

## Online Waqf Acceptance in Malaysia

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**Abstract:** Waqf is as an act of holding certain property and preserving it for the mutual benefits of Muslims community. Although, not compulsory, the economic stability experienced by Muslim community has shown an increased trend in performing waqf. In the era of automated processing and increased user access to internet facilities, the internet infrastructure opens up an opportunity for waqf contribution process to be facilitated through online means. Therefore, a survey employing Technology Acceptance Model (TAM) and DeLone and McLean Model was conducted with IT professionals to identify factors influencing online waqf acceptance in Malaysia. The results analysis was then used to propose a conceptual model for online waqf environment. The findings show that perceived usefulness and information quality are significant factors that influence online waqf system acceptance in Malaysia. In addition an online waqf acceptance model has been constructed to facilitate a conceptual understanding to associated traits required to support perceived usefulness and information quality when designing an online waqf system.

**Key words:** Online waqf, Technology Acceptance Model (TAM), DeLone and McLean Model, acceptance, support, information

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### INTRODUCTION

Waqf is an act of holding certain property and preserving it for the benefits of Muslims community (Bin Man and Salihu, 2011; Mohammad, 2011). It is one form of charity engaged by Muslims of which the contribution can be used to develop mosque, hospital, universities or any other physical properties that can be used and contribute to the well-being of the community at large.

Malaysia is one of the countries with high number of Muslims population. The economic stability among Muslims community in Malaysia have generated a strong trend of performing waqf. This is due to their ability to contribute more than the minimum shares offered by the state for waqf scheme (i.e., RM5-10). Strong cash in-flow from the waqf scheme has resulted into many properties for community use being built in Malaysia.

On the other hand, the advancement in information technology in Malaysia opens up an opportunity for transforming the conventional waqf system into an online waqf system. An online uses internet banking services as the medium of transaction. According to BNM (2015), up to September 2015, the number of population that uses internet banking facilities in Malaysia covers 60% of

Malaysian population. The increase in the numbers indicates the presence of an opportunity to create new system for facilitating waqf contribution using online services rather than conversational means due to changing user behaviour (BNM., 2015). Furthermore, the implementation of online waqf can contribute to the increment of Waqf fund as it presents itself as an easy and efficient way for donors to contribute for waqf (Yusof *et al.*, 2014).

However, online waqf systems have not been fully implemented in Malaysia. Conventional waqf process is still the norm in Malaysia where people have to go to an organization that manages waqf fund to make waqf contribution. The same observation can also be seen in Islamic banking institutions in Malaysia where they lack online facilities to support waqf contribution processes. Research on Islamic transaction has generally been on Islamic internet banking adoption and general waqf concept with the latter lacking understanding of technological perspectives.

Therefore, to be in line with the growth of online transaction usage, this study argues the need to understand how waqf contribution process can be supported through online technologies. We believe that the adaptation of Technology Acceptance Model (TAM) as

well as DeLone and McLean Model can put the acceptance of online waqf to good effect and in turn contribute to an improved online waqf system environment and attracting more donors to perform waqf.

To put context into our suggestion we begin by describing the underlying concept of waqf, TAM and DeLeon and McLean Model which illustrate their attributes. We then demonstrate how the attributes influenced the hypothesis of the research methodology. We then discuss the findings as evidence to how online waqf system can be supported. Our purpose is to reveal design considerations that system developers can use to create an online waqf system for the use of current waqf donors and potential ones.

### **Literature review**

**Waqf:** Waqf is one medium of charity in the Muslim community. The waqf is stated as similar to the endowment which consists of the declaration of intention, the donor and the beneficiaries (Bin Man and Salihu, 2011; Mohammad, 2011). However, the main trait of waqf is releasing the property (i.e., cash or physical property) from ownership of the donor but the deed of the property remains in the name of the donor as its proceed go to some specific beneficiaries. The waqf property can no longer be inherited or transferred because it is based on the concept of perpetuity where the property will remain as waqf property until hereafter. Several examples of waqf property include hospital, school and land where the underlying key feature is that the resulting property from a waqf process must be tangible and accessible for use by community at large.

Malaysia is one of the countries with high population of Muslims community. The economic stability has encouraged many Muslims to perform the waqf. The government has also been supportive by giving tax exemptions to individuals and companies that perform waqf.

**Online Waqf:** Waqf has emerged from land waqf to cash waqf and recently towards online waqf. The online waqf is generally referred to as Muslim's donation in the form of cash that is performed via. electronic transaction (Amin *et al.*, 2014).

Online waqf presents many benefits to the organization responsible in managing waqf fund. It helps in managing monetary transaction and offers tracing system to ensure that all funds are managed properly. The technology can also reduce intermediaries between the people who are giving waqf and the recipient of the waqf money, ensuring non-abuse of funds. Doubts have been casted by donors whether their waqf fund is being

channelled through the right institution. The use of online waqf can help increase trust among donor as their funding will be directly transferred into the waqf institutions account.

**Technology Acceptance Model (TAM):** TAM is a model that explains factors causing user acceptance towards a particular technology (Davis, 1989). It models how users accept and use the technology. TAM is capable in explaining user behaviour across wide range of user population and providing explanation on determinants of technology acceptance (Davis, 1989). TAM highlights two main factors that influences user intention and behaviour towards new technology. The two factors are perceived usefulness and perceived ease of use.

**Perceived usefulness:** Perceived usefulness is the degree user believes that the system will enhance their job performance (Davis, 1989). Perceived usefulness was found to be one of the factors influencing online waqf acceptance among bank customers in Kota Kinabalu, Sabah (Amin *et al.*, 2014).

A study on mobile PC found that perceived usefulness is an influential variable of mobile PC acceptance (Ramayah and Suki, 2006). Seeing that online waqf in Malaysia is also provided through mobile applications, it is believed that perceived usefulness can be used as a variable in the study of online waqf acceptance in Malaysia.

**Perceived ease of use:** Perceived ease of use is the capability of people in understanding the system and this is dependent on clear and understandable information provided by the system. System understanding requires mental effort from the user (Davis, 1989). A successful system that achieves perceived ease of use and user understanding can be considered as a user-friendly system.

**DeLone and McLean Model:** The DeLone and McLean model provides a comprehensive framework for measuring the performance of information systems (DeLone and McLean, 2004; D'Ambra and Rice, 2001). It consists of six interrelated dimensions of information systems success: system quality, information quality, service quality, intention to use, user satisfaction and net benefits. This study only focuses on system quality and information quality.

**System quality:** System quality is the comparisons on what customers feel should be offered and what is provided (D'Ambra and Rice, 2001). Users usually value

several attributes in the internet environment such as usability, availability, reliability, adaptability and response time (DeLone and McLean, 2004).

**Information quality:** Information quality captures the e-Commerce content issues (DeLone and McLean, 2004). Web content should be personalized, complete, relevant, easy to understand and secure if prospective buyers or suppliers are to initiate transactions via. the internet and facilitate customer return to a site on a regular basis. Information quality is highly related to the quality of information system outputs as it is used for decision-making, business use and meeting information specifications.

**Factors that influence technology acceptance:** The studies by Amin *et al.* (2014) and Sripalawat *et al.* (2011), found several factors that influence technology acceptance of online and mobile system. The factors are perceived religiosity, perceived self-efficacy and amount of information.

**Perceived religiosity:** The main factors for Muslims to perform waqf are to get reward in hereafter. Muslims believes that good deeds will gain rewards that would be appraised on the day of judgement. Evidently, perceived religiosity is a significant factor influencing online waqf acceptance by banking customers in Kota Kinabalu (Amin *et al.*, 2014).

People are considered religious if they believe in God and follow the principles set by religion (McDaniel and Burnett, 1990). As waqf is a form of charity strongly encouraged in Islam, people who perform waqf can be considered as religious. This indicates that perceived religiosity can be tested as underlying factors of online waqf acceptance in Malaysia.

**Perceived self-efficacy:** Self-efficacy is the ability of people in motivating themselves in performing a task. For example, people with low self-efficacy tend to be more resistant in using technologies for performing a task compared to those with high self-efficacy (Ellen *et al.*, 1991). A study by Amin *et al.* (2012) stated that self-efficacy is an important determinant in forecasting people's intention in using mobile banking. Therefore, perceived self-efficacy is an applicable variable in identifying factors influencing online waqf acceptance in Malaysia.

**Amount of information:** Information plays an important role in decision making and it is believed that the amount of information provided is one of the factors influencing

online waqf acceptance in Malaysia. This was evident from the online waqf acceptance conducted in Amin *et al.* (2014).

## MATERIALS AND METHODS

This study employed the quantitative approach where the numerical data are obtained from systematic process which helps determine the relationship between variables:

- $H_{01}$ : there is no significant influence between perceive usefulness and online waqf acceptance
- $H_{a1}$ : there is significant influence between perceive usefulness and online waqf acceptance
- $H_{02}$ : there is no significant influence between perceive ease of use and online waqf acceptance
- $H_{a2}$ : there is significant influence between perceive ease of use and online waqf acceptance
- $H_{03}$ : there is no significant influence between perceive religiosity and online waqf acceptance
- $H_{a3}$ : there is significant influence between perceive religiosity and online waqf acceptance
- $H_{04}$ : there is no significant influence between perceive self-efficacy and online waqf acceptance
- $H_{a4}$ : there is significant influence between perceive self-efficacy and online waqf acceptance
- $H_{05}$ : there is no significant influence between perceive amount of information and online waqf acceptance
- $H_{a5}$ : there is significant influence between perceive amount of information and online waqf acceptance
- $H_{06}$ : there is no significant influence between perceive system quality and online waqf acceptance
- $H_{a6}$ : there is significant influence between perceive system quality and online waqf acceptance
- $H_{07}$ : there is no significant influence between information quality and online waqf acceptance
- $H_{a7}$ : there is significant influence between information quality and online waqf acceptance

A questionnaire consisting questions related to online waqf acceptance in Malaysia was distributed to 140 respondents. The respondents were IT professionals furthering their studies in Masters of Science in Information Technology.

TAM as well as DeLone and McLean Models were used as constructs in developing the questionnaire. Both were also used as a reference model to identify factors that influence acceptance and success of an online waqf system. The research model of this study can be seen in Fig. 1.

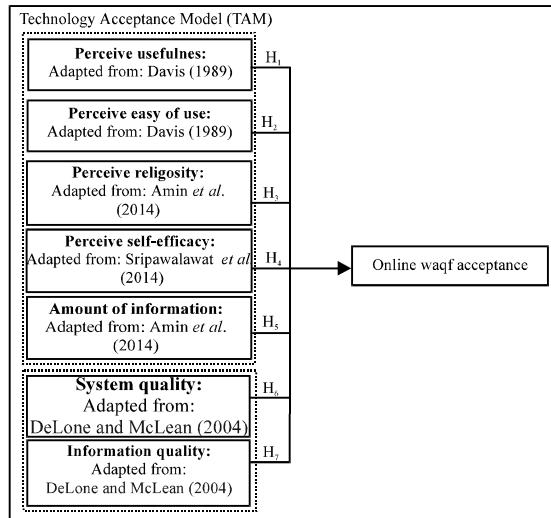


Fig. 1: Research model

From Fig. 1 it can be seen that online waqf acceptance is the dependent variable while perceived usefulness, perceived ease of use, perceived religiosity, perceived self-efficacy, amount of information, system quality and information quality are independent variables as they are perceived as factors influencing technology acceptance. The hypotheses for this study are: the purpose is to prove the type of relationship that exists between dependent and independent variables.

**RESULTS AND DISCUSSION**

**Profile of respondents:** Respondents profile was analysed using descriptive statistics of which the summary is tabulated in Table 1.

**Level of online waqf acceptance and determinant factors:** The overall mean score for all items in the survey show high positive mean. The item in the survey consists of 40 items with all the variables measured on a 5-point scale. All items in the survey have high positive numbers with the range of 3.0143-4.5243. The level of acceptance on online waqf is considered high with the mean of 4.3729. This indicates that most of the respondents gave positive feedback towards online waqf acceptance. Table 2 shows the mean value of all items in the survey.

**Factors influencing online waqf acceptance:** A multiple regression analysis was done to identify factors influencing online waqf acceptance in Malaysia. The multiple regression analysis was conducted on all independent variables of the online waqf acceptance. Table 3 presents the results of multiple regression analysis.

Table 1: Summary of respondents profile

Items/category	Frequency (n = 140)	Percentage
<b>Gender</b>		
Male	35	25.0
Female	105	75.0
<b>Age (Years)</b>		
20	2	1.4
21-30	87	62.1
31-40	39	27.9
41-50	12	8.6
51	0	0.0
<b>Highest education</b>		
Bachelor degree	118	84.3
Master's degree	22	15.7
<b>Employment status</b>		
Employed	106	75.7
Unemployed	34	24.3
<b>Monthly income</b>		
RM 900	34	24.3
Below	2	1.4
RM 901-RM 1000	29	20.7
RM 1001-RM 3000	59	42.1
RM 3001-RM 6000	16	11.4
RM 6001 and above	0	0.0

Table 2: Level of online waqf acceptance and determinant factors

Variables	Mean
Online waqf acceptance	4.3729
Perceive usefulness	4.3014
Perceive ease of use	4.1557
Perceive religiosity	4.5243
Perceive self-efficacy	4.2800
Amount of information	3.0143
System quality	4.0843
Information quality	4.2629

Table 3: Results of multiple regressions analysis for TAM

Variables	UC		SC		Sig.
	B	SE	Beta	t-values	
Constant	0.679	0.617		1.102	0.273
Perceived usefulness	0.259	0.077	0.281	3.372	0.001
Perceived ease of use	0.081	0.102	0.081	0.797	0.427
Perceived religiosity	0.035	0.119	0.022	0.294	0.769
Perceived self-efficacy	0.099	0.090	0.098	1.107	0.270
Amount of information	0.039	0.043	0.705	0.915	0.362
System quality	0.109	0.069	0.122	1.589	0.0115
Information quality	0.257	0.065	0.292	3.983	0.000

\*UC = Unstandardized coefficients; SC = Standardized Coefficients

From the analysis conducted, the followings results are shown:

- There is a significant influence between perceived usefulness and online waqf acceptance
- There is no significant influence between perceived ease of use and online waqf acceptance
- There is no significant influence between perceived religiosity and online waqf acceptance
- There is no significant influence between perceived self-efficacy and online waqf acceptance
- There is no significant influence between amount of information and online waqf acceptance

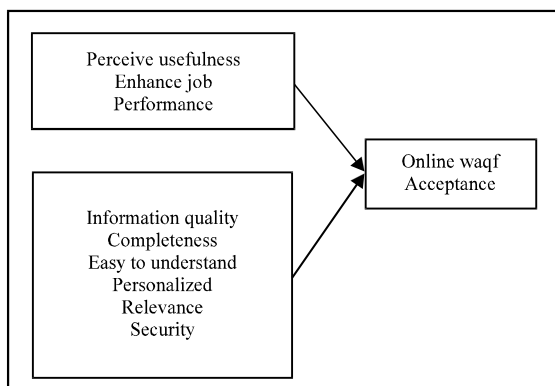


Fig. 2: An online waqf acceptance model

- There is no significant influence between system quality and online waqf acceptance
- There is significant influence between information quality and online waqf acceptance

**An online waqf acceptance model:** There are two factors that significantly influence online waqf acceptance in Malaysia. The factors are perceived usefulness and information quality. Figure 2 shows our online waqf acceptance model in Malaysian context.

Perceived usefulness plays an important role in online waqf acceptance in Malaysia as respondents believe that an online transaction would enhance user performance in a waqf contribution processes. This in turn would encourage users to accept the online waqf technology.

Information quality also plays an important role towards online waqf acceptance. The web content should be personalized, complete, relevant, secure and easy to understand (DeLone and McLean, 2004). Complete information should be provided as it serves as a predecessor to any preparation of using a system and engaging in a particular process where in this case an online waqf contribution transaction.

The information in the online waqf system should be easy to understand as users typically read information hastily. If it is complicated, it will impede its use.

The information in the online waqf system should also be personalized to user needs. This is where the online waqf developers should segment their target users that will contribute waqf through online means further garnering interest to performing waqf using online support.

The online waqf system should also provide information relevant to waqf. This means, the system should provide information in regards to the use of the online waqf system and waqf itself. Insufficient

information related to those items might affect the intention of user in using the online waqf system. The system should also provide other information such as government policies related with waqf.

Lastly, information security is one of the factors in information quality that contribute to online waqf acceptance. The system should provide security measurements in ensuring user privacy. The Personal Data Protection Act 2010 (PDPA 2010) would be a good start to employ as a guide in security design. This is essential as an online waqf system would typically store several types of personal information such as personal details, banking information (i.e. credit card number and debit card number).

## CONCLUSION

Performing waqf is a righteous virtue and highly encouraged in the teachings of Islam. As Muslims in Malaysia are seeing an improved economic stability in their daily life, performing waqf could come naturally with them. However, this needs to be in-line with the changing behaviour of users in the digital age where they are geared to performing transactions through online means. Hence, an online waqf system should be in place where this study calls for an understanding of user acceptance to such system. Our study shows that there are two main influences of online waqf acceptance in Malaysia which are perceived usefulness and information quality. Combined, it would help existing and also potential contributors to perform waqf easily and efficiently. The traits highlighted in the online waqf acceptance model could be adopted by authorized waqf institutions to further improve current online waqf services. We also hope that the findings from this study would inspire future research on the distribution of waqf system in Malaysia.

## REFERENCES

- Amin, H., A.R. Abdul-Rahman, T. Ramayah, R. Supinah and M. Mohd-Aris, 2014. Determinants of online Waqf acceptance: An empirical investigation. *Electron. J. Inform. Syst. Dev. Countries*, 60: 1-18.
- Amin, H., R. Supinah, M.M. Aris and R. Baba, 2012. Receptiveness of mobile banking by Malaysian local customers in Sabah: An empirical investigation. *J. Internet Banking Commerce*, 17: 1-12.
- BNM., 2015. Internet banking and mobile banking subscribers (end of period). Bank Negara Malaysia, Kuala Lumpur, Malaysia. [http://www.bnm.gov.my/payment/statistics/pdf/04\\_internet\\_banking.pdf](http://www.bnm.gov.my/payment/statistics/pdf/04_internet_banking.pdf).

- Bin Man, M.Z. and A.A. Salihu, 2011. New dimension in the mobilization of Waqf funds for educational development. Kuwait Chapter Arabian J. Bus. Manage. Rev., 1: 155-175.
- Davis, F.D., 1989. Perceived usefulness, perceived ease of use and user acceptance of information technology. MIS Quart., 13: 319-340.
- DeLone, W.H. and E.R. McLean, 2004. Measuring e-commerce success: Applying the DeLone and McLean information systems success model. Int. J. Electron. Comm., 9: 31-47.
- D'Ambra, J. and R.E. Rice, 2001. Emerging factors in user evaluation of the World Wide Web. Inf. Manage., 38: 373-384.
- Ellen, P.S., W.O. Bearden and S. Sharma, 1991. Resistance to technological innovations: An examination of the role of self-efficacy and performance satisfaction. J. Acad. Marketing Sci., 19: 297-307.
- McDaniel, S.W. and J.J. Burnett, 1990. Consumer religiosity and retail store evaluation criteria. J. Acad. Market. Sci., 18: 101-112.
- Mohammad, M.T.S.H., 2011. Towards an Islamic social (Waqf) bank. Intl. J. Trade Econ. Finance, 2: 381-386.
- Ramayah, T. and N.M. Suki, 2006. Intention to use mobile PC among MBA students: Implications for technology integration in the learning curriculum. Unitar E. J., 1: 30-39.
- Sripalawat, J., M. Thongmak and A. Ngarmyarn, 2011. M-banking in metropolitan Bangkok and a comparison with other countries. J. Comput. Inform. Syst., 51: 67-76.
- Yusof, M.F.M., M.F.M. Yusof, M.H. Hasarudin and N. Romli, 2014. Cash Waqf and Infaq: A proposed E-philanthropy in Malaysia. J. Humanity, 22: 1-10.