# Waqf integrated income generating model (WIIGM) for enhancing sustainable development goals (SDGS) in Malaysia: an evaluation of behavioural intention

Siti Sara Ibrahim

Faculty of Business Management, Universiti Teknologi MARA, Shah Alam, Malaysia and Centre for Islamic Philantrophy and Social Finance (CIPSF), Universiti Teknologi MARA, Shah Alam, Malaysia

Dalila Daud

Faculty of Accountancy, Universiti Teknologi MARA, Shah Alam, Malaysia, Cawangan Negeri Sembilan, Kampus Seremban, Malaysia and Accounting Research Institute (ARI), Universiti Teknologi MARA, Shah Alam, Malaysia

> Khusnul Hidayah Accounting Program, Faculty of Economics and Business,

Universiti Ahmad Dahlan, Yogyakarta, Indonesia

Amir Shaharuddin Yayasan Wakaf Malaysia, Kompleks Islam Putrajaya, Putrajaya, Malaysia, and

> Al-Amirul Mukmin Al-Amin QUTU Worldwide Sdn Bhd, Petaling Jaya, Malaysia

## Abstract

**Purpose** – This study aims to examine how beliefs and expectations on collaboration for investment, technology advancement and governance can lead to sustainable income generation that succeeds in influencing the community to accept the proposed Waqf integrated income generating model (WIIGM).

**Design/methodology/approach** – This study empirically examined the beliefs and expectations on the proposed WIIGM model, which was adapted from the theory of reasoned action (TRA). Data was collected from 366 respondents selected via convenience sampling. Questionnaires were distributed online, of which responses were then analysed using partial least squares structural equation modelling for hypothesis testing. Ethical approval is also gathered before the data collection begins.

**Findings** – This study found that collaboration for investment and governance significantly contribute to sustainable income generation in waqf operations and management, which eventually results in the community's trust and acceptance of the WIIGM model. Technology advancement also significantly influences sustainable income generation, which finally leads to the community's behavioural intention to

International Journal of Ethics and Systems © Emerald Publishing Limited 2514-9369 DOI 10.1108/IJOES-02-2022.0030

This paper is funded by Ministry of Higher Education Malaysia FRGS-RACER grant code: 600-IRMI/ FRGS-RACER 5/3 (091/2019). Waqf integrated income generating model

Received 8 February 2022 Revised 23 June 2022 29 July 2022 Accepted 29 July 2022



participate in the WIIGIM model. Further studies on this variable may establish findings from other perspectives.

**Practical implications** – This paper is an original study that empirically examines the potential for a new waqf integrated income-generating model in building the trust of the community towards waqf institutions. This study is significantly important for practitioners and policymakers in evaluating the potential roles of waqf based on the belief and trust of the community.

**Originality/value** – This paper adds value to existing literature regarding the potential of a new waqf integrated income-generating model.

Keywords Waqf, SDG, Sustainable, Income generation, Digital

Paper type Research paper

#### 1. Introduction

Waqf is an instrument for the public benefit, especially as solutions to poverty alleviation. There are many definitions of waqf. Waqf is derived from the root word "waqafa," which literally means "confinement and prohibition" or causing a thing to stop or stand still (Sabran, 2002). Waqf has the quality of perpetuity, so waqf properties cannot be sold, bought or given as a gift to others. Therefore, it is necessary to make sure that the property is fully used and properly managed by the Malaysian Islamic councils (Daud, 2019). It is also being a form of Islamic charitable giving that was recommended by Prophet Muhammad (peace be upon him) as a tool for strengthening Muslim unity during the early Islamic era. (Thaker and Pitchay, 2018). Therefore, waqf as Islamic based instrument can potentially contribute to the nation's sustainable growth. In recent years, the ability of waqf to stimulate socio-economic growth has sparked industry attention. The efficient development and management of waqf assets can result in sustainable growth of financial supplies and tackle social inequalities (Ibrahim *et al.*, 2019).

The role of waqf is in alignment with the Sustainable Development Goals (SDGs) put forward by the United Nations for worldwide implementation, including in Malaysia (Abdullah, 2018). The 2030 Agenda for Sustainable Development outlines 17 goals that are used to assess the sustainability of socio-economic welfare, with the goals of eradicating poverty, protesting prejudice and discrimination as well as confronting the issue of climate change leading up to 2030 (UNDP, 2015). The agenda of the SDGs indicates the potential for waqf organization stakeholders to verify the current importance of waqf as a practice, through developing and modifying waqf methods to better fit modern contexts and needs (Abdullah, 2018). This can be established by designing a model for income generation within the waqf framework. Working alongside the aims of the SDGs may open avenues for waqf management in various areas to join forces with other income generation models to pursue common goals in development.

However, to ensure that waqf can significantly contribute to sustainable income generation, a proper instrument is required. As the instrument is still new within literature and in practice, it is important to firstly understand how the community will react to the proposed waqf integrated income generating model (WIIGM). This is particularly important with regards to community expectations and confidence that the development of waqf assets with the purpose of sustainable income generation will eventually result in their behavioural intention (DV) to show trust and acceptance of waqf as a model for income generation.

Sustainability practices have become increasingly prominent in practice and theory. Although there is still no clearly defined scope for the type of activities that qualify as sustainability practices, literature has indicated that the adoption of a sustainability-focused culture within the organization is the best way to achieve sustainability. This sustainability indicators satisfy the requirement of measuring the progress of sustainable development

and facilitate decision-making processes (Kolk, 2016). In this study, the concept of sustainability focuses on the sustainable income generation that waqf institutions can offer towards influencing the trust and acceptance of waqf as an integrated income generating model.

Therefore, considering the 17 goals of the SDGs, this study is carried out to empirically test the beliefs and expectations that lead to DV as adapted from the theory of reasoned action (TRA). The research framework of this study tests the proposed WIIGM model using Smart-PLS 3.0, with a focus on the belief and expectations on collaboration for investment, technology advancement and waqf governance as the independent variables (IVs) through sustainable income generation, which leads to the DV of the community to trust and accept waqf as an Islamic income generating model that can enhance the SDGs. This study is significant for practitioners and policymakers in evaluating the potential roles of waqf through community belief and trust.

This paper is arranged in five primary sections. Following the introduction, Section 2 offers a review of literature pertaining to the trust and acceptance of waqf as an integrated income generating model, sustainable income generating models, collaboration for investment, technology advancement and the governance of waqf institutions. Section 3 explains the methodology applied in this study, while Section 4 identifies and examines significant findings that were derived from the measurement and structural models of partial least squares structural equation modelling (PLS-SEM). Section 5 concludes this paper by suggesting practical policy implications.

#### 2. Literature review

#### 2.1 Theory of reasoned action

The TRA developed by Ajzen and Fishbein (1975) is a widely used theory in the field of sociopsychology to investigate people's DVs (Ab Shatar *et al.*, 2021). The prominent factors influencing an individual's behaviour, according to Fishbein *et al.*, (1980) TRA, include attitude, subjective norms and DV in relation to whether a person would take an action or not.

In TRA, attitude is defined as the evaluative effect of individuals' positive or negative feelings when performing a specific behaviour. In the meantime, subjective norm is an original TRA construct that deals with the influence of social environment or social pressure on individuals and thus on DV (Ajzen and Fishbein, 1975). Then, according to TRA, intentions represent a person's motivation as a result of a conscious plan or decision to engage in the behaviour (Conner and Armitage, 1998). When measured at the same level of specificity in relation to action, target, context and time frame, intentions and behaviour are strongly related (Pitchay *et al.*, 2015).

Currently, the TRA model is being used in some prior studies conducted in Islamic communities and Muslim countries (Maryam *et al.*, 2019). Among these were studies that predicted halal product selection behaviour, Shariah-compliant bank selection behaviour (Amin, 2013), zakat payment behaviour (Reni, 2015) and banking selection behaviour (Hardinawati and Hamzah, 2017). Previous research indicates that attitude and subjective norms are the main elements in the TRA model that significantly influence DV and decision-making (Ajzen and Fishbein, 1975).

Specific to this study, the TRA model is used as the foundation of the framework, which focuses on collaboration for investment, technological advancement and governance as the construct for attitude and subjective norms, while sustainable income generation is a reflection of DV, and finally, trust is a behaviour that is translated into an action to accept the WIGIIM model being proposed in the waqf collection process.

2.2 Trust and acceptance of waqf as an integrated income generating model

Trust is especially vital in the existence of charitable Islamic bodies (Fauzi *et al.*, 2019). Based on a survey carried out by the NAFI Research Centre, the proportion of respondents who have trust and distrust towards charitable organizations is almost equal, at 44 and 43%, respectively (Shukor *et al.*, 2019). Trust also plays a counterbalancing role against the unpredictability of many organizations in the charity sector (Wolfe, 2018).

In specific to waqf institutions, in their function as charitable bodies, also rely greatly on public trust to sustain their activities which resulted from sustainable income generation (Harris *et al.*, 2018; Shukor *et al.*, 2019). In particular, for investment collaboration, technology advancement and governance that lead indirectly to a public trust through a sustainable income generation, *H4–H6* are tested as below:

- *H4.* There is a significant indirect relationship between collaboration for investment through sustainable income generation towards the development of trust (behavioural intention) in the WIIGM model.
- H5. There is significant indirect relationship between technology advancement through sustainable income generation towards the development of trust (behavioural intention) in the WIIGM model.
- *H6.* There is a significant indirect relationship between governance through sustainable income generation towards the development of trust (behavioural intention) in the WIIGM model.

For indirect relationship between collaboration for investment, it is proposed to have a sustainable income generation to ensure the public trust can be gather that makes the donor continuously shows their intention to contribute to the waqf institution's project. It is because strong public trust is valuable in ensuring the positive perception of charities in society, which is crucial in efforts to acquire funds and achieve their goals because trust is a major influence on long-term investments and donations (Hasan *et al.*, 2019). Additional research corroborates this (Hasan and Siraj, 2017; Dekker, 2018), stating that public loss of trust in the organization can result in destruction of image, reduced donations and the shutdown of the organization. The public typically perceive charities to be responsible and truthful establishments with altruistic intentions (Shukor *et al.*, 2019).

Next, as for *H2* on technology advancement that indirectly to trust, it is mutually believe that development of digital technology has contributed to increased quality and security, specialization, productivity and expertise, all of which enable more easily providing eternal money and managing waqf (Zulaikha and Rusmita, 2018). Trust is vital in waqf, particularly in fostering security and reliability among donors and their belief that waqf funds will be used responsibly. This is a challenge towards building trust because waqf donors typically do not receive detailed information regarding the use of their donated funds from the relevant waqf bodies. As a rule, greater trust is called for in more uncertain environments. Despite this, it is found that while trust does not decrease uncertainty, it cultivates a stronger acceptance of that uncertainty (Hegner *et al.*, 2019). The development of trust cuts down on the monitoring expenses for contracts and fosters social harmony. Furthermore, certain financial principles in Islam establish contexts for wealth redistribution with the aim of realizing social justice goals (Tisdell and Ahmad, 2018).

Finally, to properly manage the properties, it is essential for the state religious councils to have proper governance, which can be shown through waqf reporting. Accordingly, governance that includes the Tawhidic strategies is essential to prevent attributes of non reporting (Daud and Abdul Rahman, 2018). Governance is important, especially in dealing

public fund, which ultimately will improve in waqf reporting transparency. In fact, the influence of trust in regulating the performance of nonprofitable institutions has been a point of concern for many scholars (Hasan and Siraj, 2017; Shukor *et al.*, 2019; Maqbool *et al.*, 2019; Daud, 2019). This is argued to propose for *H3*, which highlighted indirect relationship of governance in waqf operation to a trust through a sustainable income generation.

Therefore, in summary, trust can be explained as the confidence that a charitable organization will not exploit their donors and carry out all operations ethically and responsibly in all areas (Daud, 2019; Farwell *et al.*, 2019). Meanwhile, waqf has the quality of perpetuity, so waqf properties cannot be sold, bought or given as a gift to others. Therefore, it is necessary to adhere trust to make sure that these properties are fully used and properly managed by the Malaysian Islamic councils (Daud, 2012). This indicates the level of public trust in waqf institutions and the conviction that their work is done with mutual well-being in mind.

## 2.3 Sustainable income generation

The term "sustainability" was initially coined from the definition of "sustainable development" established in the "triple bottom line" as well as the social sustainability index (Elkington, 1997). The merging of the two concepts led to the development of a commonly adopted definition of sustainability in the context of management accounting, whereby any activities undertaken by a company must cater to the requirements and well-being of the present population and allow for future populations to also meet their social, environmental and economic needs (Soderstrom *et al.*, 2017). In fact, Freeman in his study positioned sustainability within the framework of the triple bottom line of profit, people and planet (as cited in Ibrahim *et al.*, 2021).

Allowing for the broad definition of sustainability, this study narrows its scope to the sustainable income generation that can be offered by waqf institutions to impact the trust and acceptance of waqf as a tool that can contribute to socio-economic growth. Based on the 17 items that make up SDGs, Goal 8 is emphasized as a model that can work towards sustainable, inclusive and good economic growth, which provides full employment for the population (United Nations, 2015). The sustainable development agenda for 2030 advises global governments to address the issues within the social, economic and environmental growth in their respective nations. These efforts should prioritize the triple bottom line of society, economy and environment, which is a shift from past developmental agendas that emphasized mainly or only economic concerns (Bello-Bravo and Lutomia, 2020).

#### 2.4 Collaboration for investment

The goals of waqf are to provide the donor with the opportunity to obtain perpetual rewards, meet the requirements of those in need and offer socio-economic contributions to their community while ensuring the perpetuity of waqf assets. The incorporation of cross-sector collaboration in waqf endeavours is an innovative approach, which has been spreading across the industry (Ibrahim *et al.*, 2020). The Malaysian Government is in favour of this method, considering its alignment with the country's policies for developing socio-economic growth. The economic angle suggests that waqf assets be invested in a way that its returns can be applied to creating benefits including free health care, free education, job creation and aid for the poor (Wan Ab Rahaman *et al.*, 2021). The Singaporean waqf institution is an ideal standard for Malaysia because of its status as the globe's premier authority on waqf issues and success in cultivating waqf assets through partnerships and joint ventures.

Solid coordination between scholars, Islamic academics, waqf officials and practitioners and financial institutions can result in a strong integration and creation of innovative ideas and processes for waqf development. Although Muslims in Malaysia have long practised waqf, institutionalized management of waqf began in 1952, when the State Islamic Religious Councils (SIRC) were given express powers to manage waqf matters (Mohamad *et al.*, 2012). Therefore, the management and practices of waqf in Malaysia is currently put under jurisdiction of own SIRCs. Each state will typically have its own enactments for managing and administering waqf properties, for instance Selangor Wakaf Enactment (No. 7 of 1999), Malacca Wakaf Enactment 2005, Negeri Sembilan Wakaf Enactment 2005 and the respective Administration of Islamic Law Enactments of the various states as well as other laws having effect on the administration of waqf like the Trustee Act 1949, Specific Relief Act 1950, Contracts Act 1950 and others.

However, it is recommended that religious councils work together with government agencies to execute economic endeavours on waqf land. For instance, the religious council (SIRC) entered a collaboration with Jabatan Wakaf, Zakat dan Haji under the Prime Minister's Department to work on waqf land development under the 9th Malaysia Plan. Committed endeavours in the development and utilization of waqf land for the best interests of the Ummah are greatly encouraged (Puad *et al.*, 2014). Indeed, recent decades have given rise to many concerns among the Muslim population as a result of re-evaluating the conditions of waqf assets and investment (Candra and Ab Rahman, 2010). Thus, the hypothesis is:

*H1.* There is significant relationship between collaboration for investment towards sustainable income generation in the WIIGM model.

#### 2.5 Technology advancement

Innovation is growing in importance as a vital factor in the execution of any economic activity. Incorporated in this is the concept of digitized information, which involves various IT technologies including robotics, artificial intelligence and the Internet of Things, which are predicted to generate novel forms of added values in future (Isa and Mohamed, 2020). However, despite the trillions of dollars' worth of available credit, much of the existing waqf properties are still unused and undeveloped because of problems in governance. Consequently, the communities would benefit from the development of waqf assets in various Muslim countries experience poor health care, illiteracy and poverty. It is necessary to reframe waqf governance to revitalize and evolve its global role as an inclusive institution for social financing. Regulation-based technology is required as a solution for these governance issues in the efforts to creating and expanding a social capital market for waqf, together with financial technology, or fintech, for the purpose of delivering the relevant services and products (Mustapha and Muneeza, 2020).

Lately, the adoption of digital technology has resulted in improved quality and security, better specialty, stronger productivity and more knowledge, all of which allow for smoother provisions of perpetual funds and more efficient management of waqf (Zulaikha and Rusmita, 2018). To ensure that waqf benefits are better organized and more effective, it is necessary to incorporate modern information technologies or create a system of e-waqf (Hasanah and Pranata, 2019). Thus, the hypothesis is:

*H2.* There is significant relationship between technology advancement towards sustainable income generation in the WIIGM model.

#### 2.6 Governance

Malaysian waqf properties are subject to the jurisdiction of each state's respective SIRC, which number 14 in total, representing the 13 states and the federal territory. The Department of zakat, waqf and hajj (JAWHAR) was established on 27 March, 2004, by the Malaysian Government, with the purpose of centralizing and optimizing the management of waqf, hajj and zakat issues in the country. However, this department has no power in the control and administration of waqf assets but deals only with coordination and planning activities. The national court acknowledges Shariah as the authority on Muslim property laws, which incorporates waqf. The management of a Muslim individual's properties must adhere to Islamic ruling, as stated by Section 25 of the Civil Law Act.

Solid governance practices are essential to the making of efficient organizations. The Quran and Sunnah provide an outline of governance for different situations. Ghafran and Yasmin (2019) highlight that the word "governance" in Arabic is al-hakimiya, that is the existence of a higher degree of moral social order to which all decision-making entities and authorities ought to submit. A comprehensive corporate governance framework contributes to the increased credibility of a company and bolsters stakeholders' confidence. Hence, the application of excellent waqf governance can function as an avenue to reaching sustainable development, especially in Muslim nations (Latif *et al.*, 2018). Appropriate governance in a waqf institution will allow for stronger transparency and accountability, along with ensuring the long-term vigour of the organization (Abdullah, 2015).

The current economy has seen waqf adopt a fresh course as an institution and product within the Islamic finance field. This situation necessitates close observation and regulation of the various waqf entities. Waqf land investments can also be backed by financial institutions, legal entities or the state and federal governments. The most crucial concern is the capacity of the waqf institution to select the most appropriate financial strategies for the relevant projects (Latif *et al.*, 2018). Thus, the hypothesis is:

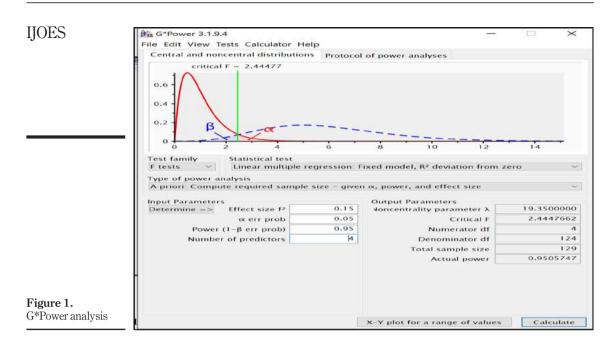
*H3.* There is significant relationship between governance towards sustainable income generation in the WIIGM model.

#### 3. Methodology

#### 3.1 Population and sampling

After describing the population and sample, which are specific to a minimum sample size requirement, the questionnaire administration, development, translation process and ethical considerations are further examined. For a sample size, there are several principles that have been proposed in recent literature regarding the required minimum sample size. Hair *et al.* (2012) have initially suggested the application of the ten times rule of thumb for the minimum sample size. More recently, Hair *et al.* (2014) have further proposed the guideline as presented by Cohen (1992) that incorporates the statistical power analysis for multiple regression models. As there was no exact sample size population, the present study is decided to use G\*Power programme that is accessible online proposed by Hair *et al.* (2014) with regard to generating the minimum sample size required in parallel with the 95% confidence level, which is appropriate sample size for a PLS model.

G\*Power is a software that features several statistical analysis functions such as *t*-test, f-test,  $\chi^2$  test and *z*-test. The analysis of G\*Power is highly recommended, as it does not only provide the minimum sample size required, but it also considers the size effects, sampling errors and significant studies. According to the G\*Power 3.1.9.2 software analysis (Figure 1), the effect of the size used in this study was 0.15. Cohen (1992) has claimed that this is a moderate effect in new studies, while the value is sufficient in social sciences. Moreover, the



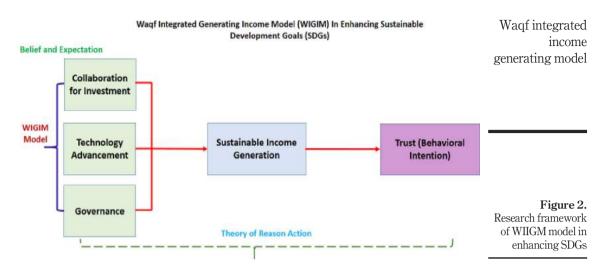
alpha value ( $\alpha$ ) was 0.05 (95% confidence) and the beta value ( $\beta$ ) was 0.20 (80% to avoid error). Therefore, the minimum sample size required that being calculated by G\*Power in this study will be a minimum of 129 respondents. Therefore, Figure 1 shows the study manages to collect data more than minimum sample size calculated by G-Power that are 366 respondents.

#### 3.2 Questionnaire development and measurement

The questionnaire was used as the instrument in this study where it was designed according to the previous studies that are relevant to the current research topic as well as industry practices. In this dynamic, the WIIGM model targets the assessment and verification of the beliefs and expectations that lead to the trust and acceptance of waqf as an integrated income generating model.

The questionnaire that was distributed to the respondents comprising seven sections. Part A measured the dependent variable, i.e. the DV. Part B until E evaluated the IVs, namely, sustainable practices, collaboration for investment, technology advancement and governance in waqf. Finally, part F incorporated the demographic profile of the respondents, and Part G was an optional section where it asked for the respondents' opinion about the concerning needs for waqf institutions to play their role as income generating tools in enhancing a SDGs. These sections were developed according to the research framework, as illustrated in Figure 2 below. The items of questions for each variable measured constituting the structure of the questionnaire is presented in Table 1 as follows.

Then, the investigation instrument is a questionnaire composed of multiple-choice questions, which applied a Likert scale. The variables in the study are assessed according to a scale of 1 to 5, representing a scale of "strongly disagree" to "strongly agree". The questionnaire features at least four or five queries per section, and from here an average score is derived. This questionnaire also has received an ethics approval from the university. This ensures that the study is conducted according to appropriate research processes and



subjected to validation from both experts and potential respondents through procedures of content and face validity.

The data collected from the questionnaire is then analysed using SMART-PLS 3.0 through a measurement model and structural model focusing on the reliability, validity and significant relationship between the variables. Figure 2 below illustrates the research framework of the study, which is developed based on H1-H6.

- *H1.* There is significant relationship between collaboration for investment towards sustainable income generation in the WIIGM model.
- *H2.* There is significant relationship between technology advancement towards sustainable income generation in the WIIGM model.
- *H3.* There is significant relationship between governance towards sustainable income generation in the WIIGM model.
- *H4.* There is a significant indirect relationship between collaboration for investment through sustainable income generation towards the development of trust (behavioural intention) in the WIIGM model.
- *H5.* There is significant indirect relationship between technology advancement through sustainable income generation towards the development of trust (behavioural intention) in the WIIGM model.
- *H6.* There is a significant indirect relationship between governance through sustainable income generation towards the development of trust (behavioural intention) in the WIIGM model.

## 4. Findings and analysis

Before the data can be analysed through PLS-SEM 3.0, the study firstly identifies any faults, common method bias and missing data, as evaluated through multiple imputations, using SPSS version 25.0. No issues with common method bias were detected within the data set, as

IJOES	Part	Variable	Questions
	A	Behavioural intention	I have an intention to trust that waqf is playing its role to generate income from the waqf fund/ assets I have an intention to trust that waqf will contribute to a sustainable economic growth of the nation I have an intention to trust that waqf will contribute to a sustainable social growth of the nation I have an intention to trust that waqf will contribute to a positive impact to the environmental growth I have an intention to contribute my money to the waqf fund collection I have an intention to dedicate my assets to be waqf for the benefit of socio-
	В	Sustainability practices	economic development Waqf institution should play its roles towards the economic growth of the nation Waqf institution should develop commercially viable and sustainable business processes Waqf institution should play its roles towards the social development of the local community Waqf institution should ensure that the waqf development can improve community health and safety Waqf institution should play its roles towards the awareness to take care of the environment Waqf institution should communicate the organization's environmental
	С	Collaboration for investment	<ul> <li>impacts and risks to the general public</li> <li>Waqf institution should ensure that there is a collaboration of other instruments such as SUKUK, UNIT TRUST, etc. in investing waqf fund/ assets</li> <li>Waqf institution should ensure that there is a cross-sector collaboration with the industry and academic scholar in developing the waqf fund/ assets</li> <li>Waqf institution should ensure that the waqf fund/ assets is invested in productive economic sectors based on Shariah compliance</li> <li>Waqf institution should ensure that there is a collaboration between State Islamic Religious Councils in developing the waqf fund/ assets</li> </ul>
	D	Technology advancement	has covered on a national and international scales of collaboration The potential of waqf in digital era could be improved by integrating the website and social media platform to disseminate information about the waqf to the community and donor The potential of waqf in digital era could be improved by integrating the development of technology such as block online platform in the waqf collection and distribution The potential of waqf in digital era could be improved by integrating the development of technology such as block chain technology in the waqf collection and distribution The potential of waqf in digital era could be improved by integrating the development of technology such as block chain technology in the waqf collection and distribution The potential of waqf in digital era could be improved by integrating the development of technology such as crypto currency in the waqf collection and distribution The potential of waqf in digital era could be improved by integrating the development of technology such as BIG DATA in the waqf information management
Table 1.Number of items inthe questionnaire	Е	Governance in waqf	Waqf institution should streamline and refine the management and development of waqf fund/ assets as stated in the Administration of (continued)

Part	Variable	Questions	Waqf integrated income
		Islamic Law Enactments by establishing the further rules and regulations for flexibility Waqf institution should ensure that all waqf properties are being used, spend and used in accordance with the terms and conditions set out by waqif (donor) Waqf institution should ensure to develop the waqf property and provide a report of the performance of waqf management/ development Waqf institution should play the greater role as an efficient, skilful and professional administrator in managing, maintaining and preserving the perpetual concept of waqf properties without disregard the objective of waqf Waqf institution should ensure that waqf fund/ assets be managed with qualified, knowledgeable and professional managers who are well acquainted with Islamic as well as country laws to make right symbiosis for attaining the performance goals in the waqf systems	generating model

the variance is indicated to be under 50%, in alignment with the recommended value of Podsakoff *et al.* (2003).

In accordance with Hair *et al.* (2014), the PLS-SEM analysis is conducted to inspect the measurement model and structural model because it has no need for a normality assumption (Chin *et al.*, 2003). The measurement model is checked for reliability and validity, while the structural model is assessed for its capacity in testing relationships between variables, where the bootstrapping method is executed through the use of 5,000 resamples (Hair *et al.*, 2017).

#### 4.1 Measurement model

When checking the measurement model, the construct reliability along with the discriminant and convergent validity are verified to ensure that the data set has met the stipulated requirement before it can be further analysed in the structural model.

4.1.1 Reliability test. The reliability, also known as internal consistency, of the data is assessed with the use of composite reliability values alongside Cronbach's alpha. The data is verified as reliable when the constructs show Cronbach's alpha readings of 0.70 or greater (Hair *et al.*, 2014) along with composite reliability readings over 0.70 (Bagozzi and Yi, 1988). All constructs in this study exhibit composite reliability and Cronbach's alpha readings that are greater than 0.70, thus proving internal consistency or data reliability (Hair *et al.*, 2014). These values are laid out in Table 2 below.

4.1.2 Convergent validity. The data must be assessed for convergent validity to verify that the items correspond to the relevant constructs (Urbach and Ahlemann, 2010). Convergent validity is tested through factor loading values and the average variance extracted (AVE) of a construct. Characteristically, a value of 0.50 or greater is required to prove convergent validity (Fornell and Larcker, 1981), whereas item loading readings must reach 0.60 (Bagozzi and Yi, 1988). Because all AVE readings are greater than 0.50 and all item readings surpass 0.60, the convergent validity of this study's variables is verified. The above values are detailed in Table 2.

4.1.3 Discriminant validity. Discriminant validity is examined to establish that the variables are sufficiently distinct from each other. Discriminant validity is reached when the square root of the AVE of every construct is greater than its correlation value with other constructs and when that construct's item loading values are greater than the cross-loading

IJOES		Loading	CA	CR	AVE
	Collaboration		0.914	0.936	0.747
		0.752			
		0.892			
		0.881			
		0.917			
	_	0.871			
	<ul> <li>Governance</li> </ul>		0.935	0.951	0.797
		0.895			
		0.773			
		0.898 0.937			
		0.937			
	Sustainability	0.95	0.943	0.957	0.818
	Sustainability	0.898	0.943	0.937	0.010
		0.967			
		0.948			
		0.901			
		0.796			
	Tech	01100	0.861	0.896	0.638
		0.818			
		0.84			
		0.871			
		0.569			
		0.857			
	Trust		0.929	0.945	0.741
		0.82			
		0.888			
		0.941			
Table 2.		0.875			
		0.814			
Convergent validity		0.818			

readings on other constructs (Chin, 1998). Table 3 reveals that every item shows the sufficient cross-loading values compared to the item loadings, along with the square root values of the AVEs that surpass the rate of correlation from one construct with its counterparts, thus proving the achievement of discriminant validity (Chin, 1998; Fornell and Larcker, 1981).

## 4.2 Structural model

The structural model is tested through the recommended conditions by Hair *et al.* (2017), which are the values of standard beta, predictive relevance (Q2),  $R^2$ , *t*-values derived from the bootstrapping method using 5,000 resample and the effect sizes (f2).

		Collaboration	Governance	Sustainability	Tech	Trust
<b>Table 3.</b> Discriminant validity (HTMT)	Collaboration Governance Sustainability Tech Trust	0.918 0.856 0.852 0.752	0.809 0.788 0.696	0.615 0.662	0.592	

4.2.1 Coefficient of determination. The coefficient of determination ( $R^2$ ) value indicates the degree to which the variation within the dependent variable is influenced by the IVs. This study reveals the value of  $R^2$  for trust as 0.40, signifying that there is a 40% rate of influence on the dependent variable from the IVs. Therefore, it can be stated that the three IVs in this study, comprising collaboration investment, technology advancement and governance carry a significant impact on trust, while the remainder of 60% can be explained by alternate factors, which are not accounted for in the current study.

Hair *et al.* (2017) advised inspecting changes in the values of  $R^2$  to evaluate the effect size (f2). According to Cohen (1988), a reading of 0.40 indicates a large effect, while a 0.07 reading represents a small effect. The f2 results in this study show sufficient effect sizes for the hypotheses. Multicollinearity between variables was also inspected within the model, with the condition that the variance inflation factor (VIF) values must be under 5.00 (Hair *et al.*, 2017), and no issues were discovered in this regard.

*4.2.2 Hypotheses testing.* Following the verification of reliability and validity in the model, the output from the structural model is used in hypotheses testing for this study. Figure 3 contains the structural model outputs for hypotheses testing.

The results (Table 4) confirm H1 because it shows significant path coefficient value (0.631) at 5% (t = 6.1969; p < 0.01). Therefore, it is confirmed that collaboration for investment has a positive effect on sustainable income generation. Furthermore, H2 that proposes the effect of technology advancement on sustainable income generation is also validated through its path coefficient value (0.148) which is proven as significant (t-statistic = 2.482; p < 0.05). The findings for H3 indicate that the path coefficient value of (0.337) is positive and also significant (t-statistic = 3.849; p < 0.01). This confirms that governance has a significant effect on sustainable income generation in waqf. Meanwhile, the indirect relationships between collaboration for investment, technology advancement and governance have significant influence towards trust and acceptance of the community towards the WIIGM model. This is proven by sustainable income generation as mediator in

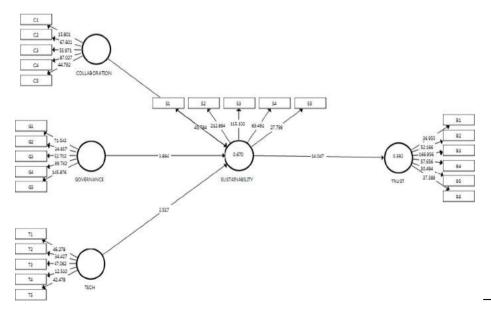


Figure 3. Model in PLS-SEM

the study, with the valid path coefficient values (0.395, 0.093, 0.211) and *t*-statistic readings (6.270, 2.482, 3.400; p < 0.05). Therefore, H4-H6 of this study are supported.

4.2.3 Blindfolding testing (Q2). The blindfolding procedure is carried out to evaluate the model's predictive relevance. This is done through the predictive sample reuse technique, otherwise termed Stone–Geisser's Q2, which functions as a measure for predictive relevance along with the value of  $R^2$ . Henseler *et al.* (2012) corroborated the use of this principle in the assessment of the predictive capacity of the research model.

According to the blindfolding procedure, Q2 calculates the model's predictive relevance through the PLS method. The value of Q2 is derived from the application of omission distance in the range 5–10 in the PLS system (Akter *et al.*, 2017). When the Q2 value exceeds 0, this indicates that predictive relevance exists in the model for the dependent variable (Hair *et al.*, 2014). In this case, it is found that the Q2 readings for TRUST (Q2 = 0.287) and SUSTAINABILITY (Q2 = 0.541) are greater than 0, suggesting that the model has sufficient predictive relevance. Blindfolding testing results are shown in Table 5 below:

#### 5. Conclusion

In view of the current economy, particularly in terms of the SDGs, waqf institutions are advised to respond accordingly so as to benefit from the developments in Islamic social finance (Candra and Ab Rahman, 2010). The importance of innovation in waqf operations has been widely discussed among scholars. Therefore, this study proposes the WIIGM model for waqf institutions towards achieving the goals stipulated in the SDGs. In Malaysia, there are several modern practices that can be used for developing investment strategies for waqf institutions, which are most popular such as saham waqf and cash waqf, which will be easily managed with the using of technology investments.

This study illustrates the significant impact of collaboration for investment, governance and technology towards sustainable income generation, which ultimately fosters the development of trust among the community to accept the integration of the WIIGM model into waqf operations moving forward. This study essentially adopts the TRA, which focuses on the

	Н	Path relationship		Stdd $\beta$	SE	<i>t</i> -value	Decision	f2	VIF
<b>Table 4.</b> Structural model – path coefficient	H1 H2 H3 H4 H5 H6 Note	? Tech $\rightarrow$ Sustainability Governance $\rightarrow$ Sustainability Collaboration $\rightarrow$ Sustainability $\rightarrow$ Trust Tech $\rightarrow$ Sustainability $\rightarrow$ Trust			0.631         0.102         6.1969**           0.148         0.060         2.482*           0.337         0.0088         3.849**           0.395         0.063         6.270**           0.093         0.037         2.482*           0.211         0.062         3.400**			0.260 0.022 0.088 - - -	4.644 2.995 3.927 - - -
			SSO		SSE		Q <sup>2</sup> (=	= 1 – SSI	E/SSO)
Table 5.	Collaboration1,825Governance1,825Sustainability1,825Tech1.825		1,825	1,825 1,825 837.677 1.825			0.541		
		Trust 2,190		1,562.521			0.287		

elements of belief and expectations that lead to acceptance. The findings reveal that only collaboration for investment and governance have significant influence on sustainable income generation, which in turn creates trust. At present, technological advancement has a significant impact on sustainable income generation in the waqf sector, but there is still room for improvements in the integration of technology advancement in waqf operation. This is because the influence and impact of technology in waqf operations is still not at a significant stage. This presents a highly interesting concern worth discussing. When most industries are already moving forward with integrating technology into their business operations, the waqf sector is yet to do so. Therefore, this study sees the crucial need for further investigations on why technology has yet to be integrated in waqf operations. Future studies may look into the nature of maqasid or waqf itself in seeking the answer.

However, the current study confirms that collaboration for investment, technology advancement and good governance are among the elements that can be proposed in the WIIGM for enhancing the SDGs. To advocate for the WIIGM model as a framework for innovation in enhancing other national agendas, another transformative or innovative elements can be considered for the realization of socio-economic goals and for ensuring the sustainable socio-economic well-being of the ummah. Based on this evolution, waqf operations should stay abreast with the times and the current economy towards realizing the SDGs.

#### References

- Ab Shatar, W.N., Hanaysha, J.R. and Tahir, P.R. (2021), "Determinants of cash waqf fund collection in Malaysian Islamic banking institutions: empirical insights from employees' perspectives", *ISRA International Journal of Islamic Finance*, Vol. 13 No. 2, doi: 10.1108/ IJIF-06-2020-0126.
- Abdul Shukor, S., Johari, F., Abd Wahab, K., Kefeli @ Zulkefli, Z., Ahmad, N., Haji Alias, M., Abdul Rahman, A., Mohd Orip, N.M., Ibrahim, P. and Abu-Hussin, M.F. (2019), "Trust on awqaf institutions: evidence from Malaysia", *Journal of Islamic Marketing*, Vol. 10 No. 2, pp. 511-524, doi: 10.1108/JIMA-05-2017-0054.
- Abdullah, M. (2015), "A new framework of corporate governance for waqf: a preliminary proposal", ICR Journal, Vol. 6 No. 3, pp. 353-370.
- Abdullah, M. (2018), "Waqf, sustainable development goals (SDGs) and maqasid Al-Shariah", International Journal of Social Economics, Vol. 45 No. 1.
- Ajzen, I. and Fishbein, M. (1975), "A Bayesian analysis of attribution processes", *Psychological Bulletin*, Vol. 82 No. 2, p. 261.
- Akter, S., Fosso Wamba, S. and Dewan, S. (2017), "Why PLS-SEM is suitable for complex modelling? An empirical illustration in big data analytics quality", *Production Planning and Control*, Vol. 28 Nos 11/12, pp. 1011-1021.
- Allah Pitchay, A., Mydin Meera, A. K. and Saleem, M. (2015), "Factors influencing the behavioral intentions of muslim employees to contribute to cash-waqf through salary deductions", *Journal* of King Abdulaziz University: Islamic Economics, Vol. 28 No. 1.
- Amin, H. (2013), "Factors influencing Malaysian bank customers to choose Islamic credit cards: empirical evidence from the TRA model", *Journal of Islamic Marketing*, Vol. 4 No. 3, doi: 10.1108/ JIMA-02-2012-0013.
- Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.
- Bello-Bravo, J. and Lutomia, A.N. (2020), "Supporting sustainability for a decent work and economic growth in Ghana", Decent work and economic growth. Encyclopedia of the UN sustainable development goals, pp. 1-9.

Candra, H. and Ab Rahman, A. (2010), "Waqf investment: a case study of Dompet Dhuafa Rep	oublika",
Indonesia. Jurnal Syariah, Vol. 18 No. 1, pp. 163-190.	

- Chin, W.W. (1998), "The partial least squares approach to structural equation modelling", *Modern Methods for Business Research*, Vol. 295 No. 2, pp. 295-336.
- Chin, W.W., Marcolin, B.L. and Newsted, P.R. (2003), "A partial least squares latent variable modeling approach for measuring interaction effects: results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study", *Information Systems Research*, Vol. 14 No. 2, pp. 189-217.
- Conner, M. and Armitage, C.J. (1998), "Extending the theory of planned behavior: a review and avenues for further research", *Journal of Applied Social Psychology*, Vol. 28 No. 15, pp. 1429-1464.
- Cohen, J. (1988), Statistical Power Analysis for the Behavioral Sciences, 2nd ed., Erlbaum, Hillsdale, NJ.
- Cohen, J. (1992), "Statistical power analysis", Current Directions in Psychological Science, Vol. 1 No. 3, pp. 98-101.
- Daud, D. (2012), "Waqf reporting framework: reporting guidelines for Islamic (waqf) councils", Business and Management Quarterly Review, Vol. 3 No. 3, pp. 9-15.
- Daud, D. (2019), "The role of Islamic governance in the reinforcement waqf reporting: SIRC Malaysia case", Journal of Islamic Accounting and Business Research, Vol. 10 No. 3, pp. 392-406, doi: 10.1108/JIABR-01-2017-0008.
- Daud, D. and Abdul Rahman, R. (2018), "Straightening the governance of waqf using Tawhidic approaches", *Journal of Contempory Islamic Studies*, Vol. 4 No. 2, pp. 1-17.
- Dekker, S. (2018), Just Culture: restoring Trust and Accountability in Your Organization, Crc Press.
- Elkington, J. (1997), Cannibals with Forks: The Triple Bottom Line of 21st Century Business, Capstone, Mankato, MN.
- Farwell, M.M., Shier, M.L. and Handy, F. (2019), "Explaining trust in Canadian charities: the influence of public perceptions of accountability, transparency, familiarity and institutional trust", *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, Vol. 30 No. 4, pp. 768-782.
- Fauzi, M.H.B.H., Yahya, S., Hanaysha, J.R., Haron, M.S. and Zahrin, S.N.A. (2019), "The impact of trust in cash waqf contribution: a case study of Wakaf Selangor Muamalat (WSM) service of bank muamalat Malaysia berhad (BMMB)", *International Journal of Business, Economics and Law*, Vol. 18 No. 2.
- Fishbein, M.C., Y-Rit, J.A.C.O.B., Lando, U., Kanmatsuse, K.A.T.S.U.O., Mercier, J.C. and Ganz, W. (1980), "The relationship of vascular injury and myocardial hemorrhage to necrosis after reperfusion", *Circulation*, Vol. 62 No. 6, pp. 1274-1279.
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 382-388, doi: 10.1177/002224378101800313.
- Ghafran, C. and Yasmin, S. (2019), "Ethical governance: insight from the islamic perspective and an empirical enquiry", *Journal of Business Ethics*, Vol. 167, pp. 513-533, doi: 10.1007/s10551-019-04170-3.
- Hair, J.F., Marko, S., Ringle, C.M. and Mena, J.A. (2012), "An assessment of the use of partial least squares structural equation modeling in marketing research", *Journal of the Academy of Marketing Science*, Vol. 40 No. 3, pp. 414-433.
- Hair, J.F., Jr, Sarstedt, M., Hopkins, L. and Kuppelwieser, V.G. (2014), "Partial least squares structural equation modeling (PLS-SEM): an emerging tool in business research", *European Business Review*, Vol. 26 No. 2, pp. 106-121, doi: 10.1108/EBR-10-2013-0128.
- Hair, J.F., Jr, Sarstedt, M., Ringle, C.M. and Gudergan, S.P. (2017), Advanced Issues in Partial Least Squares Structural Equation Modeling, Sage Publications, Los Angeles.

- Hardinawati, L.U. and Hamzah, M.Z. (2017), "Analisis faktor yang mempengaruhi intensi donatur membayar zakat, infak, dan sedekah (ZIS) melalui bank (studi kasus donatur ZIS Di provinsi DKI jakarta)", Jurnal Middle East and Islamic Studies, Vol. 4 No. 2, pp. 175-192.
- Harris, E. Petrovits, C. and Yetman, M. (2022), "Spreading the news: donor response to disclosures about nonprofit fraud and efforts to rebuild trust", 20 July, doi: 10.2139/ssrn.3021543.
- Hasan, R. and Siraj, S.A. (2017), "Toward developing a model of stakeholder trust in waqf institutions", *Islamic Economic Studies*, Vol. 25 No. Special Issue.
- Hasan, R., Hassan, M.K. and Rashid, M. (2019), "Mediating role of trust in cash waqf donations", In Revitalization of Waqf for Socio-Economic Development, Palgrave Macmillan, Cham, Vol. II, pp. 293-317.
- Hasanah, U. and Pranata, D. (2019), "Waqf financial tecnology in startup Capital", *ICIDS 2019*, Bandar Lampung, Indonesia, September 10-12.
- Hegner, S.M., Beldad, A.D. and Brunswick, G.J. (2019), "In automatic we trust: investigating the impact of trust, control, personality characteristics, and extrinsic and intrinsic motivations on the acceptance of autonomous vehicles", *International Journal of Human–Computer Interaction*, Vol. 35 No. 19, pp. 1769-1780.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2012), "Using partial least squares path modeling in advertising research: basic concepts and recent issues", *Handbook of Research on International Advertising*, Edward Elgar Publishing, Cheltenham.
- Ibrahim, S.S., Abd Halim Mohd Noorb, S.I., Arshadd, R. and Done, M.A.M. (2020), "Trust and networking in cross sector collaboration of waqf development and the mediating role of sustainability practices: higher order models in PLS-SEM", *International Journal of Innovation*, *Creativity and Change*, Vol. 14 No. 1, pp. 170-189.
- Ibrahim, S. S., Daud, D., Zainal, N. and Beik, I. S. (2021), "Urgency in waqf-microfinance project collaboration for socioeconomic growth and the mediating effect of sustainability using PLS-SEM analysis", *Studies of Applied Economics*, Vol. 39 No. 10.
- Ibrahim, S.S.B., Abd Noor, H.M., Ismail, S., Arshad, R. and Don, M.A.M. (2019), "Commitment in WAQF development through cross-sector collaboration between Islamic financial institutions and state Islamic religious councils: innovative strategy of value-based intermediation for sustainability", *GATR Journal of Finance and Banking Review*, Vol. 4 No. 1, pp. 29-35.
- Kolk, A. (2016). "The social responsibility of international business: from ethics and the environment to CSR and sustainable development", *Journal of World Business*, Vol. 51 No. 1, pp. 23-34.
- Latif, S.A., Din, N.M.N. and Mustapha, Z. (2018), "The role of good waqf governance in achieving sustainable development", *Environment-Behaviour Proceedings Journal*, Vol. 3 No. 7, pp. 113-118.
- Maqbool, N., Razzaq, S., Ul Hameed, W., Atif Nawaz, M. and Ali Niaz, S. (2019), "Advance fundraising techniques: an evidence from non-profit organizations", *Pakistan Journal of Humanities and Social Sciences*, Vol. 7 No. 1, pp. 147-157.
- Maryam, S.Z., Mehmood, M.S. and Khaliq, C.A. (2019), "Factors influencing the community behavioral intention for adoption of Islamic banking: evidence from Pakistan", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 12 No. 4, doi: 10.1108/IMEFM-07-2017-0179.
- Mohamad, N.A., Kader, S.A. and Ali, Z. (2012), "Waqf lands and challenges from the legal perspectives in Malaysia", *IIUM-Toyo Symposium*.
- Mohd Isa, M.M.Y. and Mohamed, Z. (2020), "Insaniah (humanistic) economics of waqf: from IR 4.0 to a human-centered tawhidic society 5.0", *European Journal of Islamic Finance*, No. 15, doi: 10.13135/2421-2172/3750.
- Mustapha, Z. and Muneeza, A. (2020), "Developing a waqf market and reconceptualising awqaf governance via regtech", Awqaf-Led Islamic Social Finance, Routledge, London, pp. 116-133.

F	Podsakoff, P.M	., MacKenzie	, S.B., I	Lee, J.Y.	and P	odsakoff,	N.P.	(2003),	"Common	1 method	biases	in
	behavior	al research: a	critica	l review	of the	literature	and	recomm	nended rea	medies", j	Journal	of
	Applied I	Psychology, Vo	ol. 88 No	o. 5, p. 87	9.							

- Puad, N.A.M., Rafdi, N.J. and Shahar, W.S.S. (2014), "Issues and challenges of waqf instrument: a case study in MAIS", E-proceedings of the Conference on Management and Muamalah (CoMM 2014), pp. 26-27.
- Reni, H. (2015), "The customers behavioral intention to select Islamic banking in Indonesia", *Journal of Islam and Science*, Vol. 2 No. 1.
- Sabran, O. (2002), *Pengurusan Harta Wakaf*, 1st ed., Universiti Teknologi Malaysia, Skudai, Johor, Malaysia.
- Soderstrom, K.M., Soderstrom, N.S. and Stewart, C.R. (2017), "Sustainability/CSR research in management accounting: a review of the literature", *Advances in Management Accounting*, Emerald Publishing Limited, Bingley, Vol. 28, pp. 59-85, doi: 10.1108/S1474-787120170000028003.
- Thaker, M.A.B.M.T. and Pitchay, A.A. (2018), "Developing waqf land through crowdfunding-waqf model (CWM): the case of Malaysia", *Journal of Islamic Accounting and Business Research*.
- Tisdell, C. and Ahmad, S. (2018), "Microfinance: economics and ethics", International Journal of Ethics and Systems, Vol. 34 No. 3, doi: 10.1108/IJOES-02-2018-0028.
- United Nations (2015), "Transforming our world: the 2030 agenda for sustainable development", available at: https://sustainabledevelopment.un.org/post2015/transformingourworld (accessed 27 April 2020).
- Urbach, N. and Ahlemann, F. (2010), "Structural equation modeling in information systems research using partial least squares", *Journal of Information Technology Theory and Application*, Vol. 11 No. 2, pp. 5-40.
- Wan Ab Rahaman, W.M.A.F., Yaacob, S.E. and Haron, M.S. (2021), "An investment portfolio strategy for waqf assets in Malaysia: a study at selected state Islamic religious councils", *Journal of Academic Research in Business and Social Sciences*, Vol. 11 No. 5, pp. 481-495.
- Wolfe, S.E., Rojek, J., Manjarrez, V.M. Jr and Rojek, A. (2018), "Why does organizational justice matter? Uncertainty management among law enforcement officers", *Journal of Criminal Justice*, Vol. 54, pp. 20-29.
- Zulaikha, S. and Rusmita, S.A. (2018), "Blockchain for waqf management", KnE Social Sciences, Vol. 3 No. 10, doi: 10.18502/kss.v3i10.3457.

#### **Corresponding author**

Dalila Daud can be contacted at: daliladaud@uitm.edu.my

For instructions on how to order reprints of this article, please visit our website: **www.emeraldgrouppublishing.com/licensing/reprints.htm** Or contact us for further details: **permissions@emeraldinsight.com**