam are subject to the jurisdiction of the states as provided in the Ninth Schedule (2-List of States). It lists matters related to *wakaf*, *zakat*, *baitulmal* and it's related as the responsibility of every state in Malaysia. The Federal Constitution's financial provisions also state that the proceeds of *zakat* should be accounted for in a separate fund (fund) and not in the Federal or State Consolidated Fund. Accordingly, all states have made provisions relating to the management of *zakat* in their respective state acts or enactments such as the Islamic Administration (State of Selangor) Enactment 2003, the Selangor *Zakat* and Zoning Regulations 2013 and the *Syariah* Criminal Offenses (Federal Territories) Act 1997 (Act 559). State enactments have set the State Islamic Religious Council (SIRC) as the governing body for the collection and distribution of *zakat* in each state except in the state of Kedah where the *zakat* administration is fully implemented by the Kedah *Zakat* Board under the state administration.

Overall, the SIRC plays two key functions in the state administration framework. Apart from administering the economic development activities of the Islamic states, including the administration

of charity, the main function of SIRC is to help and advise the Sultan as the head of Muslim on matters related to Islam and Malay customs. Section 5 of the Administration of Islamic Law (Pahang) 1991 for example, has outlined clearly Pahang SIRC function to advise the Sultan in respect of all matters relating to the Islamic religion and Malay customs except those related to the administration of justice. This makes them the highest authority in the Islamic administration at the state level.

Accordingly, in the 1990s, there was a change in the structure of the *zakat* administration in several states aimed at increasing the efficiency and effectiveness of *zakat* management in general. The profession of *zakat* collection is professionally introduced in Malaysia through corporate and privatization activities. Following this introduction, the management structure of *zakat* activities in Malaysia has changed in certain states. In some states, collections and / or distributions are made by entities appointed as agents (*amil*) through the concept of '*wakalah*'. *Wakalah* involves the reduction of certain functions (*zakat* collection) to third parties for a particular activity or item (Al-Zuhayli, 2002; Saleem, 2007).

This initiative is said to have successfully increased the revenue of the charity (Hairunnizam Wahid, Mohd Ali Mohd Noor & Sanep Ahmad, 2005). SIRC for Wilayah Persekutuan (MAIWP), for example, has appointed Harta Suci Sdn Bhd (*Zakat* Collection Center) to carry out *zakat* collection in the Federal Territory (Kuala Lumpur, Labuan and Putrajaya) and maintains its distribution role by the MAIWP Baitulmal Division.

As a *zakat* administrator (*amil*), SIRC is responsible for administering the *zakat* collection and distribution including raising awareness of the obligation to pay *zakat*, providing an infrastructure for *zakat* payments, and managing the distribution of *zakat* to *Asnaf* (needy mentioned in the

Quran) in their respective states. The role of SIRC has also been extended to the development of the *Asnaf* aimed at transforming their lives to become self-reliant and thus becoming a *zakat* payer. SIRC as *Zakat* institutions in Malaysia has so far provided short and long-term assistance direct to the *Asnaf* through various assistance schemes. For example, financial scheme for education, business, disable, houses, boat equipment, machineries, and others.

Even though various efforts have been placed by most of the SIRC in Malaysia to execute their duty as *Zakat* administrator or trustee, there are still issues and challenges faced by the institutions to ensure all *Asnaf* are well captured by *Zakat* fund. Moreover, people have negative impressions on the efficiency of the SIRC in terms of *Zakat* fund management which

mostly on the issue of *Zakat* collection and distribution.

Mobile/Internet Banking in Malaysia

According to Internet World Stats, there are 26,353,017 total internet users with 81.4% penetration are recorded in June/2019 in Malaysia (IWS, 2020). This number shows the adoption of information communication technology by individuals in Malaysia. Furthermore, Industrial Revolution 4.0 has emerged in several developed countries, including emerging countries such as China and India (Abdullah, Abdullah and Salleh, 2017). As this consequence, Malaysia has already welcomed this revolution through several initiatives taken by agencies such as, the Malaysian Digital Economy Corporation (MDEC) (Abdullah, Abdullah and Salleh, 2017).

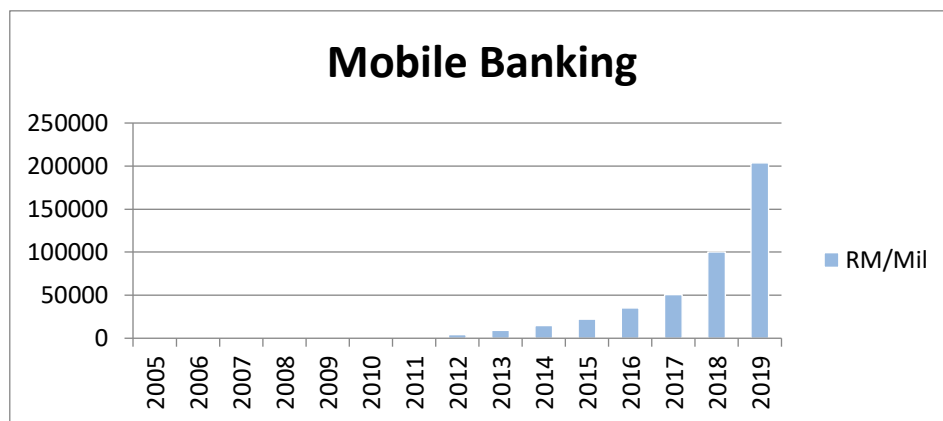


Figure 1. Mobile banking in Malaysia, Source: (BNM, 2020)

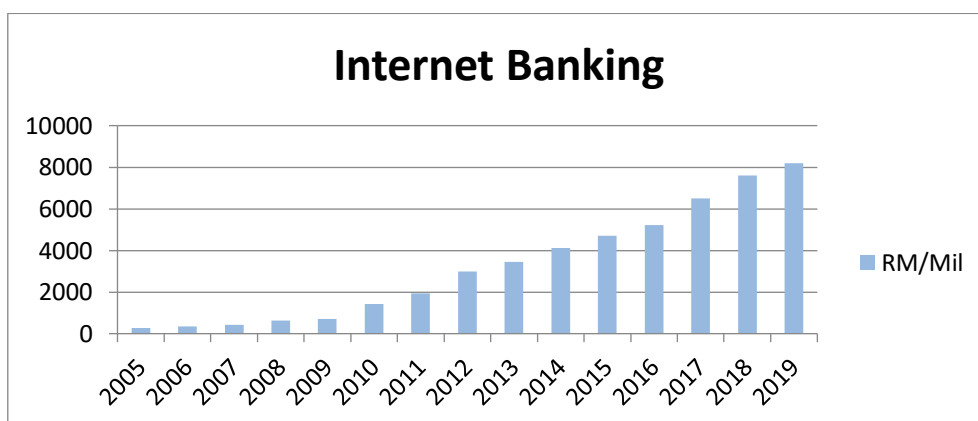


Figure 2. Internet banking in Malaysia, Source: (BNM, 2020)

Hence, internet can be used by mobile as well as computer or any other supportive devices. Internet or mobile banking, online purchase, and online trading are significantly increasing around the world. Mobile banking is used as checking balance, bill payment and other financial services for example; p2p lending or p2p payment incurred through mobile phone (Goh, Suki and Fam, 2014; Ali, Muthaly and Dada, 2018). Significantly, the value of mobile and internet banking are increasing for the last decade in Malaysia (Figure 1 & 2). The figure shows the upward growth of mobile and internet banking users. The multiple uses of mobile phone through various channels are available for communication and transaction along with other features (Abdullah, Abdullah and Salleh, 2017). Therefore, it can be predicted that the penetration of mobile and internet users may be more than 90% in near future.

With these growing internet users in Malaysia, it inclines the fast phase of adoption of innovation offered by fourth industrial revolution (Abdullah, Abdullah and Salleh, 2017). Consequently, mobile or internet banking (technology innovation) may offer flexibility, friendly uses, cost saving, accessibility from anyplace and anytime in terms of *zakat* fund collection and distribution which will ultimately enhance efficiency (Yahaya and Ahmad, 2019). Mobile banking offers financial services to those are in remote area (anywhere) and anytime, develop the regulatory and competition polices, and provides depth primary concept of this services (Klein and Mayer, 2011).

Technology Adoption in Zakat

The development of financial technology has offered opportunities for businesses to growth fast to accelerate economic activities (Ahmad et al., 2014). It is undeniable that the current era is dominated by the advanced technology where knowledge and opportunities are delivered

virtually as well as the usage of artificial intelligence (machine touch) trend have replaced human to human communication. However, improper and inadequate utilization of technology may hamper the gain of efficiency and effectiveness (Agarwal & Prasad, 1999). Technology innovation is not only covering the financial industry but also private and public non-financial sector, for instance; zakat institution (Islamic social finance) to ensure collection and distribution effectively through online system (Muhamad & Khaliq, 2019).

Zakat is one of the Islamic pillars that applied as a tool to redistribution of wealth which schedule collection of public money from eligible *zakat* payers and channels to eligible beneficiaries align with *shariah* principles (Yusuf and Derus, 2013; Rosli, Salamon and Huda, 2018; Migdad, 2019; Yahaya and Ahmad, 2019). Thus, *zakat* is a dynamic constituent in Islamic public finance that shields the ethical, societal and economic ranges (Yahaya and Ahmad, 2019).

Zakat as an Islamic social finance tool is currently move is moving towards financial technology to accelerate quicker collection and distribution of zakat funds (Salma Al Azizah & Choirin, 2019). Using online transaction, zakat payers would be able to calculate their zakat amount, making payment and tracking their payment on fingertips via online platform (Ahmad et al., 2014). Accordingly, financial technology would provide flexible and friendly system, effective, efficient, translucent and fast services to its users (Salma Al Azizah & Choirin, 2019). At the end, it may provide new innovation to the financial business in terms of products and services. Salma Al Azizah and Choirin (2019) have found that zakat funds collection and distribution were improved by adoption of technology in Indonesia. As a consequence, technology application in managing zakat funds is in trend and can facilitate the best practices as well as to

implement Islamic social finance effectively (Nur et al., 2019).

The expansion of technology with innovation and digitalization is spreading over almost all industries along with financial institutions (Yahaya and Ahmad, 2019). It helps to improve design, collection and distribution process and sharing information of any financial institutions (Nuswantara, Nugrohoseno and Iriani, 2018) including the banking and financial institutions including Islamic finance and banking. Accordingly, the public and non-public institutions such as charity, endowment and zakat institutions are adopting technology in order to ensure robust financial inclusion (Nuswantara, Nugrohoseno and Iriani, 2018; Yahaya and Ahmad, 2019). Financial technology adoption in transaction mechanism and zakat receipts are not contradict Islamic principles with several conditions (Utami, Basrowi and Julianas, 2019).

Furthermore, adoption of technology provides the opportunities to track and monitor the process of zakat collection and disbursement (Nuswantara, Nugrohoseno and Iriani, 2018; Migdad, 2019). Internet banking has adopted to collect and distribute zakat fund from the desk or service counter (Yahaya & Ahmad, 2019). Technology adoption in zakat institution has significantly increase the collection rate (Yahaya & Ahmad, 2019). Study by Esrati et al. (2018) on acceptance of the zakah institutions, Asnaf (zakat recipients) as well as Zakat contributors on the usage of technology have found that they believe that technology may enhance the Zakat management and services. They also found that the Zakat stakeholders believe in the technology and its advantages even though at the same time they were not familiar with blockchain technology. The authors in this context concluded that it may because of lack of familiarity on the blockchain technology. Similarly, in the context on Indonesia, adopting technology in zakat payment has benefitted in terms of

public welfare (Utami, Basrowi and Julianas, 2019).

In addition, adoption of technology may use to establish a central database for gathering data from all states, which will enlist all zakat institutions and other charity organizations (Migdad, 2019). Technology adoption enhances transparency of information which ultimately improve the performance of zakat institutions (Nuswantara, Nugrohoseno and Iriani, 2018; Utami, Basrowi and Julianas, 2019). As a result, adoption of technology with effective structural model will benefit the zakat institutions itself along with welcoming the fourth industrial revolution in all aspects in Malaysia. Study on the acceptance of Mobile banking in zakat distribution among Asnaf by Muhamad and Khaliq (2019) have found that four factors that may enhance the utilization of Mobile banking are behavior, facilities, family or peers. Influence and also the performance of the system.

Technology Adoption Theories

Technology acceptance model (TAM) is the contemporary version of theory of reasoned action which was introduced by Davis (1986), which is denoted the user adoption of information technology. According to Yusuf and Derus (2013), assumption of TAM denotes that an individual act without any limitation when they intend to act on specific behavior. Hence, there are several constrictions limit individuals' freedom to act such as; constraint capability, time restriction, organizational or environmental constraints or unconscious habits (Bagozzi and Verbeke, 2003). Hence, Davis (1986) denoted that IT acceptance is predicted and explained by the relationship of all components (belief-attitude-intention-behavior).

In fact, trust related components may have direct impact on individuals' trust intention (McKnight, Choudhury and Kacmar, 2002), trust intention describe the

readiness of an individual to rely on another (Yusuf and Derus, 2013; Ali, Muthaly and Dada, 2018). Trust-belief refers to the level of confidence that an individual ready to engage in transactional obligations as expected to them (Guo and Barnes, 2007). Furthermore, nature of trust and trust in institution define the belief in the web-trust model (Yusuf and Derus, 2013). Thus, familiarity is an important factor on trust-linked behavioral intention (Gefen, 2000; Bhattacharjee, 2002; Walczuch and Lundgren, 2004). Familiarity is the understanding of current behaviour adopted from past transactions/experiences that lead to further behavior (Gefen, 2000). Moreover, past successful experiences in transaction always enhance more transactions beyond a cautious valuation of the current ability, generosity and uprightness of business partner (Bhattacharjee, 2002). As the consequence, familiarity increases the acceptance of web-based facilities and also increases the understanding of trust-linked behavior enlarged web-trust (Yusuf and Derus, 2013).

Innovation refers to a notion, practice or entity which is observed as new by an individual or other component of acceptance whereas diffusion as the procedure by which an innovation is interconnected within a societal system and accepted or rejected by the society (Rogers,

1995). So, this mechanism of transferring or communicating the innovation within a societal system form the innovation diffusion theory (IDT), that has been used at both individual and organization level (Rogers, 2003). This theory provides a theoretical structure for discoursing acceptance globally (Yusuf and Derus, 2013). It also exposed the propagation of IR4.0 with the availability of all elements such as; innovation, channel, social system and time (Abdullah, Abdullah and Salleh, 2017). Hence, the impact on the level of innovation adoption is attributed by rational advantage, compatibility, intricacy, experimental ability and observability (Rogers, 1995). However, individuals have diverse propensities to accept an innovation (Yusuf and Derus, 2013).

Unified theory of acceptance and use of technology (UTAUT) signifies to explain individuals' intentions to apply information system and successive behavioral use (Venkatesh *et al.*, 2003). According to this theory, users' intention and behavior determined by four components those are; expectation over performance, expectation over effort, societal influence and facilitating condition (Yusuf and Derus, 2013; Ali, Muthaly and Dada, 2018). The core constructs used in UTAUT Model were presented in the Table 1.

Table 1. Core constructs of UTAUT

Core Construct	Definition
Performance Expectancy	the expectation level that an individual thinks adopting the system will assist him or her to achieve or perform better performance
Effort Expectancy	The level of easiness of using the system
Social Influence	Community members' influence to use a new system
Facilitating Conditions	An organizational and technical infrastructure available to support the use of the system.

Source: (Venkatesh *et al.*, 2003)

METHODOLOGY

This research is conducted based on qualitative approach. Primary data is collected based on observation on website and online internet application among zakat institutions in Peninsular of Malaysia. Overall, ten (10) zakat institutions have been selected in this research for content analysis. Findings of the observation are presented below.

FINDINGS

Table 2 below summarises results of observation among ten (10) Zakat institutions in Malaysia particularly on technology adoption for the overall zakat collection, distribution, and management. In details, it is observed that majority of the institutions have started to utilise technology system in their organization mainly with regards to zakat payment. Hence, in terms of Zakat fund collection and distribution, only three of the institutions have disclosed amount of zakat collection and distribution for a particular year in their website which were Negeri Sembilan Baitulmal Body, Lembaga Zakat Selangor, and Lembaga Zakat Negeri Kedah. The rest of the institutions were only presented general information related to Zakat such as types of zakat, calculation, value of nisab, and other general information at their websites.

Accordingly, further observation is done on a technology system adopted by the institutions. It is found that, majority of the institutions were concerned more on zakat payment system rather than zakat assistance system to the needy. In particular, they have adopted internet banking system which including FPX, jompay, credit card, salary deduction system, and others for zakat payment. In addition, only four (40 percent) of the institutions (including Negeri Sembilan Baitulmal Body, Pusat Kutipan Zakat Pahang, Majlis Agama Islam Kelantan, and Lembaga Zakat Negeri Kedah) have utilised mobile application to ease zakat payer and only one of them have adopted artificial intelligent in the website which was Majlis Ugama Islam Pahang. Therefore, majority of the institutions still do not keen to adopt mobile application even though it is now have become a norm in a society. Fortunately, only one institution (Lembaga Zakat Negeri Kedah) have used technology to record zakat activities which including asnaf registration online application, amil (agent) location, real time amount of zakat collection and distribution. As because of the mobile application is newly applied, there are parts that need to enhance in future. It is concluded that connection of all zakat activities and reporting it to public is very important to increase transparency and public trust in zakat management.

Table 2. Adoption of Technology among Malaysian Zakat Institutions

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application
1.	Pusat Zakat Melaka Zakat Melaka (PZM) since 2001 -the role mainly for zakat collection whereas zakat distribution is done by Baitulmal Majlis Agama Islam Melaka.	Enakmen Pentadbiran Agama Islam (Melaka) 2002 section 75 (1).	*No disclosure on amount of zakat collection and distribution for particular year *Very limited information on zakat at website * Website not attractive & friendly	*No zakat apps yet or any online system built to ease zakat payment and distribution * No comprehensive online zakat management system

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application
2.	Majlis Agama Islam Negeri Johor (Zakat Department)	Zakat & Fitrah Rules Year 1962	* No disclosure on amount of zakat collection and distribution for particular year *Enough information of zakat (types, calculation)	*There is option to pay zakat via online transfer *No online application specific for zakat * No comprehensive online zakat management system
3.	Negeri Sembilan Baitulmal Body	Enakmen Pentadbiran Agama Islam (Negeri Sembilan) 2003 (Enakmen No. 10 2003).	*Disclosure of amount zakat collection and distribution yearly *Information on Zakat is stated in the website	*Online system for zakat calculation, payment system, *Mobile Apps for zakat payment (Zakat N9) * No comprehensive online zakat management system
4.	Majlis Agama Islam Wilayah Persekutuan (Zakat Collection Centre-PPZ)	Article 3 (5) of the Federal Constitution Section 4 (1), Act 505 Section 31, Act 505 .	* No disclosure on amount of zakat collection and distribution for particular year * Information on Zakat types and calculation is stated in the website	*Online system for zakat (calculation, payment, statement) *Online payment system (salary deduction, direct transfer FPX, credit card, internet banking) * No mobile apps * No comprehensive online zakat management system
5.	Lembaga Zakat Selangor	Trusty Act 1952	*Disclosure of amount zakat collection and distribution yearly *Report of zakat collection and management	*Comprehensive online system for zakat payment, collection, and distribution e-zakat pay e-zakat online e-majikan e-ejen e-spg (salary deduction) *No comprehensive online zakat management system
6.	Pusat Kutipan Zakat Pahang	Enakmen Pentadbiran Undang-Undang Islam 1991	* No disclosure on amount of zakat collection and distribution for particular year * Information on Zakat types and calculation is stated in the website	*Zakat online payment (FPX) *Mobile apps (Zakat Klik) *Artificial intelligent *BizZakat * No comprehensive online zakat management system
7.	Majlis Agama Islam Kelantan	Enactment 4 1994 Section 51	*Very attractive and informative website *No disclosure on amount zakat collection and distribution for particular year	*Online zakat payment system and assistance (monthly salary deduction, jompay, fpx, migs)

No.	Zakat Institutions	Enactment on Zakat	Disclosure on Related Information at Website	Zakat Online Application
				*mobile apps (MyMAIK e-zakat payment) * No comprehensive online zakat management system
8.	Majlis Agama dan Adat Resam Terengganu	Enakmen Pentadbiran Hal Ehwal Agama Islam (Terengganu) 2001 (En. 2/01) Section 70	*No disclosure on amount zakat collection and distribution for particular year * Information on Zakat types and calculation is stated in the website	*Online system to apply zakat and for zakat payment *No mobile apps *No comprehensive online zakat management system
9.	Lembaga Zakat Negeri Kedah	Enactment Lembaga Zakat Negeri Kedah Darul Aman (LZNK) 2015	*Disclosure on amount zakat collection and distribution at front page website *Information on Zakat types and calculation is stated in the website *Disclosure of Annual Report and Statistic on zakat distribution to various types of Asnaf	*Online zakat calculation and payment *Mobile Apps (Zakat on touch)-quiet comprehensive which not only on zakat payment
10.	Majlis Agama Islam dan Adat Istiadat Melayu Perlis	Enakment Pentadbiran Agama Islam Negeri Perlis 2006	*No disclosure on amount of zakat collection and distribution *Limited Disclosure of Zakat information on website	*Limited online system for Zakat payment *No mobile apps *No online system for zakat assistance *No comprehensive online zakat management system

CONCLUSION

As Zakat is mentioned clearly in the Quran as one of the Islamic pillars, its attainment should uphold the objective of Shariah (Maqasid Shariah). The principle of accountability and transparency are very important in order to build confidence of the general public to make donation through Zakat for poverty eradication. Findings from the observation made via this research indicate that the Malaysian Zakat institutions still in their complacent state to maintain with the traditional medium to collect and distribute the Zakat fund. Furthermore, majority of the institutions do not keen to share the amount of zakat collected and distributed in their website in

addition to any activities that they have done with regards to the fund especially the investment activities. Even though, technology have been widely adopted throughout the world, it still unable to attract the interest of the Malaysian zakat institutions where only few of them have utilised mobile technology platform to reach the public both the zakat contributor as well as the recipients. Apart of zakat collection, the other important part is zakat education and awareness where the institution can easily disseminate knowledge on Zakat through medium of technology. However, the observation shows that the usage of mobile application still lacking among the zakat institutions in Malaysia. A lot of effort needs to be done

to enhance the practice and the culture of Malaysian zakat institution in order to become more proactive and innovative through technology adoption which the aim is to increase the zakat fund operation.

Suggestions

Among suggestions that the research would like to share are:

- a) It is suggested to the Zakat institutions to set up a special technology department to construct a comprehensive platform for Zakat chain management which the purpose is manage all stages of zakat from knowledge sharing, zakat collection, payment, distribution, zakat report, and investment.
- b) It is suggested to the Zakat institutions to collaborate with third part which including government body and also financial institutions to discuss any idea on enhancing the efficiency of Zakat to the society
- c) It is suggested to the Zakat institutions to disseminate knowledge and awareness on zakat and technology both via offline and online platform to the public
- d) It is suggested to the Zakat institutions to enhance human resource expertise on technology (training and education) and at the same time find more experts to strengthen the adoption of technology in zakat management
- e) It is suggested to the Zakat institutions to add more allocation/yearly budget on technology expenses. In this context, the federal government may also assist the institution in terms of budget allocation for technology

Future research may explore on the development of a comprehensive platform for zakat chain management for Zakat institutions.

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