



**FACTORS INFLUENCING THE ADOPTION OF THE  
CROWDFUNDING-WAQF MODEL (CWM) IN THE WAQF LAND  
DEVELOPMENT**

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## FACTORS INFLUENCING THE ADOPTION OF THE CROWDFUNDING-WAQF MODEL (CWM) IN THE WAQF LAND DEVELOPMENT

### Abstract

**Purpose** – This study is designed to examine the behavioural intention of donors or crowd funders to use Crowdfunding Waqf Model (CWM), as this model is proposed to address the liquidity problem faced by Waqf institution in Malaysia

**Design/methodology/approach** – The primary data are collected from the survey administered to donors or crowd funders in Klang Valley and the analysis is conducted using Partial Least Squares (PLS). The model has validated its acceptance in the field by adopting the theory of Technology Acceptance Model (TAM).

**Findings** – This study has revealed that both the perceived usefulness and perceived easy to use are found to have a positive impact on the intention of donors or crowd funders in assisting Waqf institution to develop Waqf land in Malaysia. Furthermore, perceived easy to use has a positive relationship and direct effect with perceived usefulness of crowd funders to use the Crowdfunding Waqf Model

**Research limitations/implications** – The variables that have been used based on TAM in this study are constantly in flux. There are other variables such as trust, social norm, orientations that might be affecting the adoption level of donors or crowd funders in Malaysia. In addition, the current study is covering only Klang Valley, Malaysia. Future research is nevertheless still required that incorporate other variables and extend the study to other states of Malaysia.

**Practical implications** – The findings of this paper will provide Waqf institution with an alternative source for raising capital to develop Waqf asset. The present study also has implications for government and policy makers.

**Originality/value** – To the best of the author's knowledge, no study has incorporated an element of crowdfunding to develop Waqf land. Thus, the present study is relevant in extending the importance of crowdfunding as a source of financing for Waqf institutions in developing Waqf land

**Keywords:** Waqf, Liquidity Constraint, Crowdfunding, Malaysia

**Paper type:** Research paper

### Introduction

Waqf reflects one of the most important socio-economic institutions that ensuring the social and economic role could be established and uphold with fairness and justice (Chapra, 1985). Waqf institution has played its significant role in the Islamic history and civilization. It provides the social goods such as education and health, public goods (roads, bridge and national security), commercial business, utilities (water and sanitation), religious services (building and maintenance of mosque and graveyards), helping the poor, orphans and the needy, creating employment, supporting agricultural and industrial sector without imposing any cost on the

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3 government (Sadeq, 2002). It has brought a significant movement to the Muslim in  
4 various dimensions of social and economics.

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6 The practice of Waqf in Malaysia can be traced to the 14<sup>th</sup> century after the  
7 embracement of Islam by the Malacca Sultanate (Aun, 1975). There are a number of  
8 Waqf lands that exist since the Malaya period, which is before the independence of  
9 Malaysia. During that period, the management and administration of Waqf matters  
10 in Malaysia was handled by group of people like Imams (Head), Penghulu  
11 (individual Mutawalli). Later, the responsibility was placed under one organisation  
12 which is the State Islamic Religious Councils (SIRCs) at each state level. There are  
13 several improvement had been taken by the Malaysian government to enhance the  
14 functions of SIRCs. Among them are introducing national Waqf entities like Jabatan  
15 Wakaf, Zakat dan Haji (JAWHAR) and Yayasan Wakaf Malaysia (YWM) and  
16 SIRCs' subsidiaries such as Perbadanan Wakaf in some of the states (e.g. Selangor,  
17 Negeri Sembilan and Johor). These entities are responsible in administering and  
18 managing matters related to Waqf specifically.

19  
20 Currently, there are around 11,091.82 hectares of Waqf land in Malaysia  
21 that is worth about RM 4 billion or equivalent to US\$0.9 billion (Ali et al., 2015).  
22 According to the study by Maznah et al. (2014), out of 11,091.82 hectares of Waqf  
23 land, 92.8 percent of the waqf land is undeveloped. Though, SIRCs have a huge  
24 number of potential Waqf land, most of the lands are however still lying idle.  
25 According to the former director of JAWHAR, Datuk Dr. Sohaimi Mohd Salleh  
26 mentioned that 99.28 per cent of the Waqf land currently remained undeveloped and  
27 idle. It happened mainly due to shortage of financial resources (Sabit, 2009). Rashid  
28 (2012) highlighted that the investment in developing idle Waqf land in Malaysia is  
29 expected to provide the annual rate of return of 20% to 25%.

30  
31 So far, the Malaysian government becomes the main source of funding to  
32 the SIRCs for developing Waqf land through many projects and developments. For  
33 example, in the 9th Malaysian Plan (RMK-9), the Malaysian government has  
34 allocated about RM 257 million. From this total amount, it comprises RM244  
35 million for developing 19 physical projects and RM12.5 million for non-physical  
36 projects. However, under the 10th Malaysian Plan (RMK-10), the government's  
37 allocation has been reduced to RM 72.76 million or 72 % due to economic reasons  
38 and limited to 10 selected projects (Bernama, 2012). Based on the total budget of  
39 RMK-9 and RMK-10 allocated for Waqf development, only 0.16 per cent of the  
40 total Waqf land has been developed by SIRCs. Furthermore, according to Ngah  
41 (2012) in order to develop entire Waqf lands in Malaysia, SIRCs needed at least  
42 RM80 billion.

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44 It can, therefore, be rightly asserted that the development of Waqf land in  
45 particular is requiring other innovative financing mechanism and sources of funding,  
46 in addition to the government funding. As such, a new mechanism that will allow for  
47 a sustainable source of financing is needed in developing the idle Waqf land in  
48 Malaysia. In lieu with this, the present study proposed Crowdfunding-Waqf Model

(CWM). The Crowdfunding-Waqf Model is expected as the most suitable model that can effectively address or minimize the liquidity constraints faced by Waqf institutions in Malaysia.

Crowdfunding takes advantage of crowd-based decision-making and innovation, and applies it to the funding of projects. Since this mode of raising initial capital has proven to be successful in many countries like Australia, United States, Canada, Netherland, United Kingdom, France, India and Brazil (The World Bank 2013), the potential of this model to revamp the Waqf assets in Malaysia is great. Later, we will show this study's use of the Technology Acceptance Model (TAM) to justify the behavioural intention of donors or crowdfunders to using the Crowdfunding-Waqf Model.

Therefore, the objectives of this study are to (1) propose a sustainable model that could address that the issue of liquidity faced by Waqf institution in developing Waqf assets; (2) test empirically the behavioural intention of donors or crowd funders to using the proposed model; and (3) recommend ways and policies to enhance optimisation of crowdfunding in developing Waqf assets. To the best knowledge of the researcher, there has been no any research conducted proposing crowdfunding to develop Waqf land and using TAM. The present research was designed to test empirically the behavioural intention of donors or crowd funders in using the Crowdfunding-Waqf Model. It is therefore expected that the model being developed together with other key findings from this research will be applicable to Waqf institutions in the country and will benefit not only individuals, organisations, and the country as a whole but could also be adapted and validated for other countries as well.

## **Literature Review**

### *Financing issues of Waqf assets*

There are many studies have been conducted to examine the present development of Waqf in many countries. Most of the researchers focused on how to revive the role of Waqf in the present environment which becomes ineffective due to financial constraints, in particular.

According to the earlier study by Ngah (1987) on Waqf challenges in Malaysia, he found that there was lack of finance/capital for developing Waqf land. Indeed, the income generated from Waqf properties is too low due to few factors which are: 1) the rental of the Waqf property is lower than the market value 2) the rental payments for Waqf properties are long overdue and 3) lack of manpower for collecting rentals. As implication, he mentioned that the expenditure of SIRC's exceeds the revenue generated. Similarly, in another study by Habshi and Othman (1998) noted that Muslim countries like Malaysia are struggling to utilise the existing Waqf lands due to internal constraints. According to their findings, financial is among the constraints considered the main factors that hindered the growth of Waqf land in Malaysia. Their findings also consistent with the recent study

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3 conducted by Pichay et al. (2015) who find that lack of liquidity faces by Waqf  
4 institution is among the main reason why Waqf assets could not benefit the people.

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6 Meanwhile, Ahmad and Muhamed (2011) noted that present practise of  
7 Waqf among the Muslim people is not encouraging due to financial shortage. They  
8 claimed that the contemporary founders of Waqf declared un-productive or  
9 commercially viable land compared to history practiced. The consequences of this,  
10 most of the lands are idle due to financial shortage that faced by SIRC. Chowdury et  
11 al. (2012) also noted that due to financial shortage, Waqf institution's revenue are  
12 insufficient to bear the operational cost, Waqf properties has no self-generating  
13 income and unproductive, and delay in the earning of the compensation in the  
14 acquisition of Waqf properties.

15 Hasan and Abdullah (2008) have conducted a study on the investment of  
16 Waqf land as an instrument of Muslim economic in Malaysia. This study has  
17 highlighted the issues of financial resources that limit the growth of Waqf lands in  
18 Malaysia. On the financial provider aspect, basically SIRC in Malaysia are  
19 depending on government fund allocation. Malaysian national reporter, Bernama  
20 (2012) reported that in 9<sup>th</sup> Malaysian Plan (RMK-9), Malaysian government has  
21 allocated RM 256.89 and in 10<sup>th</sup> Malaysian Plan (RMK-10), government has  
22 reduced the allocation of budget to RM 72.76 million due to some economic  
23 reasons. The total allocation of budget in RMK-9 and RMK-10 only contributed to  
24 develop 0.16 per cent of total land and according SIRC need at least RM80 billion  
25 to develop the entire Waqf lands in Malaysia (Ngah, 2012). Thus, Existing Director  
26 JAWHAR, Datuk Haji Anan Bin C. Mohd (2012) has claimed that the main  
27 challenges of developing *Waqf* land in Malaysia are (1) lack of fund allocated by the  
28 government; and (2) high cost of maintenance of Waqf assets.

### 30 *Existing modes of financing Waqf assets*

31 There are few studies that discussed the existing model of financing Waqf assets in  
32 different countries. Mohsin (2013) in her study has highlighted that currently there  
33 are six existing models of to develop Waqf assets namely (i) Waqf Share Scheme,  
34 (ii) Deposit Cash Waqf Scheme, (iii) Compulsory Cash Waqf Scheme, (iv)  
35 Corporate Waqf Scheme, (v) Deposit Product Waqf Scheme and (vi) Co-operative  
36 Waqf Scheme.

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38 Waqf Share Scheme (WSS) is practised in several Muslim and Muslim  
39 minority countries such as Malaysia, Indonesia, Kuwait, and United Kingdom (UK).  
40 The objective of this scheme is to collect money from the public and to channel the  
41 funds for upgrading the society's welfare and financing the specified projects. In this  
42 scheme, the appointed trustee or Mutawali will issue Waqf shares in different values  
43 and sell the shares to donors for a specific project.

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45 Meanwhile, Deposit Cash Waqf Scheme (DCWS) is a public Waqf which  
46 has been practised in Singapore, Bahrain and South Africa. In this scheme, the  
47 donors contribute directly to Waqf institution by depositing money as cash Waqf

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3 into a specific bank account. Later, the bank is responsible to invest the cash Waqf  
4 into certain projects according to the agreement with the Waqf institution.

5 Compulsory Cash Waqf Scheme (CCWS) is a public Waqf which has been  
6 practised only in Singapore. The Muslim employee's salary is deducted through the  
7 Central Provident Fund (CPF) Board, i.e. Singapore's national social security  
8 organisation. The collected amount is to finance charitable purposes such as building  
9 and maintaining mosques, educational programs, and building Dah'wah centre

10 Corporate Waqf Scheme (CWS) is a public Waqf, which has been practised  
11 in Malaysia, Turkey, India, Pakistan and Bangladesh (Abdel Mohsin, 2013). In this  
12 scheme, the first founder, either a private or public corporation known as the mother  
13 corporation/main founder will establish an associated Waqf institution as the trustee.  
14 Later, the main founder will ask all its subsidiaries to contribute part of their profit  
15 or dividends to the corporate Waqf as for Waqf development on a regular basis,  
16 besides calling other donors such as individuals, companies and institutions  
17 contribute cash Waqf to this associated *Waqf* institution.

18 Deposit Waqf Product Scheme (DWPS) scheme is where the bank acts as  
19 the trustee. Abdel Mohsin (2013) noted that this scheme has been practised by two  
20 banks in Bangladesh, the Social Investment Bank Limited (SIBL) and the Islamic  
21 Bank Bangladesh Limited (IBBL). Also, DWPS is practised in Malaysia by Bank  
22 Muamalat Berhad (BMMB) who acts as the special trustee appointed by the  
23 Selangor state Waqf institution. In this scheme, the donors can deposit the cash  
24 *Waqf* directly to bank account. Later, the bank is responsible for investment the  
25 pooled of deposit money and return on investment will be channelled for various  
26 activities.

27 Co-Operative Waqf Scheme (CWS) is a public Waqf which has been  
28 practised in Uzbekistan (Abdel Mohsin, 2013). This scheme has been established in  
29 1992 to provide the basic needs for each district. Each district acts as the trustee to  
30 manage its own cash Waqf and to offer the services needed in their districts. In this  
31 scheme, the people contribute cash Waqf *by* endowing money for different projects  
32 required by their communities.

33 Besides existing models, there are several past studies have proposed the use  
34 of certificates, e-Waqf and Waqf Shares as a proxy for cash Waqf (Sadeq, 2002;  
35 Jalil and Ramli, 2008). They proposed such certificates to develop Waqf assets.  
36 These types of instruments are straightforward and convenient, especially for  
37 individual donors compared to the use of financial instruments. On the other hand,  
38 Picthay (2015) has proposed Muslim employees and, Islamic businesses and  
39 institutions (MEIBI) model for the development of Malaysian Waqf assets. This  
40 model is a combination of employment salary deduction and corporate philanthropy  
41 schemes. After the cash Waqf collection and then fund is channeled for developing  
42 idle Waqf lands or financing other charitable purposes.

43 It is obvious that the previous literature have focused on the methods of  
44 financing the development of Waqf assets. However, all the studies to date have  
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3 tended to focus only on the use of cash Waqf and income deduction to develop  
4 Waqf land.

5 None of the earlier studies have attempted to conceptualize this issue by  
6 using other alternatives particularly using crowdfunding. Although there is a few  
7 study that discussed element of crowdfunding, however their studies are in the form  
8 of general and conceptual context, and not to develop Waqf land. For instance,  
9 Achsien and Purnamasari (2016) in their study highlighted on the definition of  
10 crowdfunding, types of crowdfunding, and potential and challenges in the context of  
11 Indonesia. Indeed, their study is also described anticipated regulations for crowd-  
12 funding in Indonesia. On the other hand, Nedal (2015) proposed a cross-border  
13 independent institution, known as Tazkiah bank. The proposed bank model  
14 incorporates the concept of crowd-funding for channelling savings into socially  
15 responsible investments at the global level. However, those existing studies to date  
16 have tended not to focus on developing Waqf land. Thus, the studies would have  
17 been more interesting and appealing if the authors had considered to conceptualise  
18 Waqf land development into a model or framework by using crowdfunding.  
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### 21 *Crowdfunding*

22 Crowdfunding is known as a process of collection of funds (in small amount) from  
23 many donors or investors by using a web-based platform for a specified project,  
24 business venture or for the social cause. Crowdfunding can be divided into four  
25 types namely donation crowdfunding, reward crowdfunding, lending crowdfunding,  
26 and equity crowdfunding.  
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### 28 *Donation crowdfunding*

29 Donation crowdfunding is where the collection of funds takes place for the purpose  
30 such as social, artistic, philanthropic and others. Basically, this type of  
31 crowdfunding is not based on any exchangeable of tangible value. For example, in  
32 the United States, Kickstarter, Indiegogo etc. are among the platforms that  
33 supporting donation based crowdfunding.  
34

### 35 *Reward crowdfunding*

36 Reward crowdfunding is the collection of funds, where the investors or donors  
37 receive some tangible reward (such as membership rewards scheme) as a token of  
38 appreciation. Most of the websites which support donation crowdfunding are also  
39 managing reward-based crowdfunding, such as Kicktstarter, Rockethub, Indiegogo  
40 etc.  
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### 43 *Lending crowdfunding*

44 Lending crowdfunding is a platform that matches lenders or investors with  
45 borrowers or issuers to provide loans with lower interest rate, which is set by the  
46 platform. There are some platforms arrange loans between individuals, while other  
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platforms collect funds and then lent to small and medium enterprises. Some of the leading examples from the US are Lending Club, Prosper etc. and from UK are Zopa, Funding Circle etc. Some of the platforms charge a fee based on the loan.

#### *Equity based crowdfunding*

Equity based crowdfunding refers to the fund raised through online by a business, particularly early-stage funding, by offering equity interests in the business to investors. Businesses that are looking to raise capital through this mode typically advertise online through a crowdfunding platform website, which serves as an intermediary between investors and the start-up companies. In the United Kingdom two platforms namely Crowdcube and Seedrs have dominated the narrative for investment crowdfunding from the equity side

#### **The Development of Crowdfunding Platform**

Over the last five years, it seems that crowdfunding platform (CFP) has achieved tremendous growth. In terms of geographical distribution of CFP, it shows that the largest number of CFPs existed in the U.S followed in European countries. In 2014, around 60 percent of CFPs are existed in Europe, while around 20 percent of all CFPs are based in North America. In European continents, United Kingdom is leading with more than 70 CFPs in 2014, followed by France with 70 CFPs, and Germany with around 50 CFPs.

In terms of popularity of types of crowdfunding, reward-based and donation-based CFPs are considered to be prominent and each type attracts substantial funds. As of 2014, the share of newly created platforms that are reward-based is 40 percent, followed by donation-based platforms and lending-based platforms (each around 20 percent in 2014). Meanwhile, in terms of funding volumes of different types of CFPs, it shows that based on data from 2010 to 2012, the most important types of CFP are lending-and donation-based CFPs with funding volumes of USD\$1169.7 million and USD\$979.3 million, respectively (Iizuka, 2014).

Meanwhile, in the context of successful campaign in CFPs, majority of campaigns (62 percent) are donation based. Only 15 percent are reward-based or a mix of donation-based and reward-based, while 22 percent are lending-based (i.e., fundraisers incur a debt). Other investment-based campaigns (equity-based) contribute with less than 1 percent to the total.

#### **Crowdfunding Development in Malaysia**

Malaysia is also not excluded in recognizing the importance of crowdfunding as shown by the concerted efforts by the government and some private agencies to introduce it to the local funding ecosystem. According to Asian Institute of Finance (2014), there are three main web-platforms on crowdfunding in Malaysia namely pitchIN, MyStatr and MDeC. However, these crowdfunding platforms are reward-



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3 based and donation-based crowdfunding. So far, as August 2015, only 19 out of 103  
4 projects are successfully raise funding through these crowdfunding platforms (Asian  
5 Institute of Finance, Unpublished). Indeed, all the successful projects are focusing  
6 on community projects, film and video, arts and music.

7  
8 The market volume for crowdfunding platform in Malaysia was over  
9 \$5million between years 2013-2015. This is covering approximately 6 percent of  
10 total market activity across South East Asia. The total volume was dominated by  
11 donation-based crowdfunding, which accounted for 92.4% of total Malaysian  
12 market, which raised a total of \$4.68m. Reward-based crowdfunding accrued a total  
13 of 6 percent, which amounted to over \$325,000 over the period.

14 In addition to existing crowdfunding platforms in Malaysia, recently, in  
15 June 2015, Malaysian Securities Commission has approving six equity-based  
16 crowdfunding platforms for operation by the end of December 2015. Malaysia was  
17 one of the first countries in Southeast Asia to give regulatory approval for equity  
18 crowdfunding. Among the approved equity-based crowdfunding platforms in  
19 Malaysia are Alix Global, Ata Plus, Crowdonomic, Eureka, pitchIN  
20 and CrowdPlus.asia. Equity-based crowdfunding began to emerge with a very small  
21 total volume of \$58,000, equating to 1.1 percent of total market activity.  
22

### 23 **Technology Acceptance Model (TAM)**

24 The Technology Acceptance Model (TAM) has been known as a useful model of  
25 identifying technology acceptance behaviours in a variety of information system or  
26 information technology contexts. According to Davis (1989), Theory of Reasoned  
27 Action (TRA) introduced by Fishbein and Ajzen's (1975) represents the theoretical  
28 framework of TAM. TRA has indicated that a person's performance of a specified  
29 behaviour is determined by his/her intention to perform it. Meanwhile, TAM  
30 predicts the intention to use and acceptance of information systems and information  
31 technology by individuals (Chen et al., 2011).  
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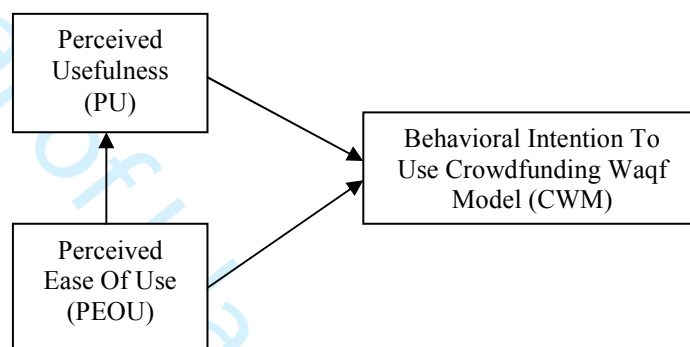
33 TAM incorporates two belief variables that relevant and represents primary  
34 drivers of technology users' acceptance of new information technology namely  
35 perceived usefulness and perceived ease of use. Perceived usefulness is defined as  
36 the degree to which a person believes that using a particular system would enhance  
37 his or her job performance (Davis, 1989). On the other hand, perceived ease of use is  
38 defined as the degree to which a person believes that using a particular system  
39 would be free from effort (Davis, 1989). Perceived ease of use has both an  
40 immediate effect and an indirect effect on adoption intention via perceived  
41 usefulness; therefore, this construct has effects on both perceived usefulness and  
42 attitude (Davis, 1993; Venkatesh and Davis, 2000).  
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44 Many researchers have conducted empirical studies to examine the  
45 explanatory power of TAM, producing relatively consistent results on the  
46 acceptance behaviour of information technology end users (Igbaria et al., 1997;  
47 Venkatesh and Davis, 2000; Horton et al., 2001). According to Chang and Tung  
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(2008), researchers agree that TAM is valid in predicting the individual acceptance of numerous systems including technological based system and information technology-based system (Chin and Todd, 1995; Segars and Grover, 1993).

Realizing the application of the TAM in various fields, this study aimed for the additional contribution of TAM in the area of crowdfunding platform and the Islamic voluntary sector, specifically the Waqf. To the best knowledge of the researcher, there has been no any research conducted using crowdfunding platform for developing Waqf asset and tested the particular model using TAM. Thus, the present research is designed to test empirically the behavioural intention of donors or crowd funders to using Crowdfunding-Waqf Model in developing Waqf assets in Malaysia, as shown in Figure 1.

**Figure 1:** Technology Acceptance Model (TAM)



**Source:** Author's illustration

Based on TAM framework, the present study comes out with three main hypotheses, which are:

(i) Hypothesis 1

Ho: There is no significant (positive) influence of perceived usefulness on the intention to engage in Crowdfunding-Waqf Model among donors or crowd funders.

Ha: There is a significant (positive) influence of perceived usefulness on the intention to engage in Crowdfunding-Waqf Model among donors or crowd funders.

(ii) Hypothesis 2

Ho: There is no significant (positive) influence of perceived ease of use on the intention to engage in Crowdfunding-Waqf Model among donors or crowd funders.

Ha: There is a significant (positive) influence of perceived ease of use on the intention to engage in Crowdfunding-Waqf Model among donors or crowd funders.

(iii) Hypothesis 3

Ho: There is no significant (positive) influence of perceived ease of use on perceived usefulness of Crowdfunding-Waqf Model among donors or crowd funders.

Ha: There is a significant (positive) influence of perceived ease of use on perceived usefulness of Crowdfunding-Waqf Model among donors or crowd funders.

**Islamic Perspectives on Information System (IS)**

The revolution of Information System (IS) particularly information and communication technology (ICT) has transformed the world economy from production-based to knowledge-based economy. Nowadays, information system has become complementary in the lives of millions all over the world. It has become as a tool of all humans to gather knowledge as well as information.

Information system considered as a new media, which comprises of Internet, email, blogs, social networking sites, digital TV and mobile phones. It is the new form of mass media which is mediated by technology, especially the Internet. Unlike the traditional print and electronic media, the new media is interactive and user driven. The users themselves, rather than editors, determine the content.

In this section, this paper discusses the Islamic perspectives on Information System. Since TAM is useful model of identifying technology acceptance behaviours in a variety of information system or information technology contexts, thus it is necessary to look at the position of information system from Islamic context. Generally, information system emphasizes on the aspect of ethics in its usage. However, it is frequently used illegally and against the ethics all over the world. Many of the rights of information system are being interrupted in the name of economic advancement, political stability, religious causes, campaigns against terrorism or for personal greed and interests (Masum et al. 2015). Consequently, violations of these rights have created new problems in human social systems, such as the digital divide, cybercrime, digital security and privacy concerns.

In addition, there are many people who are very intruder in nature. They secretly view other people's personal information, which is a total violation. There are many recent examples of the impacts of unethical IT behavior, including problems such as software piracy, virus development and illegal access. All of those have affected people's lives either directly or indirectly. Such hi-tech advances sometimes deny the underlying IT ethical issues.

Thus, from the Islamic perspectives, there is a guaranteed right in the ethics of using information system. According to Masum et al. (2015), the general understanding of ethics in Islam can be express as a "set of moral principles and guidance that recognizes what is right behavior from what is wrong or what one should do or not". Muslims' life including Islamic ethics are guided by Qur'an and Sunnah. Allah said "Verily this Qur'an Doth guide to that which is most right (or

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stable)” (Qur’an 17:9). Allah uses the term Akhlaq or khuluq in the Holy Qur’an to refer to the ethics. In addition, the Qur’an and Sunnah use set of ethical terms to describe the concept of goodness such as: Sidq (Truth), Khayr (Goodness), Birr (Righteousness), Qist (Equity), ‘Adl (Equilibrium and Justice), Haqq (Truth and Right), Ma’ruf (Known and approved), Amanah (Honesty), Ikhlas (Sincerity), and Taqwa (Piety). Pious actions are described as Salihat and impious actions are described as Sayyi’at.

The importance of ethics in Islam is shown when Allah prescribes Prophet Mohammed that he is with great ethics “Prophet of Allah had been raised to a great spiritual dignity” (Qur’an 68:4). Also Prophet Mohammed said “I was sent to complement the best of ethics”. Thus, it can be claimed that the Qur’an represents the main dimension for the concept of ethics in Islam. The ultimate moral code embedded in Islamic ethics emphasizes the relation of man to his Creator. The Islamic code of ethics is enforceable at all times because the Creator and Monitor is closer to man, and has perfect, eternal knowledge.

According to (Masum et al. 2015), there are a set of Islamic ethics of using information system for all mankind including computer and software professionals, and users. Among them are:

(i) Work as vicegerent of Allah: The main objective of creating all mankind by God (Allah) is to warship him; by developing and reconstructing the earth for the best (as vicegerent or Caliph) through their good acting and deeds. Allah said, “I have only created Jinn and Men that they may serve me” (Qur’an 51:56). “Allah they Lord said to the angels: I will create a vicegerent on earth” (Qur’an 2:30).

(ii) Understand and follow the standard ethics, especially Islamic ethics: information system professionals including end users have to understand the standard Islamic ethics (based on Quran and Sunnah). They have to consider it as the highest standard that they should follow in their life and work.

(iii) Remember the Judgment day: Information System professionals including end users have to know that doing goodness and producing useful knowledge will be rewarded by Allah in their life and after death to the Day of Judgment.

(iv) Management with honesty: Information System professional managers and leaders have to subscribe to and promote an ethical approach to the management of software and hardware development and maintenance. They have to show the honesty (Amanah) and equity in performing their duty.

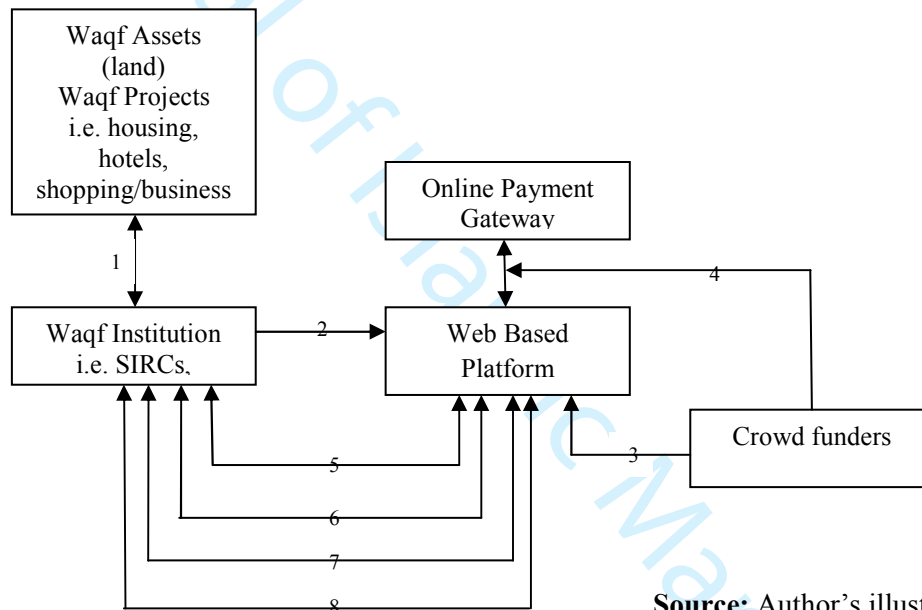
(v) Work with highest profession: Information System professionals including end users have to advance the integrity and reputation of the profession consistent with the Ummah (nation) interest. They have to do their best using their highest profession.

### Proposed Crowdfunding-Waqf Model (CWM)

Our proposed model which is known as Crowdfunding-Waqf Model involves two main different parties which are Waqf institution and donors or crowd funders. Waqf institution can be consisting of State Islamic Religious Councils (SIRCs) or Department of Waqf, Haji and Zakat (JAWHAR). Meanwhile, donors or crowd funders are consists of the public or a large audience (the so-called “crowd”), where each individual provides a fund.

Donation-based crowdfunding (where no rewards are given to the crowd funders) and reward-based crowdfunding (where crowd funders receive a tangible (but not in financial form) reward for backing the project) is the biggest and fastest growing form of crowdfunding, and thus these two models will be applied into the present proposed Crowdfunding-Waqf Model. The proposed model could be illustrated by Figure 2.

**Figure 2:** Crowdfunding-Waqf Model (CWM)



**Source:** Author's illustration

The following are the detailed explanation of Crowdfunding-Waqf Model (CWM):

1. Waqf Institution such as SIRCs or JAWHAR plans to develop Waqf land by developing various projects such as housing, hotels, shopping/business premises, schools, and hospital/clinic. Waqf Institution needs to raise the funding from crowd funders to implement the projects.

2. Waqf Institution identifies their potential Waqf land and does all the screening process on the projects to get financing from crowd funders. Later, Waqf Institution uploads and submits the potential of particular projects' proposal to the system which is known as Web Based Platform and Social Networks. Waqf Institution can establish and manage its own Web Based Platform and Social Network instead of outsourcing from external parties. The projects have to be funded within a predefined timeframe.

3. Crowd funders choose projects that they want to support. Crowd funders browse the web to search requests and finally choose the projects they are willing to fund. Crowd funders can choose either to involve in donation-based crowdfunding or reward-based crowdfunding

4. Crowd funders transfer/send funds through payment gateways. Waqf Institution can have its own payment gateways through collaboration with existing financial institutions.

5. Once the target amount of fund from crowd funders is reached, the system will update the status of projects and keep track of received fund until it is ready to be distributed.

6. The system distributes the fund to Waqf Institution and notifies them to get ready managing and supervising the projects they proposed earlier.

7. Waqf Institution manages and supervises their identified projects. Waqf Institution must track the progress regularly and updates the progress into the system until the particular projects completed and started to commence. This will ensure transparency between them and the crowd funders.

8. The system communicates with Waqf Institution as for control and audit purposes through a simple communication media such as short message services (SMS)

## Research Methods

### *Data collection procedure and sample*

Data are collected from donors or crowd funders in the Klang Valley (Selangor and Kuala Lumpur), who are above 18 years old. According to the statistics by Department of Statistics Malaysia, there are about 5.5 million population, who are above 18 years old and living at Klang Valley. Using purposive sampling method, around 800 donor or crowd funders are sent the questionnaire (including online survey). A total of 175 questionnaires are returned, where 125 are usable for data analysis purpose. The lower response received from the donors or crowd funders may due to the time constraint, online survey through email may get caught in spam filters, respondents may not understand the question and many errors aroused during the filling up of the survey, and reluctance of donors or crowd funders to participate into the survey (privacy and confidential issue).

The behavioural intention of donors or crowd funders to using Crowdfunding-Waqf Model was tested by using partial least squares (PLS)

regression. According to Thakur (2014), PLS is a structural equation modelling technique in which it assesses the reliability and validity of the measures of theoretical constructs and estimates the relationships among these constructs simultaneously. Furthermore, this approach allows researchers to assess measurement model parameters and structural path coefficients, and is widely used in information science research (Bock et al., 2005). The advantages of PLS include minimal restrictions on measurement scales, sample size and residual distributions (Chin et al., 2003).

### Research Findings and Discussion

In order to ensure that there is no Common Method Bias (variance that is attributable to the measurement method rather than to the constructs the measures are assumed to represent) in the questionnaire survey, we have performed Harman's single factor test which revealed that the first factor accounted for 42.19 percent of variance which is less than the threshold level of 50 percent of total variance explained (Podsakoff et al., 2003).

Around 125 respondents participated in this research. Most of the respondents (55.2 percent) were male followed by female of 44.8 percent. Almost three-quarters (82.4 percent) of the respondents are between the age group of 20-40, few are over 40 years of age (17.6 percent). There was a majority of 58.6 percent respondents are married, followed with 41.6 percent respondents are still single. Besides, in terms of educational level, majority of respondents are well educated, with almost 16% holding a college diploma or matriculation and about 71.2 percent holding at least a bachelor degree or above. Most of the respondents (72.8 percent) were working at private sector followed with 11.2 percent were working at public sector. Only 14.4 percent of the respondents are students. Meanwhile, majority of respondents (55.2 percent) are in the income group of more than RM3000. The remaining 44.8 percent of the surveyed respondents fall in below RM 3000 income group.

**Table 1:** Distribution of Respondents by Gender, Age and Marital Status

		Frequency	%
Gender	Male	69	55.2
	Female	56	44.8
Age Group	20-30	48	38.4
	31-40	55	44
	41-50	18	14.4
	Above 50	4	3.2
Marital Status	Single	52	41.6
	Married	73	58.6
	No Education	1	0.8

Educational Level	Secondary School	15	12
	Diploma	20	16
	Bachelor	72	57.6
	Postgraduate (Master or PhD)	17	13.6
Occupational	Public	14	11.2
	Private	91	72.8
	Self employed	1	0.8
	Housewife	1	0.8
	Student	18	14.4
Income Level	Less than RM1000	10	8
	RM1001- RM2000	20	16
	RM2001- RM3000	26	20.8
	RM3001- RM4000	23	18.4
	RM4001- RM5000	13	10.4
	More Than RM5000	33	26.4

### *Measurement*

All constructs and the items are adapted from extant literatures and were modified to suit the purpose of this study. All major scale items are based on a five-point Likert-scale ranging from strongly disagree (1) to strongly agree (5).

In terms of items development, they are adapted from Davis (1989), Kripanot (2007), Willis (2008), Cowen (2009), and Chandio (2011). Perceived usefulness consists of (9-item), perceived ease of use consists of (12-item) and behavioural intention consists of (9-item).

### *Assessment of measurement model*

The convergent validity was tested at the initial stage. During the test of convergent validity, indicator or items loadings, average variance extracted (AVE) and composite reliability (CR) were taken into the consideration. Based on the results presented in Table 1, indicators loading for all items exceeded 0.5, recommended value as suggested by Hair et al. (2009).

In terms of AVE threshold or requirement, Hair et al. (2009) suggested that AVE should exceed 0.5. In the current study, AVEs were in the range of 0.499 and 0.580. According to Fornell & Larcker (1981), if value of AVE is less than 0.5, but composite reliability (CR) value is higher than 0.6, the convergent validity of the construct is still adequate. The CR ranged from 0.899 to 0.942, which exceeded the recommended value of 0.7 as recommended by Hair et al. (2009). Table 2 shows the results of measurement model.



**Table 2:** The Results of Measurement Model

Variables	Items	Factor Loading	AVE	CR
Perceived Usefulness	PU1	0.819107	0.517162	0.904926
	PU2	0.750703		
	PU3	0.815572		
	PU4	0.677635		
	PU5	0.738318		
	PU6	0.783227		
	PU7	0.607388		
	PU8	0.610163		
	PU9	0.629159		
Perceived Easy to Use	PEU10	0.714532	0.580561	0.94289
	PEU11	0.793531		
	PEU12	0.82471		
	PEU13	0.826658		
	PEU14	0.796774		
	PEU15	0.711874		
	PEU16	0.689592		
	PEU17	0.824721		
	PEU18	0.761734		
	PEU19	0.742133		
	PEU20	0.635149		
PEU21	0.794512			
Behavioral Intention	BI22	0.637715	0.499775	0.899161
	BI23	0.816374		
	BI24	0.64902		
	BI25	0.671077		
	BI26	0.786944		
	BI27	0.681288		
	BI28	0.748842		
	BI29	0.722503		
BI30	0.622131			

After conducting earlier test of convergent validity, later, the research is testing discriminant validity. The test of discriminant validity can be performed by examining correlations between the measures of potentially overlapping constructs

(Fornell & Larcker, 1981). The result shows that the square root of AVEs (in bold) are larger than off-diagonal elements in their corresponding row and column for all cases (see Table 3). It is suggesting that the required discriminant validity has been achieved. Based on these results, it indicates that measurement model has adequate convergent validity and discriminant validity.

**Table 3:** The Results of Discriminant Validity Analysis

	Behavioral Intention	Perceived Usefulness	Perceived Easy to Use
Behavioral Intention	<b>0.706948</b>		
Perceived Usefulness	0.641348	<b>0.71914</b>	
Perceived Easy to Use	0.679676	0.70023	<b>0.761946</b>

*Descriptive statistics of the latent constructs*

The value of mean for all the three latent variables range from 4.089 to 4.189 followed with the standard deviation ranging from 0.425 to 0.497 on a five point Likert scale. Perceived easy to use scored the highest with a mean value of 4.189, while perceived usefulness showed the lowest mean value at 4.089.

The dispersion values represented through standard deviation indicates that the highest value showed by perceived usefulness at 0.497, and lowest value showed by perceived easy to use at 0.425. Table 4 lists the result obtained from the descriptive analysis.

**Table 4:** The Results of Descriptive Analysis

	No of Items	Mean	Standard Deviation
Behavioral Intention	9	4.116	0.496
Perceived Usefulness	9	4.089	0.497
Perceived Easy to Use	12	4.189	0.425

*Assessment of structural model*

Ramayah et al. (2016) have suggested using  $R^2$  to observe the goodness of the structural model. According to Hair et al. (2011), coefficient of determination and the level of significance of the path coefficients (beta values) can be captured by  $R^2$ . The results of the current research show that  $R^2$  value for behavioral intention to use Crowdfunding Waqf Model is 0.52. It is suggesting that 52 percent of the variance in behavioral intention to use Crowdfunding Waqf Model can be explained by perceived usefulness and perceived easy to use.

Later, in order to assess the statistical significance of path coefficients, the current study has calculated the path coefficients of the structural model and performed bootstrap analysis (re-sampling = 5000) was performed, to assess the statistical significance of the path coefficients (Table 4). The results revealed that perceived usefulness and perceived easy to use has a positive relationship with behavioral intention to use Crowdfunding Waqf Model with  $b = 0.325$ ,  $p < 0.05$  and  $b = 0.452$ ,  $p < 0.01$ , respectively. In addition, perceived easy to use has a positive relationship and direct effect with perceived usefulness with  $b = 0.700$  and significant at  $p < 0.05$ . Thus, H1, H2, and H3 are supported. Table 5 shows the results.

**Table 5:** The Results of Structural Model

Hypothesis	Relationship	Beta	SE	t-Value	Decision
H1	PU -> BI	0.325	0.127041	2.554735	Supported
H2	PEU -> BI	0.452	0.112543	4.019913	Supported
H3	PEU -> PU	0.700	0.061048	11.47014	Supported

The behavioural intention of donors or crowd funders to using Crowdfunding-Waqf Model was found to depend on perceived usefulness and perceived easy to use. Perceived usefulness is the perception that a given a technological-based system, it will help a user achieve his or her work goals. The donors or crowd funders need a mechanism that could help them to assist Waqf institutions to develop Waqf land. Thus, by using Crowdfunding-Waqf Model which is through online platform, it will help the donors or crowd funders to assist Waqf institutions to develop Waqf land in Malaysia. The findings suggest that crowd funders would like to engage with Crowdfunding-Waqf Model because they believed that the Crowdfunding-Waqf Model was useful. This perception motivated them to utilise the technology for their work. Indeed, since Crowdfunding-Waqf Model is involving platform to raise capital, thus crowd funders might only involve with this model if they believe that it provides useful information on security, risk and project itself. Also, crowd funders believe that Crowdfunding-Waqf Model provides effectiveness, better performance, and productivity in assisting Waqf institutions to develop Waqf land in Malaysia. This finding is consistent with Venkatesh et al. (2000), Abassi et al. (2011), and Cheng et al. (2006). This model is expected to create a positive perception towards the donors or crowd funders in developing Waqf land in Malaysia.

On the other hand, perceived ease of use is defined as the degree to which a person believes that easy-to-use technology was associated with greater intent to use

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3 it (Davis, 1989). Thus, the easier to involve with Crowdfunding-Waqf Model, it will  
4 attract more donor's or crowd funders' intention to assist Waqf institution in  
5 developing Waqf land in Malaysia. It means consumers have a positive attitude  
6 toward the use of Crowdfunding-Waqf Model when consumers feel greater benefits  
7 and easy accessibility into various elements such as faster information search, risk  
8 availability, projects, rewards offered and security will come to them by using  
9 Crowdfunding-Waqf Model. This finding is also similar and consistent with the  
10 findings by Davis (1989), Gefen et al. (2004) and Yi et al. (2003). Meanwhile,  
11 perceived ease of use was positively associated with perceived usefulness. The  
12 easier the system was to use, the more useful it was perceived to be. Thus  
13 Crowdfunding-Waqf Model may need to have the features that useful to the user  
14 particularly the donors or crowd funders.  
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### 16 17 *Predictive relevance ( $Q^2$ )*

18 According to Ramayah et al. (2016), predictive sample which is previously known  
19 as Stone-Geisser's  $Q^2$  can be used to look at the predictive relevance of research  
20 model. This measure has also been used by Henseler et al. (2009) to assess their  
21 research model's predictive relevance. Predictive validity has assessed by using  
22 blindfolding procedure.  
23

24 Predictive sample reuse technique, popularly known as the Stone-Geisser's  
25  $Q^2$ , can be applied as a criterion for predictive relevance besides looking at the  
26 magnitude of the  $R^2$  (Ramayah et al. (2016). Other researchers such as Henseler et  
27 al. (2009) also utilized this measure to assess the research model's capability to  
28 predict.

29 Based on Hair et al. (2011) suggestion, if  $Q^2$  values are larger than zero, they  
30 indicate that the exogenous constructs have predictive relevance for the endogenous  
31 construct. Thus, it can be conclude that the current research model has good  
32 predictive relevance. For the present study, the  $Q^2$  of behavioral intention to use  
33 Crowdfunding Waqf Model is (CV Red = 0.246). It signifies that the research model  
34 has good predictive relevance.  
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### 36 **Conclusion and Recommendation**

37 This paper has developed Crowdfunding-Waqf Model. The model is expected to  
38 assist Waqf institutions to meet their liquidity in developing Waqf land. Later, this  
39 study has empirically tested the behavioural intention of donors or crowd funders in  
40 using this model by applying Technology Acceptance Model (TAM). The author has  
41 extended the application of TAM in the context of crowdfunding and Waqf.  
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43 This study has proven that both perceived usefulness and perceived ease of  
44 use are directly significant in influencing the crowd funder's intention to use the  
45 Crowdfunding-Waqf Model. The findings of this study can be used to develop a  
46 specific framework in which to examine other components of using Crowdfunding-  
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3 Waqf Model's behavior and to plan appropriate intervention strategies to increase its  
4 capacity in developing Waqf land in Malaysia.

5 The policy makers and Waqf institutions should promote and enhance  
6 awareness on the use of Crowdfunding-Waqf Model in developing Waqf assets in  
7 Malaysia. Extensive information and high quality projects and rewards descriptions  
8 must be provided to the crowd funders in making a well-informed decision before  
9 donating fund. Furthermore, Waqf institutions should emphasise more on the  
10 privacy and security of their online platform. The risk exposure for online platform  
11 should be minimized by enhancing security of virtual transaction. Equity  
12 crowdfunding platforms have to reach out to investors proactively to reassure them  
13 on the latest advancements in design and security, and help close the reality gap  
14 between investors' perceptions and delivery.  
15

16 In terms of implications for practice, Crowdfunding-Waqf Model offers a  
17 guide for the implementation which could be useful for further development of  
18 Waqf assets particularly Waqf land. It may eventually become a substitute model to  
19 assist Waqf institutions in meeting their financial need to develop Waqf land. It is  
20 also to inspire Waqf institutions to shift from mainly utilising government funding  
21 services to an alternative model that is based on the element of crowdfunding. From  
22 the view of the crowd funders, the model is considered to be very useful for Waqf  
23 institutions in meeting their financial need to develop Waqf land. Besides,  
24 Crowdfunding-Waqf Model can be proposed to other Muslim countries.  
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26 In line with the issue that hindering the development of Waqf land, the  
27 present study has developed Crowdfunding-Waqf Model to assist Waqf institutions  
28 to find an alternative source of financing. Based on the responses received from the  
29 field particularly from the crowd funders, it has been shown that the intention and  
30 readiness of them in accepting the Crowdfunding-Waqf Model as source of  
31 alternative financing for Waqf institution to develop Waqf land is impressive. Thus,  
32 it is suggested that the various government bodies and other policy makers support  
33 Waqf institution by applying the proposed Crowdfunding-Waqf Model.  
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35 For example, the government may provide incentives such as tax exemption  
36 of 10 percent (currently in Malaysia, tax exemption of 7 percent) for the crowd  
37 funders of Crowdfunding-Waqf Model as a motivation for them to continuously  
38 donate to crowdfunding fund. By having sustainable fund from them, Waqf  
39 institutions would be able to develop Waqf land.

40 Furthermore, the government may encourage the private companies or  
41 Government Linked Companies (GLCs) to participate in this model as part of their  
42 corporate social responsibility. In this case, the government may also provide  
43 incentives such as corporate tax exemption. This is to attract the corporate sector to  
44 participate in social-oriented program.

45 In addition, the government may play the role in facilitating the  
46 collaboration between Crowdfunding-Waqf Model and relevant authority such as  
47 crowdfunding platforms, and investors. Based on its potential to strengthened  
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3 relationship between relevant parties, Crowdfunding-Waqf Model can become a  
4 successful model that could assist Waqf institutions in obtaining a better source of  
5 financing for Waqf development.

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7 Meanwhile, Crowdfunding-Waqf Model could also help in reducing the  
8 burden of the government. In other words, this suggests that Crowdfunding-Waqf  
9 Model may help the government to reduce budget deficit. Usually, the government  
10 has to allocate extensive amount of financing to the development of Waqf assets in  
11 general. The model could equally help in reducing government budget deficit. Thus,  
12 by adopting the Crowdfunding-Waqf Model, the government does not need to be  
13 bothered about the expenses for the development of Waqf assets. It is due to the  
14 involvement of crowd funding that help Waqf institutions with a better source of  
15 financing.

### 16 17 **Limitation and Future research**

18 This study contributes in developing Crowdfunding Waqf Model (CWM), as this  
19 model is proposed to address the liquidity problem faced by Waqf institution in  
20 Malaysia and examining the behavioural intention of donors or crowd funders to use  
21 this model. However, there are some limitations of the current study. The sample  
22 size and area of study becomes the obvious limitations. Thus, there is a need for  
23 cautious in the interpretation of the results and conclusion cannot be as generalized.  
24 In addition, as the respondents of this study are those above 18 years old, relying on  
25 the perception of one key informant, might imply cognitive biases.

26 Besides, the use of current factors might limit the ability to explore other  
27 potentially important determinant of the donors' behavioral intention on using  
28 CWM. Thus, future research can be conducted by incorporating new factors and  
29 provide new insights by including, among others religious obligation, riskiness,  
30 rewards and perceived benefits.  
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