

THE JOURNAL OF MANAGEMENT THEORY AND PRACTICE (JMTP)



E-ISSN: 2716 - 7089

VOLUME 2 ISSUE 1

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**THE JOURNAL OF
MANAGEMENT THEORY
AND PRACTICE
(JMTP)**

VOLUME 2 ISSUE 1

PREFACE

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The Role of Dynamic Capabilities in Improving Readiness for Digital Business Transformation

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Received: 6th October 2020

Accepted: 29th December 2020

Published: 2nd January 2021

Abstract

As digital technologies development continues, as the risk for existing business in all industries increases due to the new innovated, digital-based products and services that are changing market conditions. Digital transformation strategy enables incumbent firms to keep their existence in the digital era. However, firms need first to assess their readiness for digital transformation strategy requirements. The lack of agreed model that explains the process of digital transformation strategy in general and on firm's readiness for this strategy were enough justifications for the researcher to conduct this study. The researcher fills this gap by proposing new model for digital transformation readiness. The study also examines a mediation role for dynamic capabilities in reconfiguring operational capabilities in a firm so that to enhance its readiness for digital transformation strategy. The findings of this research shall empirically validate the proposed model and it will reveal the role of dynamic capabilities in improving firm's digital transformation readiness. The research indicates that dynamic capabilities are developed by other organizational capabilities such as culture values and ICT capabilities. It also points to the essential role of dynamic capabilities in adapting operational capabilities for any market change. Organizations shall prepare themselves for digital transformation strategy by focusing on developing capabilities needed for this strategy to reduce the risk of failure. The proposed model can be considered as a significant contribution in the area of the digital transformation strategy. The model in practical wise will help managers to assess their firm's readiness for digital transformation strategy and fill any gap identified. The proposed model for digital transformation readiness is recommended to be further extended to include more effecting factors including technological and environmental factors.

Keywords: Digital; Transformation; Dynamic; Readiness; Capabilities

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BACKGROUND AND INTRODUCTION

Pre-digital firms are facing real threat due to digital disruption facilitated by the rapid digital technology's development. Digital disruption happened when new digital-based business players introduced new innovated services and products based on digital technologies so that to it can threaten traditional services and products. Due to digital disruption, the market structure and the rules of competition have been changed and completely different competitive opportunities and risks are result (Porter & Heppelmann, 2014). Start-ups such as Uber, WhatsApp, Amazon, Airbnb surprise business leaders with their capabilities to create attractive digital-based business models (Sanchez, 2017). The mention disruption is now affecting strategies of many industries including transportation, telecommunication and others (Karimi & Walter, 2015, Stewart et al.; 2016). Enterprises of all sizes in different industries are discovering that for themselves and hence they have to deploy an emerging set of new business practices that are based on the new digital tools and technologies (Hanna, 2011). Telecommunication industry as other industries is being disrupted by digital services that offer

telecommunication media for people over the internet and they have been known as Over The Top (OTT) services such as Skype, WhatsApp, Imo and others. Such services are substituting traditional telecommunication services due to its attractive features for users (Onyeji-Nwogu et. al, 2017). As evidence of such impact, the researcher has combined annual telecommunication traffic reports and growth in Internet users in Yemen provided by the Ministry of Telecommunication in Yemen that includes reports for the period of 2006 - 2018. The graph in Figure 1 below shows growth in International Direct Dialing (IDD) and Mobile Messaging before 2012. By 2012 and while Internet users continue to grow and with the increasing use of digital communication applications over the internet such as Skype, WhatsApp and other applications that grant customer better experience, the traditional telecommunication services usage declining. For example, IDD annual growth reached 40% in 2008 then dropped to negative growth of 20% by end 2017. Similarly, the total number of mobile SMS messaging dropped from 76 Million messages in 2008 to less than 38 Million messages in 2017. Hence both IDD and SMS messaging usage decline with time as Internet users keep

increasing as shown. The justification of this drop is that customers in Yemen preferring the OTT services in performing their communication over the traditional services and this phenomenon is increasing with time.

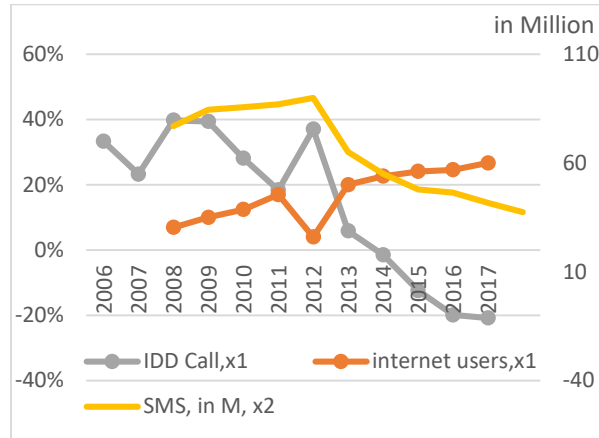


Figure 1: Internet Users versus IDD calls and mobile SMS

As per (Mihardjo & Sasmoko, 2019), telecommunication companies among other businesses need to consider adapting their services in a new way and to develop new featured digital capabilities to be able to address the digital disruption they are facing. Digital transformation refers to the change process that is enabled by digital technologies (Larjovuori et al., 2018). It is fundamentally changing existing value chains across industries and enables essential business enhancement (Afandi, 2017). Not only digital transformation enables firms to respond to digital disruptors, it is even can make them able to disrupt other businesses. Although the digital transformation becomes a hot topic for researchers and already being investigated by my scholars, there is still no agreed framework for digital transformation (Mihardjo & Sasmoko, 2019, Afandi, 2017). Such framework that lead to understanding the process to achieve digital business transformation objectives in a firm. Many managers still see digital transformation ambiguous process to implement (Afandi, 2017). According to Fitzgerald et al. (2014), many firms struggle to achieve the expected benefits from this process. Scholars (Mihardjo & Sasmoko, 2019; Sow & Aborbie, 2018; Orji, 2019, Afandi, 2017) refer these difficulties to the missing capabilities and skills required by digital transformation. This justified knowledge gap motivated the researcher to conduct this study. The researcher is proposing a model to assess firms' readiness to proceed with digital business transformation. The researcher is also examining the role of dynamic capabilities in reconfiguring firms' operational capabilities to enhance their readiness for digital business transformation. This conceptual paper include introduction (objective, questions, problem statement and background of the study), literature review (hypothesis development, underpinning theory, operational definition, theoretical framework), discussion and conclusion.

LITERATURE REVIEW

Due to the spread of new disruptive products that impact many industries, the digital transformation strategy become an important area to be investigated by many scholars. The continuous technological development has changed the principles of market dominant and competitive advantages rules (Packmohr, Mosconi, Santa-Eulalia, 2020). Hence incumbents need to consider digital transformation strategy if they need to keep in the market. The improved performance

of Information and Communication Technologies (ICT) infrastructure will bring many opportunities for communities and enterprises to learn and produce innovative products and services (Hanna, Nagy, 2016). Many Scholars focused on drives and opportunities of digital transformation and its effect on firm's performance. Regarding the success of digital transformation, some scholars found that the digital transformation success depend on factors related to customer centricity, governance and innovation as Mhlongu et al, (2018) found. Others found that IT capabilities plays an important role in digital transformation success Hsu et al. (2018). Others see strategy, people, regulation, customer readiness are among important success factors for digital transformation (Sanchez, M. A. (2017), Parida et al., (2016), Aboelmaged, M. G. (2014), Müller, E., & Hopf, H. (2017)). The researcher decided to consider the capabilities-based approach to develop a new model for digital transformation readiness for the reason that digital transformation cannot be successful process without organizational capabilities that can drive this process. The readiness of firms for digital transformation being addressed in this study is an important topic in relation to digital transformation. The researcher focuses in this study on the association relationship between operational capabilities and in particular ICT capabilities and organizational culture and the firm's organizational readiness for digital transformation. The focus also will be on a possible mediation role for dynamic capabilities to prepare the operational capabilities for the digital transformation strategy. The outcome of this study will constitute of a model for the digital transformation readiness that can be a contribution in knowledge body of the digital transformation strategy. in the next sections, the researcher presents some definitions for the main themes of this study.

Digital Business Transformation

To survive in a digital environment, incumbents are required to start planning for their digital transformation strategy. Many definitions for digital transformation have been found in literature. While the essence of digital transformation strategy is the use of new digital technologies, such as G5, artificial intelligence, cloud computing, and Internet of things (IoT) technologies to lead the business to major improvements (Warner & Wäger, 2019). while digitization is concern on converting functions in a firm from manual to digital by using computers, Digital Transformation or digitalization has a comprehensive concept that effects all aspects in a firm operation (Bharadwaj et al. 2013; Porter & Heppelmann 2014). Digital transformation refers to the major transformation of the entire business world through developing new business models based on the digital technologies with a fundamental effect on customer experience PwC (2013) as cited by (Schallmo & Williams, 2018). With digital technologies, firms can improve their business performance to keep competitive and adopt possible opportunities (Stief et al., 2016). It is as per (Hartl, 2019) a large-scale business transformation that completely affects various areas of the firm. Companies that don't consider digital transformation strategy today will find it difficult to keep its competitiveness advantage in a digital-based environment (Zeike et al., 2019). Liu et al. (2011) also defined digital transformation as an organizational transformation that integrates digital technologies and business processes in a digital economy. A digital transformation process and digital projects cannot run separately from the rest of the company. Hence, digital transformation is a common effort that expects the inclusion of all teams (Ivančić et al., 2019). Many researchers tried to

explain the digital transformation phenomenon via different frameworks found in literature. Nevertheless, there is still no consensus on a single framework and there is lack of model for digital transformation that can answer all aspect in relation to this strategy. Fitzgerald et al. (2013) found that majority of companies facing challenge to attain all benefits from this process. It is vital to mention that migration into digital world is not a transit change. It is however a migration through many steps including technological and organizational modification (Rajnai & Kocsis, 2018). Although digital technologies are the main tool for the digital transformation strategy, technology is still only one requirement and the other related changes inside and outside companies are much more important and impact the entire organizational and operational structure (Müller & Hopf, 2017).

Organizational Readiness for Digital Transformation

The readiness for change is a term that has been used by scholars since long time ago. It is defined by (Albano, 2010) as people preparedness level within a firm to execute organizational development practices. The organizational readiness is known as an important prerequisite for the successful change within an organization. The effectiveness of organizational change is usually influenced by many factors and the readiness is on top of those factors (Armenakis et al., 1993). The readiness assessment is needed prior major change within an organization. This assessment expose any gaps that might be identified between their own estimation concerning the planned change and that is of others (Holt et al., 2007). Resources readiness provides organizations with the capability to be defensive and proactive in some cases in adopting new technologies or designing innovated services (Arfin, 2016). Organizational readiness for change was described by (Weiner, 2009) by the shared commitment and belief of the organization member their capability to perform that change.

Many changes failed because organizational readiness was not assessed for this change (Albano, 2010). Among many approaches that conceptualize organizational readiness for change found in literature are two approaches presented by (Armenakis et al., 1993). The first approach considers the organizational readiness for change has relation to the psychological state of organizational team. According to this view, Organizational readiness can be assessed by team's Change Commitment and Change efficacy (Albano, 2010). The second approach embraces the professional view as suggested by Campbell et al. (2001). Campbell proposed six factors of eHealth readiness (turf, efficacy, practice context, apprehension, time to learn and ownership). Holt et al., (2007) study result in five factors expected to be the essential impactful readiness factors, confirmed empirically. Those factors include (a) discrepancy: content of the change, (b) efficacy: capability of performing the change, (c) organizational valence: the important of the change for the organization, (d) management support: the leader commitment for the change, and (e) personal valence: the benefits of the change for personals. The researcher is considering those factors to measure the organizational readiness construct throughout this study.

ICT Capabilities

IT plays an important role in improving performance in organizations. Since introduced in 1970s, IT automated many functions in organizations. There are huge number of studies

found in literature focusing on the role of IT in business (Bharadwaj 2000; Wade and Hulland 2004, Dehning and Richardson 2002). In the digital economics, firms increase their dependency on advanced information and communication technologies to accomplish tasks and delivering services Hsu et al. (2006). IT capability is one of the driving forces for digital transformation as per many studies. The IT capability motivates the role of technology in achieving the digital transformation targets (Sambamurthy et al., 2003; Chen et al., 2014) as cited by Nwankpa and Roumani, (2016.). ICT capabilities on the other hand can impact digital transformation indirectly by its role in developing dynamic capabilities needed for digital transformation (Karimi & Walter, 2015; Warner & Wäger, 2019). Parida et al., (2016) investigated the role of ICT in developing dynamic capabilities and his study revealed that ICT capabilities have an important role in developing dynamic capabilities of small firms. One of the major definitions of digital transformation considers it as organizational migration to big data, cloud computing, mobile and social media environments Nwankpa and Roumani, (2016.). All these applications are IT-based systems that need the ICT capabilities to be secured by team. ICT capabilities can be described by its components. Parida et al., (2016) used three components to measure ICT capabilities in a firm including:

1- IT internal Use. This component is related to the use of IT systems to improve internal operations. This can be expressed by reducing operation cost, improving decision-making process, offering better ways for service delivery as well as enhance financial and administrative operations.

2- ICT use for collaboration: This component is related to the use of ICT applications in identifying, establishing and maintaining collaboration with new business external partners including contractors, agents and suppliers Tan et al., 2010). The great offers of ICT systems in information exchange, knowledge sharing can help to build a long terms collaboration between firms and external business partners (Parida et al., 2016).

3- ICT use for Communication: ICT systems also offers firms tools for communication that can address the geographical presence of business branches or people which in turn improve work process regardless of offices locations. ICT systems also allow team to accomplish their tasks despite their attendance in offices as ICT allow connections to the system remotely. The Hypothesis that shall be tested:

H1: ICT capabilities is positively influencing Organizational readiness for digital transformation.

Organizational Culture

Digital business transformation strategy execution is not straightforward process, and firms need to considers many conditions before and during digital transformation and organizational culture is among these considerations (Osmundsen et al., 2018). To meet business improvements, comprehensive organizational changes are needed. To meet changes in the market as well as changes in customer preferences and experience, firms need to transform their entire business operations including structures, processes and culture values (Fitzgerald et al. 2014). Culture is often being considered as an essential strategic asset that enable business transformation and the effective use of digital

technologies (Downes and Nunes 2014). Many scholars found that culture values have fundamental impact on the success of business transformations (Hartl & Hess, 2017). According to McKinsey's survey of global executives conducted on 2016, found that culture is the most significant barrier to digital effectiveness as more than 33% of respondents consider cultural and behavioral attributes have direct impact to enable the effective use of digital opportunities (Goran et al, 2016).

Organizational culture values constitute behavioral characteristics that define how tasks get done within an organization and describe the way employees control their relationship in the organization (Hemerling et al., 2018, Shin et al., 2012). Organizational values impact on firm's strategic orientation can be found in terms of sensing of opportunities (Matzler et al., 2013). The role of culture becomes more important in the digital environments which requires a team with an open mindset, adaptable and accept to change. Venkatraman (1994) proposed a model as cited by (Parida et al., 2016) that consider the proper use of IT deployment to be subject of existing organizational culture values. Fitzgerald et al. (2014) found that the development of digital mindset is important factor for digital business transformation. Recent studies (Haddud & McAllen, 2018) also found that migration into digital doesn't limited by deploying new technologies, but it is also about executing changes in people shared values to be supportive digital transformation.

Many studies found that the reason behind many digital transformation initiatives failure is referring to the non-digital culture (Hartl & Hess, 2017). To avoid the failure in digital transformation, firms need to change the organizational culture values to enhance internal readiness for innovation and change Albano, (2010). Kane et al., (2015) found a strong association between organizational culture and the achieving of all benefits of digital technologies in any firm. In a Delphi study done by Hartl and Hess (2017) to investigate on the supported culture values for a successful digital business transformation, he found that the most impactful organizational values are openness to change, customer centricity and failure tolerance. To measure organizational culture, the researcher adopted the (Belassi, 2017) model that include three components 1) Positive work place, 2) Management Leadership, and 3) Results- oriented. The hypothesis to be verified for this construct:

H2: Organizational Culture is positively influencing Organizational readiness for digital transformation.

Dynamic Capabilities

As the technological development continues to impact the business environment conditions and change its competitiveness rules, the more need for special organizational capabilities that can respond to such dynamic changing of environment. With this new organizational capabilities, organizations and employees can learn quickly, identify new opportunities and build new assets strategies (Teece, 2007). Teece, Pisano, and Shuen (1997) have developed the new concept of dynamic capabilities and defined such capabilities by the abilities of firms to integrate, build, and reconfigure internal resources and capabilities to deal with dynamic environments (Teece, 2007). Some scholars consider dynamic capabilities framework as extension for Resources-Based view (RBV) that have been used to describe the static market (Helfat & Peteraf, 2003, Mikalef & Pateli, 2017; Teece, 2007, Reilly & Pamela Sharkey

Scott, 2009). It becomes known among scholars that dynamic capabilities are related to turbulent environment.

Despite the high attention that dynamic capabilities have been received by many scholars, these capabilities still lack of understanding in terms of what it constitutes of and how they can be developed (Pavlou & El Sawy, 2011). In the context of digital transformation, few studies were found to investigate the role of dynamic capabilities in digital transformation process. Many studies revealed that dynamic capabilities are among organizational capabilities needed for digital transformation strategy (Wu, 2010, Leonardus W. Wasono Mihadjo et al., 2019, Banerjee et al., 2018, Yeow et al., 2018, Wang & Ahmed, 2007, Hermano & Martin-Cruz, 2016). The researcher in this study investigates a mediation role for the dynamic capabilities considering that any firm doesn't possess such capabilities might not able to respond to dynamic markets and will not be in a good position to use the digital transformation to protect its business that been disrupted by digital players. Many frameworks were found to conceptualize dynamic capabilities and to measure the dynamic capabilities. One of those frameworks is the one proposed by Pavlou and El Sawy, (2011). As per this framework, dynamic capabilities involve the following components:

1- Sensing Capability: sensing capabilities includes activities related to searching and frequently scanning the environment for new opportunities. The keep knowledge of environment changes including those related to changes result from the technological development. Organizations can also identify new opportunities by keep getting customers feedback on their products and services. The change of customer feedback could lead to a change in customer preferences due to possible new services they found including new technology related services. Customers in many cases among the earliest to perceive the right to applying new technological ideas (Teece, 2007).

2- Learning capability: In some studies (Zahra and George (2002), Parida et al., (2016)) learning capability is referred to absorptive capability. Executive internal experiences and the absorption of external information as per Parida et al., (2016) are a learning mechanism to create competitive advantages. Knowledge sharing and documenting practices are also learning activities that enhance dynamic capabilities within organizations (Lin & Wu, 2014).

3- Integration capability: Pavlou and El Sawy, (2011) defined integration capabilities as the organization ability to combine internal and external knowledge resources. Teece (2007) also views the knowledge integration as an essential pillar for dynamic capabilities. Activities that include in this capability such as customer information collection, Recording and integrating historical methods and experiences and potential market exploration (Lin & Wu, 2014, Pavlou and El Sawy, 2011). The two hypotheses to be tested are:

H2: Dynamic Capabilities mediates the relationship between ICT capabilities and Organizational Readiness for Digital business transformation.

H4: Dynamic Capabilities mediates the relationship between Organizational Culture and Organizational Readiness for Digital transformation.

UNDERLYING THEORIES

The researcher developed the framework of this study based on three theories in related to the study. First Resources-Based View (RBV) of Barney, (1986) that refer the success of firms to internal resources and capabilities. RBV stated that firms can attain and sustain competitiveness advantage by developing resources in such way that are difficult to be imitated and such resources to be rare including organization capabilities (Saá-Pérez & García-Falcón, 2002). With the changing conditions of markets of being volatile and face frequent changes due to technologies development, the questions about ability of operational capabilities in continue providing competitive positions increased (Drnevich and Kriauciunas, 2011). Many scholars argue that RBV is dealing with static environment and it was developed before the digital era. Hence Dynamic Capabilities View (DCV) introduced as to update RBV. Some scholars consider DCV as extension for RBV to deal with the changes occurred in the environment due to digital technologies (Mikalef & Pateli, 2017; Reilly & Pamela Sharkey Scott, 2009; Zaidi & Othman, 2012). Dynamic capabilities were separate from operational capabilities, which relate to the current operations of a firm (Arfin, 2016).

The Dynamic capabilities is viewed as responsive for the market changing conditions in which dynamic capabilities to renew existing capabilities to survive the firm to continue to be competitive. (Winter, 2003). The researcher built his conceptual idea from this argument and for this objective, the researcher is interested to examine this concept in the context of digital transformation readiness. Hence the researcher is examining a possible mediation role for the dynamic capabilities between operational capabilities such as ICT capabilities and organizational culture values and the organizational readiness of firms for digital business transformation strategies. The third theory that was used to build the conceptual framework of this study is the Technological, Organizational, Environmental (TOE) framework. TOE framework (shown in Figure 2) was proposed by Tornatzky and Fleischer in 1990 to categorize factors influencing adoption of innovation. It determines three categories of an organization that influence the adoption of technological innovation. The three area include: technological factors, organizational factors and environmental factors (Oliveira & Martins, 2011).

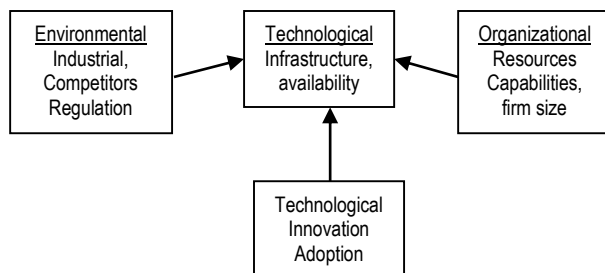


Figure 2: TOE Framework

TOE framework was also used extensively in literature where studies addressing the behavior against introducing new technologies. It was also being used in the area of digital transformation by some scholars and to categorize success factors of digital transformation strategy. Among those studies including: (Sun et al., 2018, Leung et al., R. 2015) in adoption of Big Data and (Awa, H. O., Ukoha, O., & Emecheta, B. C. 2016) in adoption of ERP application.

THE THEORETICAL FRAMEWORK

The researcher proposing a Digital Transformation Organizational Readiness (DTOR) model based on RBV, DCV and TOE. The model shows the organizational readiness factors in terms of organizational capabilities involving ICT capabilities and organizational culture values while dynamic capabilities is supposing to have mediation role in this relationship. The theoretical framework shown in figure 3 shows direct association between ICT capabilities and Organizational culture with dynamic capabilities. On the other hand, the dynamic capabilities are having direct relationship with organizational readiness for digital transformation.

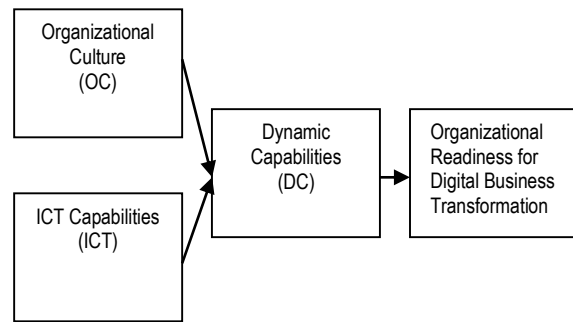


Figure 3: Research Theoretical Framework

DISCUSSION AND CONCLUSION.

This study emphasizes the key role of organizational capabilities in the success of organization when facing any environment change. In relation to dynamic capabilities development, Arfin (2016) mentioned that dynamic capabilities and their antecedents are distinct constructs, and there are several external and internal capabilities and factors that play as enablers that impact the deployment of dynamic capabilities as cited from (Ambrosini and Bowman, 2009). The findings of this study shall verify the role of dynamic capabilities in digital transformation process and how it can affect the readiness of firms for this process. The possibility of dynamic capabilities development by culture values and ICT capabilities shall also be identified. The proposed model will be valuable contribution to the literature in relation to digital transformation. This model will also emphasize the importance of ICT capabilities and the supportive organizational culture values for change to secure the successful operations of digital transformation and to achieve the maximum benefits of this process. The model will also indicate to the importance of dynamic capabilities to make the firm able to respond to changes in the market and especially to effectively use the technological development in sensing and seizing new opportunities and reconfigure internal resources and capabilities to match the changing customer needs. The model from the other hand will assist managers to assess their firms readiness for digital transformation and identify any gaps in terms of organizational capabilities and skills to be addressed. This model still needs to be extended in future studies to include other technological and environmental factors that have impact on firm's readiness for digital transformation. It is also recommended to examine this model in different industries with different environment conditions.

ACKNOWLEDGEMENT

First and foremost, *I am grateful to the almighty God* for blessing and guiding us throughout this work. Then am

profoundly grateful for Dr. Fakhrul Anwar Zainol for great contribution and support. My gratitude also goes to Dr. Murad Al-Nashmi for support.

CO-AUTHORS CONTRIBUTION

Fakhrul Anwar Zainol: Professor, Faculty of Business and Management, [Universiti Sultan Zainal Abidin | UniSZA](#) . Prof Fakhrul is the main supervisor for this researcher. He is involving in all processes and stages of this project.

Murad Al-Nashmi Professor, Faculty of Business and Management, University of Science & Technology. Prof Murad is a Co-author who has support contribution in some parts of this project.

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A Study of the Effectiveness of Brand Equity Effecting Student's Preference Towards Enrolling into The Institutional of Higher Learning, in Klang Valley

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Received: 12th December 2020

Accepted: 10th January 2021

Published: 14th January 2021

Abstract

In Malaysia, high-speed university growth is confronted with the business climate. The notion of branding was at variance with business research for the university, it should or should not be shown. The purpose of the review is to display the significant impact of brand equity, on Brand awareness, Brand association, Brand Loyalty and Perceived Quality. In this study, one dependent variable and 4 independent variables was tested. Brand equity is defined in this term as the distinction of the firm and what may be the element to be in brand equity. A realistic, non-random sampling technique was made to test the hypothesis of Brand awareness, Brand association, Brand Loyalty and Perceived Quality effect on brand equity. One hundred and sixty-five surveys have been sent across Whatsapp and emails to Klang Valley with different age groups. The responses from the survey were tested by SPSS. To test the reliability (internal consistency) of the data, Cronbach alpha was performed. The data was initially tested for levene test before it has been tested using regression analysis. Then, when the test not violate null hypothesis, regression analysis such as ANOVA was performed. To accept the hypothesis of objective, the person correlation coefficient was performed. The study revealed which Brand awareness, Brand association, Brand Loyalty and Perceived Quality do have huge influence on brand equity. This finding will not only provide a credible basis for the possible service industry, such as colleges. It is also a crucial potential research strategy to boost the brand value for the organization.

Keywords: Brand Equity, Brand loyalty, Brand Awareness, Brand Association, Perceive Quality

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Introduction

The new initiative in the marketing field is for brand equity. The higher education in Malaysia was chosen to be supported by industry. The university study on the levels of Kuala Lumpur, Malaysia focuses on college and university levels of education.

In a country like Malaysia, higher standard of education is one of the key points taken into consideration when it comes to being competitive as a country (Wan, Sirat and Razak 2018). As a general concept, there are three primary types of tertiary education, which are public universities, private universities and colleges (Ballesteros, 2007). Based on the source number published by StudyMalaysia.com, which reports that there are approximately 20 public universities and 47 private universities in Malaysia, the Ministry of Education suggests that there are 34 universities and 10 foreign universities in Malaysia (List of Universities in Malaysia, 2018).

The Malaysian Quality Education System (MyQuest) for private universities was introduced in 2011 to enable private institutions in Malaysia to improve productivity and quality of education. In our 2017/2018 report on private schools, MyQuest noticed a 27% improvement in the level of education

provided at educational institutions. However, during this time period, the Ministry closed a total of 46 universities and colleges; after MyQuest was established, there was some shuttering of 33 private colleges in 2017 (New Straits Times, 2017). Thus, the importance of the brand equity in the higher learning institute cannot be denied. Private and public university shall need to find a way to assess and increase their brand equity to the next level.

Purpose and Problem Statement

Aaker's brand equity has shown that it is an asset for the organization. As brand value drops, the entire company system declines. Brand is the first criterion that students evaluate to recognise their preferences and make their university decisions (Clark et al., 2009). Brand equity will limit the number of students accepted to the university (Mourad, Ennew and Kortam, 2011). Often, operating costs including paying the lecturer's fees, maintenance fees and more would increase (Johnes, Portela and Thanassoulis, 2017). Because of the mistrust between the university and students, they would undoubtedly switch to other goods (Casidy, 2013). Beyond solving the research issue, customer loyalty is necessary to respond correctly in behavioural experiences (Merz, He and Vargo, 2009). Customers tend to pay more in a

company offering greater value than other companies (Vargo and Lusch, 2008). Below is a rather clear example demonstrating the decline in brand worth.

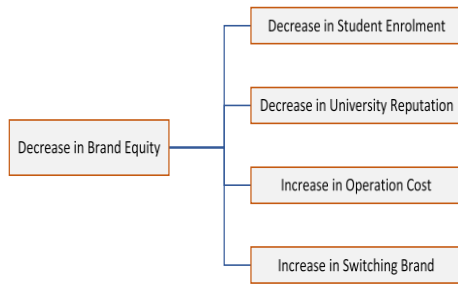


Figure 1: Decline in brand worthiness

Significant of Research

This will encourage managers and owners to understand that brand equity is not being utilized properly. It provides a rundown of Veritas University College's brand equity ratings. A review of the planning mechanism will be necessary. The thesis examined the impact of geography on Malaysian students. It is proposed that primary and secondary school respondents or students in other states in Malaysia should participate in the next report. Subjects would be sampled from multiple social groups and ethnicities.

Research Questions

The contingent variable is brand equity and the independent variable is brand recognition, brand affiliation, perceived consistency and brand loyalty. The concerns proceed.

1. How does brand awareness affect brand equity?
2. How can brand associations affect brand equity?
3. What is the impact of perceived quality on brand equity?
4. How can brand loyalty influence the brand equity?

Research Objectives

This research aims to establish the total brand equity philosophies at Kuala Lumpur, Malaysia for undergraduate and postgraduate level.

The research objectives are to:

1. Evaluating the connection between the association of the brand and the equity of the business
2. Evaluating the connection between perceived brand quality and brand equity
3. Investigation of the relationship between brand awareness and brand equity
4. Assessing the correlation between buyer loyalty and brand equity

Figure 2 below is a schematic that shows the causal connection between the targets.

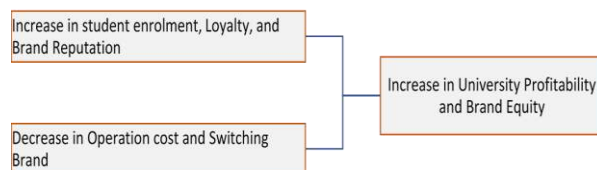


Figure 2: Relationship of the objectives

LITERATURE REVIEW

The literature review indicates a comparatively limited number of studies on university branding, with concentration toward higher educational branding globally. The highest

endorsements in marketing universities were recognition of professors and services quality, campus lifestyle (extra features) and leadership development. In this section, which is based on the guiding principle of the Aaker (1991) model, factors such as brand association, brand loyalty, brand awareness, perceived quality, and brand equity will be further explained.

Brand Equity

Brand equity can be defined by Aaker theory mostly as a collection of brand assets and liabilities attributable to a brand as well as the symbolic meaning that a good or service provides or removes from that value to an organization and the customer (Aaker, 1991, p. 15). Study postulates that university branding highlights practical knowledge in crucial value development (Ng and Forbes, 2009). Brands are far more than goods or services; national branding and lifestyle work has been achieved (Evans, Wasserman, Bertolotti & Martino, 2002). Scholars such as academic programs are key value building processes, depending on the concept of a contribution of students to educational institutions (Schroeder 2009). In brand equity calculations, the significance of the main benefit creation of learning experience may also be measured, suggests Aaker. The knowledge and experience of the individual reflects the overview of all the students' encounters across all the sessions that create up their future knowledge. Over decades, Aaker established the Brand Equity Concept from 1991.

Brand Association

In basic, brand associations are seen as verbal embodiments of the object. However, psychological analysis indicates that is just one mode of expression (Anderson, 1983). The large number of interactions lacking corresponding verbal examples are neither auditory or visual (Zaltman, 1997). A good brand association builds trust in the business and keeps the competitor from flooding the industry. It is quite complex and challenging to grasp brand relationships fully (Andéhn, & Decosta, 2016). Earlier studies by Pouromid and Iranzadeh (2012) indicates that there is a strong and relevant correlation between brand association and brand equity. The hypothesis is established anchored on the theoretical statements.

H1: Brand association has a positive impact on the brand equity

Brand Awareness

Brand awareness is simply the thought and feel of a customer about a brand (Roy and Banerjee, 2008). Brand awareness is therefore the mutual intellectual and personal interpretation of a service in contrast with other goods (Faircloth, 2005). Businesses seek beneficial practices to create positive market value. A good brand awareness enhances the prestige and brand equity of an organization, Aaker suggests. The creation of specific brands plays a vital role in marketing. Because customers will perceive the brand differently, it is vital to guarantee that the integrity of the brand is unchanged, confirms Aaker. The research concluded that marketers may start first creating consumer awareness and brand equity (Aaker 1991). Brand awareness has a huge influence on customer verdict (Chung et al, 2013). Brand recognition, thus, has a strong correlation with brand equity (Pouromid and Iranzadeh, 2012). The presumption was generated accordingly.

H2: Brand awareness has a positive impact on the brand equity

Perceive Quality

The perceived value mirrored the brand's perception of consumer significance. These principles were taken from their usage history and based on a theory of consumer participation (Holbrook, 1999). One analysis showed how market demand increased with price rises (Rubinstein and Tyrole, 2006). Intelligent businesses depend on consistency viewed in a highly competitive setting. There are a number of luxurious features that product design professionals will use to create an outstanding service (Dettori, Floris & Dessì, 2020). It is important if a viewer perceives a high-quality brand to increase brand confidence and build brand trust. Top quality demands lead to increased quick profitability due to premium rates (Bartikowski, Kamei and Chandon, 2010). The higher the consistency of a brand considered, the stronger the brand equity (Nguyen, Barrett, and Miller, 2011). Therefore, Faircloth et al. (2001) indicate that perceived quality has a favourable influence on the equity of the brand. The analysis, thus, proposes that:

H3: Perceived quality has a positive impact on the brand equity

Brand Loyalty

Brand loyalty is part of the Relationship Building Strategy; thus, challenging to forecast and describe. Starting from earlier findings, two dimensions of behavioral and emotional contribution were observed (Bandyopadhyay and Martell, 2007). The scientist such as Kuenzel et al. (2010) claimed that even more loyal consumers see a business, stronger prestige and loyalty to the brand. Marketing strategies seek to foster a brand dedication (Huang, 2017). The loyalty of a brand is the preference of the consumer over like goods on the market. Companies of professionals will often gain simultaneously with the increasing customer loyalty (Coelho et al., 2018, p.107). This strategy is a cost-effective measure of the degree of consumer loyalty or service. Fellow loyal customers becoming transparent allies and key influencers for a brand (Foroudi et al., 2018, p.465). By generating a positive production of brand equity that positively generates brand interest over other products, customers have established brand loyalty (Atilgan et al., 2005). From this, the hypothesis was generated:

H4: Brand loyalty has a positive impact on the brand equity

Research Conceptual Framework

In the current educational paradigm, the brand equity research conceptual framework model is presented below:

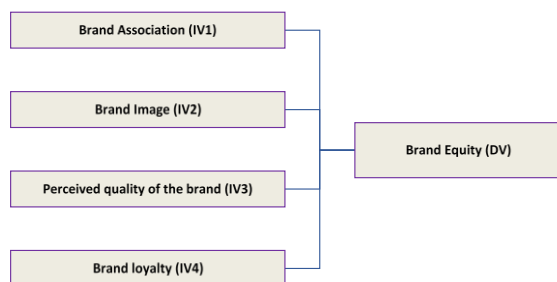


Figure 3: Conceptual framework

METHODOLOGY

Data for this research were obtained by means of a self-administered survey. 165 questionnaires were circulated and screened to full-time student undergraduate and postgraduate students at Klang Valley, MALAYSIA over a two-week span (from 15 June 2020 to 29 June 2020). With a 100 percent

answer rate using the convenience non-random sampling process, 165 questionnaires were obtained. This sample size is rational as Rocoe (1975) claimed that the sample size of 30-500 samples is considered to be adequate. The study sample comprised those postgraduate and undergraduate, particularly those studying at universities. There are two parts of the standardised close-ended questionnaire. Section A is made up of demographics such as wages, the occupation(s), and age. Section B asked respondents to include their personal interactions with the brand and the different experiences they had with the brand. The survey questions were taken from Ling (2013) which were updated to fit our subject. Questions on the survey were assessed on a five-point Likert scale, varying from 1 (strongly disagree) to 5 (strongly agree).

Data were analysed using descriptively and inferentially descriptive statistics, Levene's analysis, one-way ANOVA and Pearson correlation coefficients analysis through the computer programme known as SPSS version 25. Factor analysis is based on categorizing and summarizing a broad data set into factors while Pearson correlations are used to quantify the interactions between variables. To assess the impact of independent variable (in this case, brand affiliation, brand loyalty, brand recognition and brand image) on the dependent variable (obtained by regression analysis).

RESULT

Table 1 below shows the plurality of respondents who participated in this survey are males based on gender. The outcome indicates that males have participated 57% and females 43%. On the other side, the bulk of respondents taking part in this research are private sectors owing to the profession of participants. Results indicate that the private sector, the government, the non-working sector and the self-employed added 64.8%, 15.8%, 12.1% and 7.3%, respectively.

Furthermore, the largest of participants who participated in this survey are consistently under 30 years of age at the age of respondents. The outcome was below 30 years, between 30 and 40 years, between 40 and 50 years of age and above 50 years leading to 46.7%, 35.2%, 12.1% and 6.1% respectively. Finally, the plurality of respondents who engaged in this survey are less than 30 years old regardless of the age of the respondents. The figures were under the age of 30 years, between the ages of 30 and 40, between the ages of 40 and 50 and up, with 46.7%, 35.2%, 12.1% and 6.1%, respectively.

Table 1: Demographic data

	Frequency	%
Gender		
Male	94	57.0
Female	71	43.0
Age		
Below 30 years	77	46.7
31-40 years	58	35.2
41-50 years	20	12.1
Above 51	10	6.1

Occupations

Government	26	15.8
Business/Self-employers	12	7.3
Not working	20	12.1
Private sector	107	64.8

Income

Below RM 2,000/-	33	20
RM2,001/ - RM4,000	41	24.8
RM4,001/- RM6,000	34	20.6
Above RM6,000	57	34.5

Summary: Ranking of Independent Variables

The mean and standard deviation have been estimated for each vector above. This indicates that the variable is based on each subject's independent and dependent variable ranking.

Table 2: Ranking of the mean

Item	Standard Deviation	Mean
Brand Awareness	1.094	3.042
Brand loyalty	0.934	3.089
Perceive Quality	0.723	3.588
Brand Association	0.857	3.339
Brand Equity	0.868	3.325

In the classification, the perceive quality have the higher mean follow by brand association, brand equity, brand loyalty and brand awareness by 3.588, 3.339, 3.325, 3.089 and 3.042 respectively.

Reliability test using Cronbach Alpha

As seen in the following table, the Cronbach Alpha approach is to measure the internal accuracy. This can be achieved by the application of three separate questions with a single independent variable. As shown, this is the above score 0.7 and the reliability of the data is verified.

Table 3: Cronbach's Alpha

Item	No. of Item	Cronbach's Alpha
Brand Awareness	3	0.927
Brand loyalty	3	0.814
Perceive Quality	3	0.848
Brand Association	3	0.846
Brand Equity	3	0.846

Table 4: Levene's test

	Levene Statistic	df1	df2	Sig.
Based on Mean	2.582	3	161	0.055
Based on Median	0.804	3	161	0.493
Based on Median and with adjusted df	0.804	3	160.252	0.493
Based on trimmed mean	2.582	3	161	0.055

H^0 = the groups were comparing all have equal population variances.

The Levene's test suggest that the variances for gender and income were equal, $p > 0.05$. Thus, the null hypothesis accepted. The group were comparing all data have equal population variances and does not violate the null hypothesis. Furthermore, all the data will be analyzed by ANOVA and Pearson correlation coefficients.

The Impact of Brand Awareness on Brand Equity

Table 5: Model Summary of the brand awareness on brand equity

R	R Square	Adjusted R Square	Std. Error of the estimate
0.568*	0.323	0.318	0.642

Table 6: ANOVA analysis of brand awareness on brand equity

	Sum of Squares	df	Mean Square	F	Significant
Regression	32.034	1	32.034	77.594	.000
Residual	67.294	163	0.413		
	99.329	164			

Table 7: Coefficients of brand awareness on brand equity

	Unstandardized coefficients		Standardized Coefficients Beta	t	Significant
	B	Std. Error			
Constant	2.013	0.157		12.80000	14
Brand Awareness	0.431	0.049	0.568	8.80000	9

Table 8: Pearson Correlation Coefficient of brand awareness on brand equity

	Brand Awareness
Pearson Correlation	0.568**
Sig. (2-tailed)	0.000
N	165

One-way ANOVA have been conducted to evaluate the impact of brand awareness on brand equity and the result shown in table 4, 5, and 6. The brand awareness ($b=0.431$ $p<0.01$) had been shown to be a relevant indicator when brand equity is expected. Brand awareness could clarify the total model fit $R^2 = 0.318$ and 31,8% of the variability in brand equity.

In order to justify the hypothesis: *Brand awareness has a positive impact on the brand equity*, Pearson Correlation Coefficient test was performed and the result have shown on table 7. The results suggested that, there is positive correlation ($r=0.568$, $n=165$, $p=0.000$). Overall, there is moderate positive correlation between brand awareness and brand equity. Thus, increase in brand awareness will impact on increase in brand equity. The initial hypothesis is accepted.

The Impact of Brand Loyalty on Brand Equity

Table 9: Model Summary of the brand loyalty on brand equity

R	R Square	Adjusted R Square	Std. Error of the estimate
0.765*	0.586	0.583	0.50245

Table 10: ANOVA analysis of brand loyalty on brand equity

	Sum of Squares	df	Mean Square	F	Significant t
Regression	59.178	1	230.442	230.44	0.000
Residual	41.151	16	0.252		
	99.329	16			
		4			

Table 11: Coefficients of brand loyalty on brand equity

	Unstandardized coefficients		Standardized Coefficients Beta	t	Significant
	B	Std. Error			
Constant	1.035	0.156		6.63	0.000
Brand loyalty	0.742	0.049	0.765	15.10	0.000

Table 12: Pearson Correlation Coefficient of brand loyalty on brand equity

	Brand Loyalty
Pearson Correlation	0.765**
Sig. (2-tailed)	0.000
N	165

One-way ANOVA have been conducted to evaluate the impact of brand loyalty on brand equity and the result shown in table 8, 9, and 10. The brand loyalty ($B=0.742$ $p<0.01$) had been shown to be a relevant indicator when brand equity is expected. Brand loyalty could clarify the total model $R^2 = 0.583$, and brand loyalty accounted for 58.3% of the variability in brand equity.

In order to justify the hypothesis: *Brand loyalty has a positive impact on the brand equity*, Pearson Correlation Coefficient test was performed and the result have shown on table 11. The results suggested that, there is positive correlation ($r=0.765$, $n=165$, $p=0.000$). Overall, there is fairly strong positive correlation between brand loyalty and brand equity. Thus, increase in brand loyalty will impact on increase in brand equity. The initial hypothesis is accepted.

The Impact of Perceived Quality on Brand Equity

Table 13: Model Summary of the perceive quality on brand equity

R	R Square	Adjusted R Square	Std. Error of the estimate
0.730	0.533	0.530	0.53339

Table 14: ANOVA analysis of perceive quality on brand equity

	Sum Squares	ofdf	Mean Square	F	Significant t
Regression	52.955	1	52.955	186.13	0.000
Residual	46.374	16	0.285		
	99.329	16			
		4			

Table 15: Coefficients of perceive quality on brand equity

	Unstandardized coefficients		Standardized Coefficients Beta	t	Significant
	B	Std. Error			
Constant	0.105	0.240		0.440	0.000
Perceived Quality	0.879	0.066	0.730	13.60	0.000

Table 16: Pearson Correlation Coefficient of perceived quality on brand equity

	Perceived Quality
Pearson Correlation	0.730**
Sig. (2-tailed)	0.000
N	165

One-way ANOVA have been conducted to evaluate the impact of perceived quality on brand equity and the result shown in table 12, 13, and 14. The perceived quality ($b=0.897$ $p<0.01$) had been shown to be a relevant indicator when brand equity is expected. Perceived quality could clarify the total model $R^2 = 0.530$, and perceived quality accounted for 58.3% of the variability in brand equity.

In order to justify the hypothesis: *perceived quality has a positive impact on the brand equity*, Pearson Correlation Coefficient test was performed and the result have shown on table 15. The results suggested that, there is positive correlation ($r=0.730$, $n=165$, $p=0.000$). Overall, there is fairly strong positive correlation between brand loyalty and brand equity. Thus, increase in perceived quality will impact on increase in brand equity. The initial hypothesis is accepted.

The Impact of Brand Association on Brand Equity

Table 17: Model Summary of the brand association on brand equity

R	R Square	Adjusted R Square	Std. Error of the estimate
0.619	0.383	0.380	0.61293

Table 18: ANOVA analysis of brand association on brand equity

	Sum Squares	ofdf	Mean Square	F	Significant t
Regression	38.093	1	38.093	101.39	0.000
Residual	61.236	16	0.376		
	99.329	16			
		4			

Table 19: Coefficients of brand association on brand equity

	Unstandardized coefficients		Standardized Coefficients Beta	t	Significant
	B	Std. Error			
Constant	1.178	0.219		5.380	0.000
Brand association	0.643	0.064	0.619	10.00	0.000

Table 20: Pearson Correlation Coefficient of brand association on brand equity

	Perceived Quality
Pearson Correlation	0.619**
Sig. (2-tailed)	0.000
N	165

One-way ANOVA have been conducted to evaluate the impact of brand association on brand equity and the result shown in table 16, 17, and 18. The brand loyalty ($B=0.643$ $p<0.01$) had been shown to be a relevant indicator when brand equity is expected. Brand association could clarify the total model $R^2 = 0.380$, and brand loyalty accounted for 38.0% of the variability in brand equity.

In order to justify the hypothesis: *Brand association has a positive impact on the brand equity*, Pearson Correlation Coefficient test was performed and the result have shown on table 19. The results suggested that, there is positive correlation ($r=0.619$, $n=165$, $p=0.000$). Overall, there is moderate positive correlation between brand association and brand equity. Thus, increase in brand association will impact on increase in brand equity. The initial hypothesis is accepted.

DISCUSSION

The first research question was on the effect of brand awareness on brand equity. From the perspective research of Yoo and Donthu (2002), it has been verified that brand recognition has a positive and fair effect on the brand itself. In the real world, through searching the internet, people obtain more knowledge about the point of concern. Anything that occurs to the market awareness would have a major effect on the Equity brand.

The second question of study concerns the effect on brand loyalty. The average concept adaptation was changed to $R^2 = 0.583$, and brand loyalty describes 58.3 percent of brand equity volatility. We assume that the association between brand equity and brand fidelity is still mixed, although it seems more likely to be that brand fidelity is a correlation of brand equity. Whatever the client's loyalty increase or decrease; it would have a major effect on equity brand. This is also a shared partnership between brand equities and brand loyalties; brand loyalty leads to greater brand equity, while the relationship between brand equity and brand loyalty remains optimistic (Arora, Raisinghani, Arora and Kothari, 2009).

When the third question from the study was addressed. The perceived consistency will describe 53 percent of the variation in brand equity. Perceive quality IV3 was found to be a powerful indicator and to have an effect on brand equity from this research ($b=0.897$ $p<0.01$). Anything that is viewed would have a major effect on the Equity name. The research concludes that perceived quality is anticipated to have a stronger impact on brand equity than the others. Zeithaml (1988) has suggested that perceived quality is a final decision and many research scientists have stated that perceived quality will boost brand equity by growing customer perception and justifying the purchasing of the service (Arora, Raisinghani, Arora and Kothari, 2009).

According to the survey results as the fourth research question on impact brand association towards the brand equity, brand equity (DV) was expected in relation to the connection. In order to create a set of ties, a consumer should first become knowledgeable of the brand (Washburn & Plank, 2002). The strength of the connection resides in many brand meetings and exhibitions. The relationship with brand behaviors, brand characteristics and brand benefits can be identified. The average model health was changed to $R^2 = 0.380$ and brand affiliation describes 38 percent of variation. So many scientists studied brand association as a brand equity dimension, which Aaker (1991) also proposed, and illustrated the critical connection between brand equity and brand association (Kumar, Dash, & Chandra Purwar, 2013; Tong & Hawley, 2009; Ye & Van Raaij, 2004; Yoo & Donthu, 2002). Thus, everything the brand association does however, would have a major influence on brand equity.

In brief, the impact of brand equity is correlated on brand awareness, brand loyalty, perceives quality and brand association. Brand marketers should also use this IV as such in order to boost the brand equity when it has been taken into account. If brand management is reluctant to improvise the brand, there is a disparity between brand equity and the consumers' willingness to give competitors an opportunity (Janonis and Virvilai, 2007) and to lose market share and even customer loyalty. Effective Social Networking network, referral system, Devotion to consumer products, loyalty rewards programme, celebrity support and advertisement will enable corporations to develop their global brand reputation and boost their value (Arora, Raisinghani, Arora and Kothari, 2009). Better brand equity may have an effect on purchase power and potentially contribute to a rise in market recognition, brand satisfaction, mixture of products and quality perception. In this way, brand equity would be strengthened directly.

LIMITATION AND FUTURE RESEARCH

The distractions in the research were the inquiry phase, the methods utilized in this study to measure brand equity influences, both relations were based on early literatures and the lack of real circumstances, which indicate that the study could mix qualitative and quantitative approaches, as the plurality of literary materials focused on the western literature. Otherwise, the Brand Feedback Survey should be included in the calculation because it does not seem to be consumable for education services. The client cannot thus be a faithful consumer. The brand advisory thus represents an alternate solution to the influence of brand loyalty on brand equity.

Another limitation is the online sample, which requires researchers to email those questioned to explain the topic and to examine how interviewees handle themselves to decide what questionnaire is reliable. However, the researcher cannot explain the individuality of the interviewee when answering questions for the online survey.

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An Empirical Evidence of the Value Relevance and Timeliness of Financial Reports in the Post Adoption of IFRS in Nigeria

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Received: 1st November 2020

Accepted: 10th January 2021

Published: 14th January 2021

Abstract

The emergencies of the globalization of accounting standards and other critical issue have been reported to reduce the cost of enhancing comparability, understandability, and producing supplementary information, and analysis of the accounting reports. This allowed many developing nations who do not want to be left behind to take a cue from the world's major economies to meet the international financial reporting standards (IFRS) that Nigeria has taken measures to converge equally. The study examines the effect of IFRS adoption on financial reporting quality of listed non-financial companies in the Nigerian stock exchange. Particularly, in the area of value relevance and timely loss recognition. The study used 63 non-financial companies' annual reports listed on the Nigerian Stock Exchange (NSE) for the period of 2008 to 2018 (i.e., 5years pre-adoption and 5years post adoption). Multiple linear regression was used in analyzing the collected data via STATA software. The result shows a significant increase in the value relevance of financial reports after IFRS adoption. The study also showed that the identification of significant losses increased in the post-IFRS adoption era. Based on the result, the study suggests that the relationship between accounting measures on IFRS adoption and financial reporting quality indicates that both foreign and local investors can predict the future of market value of individual securities. Therefore, investor receives considerable information by knowing the price information on time that shows more value relevant. Finally, this study contributed to the theory and practice, as well as direction for further studies related to the financial reporting standards and the reporting quality.

Keywords: Financial reporting quality, IFRS adoption, value relevance, timely loss recognition, Nigeria

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INTRODUCTION

The problems caused by discrepancies in financial reports used in many different countries have been brought to the forefront by economic globalization around the world. Thereby, the drive for global harmonization of the standards and procedures of financial reporting has been generally recognized as expedient and pragmatic (Samaha & Khlif, 2016; Khlif & Souissi, 2010). This is consistent with the highlighted prime objective of the International Accounting Standards Board (IASB) to establish a single set of high-quality accounting standards for all listed companies around the world (Samaha et al., 2009). Meanwhile, following the recent waves of globalization in financial markets, the debate on the shift to international financial reporting standards (IFRS), coupled with economic consequences, has gained traction among policymakers and professionals, particularly in developing countries such as Nigeria, where poor FRQ may hinder their ability to entice foreign investors.

Prior to the adoption of IFRS in Nigeria, there is a failure in the FRQ, which translates into the inability of organizations to meet the expectations of their various stakeholders (Damak-

Ayadi, Sassi, Bahri, 2020; Park, 2018; Too & Simiyu, 2018; Kyari, 2019). As a result, some reservations were made on the quality of financial reports and the extent to which they can guide investment decisions. The vulnerabilities and naive expectations are often intentionally induced by management and often behave in a way that promotes rational self-interest, which should eventually have beneficial implications for all stakeholders. (Mohamed et al., 2020; Rasid, 2020; Patrick, Paulinus, & Nympha, 2015). To the extent that after the adoption of IFRS, most of the researchers around the world embarked on researches on the impact of IFRS adoption on financial reporting quality (Albu, Albu, & Gray, 2020; Saha, Morris, & Kang, 2019). In Nigeria, however, very little evidence exists to show how the adoption of IFRS has affected the standard of financial reporting of organisations.

Although, numerous challenges come with the adoption of IFRS in Nigeria. This include: shortage of qualify accountants at all levels in the application of the standards, accounting data are not adequately utilized for internal management purposes; need to engage specialist due to difficulty of standards, enhance the present information technology (IT) system for

IFRS compliance; financial instrument to be the most difficult standards; accounting information is not available in proper form; and high cost of employees training on IFRS matters (Echobu, Okika & Mailafia, 2017; Shiyabola, Adeyemi & Adekunle, 2015; Olowokure, Tanko & Nyor, 2016).

Meanwhile, the key feature of financial statements is to report the financial information of a company to users in a timely and accurate way. As stated by Kyari (2019) and Ball (2001), high IFRS accounting standards would improve the quality of financial information and enhance uniformity of the standard among the adopted countries of the world. Several scholars were conducted studies on the assessment of whether IFRS adoption has improve the accounting quality in the area of value relevance and timelines for the users (Samaha & Khlif, 2016; Echobu, Okika & Mailafia, 2017; Shiyabola, Adeyemi & Adekunle, 2015; Olowokure, Tanko & Nyor, 2016; Mehrabanpour et al., 2020). However, their outcome shows both positive and negative results on the impact of IFRS on FRQ. Although, dearth researches were document on the impact of IFRS adoption in Nigeria. Thus, there is need to carry out study with a view to finding whether adoption of IFRS in Nigeria has improved the financial reporting quality of Nigerian firms. Therefore, this study examines financial reporting quality in terms of value relevance and timely loss recognition after the IFRS adoption in Nigeria, particularly non-financial firms quoted on the NSE.

Research Objectives

Based on the reviewed of the existing literatures highlighted above, the study investigates the impact of adoption of IFRS on the FRQ of non-financial companies quoted firms in the NSE. Other specific objectives are as follows:

1. To examine the value relevance of earnings and book value after the IFRS adoption.
2. To investigate the timely loss recognition of financial reporting after the IFRS adoption.

REVIEW OF RELATED LITERATURES

Overview of IFRS Adoption Nigeria

Before the advent of IFRS, Nigerian was reporting financial statement in accordance to the Nigeria Generally Accepted Accounting Standards (NGAAP) issued by the Nigerian Accounting Standard Board (NASB). Many factors have an effect on the financial performance of the country. For example, the information disclosure was insufficient to effectively and efficiently minimize the information asymmetry between the company and its financial reports users (Bala, 2013; Olowokure et al., 2016). NGAAP measure the property, plant and equipment using the cost model whereas the IFRS measure them using the fair value. Valuation of financial assets classification are other factors which classified at fair value, cost and amortization cost in accordance with IFRS standards (Edogbanya & Kamardin, 2014; Sunday et al., 2020). These necessitate that firm's financial report are couple with complexity of IFRS convergence to enable disclosure of more comparable information (Adeuja, 2015).

To accomplish the stated objectives of the IFRS, the Nigerian government disclosed a framework for the adoption in three phases commencing in 2012 (January, 2012) that lead to full transition of IFRS. With regards to this directive, all listed companies in the NSE were mandated to prepare their financial statement in line with the IFRS for statutory purpose. Other public interest companies were mandated to implement

in 2013 (December, 2013). The final phase was required all SME's to adopt IFRS in the year ended 2014 (Umoru & Ismail, 2012).

Financial reporting is used to provide reasonably accurate information which helps the user of financial information to make investment and economic decisions. The financial report is also prepared to satisfy the information criteria of different users of financial information (Al-Dmour, Abbod & Al-Balqa, 2018). High-quality financial statements must contain financial information that faithfully and promptly documents activities in a timeframe that becomes crucial when companies and individuals are concerned about the future of their assets (El-Bannany, 2018; Okwoli, 2001).

The Financial Reporting Council of Nigeria (FRCN) legislation is intended to create an enabling atmosphere for the implementation of IFRSs and to ensure that all private and public sector organisations have a reliable financial reporting regime. The government in Nigeria has equally allowed the FRCN to issue and control actuarial accounting valuation and auditing standards. What this means is that it has now replaced the NASB with the Statement of Accounting Standards (SAS) provided by it (Park, 2018; Too & Simiyu, 2018; Shiyabola, Adeyemi & Adekunle, 2015). While this could be seen as a welcome change, there is a legion of questions asking for answers as to whether implementing IFRS will boost the transparency of financial reporting in Nigeria. IFRS is based on more values and does not provide issuers with the same degree of comprehensive guidelines as under Nigeria's GAAP for preparing financial statements (Azobi, 2010; Echobu et al., 2017).

In the study of Musa (2015) and Abata (2015), the implementation of IFRS in Nigeria has promote the economic growth and motivate the foreign investors to establish in Nigeria. They empirically reported that the IFRS adoption has promote the better accounting quality in the financial statement of the companies in Nigeria. They also stated further that IFRS adoption upsurge the level of confidence of investors and investment analysts in the financial reports of Nigerian firms which helped in generating more incomes for foreign investment. According to Samuel (2014) and Adetoso and Oladejo (2013), the adoption of IFRS has promote the economic growth and development and increase the inflow of FDI. Therefore, the financial reporting and company's performance have positive significant with the adoption of IFRS in Nigeria.

Financial Reporting Quality (FRQ)

The concept of FRQ not only applicable to financial statements and disclosure but also to other matter of non-financial that are attached in the reports for economic decisions which are more concerned with the quality of financial reports (Afsheena & Santhakumar, 2020; Saha, Morris & Kang, 2019; Musa, 2015; Van Beest, Braam, & Boelens, 2009). As described in the FASB Statement of Financial Accounting Principles (1978), in making sound investment decisions, the financial reports of companies seek to notify investors of the company's planned cash flows. Financial reporting offers information to help investors determine the timing, amount and uncertainty of potential cash receipts. Publishing high quality of financial reporting information is essential to investors, which capital providers tends to influence by the accounting information contained in report and other stakeholders will be affected in

having investments, giving credit and other related fund allocated for the overall market efficiency (IASB, 2008; Abang'a, 2017; Amidu & Issahaku, 2019).

The International Accounting Standard Boards (IASB) concentrated primarily on the needs of the participants in the capital markets, where investors are often regarded in terms of information and financial statements, since they are unable to explicitly request information from companies. The investor's needs are also considered to be highly reflective of the needs of a wide variety of potential users because of the company's risk resources (IASB, 2010; El-Bannany, 2018).

Kythreotis (2014), financial reporting quality can be measured using different techniques or combination of different strategies like discretionary accruals, relevance, conservatism and predictability of earnings. Hence, financial reporting information can be measured through the contents of the statement of firm's financial position, changes in equity values and a statement of comprehensive incomes (Bonham et al., 2009; Al-Dmour et al., 2018; Hlel et al., 2020). Chalki, Didar and Riahinezhad (2012) described the financial reporting quality as the exactness that financial reporting conveys information about the operation of the company, expected cash flows that tends to inform company's equity investors. Therefore, high quality of financial report is essentially significant but the main issue is how to measure the quality of financial reporting of the firms. This study explained the measuring of FRQ in terms of timeliness and value relevance.

Meanwhile, the adoption of IFRS in Nigeria can only be worthwhile if the accounting quality of Nigerian companies have increased with the adoption of this standard. According to Kibiya, Che-Ahmad and Amran, (2016). Investors expected to rely on the leverage ratio and return on equity to speculate on their fortunes in the companies. However, investors were reluctantly invest in the Nigerian businesses due to the failure to properly comply with the reporting standards. Based on the empirical evidence from previous studies in Nigeria, little or no studies document any research on the impact of adoption of IFRS on accounting quality in term of value relevance and timeliness financial reports in Nigeria. Even, the little studies still have conflicting results. This serves as a major gap in this study to know whether IFRS standards actually improve financial reporting quality to serve the users better. Hence, there is need to conduct research with a view to finding whether the IFRS adoption in Nigeria has improved the FRQ of Nigerian firms.

Value Relevance of Financial Reports

The value relevance refers to two different words that are value and relevance. From the business point of view, value defined as the monetary value of an asset, company, services, responsibility, money and obligations obtained by a business, while the relevance is defined in accounting terms as the information given by an accounting process can affect users' ability to make meaningful decisions (Tracy, 2013; Chychla et al., 2019). Therefore, the financial reports are mainly considered as relevant when the information is more quickly and timely to users. This means relevance implies the situation that tends to modify substantially the process of decision making. For any information to be value relevance, the information must be worth a price expressed in monetary value. Several studies carried out after IFRS adoption focused in value relevant examined the relationship between value

relevance and the financial reporting quality to investigate the quality of financial reporting are numerous (Maigoshi, 2017; Wadesango & Ncube, 2020).

Value relevance refer to the ability of financial report to contain information clarifying stock market measures (Umoren & Engang (2015). This means, if the figures in the financial report can guide the investors in their stock pricing, hence such figures were said to be value relevance. Also, the investors need to understand the items in financial statement which have more value relevance to carry out their investment decisions. As reported by Bilgic and Ibis (2013), the users of financial reports investigate the content of value relevance from the accounting information revealed to make their investment decisions. They explained that the explanatory power of book values after IFRS adoption is higher than earnings prior to the IFRS adoption. This justifies the conclusion that investors use value relevance of financial reports to provide risk capital after new accounting standards. Therefore, this study proposed the hypothesis as follows:

H₁ There is a significant effect of value relevance of earnings and book value after the IFRS adoption.

Timely Loss Recognition and FRQ

As explained by the American Securities Association, it is the process of presenting timely financial information by the legislative decision and requirements by the bodies are highly significant. The timely loss recognition in the financial reporting assists to minimize the level of insider trading leakages and the impact of rumors available in the stock market (Afsheena & Santhakumar, 2020; Maigoshi, 2017:2014; Musa, 2015). This means timely disclosure of financial statement by the firms contributes immensely to the rapid efficient performance to the stock markets. Hence the timeliness of accounting reports is to make information available for the investors to make decision at the appropriate time and before that information loses the capacity to influence the decision of investors (Ezat & El-Masry, 2008; Suryanto & Komalasari, 2019). Therefore, it is important to satisfy the need of investors by revealing information in a timely manner. As argued by Turel (2010), the timeliness is the determinants of financial information quality. The company prepares the financial information need to make information available in a timely and adequate manner for investor to make effective investment decisions. However, prior to the adoption of IFRS, many studies conducted on timeliness of financial reporting revealed that companies are facing challenges of timely report of financial information, as compared to the timeliness of financial reports after IFRS adoption (Afsheena & Santhakumar, 2020; Maigoshi, 2017:2014; Musa, 2015).

As suggested by Al Daoud, Ismail, and Lode (2015), the timeliness of financial information is essential for protecting the best interest of the information users from making their decisions based on outdated information which means if the company fail to disclose timely information, the outcome would be an inefficient allocation of resources. Despite the centrality of conservatisms and timeliness to financial reporting, Ball, Robin and Sadka (2016) argued that few direct examinations have been conducted of what economic factors determine the timeliness after IFRS adoption with international data of 22 countries. Their study revealed insignificant relationship between time loss recognition and equity market. Whereas,

other studies indicate significant relationship between the timeliness of favorable recognition and equity market and debt market size. Thus, this study proposed the hypothesis as follows:

H₂ There is a significant effect of timely loss recognition of financial reporting after the IFRS adoption.

Theoretical Review

This study adopts the theory to explain the effect of IFRS adoption and FRQ of non-financial companies quoted on the Nigerian stock exchange. Meanwhile, several theories were using to measure the IFRS adoption and compliance from different countries. This includes: legitimacy theory, economic theory of networks (Samaha & Khlif, 2016; Ramanna & Sletten, 2009); stakeholders’ theory, Diffusion theory (El-Helay, Ntim & Al-Gazzar, 2020); institution theory agency theory among others. The economic theory of network mostly used in the developing countries and emerging economy, because they are likely to adopt the standard if the countries within their region or their trade partners are IFRS adopters (Samaha & Khlif, 2016). That is, the country that has economic relationship with other nations that have already adopted IFRS (Judge et al., 2010). Implementing IFRS in this setting will eventually facilitate FDI and as well minimize the domestic bias faced by the foreign investors. Although, empirical evidence from developing countries to confirm this theory is not sufficient.

However, this study focus on the institution theory, which is a complete set of organizational acts and standards, such as IFRS, institutional environment and ritualistic structures. It also recognizes the role of external pressures in architecting company activities and affirms the significance of legitimacy to improve the financial reporting quality (Berrone et al., 2007). Therefore, institution theory adopted in this study as underpinning theory to test the significant effect of IFRS adoption and FRQ non-financial company listed on the NSE. This study highpoints the capacity for the institutional theory to explain the in-depth understanding of change processes related with the international accounting adoption and implementation by the companies towards financial reporting quality. Though, the fact of requiring adoption might be characterized form of coercive power. This help to explore the extent to which adoption of IFRS is shaped by agency, interested stakeholders involved in the adoption process and role of institutional entrepreneurs. As stated by Irvine (2008), the adoption of IFRS is often presented as a powerful legitimizing force in the area of international accounting harmonization. Therefore, an institution theory assists to understand how IFRS have become the benchmark for global accounting. Bye and large, the standard embodied in IFRS will enhance the value relevance, timeliness, transparency, quality and comparability of financial reports of the organisations. Then, the needs of main users of accounting information will served better (El-Helay et al., 2020; Mantzari et al., 2017; Maroun & Zijl, 2016). Finally, an effective adoption and compliance of IFRS can signal to the stakeholders and invariably promote investors’ protection and improve their confidence about the credibility and timeliness of the financial reports.

RESEARCH DATA AND METHODS

This study investigates the effect of IFRS adoption and FRQ of non-financial firms listed on the NSE for the period of 10 years (i.e., 2008 – 2018) to 5 years pre-IFRS adoption and 5 years post-IFRS adoption. The study considered the non-financial firms due to the general standards guiding non-financial firms, as compare to the financial firm that guided by different regulation (BOFIA). This study explained the model specification, the data, variable measurement and the estimation procedures of data analysis as stated in the sub-section below:

This study use secondary data extracted from annual reports and account of the selected firms. The population of the study is the all non-financial companies quoted on the NSE starting from 2008 until 2018 financial years. There were 113 listed companies as at 31 December 2018. All the available companies were considered as the sample of the study. However, the study applied the methods of filtration and screening, whereby any company that have failed to provide an adequate data for the study period or the NSE delisted it before the year 2019 was rejected from the sample. Thus, finally, 63 companies were the only firms that have complete required data. The total of 630 firm years’ observations was utilized in the study. After data cleaning process through treatment of missing data and outlier, the final data were amounted to 504 observations. The selection of the non-financial sector of the Nigerian economy is as a result of the different rules and regulations that governed the sector. Different authorities direct the regulations in the Nigerian financial sector from those directing the non-financial sector. Most of those regulations are only applicable to the banks and other non-banking financial institutions in Nigeria.

MODEL SPECIFICATION

Value Relevance and IFRS Adoption (Book Values and Earnings per Share)

This study used modified price model for measuring value relevant of financial report in accordance with the recommendation of Ohlson (1995). The study comprised of two major variables which are book value and earnings per shares from income statement and statement of financial position. This study adopted this model to measure the link between market value/share of the firm with two major constructs (book value and earnings/share) from the financial statement. The model was constructed in order to capture and measure changes in value relevance of financial report after the IFRS as adopted from (Kargin, 2013; Maigoshi, 2017). Thus, β_3 and β_4 coefficients were introduced to represent the differences between book value and earning per share for both pre and post IFRS adoption periods. Positive value change in the coefficients signals the improvement in value relevance while negative value means decrease in value means decrease in value relevance of accounting data after the IFRS adoption. In order to detect the changes in value relevance before and after the adoption of IFRS, dummy variable (D) was introduced, ‘0’ is used for pre-adoption period and ‘1’ is used for post adoption era. The model is as follows:

$$MVPSit = \alpha_0 + \alpha_1D + \beta_1BVPSit + \beta_2EPSit + \beta_3DBVPSit + \beta_4DEPSit + \epsilon it \dots\dots\dots (i)$$

Where: MVPSit = Market Value per Share; BVPSit = Book Value per Share; EPSit = Accounting Earning per Share; D=Dummy Variables for Pre and Post Adoption; & ε=Error terms

Timeliness and IFRS Adoption

Several studies have shown the inability of businesses to disclose major losses in a timely way as indicated by the accounting standards (Maigoshi, 2014; Leuz et al., 2003; Ball et al., 2003). Meanwhile, the timely loss recognition was evaluated using the model modified by Barth et al. (2008) to determine the effects and impact of IFRS adoption on the standard of financial reporting. Therefore, the positive coefficient of large revenue in the equation as follows shows that, after the introduction of IFRS, businesses record large losses more frequently as a viable reporting norm and negative suggests otherwise. The model for calculating loss recognition timeliness was as follows:

$$POST = \alpha_0 + \beta_1 LNEG_{it} + \beta_2 SIZE_{it} + \beta_3 GROWTH_{it} + \beta_4 EISSUE_{it} + \beta_5 LEV_{it} + \beta_6 DISSUE_{it} + \beta_7 TURN_{it} + \beta_8 CF_{it} + \beta_9 AUD_{it} + \epsilon_{it} \dots\dots\dots(ii)$$

Where: LNEG is dummy variable equal to 1 when the net income scaled by total asset is less than -0.2, otherwise it is zero (0). Also, POST is dummy variable equal to 1 for the observation in post IFRS adoption period, and zero (0) for the pre-adoption period; SIZE is Natural log of market value; GROWTH is percent change in sales; EISSUE is percent change in ordinary shares; LEV is leverage; DISSUE is percent change in liabilities; TURN is sales over total asset; CF is cashflow divide by total asset; and AUD is dummy variable equal to 1 when the firm is audited by big four (4) auditing company.

Data Analysis

This study processed data by employed STATA version 15.0 and used the random effect estimator with

regards to the outcomes from the Hausman tests. For study to investigate the adequacy of the model, the study conducted all the diagnostic tests (normality test, heteroscedasticity test, multi-collinearity test, unit root test among others). Finally, the study empirically analyzed to assess the effect of mandatory IFRS adoption on FRQ through regression analysis.

DATA ANALYSIS AND DISCUSSION OF RESULTS

Descriptive Analysis

This is a quantitative method used to analyze or summaries the nature of research data in order to organize and present it in a more logical way. Table 1 summarizes the average data score in terms of mean, standard deviation, minimum and maximum for the entire test, as well as control variables, as described in this report. In addition, each observation of the change in net income, growth, change in cash flow, change in liabilities and change in common stock appears to have an infinite negative percentage to an infinite positive value. Therefore, one small positive benefit is scored when the total net income by total assets is between 0 and .01 and otherwise zero (0).

In addition, loss recognition is scored one, where the benefit scaled to the overall asset is less than .02 and if otherwise zero (0); and the same treatment used by auditors. Also, stock market per share, net income per share, book value per share were all measured via naira (₦) value. To content the effect of differences in size of our sampled companies on outcome of this study, the following procedures were followed which are in consistence with the prior literatures. (a) Natural log as a proxy for firm size (b) sales by total asset as proxy for turnover (c) cash flow by total asset as cash flow from operations (d) ratio of liabilities to the total equity as proxy for total equity. Table 1 depicted the result of the descriptive statistics for pre- and post-adoption of IFRS.

Table 1: Descriptive Statistics for Pre and Post Adoption of IFRS

Constructs	N	Measure	Pre-Adoption of IFRS Period				Post-Adoption of IFRS Period			
			Min	Max	Mean	SD	Min	Max	Mean	SD
Change in Cash flow	504	Percentage	-4	.83	.0095	.1349	-.52	1.46	.0887	.2623
Change in Income	504	Percentage	-15	1.15	.035	.1462	-.47	1.67	.0381	.1658
E-ISSUE	504	Percentage	0	78.66	4.1385	14.386	0	78.66	4.136	15.95
D-ISSUE	504	Percentage	-89.25	223.5	22.14	42.48	-89.50	223.5	22.14	42.48
Market Price /share	504	Naira	.04	400.2	19.679	48.756	.05	620	25.138	70.457
Book Value/share	504	Naira	-6.44	110.33	8.7762	15.413	-5.67	112.23	9.478	16.295
Net Income /share	504	Naira	-19.16	35.1	1.3152	5.0160	-17.15	42.35	1.542	5.184
Small Positive Profit	504	Score	0	1	.1314	.3361	0	1	.2169	.4375
Large Loss Recognition	504	Score	0	1	.0267	.2541	0	1	.0653	.3211
Auditors	504	Score	0	1	.3775	.5499	0	1	.3775	.5499
CFO	504	CFO by Total Asset	-25	.47	.095	.1520	-.38	.92	.1097	.0415
TURNOVER	504	Sales by total asset	0	2.76	.7710	.5447	0	3.56	.8584	.7612
SIZE	504	Log of equity mkt	9.12	26.54	16.629	2.106	9.12	26.54	16.629	2.367
LEVERAGE	504	Liability by equity	-3120.1	18.11	-27.441	300.68	-14.12	32.91	2.6427	4.468
GROWTH	504	%Δ in Sales	-99.55	82.65	2.5819	16.685	-62.85	100.81	8.705	16.112

Note: GROWTH is % change in sales; SIZE is natural log of market value of equity; LEVERAGE is total debt by total equity (book value); TURNOVER is sales by total asset; CFO is cashflow by total asset; E_ISSUE is % change in ordinary shares; and D_ISSUE is % change in total liabilities

The result from Table 1 above on the descriptive statistics (minimum, maximum, mean and standard deviation) for the pre and post IFRS adoption era indicated as follows: the result of the stock price were for the post-adoption period are greater and better than the pre-adoption period. The mean value of 25.138 in the post adoption period is greater and better than 19.68

of the pre-adoption. This is an indication that the response of stock market to company announcements and financial report is better in the post IFRS adoption period than pre-adoption period. In addition, the book value per share as one of the main items in the financial statement that used in valuing firm are more value relevant to the user of financial report as the result of the post IFRS adoption is far

greater and better than pre-adoption. That is, an increase in the mean of the book value pre-adoption 8.776 to the 9.478 for post adoption indicates an increase in the total equity value which may be interpreted to mean additional increment in the market as a result of increase in the confidence of investor in the market participants after the IFRS adoption. Likewise, net income per share is another vital construct and measure of performance from the financial statement. The mean of the post adoption period (mean=1.542; SD=5.184), which is far above the pre-adoption period (mean=1.315; SD=5.016). This may be the major trigger for the positive variation in the market stock share price. This also serves as a better signs that market respond to financial performance of the reporting company faster than other environmental and economic factors in measuring and determining the stock market price.

Based on the change in income, the post adoption period is more sensitive to change in income with the mean value of 0.0381 (3.81%) compared to the pre-adoption period of 0.035 (3.5%) recorded. This signify that earnings in the post adoption are more volatile than the pre-adoption which is clear indication to show less earnings smoothing after the adoption of IFRS. In addition, the change in cashflow recorded the

Table 2: Correlation Analysis for IFRS Adoption and FRQ

Constructs	1	2	3	4	5	6	7	8	9	10	11	12
Δ in Income (1)	1											
Δ in Cashflow (2)	.095	1										
Small Positive Profit (3)	.079	-.109	1									
Large Loss Recognition (4)	.555**	.696**	.378**	1								
Stock Market per share (5)	.338**	.046	.629**	.416**	1							
Book value per share (6)	-.018	-.169	.493**	.259**	.405**	1						
Net income per share (7)	.159*	-.073	-.024	.002	-.037	-.125	1					
E-ISSUE (8)	.004	-.022	-.010	-.066	-.115	-.025	.094	1				
D-ISSUE (9)	.118	-.085	-.071	-.098	-.043	.081	-.108	-.062	1			
Turnover (10)	.094	.058	.160	-.147	-.054	.049	.121	-.046	.081	1		
CFO (11)	.106	.021	.193*	-.027	.169	.208*	.248*	-.200*	-.182	.148	1	
Auditors (12)	.061	.066	.182	.166	.150	.106	.022	.002	.055	.227*	.021	1

Note: The correlations were checked based on 504 observations.

The result in the Table 2 above revealed that the stock price/share is significantly correlated with the book value per share at 1% significant level ($r = .405$; $p < .01$); change in income at 1% significant level ($r = .555$; $p < .01$); small positive profit @ 1% significant level ($r = .629$; $p < .01$); Also, net income per share is positively and significantly correlated with change in income at 5% significant level ($r = .159$; $p < .05$). Likewise, book value per share is significantly correlated with last three variables prove the explanatory power of small positive profit and net income per share in determining market price/share. Book value/share is another construct which having a moderate relationship with net income per share @1% significant level. In addition, the result of the correlation analysis on large loss recognition is positively, moderately and significantly related with other variables. This can be check to the fact that highly geared firms received numbers of control mechanisms within and beyond the company. Thus, as suggested by Houque et al. (2012), credit institutions control the activities and ensure timely and quality reporting of financial statement of the company by which they have stake.

average value of 0.0887 (8.87%) for the post adoption higher than the result of the pre-adoption period 0.0095 (1.0%). This signifies that cashflow are more stable in the pre-adoption compare to the post adoption period. Also the result of the standard deviation signifies that accrual play more role in having total earnings in the pre-adoption and it is a good indicator of less earnings manipulation in the post adoption period. Meanwhile, with regards to the tendency of large loss recognition, the post adoption period recorded higher mean value .0653 compare to the pre-adoption period. This indicate that company more often recognize large loss in their financial statement after the adoption than before adoption period. Summarily, the result of control variables indicates that post adoption period have better results when compare to the pre-adoption period.

Correlation Analysis

This is one of the inferential statistical tools that are employed to measure the level of relationship between or among the constructs in terms of strength and direction. The correlation used in this study to examine the existence and measure the strength of association among many research constructs with 504 observations. Table 2 below present the result of Pearson correlation statistics on the relationship among the research constructs for the IFRS adoption and FRQ.

Diagnostic Test

The diagnostic test of the IFRS adoption and FRQ variable is normally distributed. Meanwhile, the series are not serially correlation but it is stable with the presence of homoscedasticity. Thus, the diagnostic test revealed that all the assumptions of the ordinary least square OLS is not achieved due to the fact that serial correlation is violated. Therefore, the used VAR model as appropriate estimate model based on the unit root test. Finally, the diagnostic test assist to give the model estimate direction. Table 3 show the results of the diagnostics test of the study with the data of 504 observations.

Table 3: Diagnostic Test for Residual

Residuals	Test	Value	p-value	Remarkd
Heteroscedasticity test	ARCH	.5232	.6561	Presence of homoscedasticity
Serial Correlation test	LM-test	2.1182	.04812	serially correlated
Normality test	JB-test	2.2335	.04231	Normal
Stability	Ramsey Ret	8.5267	.01890	Stable

Analysis Result and Hypotheses Testing

Based on the prior literature reviewed in this study, it was indicated that there is mixed result on the impact of IFRS adoption on the FRQ in the world. Several studies revealed a positive effect (i.e., improve the financial reporting quality), whereas others prove otherwise. However, it was implied that most of those studies were conducted in developed countries and developing countries have their own peculiarities that may cause such findings to not hold water in developing countries. This study employed the empirical findings generated from the analysis of data using the established models in testing the formed for this research study.

Hypotheses Testing on Value Relevance

To test the effect of IFRS adoption on the FRQ in term of value relevance, the study used linear regression analysis as a statistical procedure to examine the relationship that between a particular dependent variable and a group of independent variables comprises of book value/share, earnings/share and its dummy variables for pre and post IFRS adoption. Table 4 below indicate the result of the linear regression for the value relevance for both periods of the study.

Table 4: Impact of IFRS adoption on Value Relevance of Financial Reports

MVPS	Coefficient	P-Values
Constant	5.218	.187
Book Value per Share (BVPS)	.906	.003
Earnings per Share (EPS)	4.153	.000
DBVPS	-.414	.541
DEPS	4.570	.000
F-Statistics	33.652	.000
R ²	.482	

Note: MVPSit = Market Value per Share; BVPSit = Book Value per Share; EPSit = Earnings per Share; D=Dummy Variables for Pre (0) and Post Adoption (1).

Based on the effect of mandatory IFRS adoption as the reporting standards in Nigeria, this research study examine the value relevance of financial report on the stock market price of the listed non-financial firm on the NSE for pre and post adoption period. The result of the table 4 above indicates that the book value/share and earnings per share contributed 48% in determining the stock market price as the model summary revealed the 0.483 (48%) coefficient of determination. Nevertheless, the remaining balance of percent are determine by the other factors outside the constructed model constructs. Specifically, Table 4 revealed the result of the multiple regression analysis which indicates that both book value and earnings/share have positive coefficient of .906 and 4.153 respectively. Therefore, the book value and earnings/share are significant financial reporting in determining the stock market price (i.e., p-value of .000 @ 1% confidence level). Although, earnings per share is a dominant variable with coefficient of 4.153 which is far higher than book value/share result.

Furthermore, as stated in the model specification above, the coefficient in b3 and b4 proved that value relevance of the book value per share in determining the stock market price has reduced after IFRS adoption, although it is not significant factor considering the p-value of .541 attached to the construct. On the contrary, earnings per share of value relevance have positive coefficient of 4.570, implied its impact in determining the stock market price. This indicates a significant increase in the value relevance of the earning/share after adoption of IFRS. This outweighs the marginal minimize

in the coefficient of the book value/share after the adoption. In summary, the study supported the first hypothesis which stated that mandatory of IFRS increase the value relevance of FRQ in Nigeria. This is in agreement with the previous studies of Maigushi (2017); Kargin (2013); Palea (2013) and Kim (2013); Chua et al. (2012) which all have increase in the value relevance of financial reporting after IFRS adoption in their various literatures.

Hypotheses Testing on Timely Loss Recognition

To test the effect of international financial reporting standard (IFRS) adoption on the financial reporting quality in term of timely loss recognition, the study adopted Barth et al. (2008) model which eventually modified and used in this study to ascertain the influence of IFRS adoption on timely loss recognition of financial reports. Table 5 presents the result of the coefficient of reported large negative net income (LNEG) for the data. Also, the timely loss recognition predictions were made, if IFRS adoption were to have improvement on the FRQ.

Table 5: Multiple Regression Analysis Result (Timely Loss Recognition)

Metrics	Prediction	Coefficient
Large Negative NI+ (LNEG)		.236

The result from Table 5 above shows that the positive coefficient of .236 reported by the large negative income. This indicates that aside from the relationship of the model control constructs, companies reported large negative net income more often after IFRS adoption. Thus, the result proved that companies smooth earnings by way of delaying large loss recognition before the IFRS adoption. Thus, the result of the study support the research hypothesis that adoption of IFRS increases the timely loss recognition by the financial reporting. The result of study is consistence with the prior literatures of Maigushi (2017); Dimitropoulos et al. (2013); Chua et al. (2012); Paglietti (2010); and Barth et al. (2008) which supported the increase in the timely loss recognition of financial reporting after the IFRS adoption in their various literatures.

SUMMARY OF FINDINGS

This study examine the effect of IFRS adoption on FRQ of non-financial companies listed on the Nigerian stock exchange. Descriptive statistics were carried out with the view of presenting the data received in an orderly manner which permit revealed the possible results of the study before going into analysis in detail. Also, correlation analysis was duly carried out and interpreted to establish the nature of the relationship between or among the variables. It is also noted that all the necessary diagnostic tests were conducted to know the appropriate model to examined the study. Based on the analysis of data collected from the annual report, the study findings revealed that adoption of IFRS as financial reporting standard has increase the FRQ across the economy in Nigeria. The outcome of this study provides support for the adopted theory (institution theory) that explain the in-depth understanding of change processes related with the international accounting adoption by the companies towards FRQ. Also, this study contributed to the theory and practice, conclusions as well as direction for further studies related to the financial reporting standards and the reporting quality. Hence, the economy has a chance to benefit from all

benefit accruable to nations with strong and better accounting quality, as compare to the pre-adoption of the IFRS. Specifically, the result of the hypothesized variables are as follows:

- The value relevance of financial report variables is better in the after IFRS adoption period when sized with before the IFRS adoption. Thus, earnings per share play the significant impact in improving the stock market price.
- With regards to the timely loss recognition, the empirical evidence revealed the large negative net income after adoption with positive coefficient of large negative net income (LNEG). This indicated that IFRS adoption as reporting standard encourage several companies to recognize large negative net income in a shortest year.

CONCLUSIONS AND RECOMMENDATIONS

Several research studies have been carried out on the value relevance and timeliness of the FRQ before and after IFRS adoption by using different measures in different sectors of the economy around the world (Maigushi, 2017; Musa, 2016; Umoren & Enang, 2015; Salehi & Mareshk, 2013; Barton, Hansen, & Pownall, 2010; Iyoha, 2012; Barth et al., 2008). In an attempt to study the connection between IFRS adoption and financial reporting quality among quoted firms in Nigeria after the implementation of IFRS, the timeliness and value relevance are expected to give enough evidence on the extent of the link between IFRS adoption and reporting quality and accounting information provided in general purpose financial report. The study considered the confidence of stakeholders on the financial reporting quality specifically among investors with respect to their investment decisions. Hence, the study explained the timeliness and value relevance of financial reporting based on the previous studies. Therefore, the study improved the existing literature on the value relevance and timeliness of financial reporting information and provided essential qualitative and quantitative information on the performance of listed firms on the NSE. Also, shareholders investing with Nigerian listed firms would benefit from this study.

The outcome of this study provides significant contributions to both practitioners and researchers for further understanding on the effect of IFRS adoption on the FRQ. As such, organizations should be encouraged to exhibit adherence to the standard to improved financial report. Both practitioners and policy makers need to restructure their systems to align with the IFRS laws and regulation to build the confidence of investors toward the FRQ. The study focuses on timeliness of loss recognition and value relevance of financial reports only, which revealed the positive influence on financial statement after the IFRS adoption as indicated by the previous studies. Therefore, this study recommends to conduct the empirical survey with other qualitative characteristics across the all sectors of the economy to ascertain the quality of financial information based on all characteristics. Finally, future studies needed to carry out the similar research with the adoption of timeliness and value relevance of financial information on other sectors will assist in ascertain whether the IFRS adoption increase the financial reporting quality for all industries in Nigeria and beyond.

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Issues and Challenges of Perceived Value and Service Quality on Student Loyalty among University Student in Malaysia

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Received: 4th January 2021

Accepted: 22nd January 2021

Published: 4th February 2021

Abstract

The conceptualization of issues patterning to student perceived value, service quality, loyalty and student satisfaction is a new mainstream approach for the institution of higher learning in Malaysia. These issues and challenges remain unobserved in past studies. Given the noteworthy of student dissatisfaction and disloyalty in universities, this conceptual study analyzes and discuss various issues as it influences higher institutions, student and highlight some facts with conclusions patterning to service quality. Implications and conclusions are presented and this paper will make some contributions in the respective research area on higher institutions.

Keywords: Service Quality, Student Loyalty, Perceived Value, Student Satisfaction and University Student.

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INTRODUCTION

Over the past years, international students traveled from one country to another as a result of academic pursuit. Many developing nations have positioned themselves as a center for international students, for example, Malaysia in which the government has placed a standard for attracting international students from a neighboring country and other developing countries worldwide and the educational sector has highly contributed to economic growth. Chronologically, since 2013, international students have increased by 16.5 percent in Malaysia with increased revenue of 7.8-Billion Ringgit Malaysia, from 135,503 international students coming from 160 develop and developing nations enrolled in the various higher institution of learning according to (Shahar, 2017). Shahar's further submitted that 74,996 enrolled in private institutions representing 29.9 percent and 32,842 enrolled in public universities. In accordance with Malaysia's ambition to become a global education center, the goal for 2025 is to host 250,000 foreign students (Hazlina, 2020). However, many public and private universities in Malaysia undergo a lot of pressure such as the quality of service rendered to students. Unsatisfied students end up leaving the university, reduced funding or competition among universities in terms of academic values. These parameters have lead scholars and experts to review problems emanating in tackling student loyalty. Hence, this gap is largely connected to the quality of service and the university administrative work values. Many experts have studied the concept of student's service quality, loyalty, satisfaction and values (Tabaku and Kushi, 2013; Taecharunroj, 2014) and it issues or challenges affecting universities, with increased competition and reduction of

student enrolment (Bergamo, Zambaldi and Ponchio, 2012). According to Zeithaml (1988), perceived value is a strategic tool to desire to retain potential students in the university before and after graduation.

According to Taecharunroj (2014), a potential student from a university could increase the number of prospective students via spoken behaviour. Building a relationship with students as a core value will enhance student loyalty leading to university financial footing for the future (Taecharunroj, 2014). All of these parameters seen to be interrelated to gain a competitive advantage for higher institutions (Helgesen, 2006; Taecharunroj, 2014). However, a change in any of these measurements will lead to a large change in profitability emanating from issues in students' perceived service quality (Taecharunroj, 2014; Reichheld, 1993). The main goal of this paper is to analyze the issues and challenges affecting higher institutions in Malaysia. This paper can be insightful to researchers and benefit in the respective research area to understand student impact with various higher institutions.

LITERATURE REVIEW

Issues and challenges of among Universities

In this paper, the researchers examined various issues and challenges that limit students in higher institutions in Malaysia.

Issues of Service Quality

Service quality can be defined as the difference between the services that the customer is expecting and the believed services received. If the services received are less than what the customer expects, then there is no customer satisfaction,

(Parasuraman et al., 1985; Lewis and Mitchell, 1990). Universities from developing countries have ventured into opening branches in other countries with partnership programs that provide students with the same degree on a lower tuition cost and living expenses. These universities aim to maximize profit and enhance education on a global scale.

According to (Sun Daily, 2015) with an increasing number of universities in Malaysia, the government has developed a policy to open Malaysia's door to foreign students and encouraged students thereby enhancing quality service-based. As a result, many institutions of higher learning private or public tried to enhance their institution's brand image compared to their competitors by extending additional incentives to students and providing higher quality services for their students. However, with this demand competition emerged among education industry thereby leading to low technical know-how to make profit delivery low standard quality of service to students such as weakness in core course structures among other factors that contributed to issues of service quality and lecturers lacks adequate skills in handling task required for curriculum standard by Malaysian National Accreditation Body. The body has sometimes rejected some application of over 40 programs due to the weakness in service quality on the course structure and administration (Hasan, Ilias, Rahman and Razak, 2008). Therefore, Service Quality has a significant impact on higher institution performance and student loyalty (Tabaku and Kushi, 2013).

In growing competitive advantage for higher institutions, universities need to enrich their offer by using the proper service quality tool. Although, making evaluations in service quality is not easy due to some difficulties and issues that will emerge based on heterogeneity, inseparability, perishability, and intangibility. According to literature studies, the issue of service quality can be resolved if the relationship between the service provider and his clients is well maintained. Therefore, in a higher institution such as the educational environment, the belief that a famous university brand name has achieved higher service than a less famous university is the measurement of the type of services that is been rendered in quality. Kandampully (2000) further submitted that any organization being its institution of learning either small/big, service quality is important as it entails customers' satisfaction. The submission that service quality is a logical measurement for value makes more difficult for competitors to utilized effective services in the satisfying consumer. Therefore, service quality is an antecedent for satisfaction if higher institutions in Malaysia want to increase or meet its competitive advantages in retaining students.

Issues of Perceived Value

Value is said to represent a trade-off between the most obvious factors of what was given in exchange for what has been received (Zeithaml, 1988). A few researchers have also adopted this view of value as their guide when examining perceived value (McDougall and Levesque, 2000) and this construct hasn't been fully observed in Malaysia as regards the higher institution. According to Woodruff (1997), perceived value is the customer's perceived preference in evaluating a product and service. This can range from attributing performances; product attributes, and concerns arising from the usage, which may facilitate or hinder considering the customer's targets and reasons in usage circumstances.

Based on the explanation by experts, perceived value thus includes the process in which the customer perceives value, value anticipated and received, as well as the link between product and service on its significance in terms of consumer goals, which is a means-end type model. Within the context of the service industry, some experts made known that value has both a direct and indirect impact on consumer behaviour (Tam, 2004). Further examinations show that value is antecedent of satisfaction as a consequence resulting from customer loyalty. The parameters of perceived value could influence the willingness for a student assessment in rating service rendered in higher institutions. In the case of Kotler and Keller (2012), perceived value is a transformational evaluation of customer benefits and total cost regarding supposed choice made.

In Malaysia, a student in higher learning perceived value as an object of interest when selecting universities of their choice, which can be measured in price and quality of service delivered. Perceived value could serve as a competitive advantage for attracting and retaining people and is regarded as a major factor for a service provider to drive its brand most especially in Malaysia where international students care more about the universities they want to study and earn their degree. Therefore, issues influence perceived values such, as satisfaction and loyalty must be the outcome to gain repurchase behaviour and brand image. In higher education and institutions of various learning, the student's total evaluation of the net value of the services received is based on what the student such as assistance provided by the service receives and what is given such as costs or sacrifices in purchasing and using the service. Therefore, the student's total view on the worth of the service provides positive influences on student's final assessment of service satisfaction. In this view, we can say that perceived value is an essential parameter when analyzing the quality of service rendered by universities in Malaysia.

Issues of Student Loyalty

Student loyalty has been analyzed and defined from different perspectives such as behavioural (Kandampully and Suhartanto, 2000), attitudinal Bennett and Rundle-Thiele (2004) and composite (Day, 1969; Dick and Basu, 1994). Concerning the behaviour loyalty, is the propensity of time consumer applied or chooses in patronizing services they deem fit to meet their demand or services based on the categories of services that are made available from the provider (Rundle-Thiele and Bennett, 2001). Attitude loyalty is the preposition that entails the obligation to brand image and repurchasing the brand based on the attachment or loyalty to it (Bowen and Shoemaker, 1998). Chronologically, the examination of behavioural and attitudinal elements was suggested by (Day, 1976). The issues and challenges associated with student loyalty are as a result of psychological activities and changes in manifestation behaviour. Student loyalty is a component that entails attitudinal and behavioural parameter when defined as a non-random behavioural responses expressed over a specific time in the decision-making process. Researchers like Amaro et al. (2019) examined the factors and sources of information delivered through Higher Education Institutions (HEI) influencing students' decisions and equally assessed students' satisfaction, loyalty to achieve attraction and retention of international students. The study used a sample of 190 international students in Portugal, in which structural equation

path modeling was applied. The study found that choice factors having the most significant effect on the satisfaction of the students turned. Whilst, perception of the host country, environment or location of the institutions, as well as sources of information offered by the institutions were significant. The study thus concluded that a positive perception of the institution received globally had influenced the recommendation thereby increasing the satisfaction and loyalty of the students.

In the Malaysia context, Sin et al (2018) studies aimed to determine the level of students' satisfaction towards the service quality of international students. Equally, the study had to examine the relationship between the level of students' satisfaction and their loyalty. Questionnaires were adapted using the Parasuraman's SERVQUAL model, using a sample of 334 international students studying in the University Technology Malaysia (UTM). Pearson correlation and multiple regression analyses were applied. Findings revealed that international students' satisfaction with the service quality of the university was found to be negative. The five dimensions of service quality such as tangibles, reliability, responsiveness, assurance, and empathy got a higher score in expectation than in the perception score of the SERVQUAL model. Similarly, the results from multiple regression analysis indicated that responsiveness, assurance, and empathy proved to be the three dimensions to have a significant relationship with the students' loyalty. According to Hoyt and Howell (2011) managing an educational institution and a company is the same and both can be profitable by applying similar techniques. In some models, students were regarded as customers and educational institutions as service providers (Hennig-Thurau, Langer and Hansen, 2001). In Malaysia, it is an indisputable fact that student loyalty has become a significant concept for educational institutions. A loyal student is likely to suggest their institution or schools before and after graduation (Hennig-Thurau et al. 2001). Students' loyalty has become essential for the survival of higher education institutions (Helgesen and Nettet, 2007). Maintaining long-lasting relationships with students creates a competitive advantage for universities (Henning-Thurau et al. 2001).

Annamdevula and Bellamkonda (2016) conducted a study to determine the effect of service quality on student loyalty, the mediating role of student satisfaction was also observed. The study submitted that student satisfaction mediates the relationship between service quality and student loyalty. Further examination shows that service quality predicts student satisfaction, Annamdevula and Bellamkonda's studies further argued that while universities provide no basis for differentiation among the constructs, age and gender played a major role in determining the different perceptions of students on the construct being investigated.

Issues of Student Satisfaction

Satisfaction is a multifaceted construct that includes not only satisfaction with specific products and services but also with various aspects of the organization, such as the physical facilities and the interaction with different employees. Moreover, satisfaction is positively related to trust (Anderson and Narus, 1990; Dwyer et al. 1987). According to Michell et al. (1998) satisfaction is a starting point and foundation of trust. Trust is a key issue for a successful relationship between two or more parties and individuals. For instance, Zeithaml et al. (1993) argued that trust is fundamental to the development of

loyalty toward retailers in which they derived satisfaction. Nowak and Clarke (2003) identified trust as pivotal to the success of strategic alliances. Spekman (1988) labeled trust as the cornerstone of strategic partnerships for consumer satisfaction. Therefore, it is no surprise that the trust construct has been introduced as a factor that can predict future intentions leading to consumer satisfaction (Moorman et al. 1993; Morgan and Hunt, 1994). In the Malaysia case, experts have defined student satisfaction in various dimensions and the satisfaction still evolved among students who feel the services provided by higher institutions need to be improved on to get adequate service quality and build consumer trust. However, researchers like Morgan and Hunt (1994) classified satisfaction as a normative deficit component whereby people or individuals are comparing actual results and culturally accepted conclusions. However, the equity perspective component of satisfaction refers to the comparison, interest, and satisfaction procured from social exchange or behaviour. If the satisfaction or benefits are not the matchings or the same expected, then the person involved remain dissatisfied and unhappy. This case is observable in the Malaysian context where most students remain unhappy or unfulfilled as a result of service quality rendered by a higher institution of learning. Further examinations show that the normative component describes people's satisfaction as a comparison between real issues on the outcome and the anticipated standard among consumers. The procedural fairness perspective states that consumer satisfaction believes that students in the higher institution will be treated fairly and served with adequate service quality. Whilst, attribution perspective states that satisfaction is not only determined by the way of life of anticipated disconfirmation, but also by the source beliefs of disconfirmation vis-à-vis. Student satisfaction on perspective measurement was also examined by (Parasuraman et al. 1990). Parasuraman et al. defined satisfaction as an evaluative response towards various measurements that are based on experienced expectations in comparison to the actual performance of the products and services delivered. Sometimes, issues relating to student expectations in Malaysia are based on post-purchase behaviour or social exchange that is heterogenetic.

CONCLUSION

Service quality, perceived value and satisfaction in higher institutions specifically among foreign student is important and a mainstream focus in the educational system. Different literature has provided a manifestation that service quality and satisfaction can influence the intention of student retainment. It is also clear that offering international students a good quality education will help to retain them. Servqual Model or other theories can be used to understand student's perspective. Therefore, marketing strategy should be applied for the demand in implementing policies to enhance service quality and perceived value if higher institutions in Malaysia were to retain and keep students in their domain. In a competitive environment for a student, higher institutions should be able to give account on the level of satisfaction and quality offered. Concerning the issues and challenges, this conceptual review has concluded that service quality; value and satisfaction are good antecedents that will predict student loyalty and retention. Hence, customer loyalty or retention is important for higher institutions due to strong competition among universities to seek students. However, fulfilling this parameter for the student is a major challenge for service providers and appears to be less visible for higher institutions

in Malaysia. Therefore, higher institutions must apply a focus strategy vis-à-vis sustainable approach and utilize a value exchange status for student assessment (value for money). Since the educational industry is a major focus on the economic growth and service sector, it should be well developed to meet the demand for economic capacity and build up the student service sector, a major focus for economic development. This research paper should be useful in model development in marketing management, especially with variables of perceived value, student satisfaction, service quality and student loyalty. Also, expected to theoretically contribute to university regulators and policymakers, as well as to academicians and researchers pursuing this field of study.

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Establishing a Graduate Agropreneur Business Model for Food Security: A Case Study of the Melon Manis Terengganu (MMT) Fertigation Project

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Received: 4th January 2021

Accepted: 3rd February 2021

Published: 8th February 2021

Abstract

Revitalizing Malaysia's agriculture, to cater to food security issues, has become a priority, given the current economic conditions faced by the government, due to the worldwide COVID19 pandemic. There are, however, a set of complex issues, which involve human capital development, trade agreements, domestic structural problems, and the appropriateness of techniques that must be tackled. Graduate agropreneurs, though, seem to be the future of the nation; while they, continue to struggle with profitability in these difficult economic times. The agricultural industry, however, supports the view that through business model innovation, farms can increase their competitive advantage. This paper identifies and describes some of the elements needed for these graduate agropreneurs when they consider business model innovation. A qualitative approach was used in this study to interview successful graduate agropreneurs involved in Melon Manis Terengganu (MMT) fertigation farming. The paper concludes that the relevance of a business model, in agriculture, relies on the fact that global competition and technological advances urge agropreneurs to look for new business structures and new ways to interact within the business environment. On the other hand, the agropreneur projects should take into consideration the viability of the agriculture projects to encourage a new generation of farmers; the young, energetic, and knowledgeable agropreneurs, to venture into high technology farming which also has substantial income potential. All factors, however, merit attention when graduate agropreneurs develop new business models for their farms.

Keywords: Food security, graduate agropreneurs, business model innovation, Melon Manis Terengganu (MMT), agriculture

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INTRODUCTION

Food security by definition exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs (Food and Agriculture Organization of the United Nations, 1996). Thus, when Malaysia, which logged 8.2% of its GDP from agriculture in 2017, was ranked 40th in food security among the 113 countries tracked by the 2018 Global Food Security Index (2018), it was felt that Malaysia was left behind by its neighbor, Singapore, which was at the top of the ranking. A lot of questions arose including "What are we doing"? As of August 2019, Malaysia's spending for the import of food had reached RM34.2 billion and has significantly increased this upward trend from year to year. The country's food import bill has risen by an average of 6.5% per year from RM30 billion in 2010 to RM50 billion in 2018 (The Malaysian Reserve, 2019). If this trend continues, the country's food import bill will go beyond RM60 billion per year in the coming years. Although Malaysia is not in a food security crisis currently, prompt action is needed to prevent a food crisis from happening (C.K Aik, F.A Zainol & N. Arumugam, 2015). The current COVID19 crisis

shows that this pattern of food importation is not sustainable due to restrictions in place to curb the pandemic. The Malaysia Government needs to revive new agriculture development strategies to ensure the country's survival in the long term.

The Malaysian government wants to modernize the agriculture sector, with the objective of increasing food production. Consequently, agriculture has been identified as the third engine of economic growth in Malaysia, resulting in large scale farming projects being implemented throughout the country. In order to increase productivity, various elements (seeds and planting materials, labor, fertilizer, irrigation, crop protection, and others) must be utilized effectively. The government has taken speedy action to ensure our food supply remains sufficient at all times, and at a reasonable price for consumers, by implementing an approved new Food Security Plan which is aimed at increasing food production and productivity to achieve self-sufficiency, to provide adequate incentives and income, to produce more food locally, and to ensure adequate, safe, quality food for consumers. For example, the Ministry of

Agriculture and Agro-Based Industry (MOA) implemented *Dasar Jaminan Bekalan Makanan* (DJBM) to increase the production and productivity of the agro-food sector to satisfy a level of self-sustenance and ensure adequate quality checks within the food supply for safe consumption.

Another preventive measure, to curb the food crisis in the country, is the development of a new breed of farmers that have vision, energy, and knowledge, who are known as 'agropreneurs', to replace the existing ageing farmers. The Young Entrepreneur Unit was established in 2013 by the Ministry of Agriculture and Agro-based Industry (MOA) to encourage the involvement of young people in agriculture. The main focus of this initiative was to nurture high income agropreneurs among the young generation via various support programs within the agriculture industry value chain. The involvement of the young generation in the agriculture industry is crucial to avoid our country's dependency on imports, as well as, to develop more innovative, and apply more modern, agriculture for generations.

While the government put forth a concentrated effort to develop young agropreneurs, a survey shows that less than 30% of Malaysia's population is involved in agriculture and the ones who are, on average, are more than 60 years old (The Edge Market, 2018); which shows that this industry is less preferred by the younger generation. This study thus focused on a sustainable business model for the development of agropreneurs, among the graduates, and the model's impact on business profitability. This study employed a single case study methodology and utilized a narrative approach to analyze the case of graduate agropreneurs, who are active producers of Melon Manis Terengganu (MMT), using fertigation farming technology, to verify the proposed sustainable business model and business profitability relationships.

LITERATURE REVIEW

Challenges of Food Security in Malaysia

Malaysia's current population is estimated at 32.7 million with an average annual population growth rate of 0.4 per cent (DOSM, 2020). This population is expected to reach approximately 43 million people in 2050 (FAO, 2020). In a nutshell, by looking at the population growth of Malaysia today, food security must become the prime focus in order to provide a continuous supply of food to fulfil the growing demand. Even though agriculture is one of the pillars of Malaysia's economic growth, this sector is still struggling to meet the country's food consumption demands. This is because the agriculture industry in Malaysia focuses on the plantation sector, which is palm oil and rubber for exportation, while the food crop sector gets far less attention. Currently, there are five million hectares of land in Malaysia being cultivated for plantation crops in comparison to just one million hectares for food crops (The Edge Markets, 2019). In 2018, only 77,845.84 hectares of agriculture land were planted with vegetables and field crops (DOA, 2018).

Malaysia is the second largest producer of palm oil (MPOB, 2020) and the fifth largest producer of natural rubber in the world (Malay Mail, 2019). In fact, the value of Malaysian palm oil exports is about RM70 billion a year (The Edge Markets, 2018). However, when it comes to food crop production, Malaysia is way behind, when compared to other countries in Southeast Asia. For example, Malaysia only produces 71% of

its local demand of rice, 66% of fruit, 40% of vegetables and 29% of ruminants (The Edge Markets, 2018). Records also show that only eleven types of fruit, with a self-sufficiency ration (SSR) of more than 100 percent, fulfil the local demand; i.e., watermelon, papaya and star fruit are a few on that list, while other types of fruit, such as mango, need to be imported from other countries since mango's import dependency ratio (IRDA) is 73.5% (DOSM, 2020).

There are many factors which influence the farmers' and other agricultural players' preferred type of crop. The main reason is their consideration of the cost of maintenance since food crops require more effort, need higher capital, and a lot of manpower, when compared to plantation crops. The food crops are a lot harder to take care of because they require more attention, especially the management of pests and diseases. The agronomy practices, to grow food crops, are also more complicated when compared to plantation crops, since they require the application of specific fertilizers, with suitable irrigation at specific times, to keep plants healthy. In addition, the lifespan of most food crops is a few months to a few years when, after harvesting, farmers need to replant their crops to continue to get profit.

Agriculture is also viewed as an unpopular industry and not attractive enough for many people for various reasons including lack of knowledge, return of investment (both time and financial), and the lack of funds or land to initiate a start-up. A survey shows that less than 30% of Malaysia's population is involved in agriculture and they are, on average, over 60 years old (The Edge Market, 2018); which shows that this industry is less preferred by the younger generations. Some of these farmers also give up on agriculture; leave the land unplanted, and even sell their agricultural land for housing development, when they do not get the profits expected. The level of education among farmers in Malaysia also influences their view and understanding of agriculture practices. Compared to other farmers in Europe or the US, who are mostly university graduates, most of the farmers in Malaysia have only passed primary or secondary school. Thus, it is quite challenging for the agriculture authorities in Malaysia to educate farmers in good agriculture practices or introduce the application of modern technology in agriculture.

Development of Graduate Agropreneurs

The concept of agropreneurship is gradually getting attention in both agriculture and entrepreneurship areas, especially in redefining new and modern agriculture. A recent study showed that agropreneurship is not wishful thinking or a new hype; it has a profound impact on business growth and survival (Verhees, Kuipers, & Klopčic, 2011). The concept of agropreneurship has been promoted to encourage the set up of agro enterprises in an effort to modernise the agriculture sector. The term agropreneurship actually originates from entrepreneurship, which refers to the venture creation process (Saeed, Yousafzai, Yani-De- Soriano, & Muffatto, 2013). Agropreneurship is also linked to efforts to innovate and explore new ways and means of venturing into a profitable agricultural enterprise. Therefore, agropreneurship can be defined as an act of creating a venture that incorporates elements of innovation in an agricultural setting. Since the concept of agropreneurship originates from the concept of entrepreneurship, studying agropreneurship must therefore include agropreneurial intention because this intention serves

as a crucial element in the venture creation process (Saeed et al., 2013).

The idea of agropreneurship is steadily gaining focus enough to be noticed in horticulture and business venture regions, particularly in reclassifying new and current agribusiness. A new report indicates that agropreneurship is not unrealistic reasoning or just another promotion; it actually, profoundly, affects business development and endurance (Verhees, Kuipers, and Klopčic, 2011). The idea of agropreneurship is being elevated to support the creation of ventures identified within the ranch arena with an end goal to modernize the horticulture areas. The term agropreneurship really starts from business, which alludes to the endeavour creation measure (Saeed, Yousafzai, Yani-De-Soriano, and Muffatto, 2013). Agropreneurship is additionally connected to endeavours which advance and look for new available resources and continues toward productive farming techniques and projects. Along these lines, agropreneurship can be characterized as a demonstration of creating an endeavour that joins the components of advancement on a farm. Since the idea of agropreneurship begins from the idea of business, considering agropreneurship, it should thusly incorporate agropreneurial expectations since they fulfil, as an urgent component, the endeavour creation measure (Saeed et al., 2013).

In recent years, researchers have given extraordinary consideration to the idea of agropreneurship expectation, for its incredible commitment to perceiving the potential of future agropreneurs, yet in addition, in understanding how the goals to become agropreneurs are framed. Past research on agropreneurial aims, among understudies, incredibly centre around the effect of individual factors on expectation development. The studies highlight the contribution of factors, for example, mentality, self-viability, seen social control, and other individual credits (Abdullah and Naem Sulaiman, 2013; Movahedi, Latifi, and Sayyar, 2013; Zakaria, Adam, and Abujaja, 2014). The after effects of these investigations demonstrated that singular factors are basic in clarifying understudies' agropreneurial expectations. However, the fact that an individual is surrounded by an extended range of cultural, social, economic, political, demographical, and technological factors (Turker & Selcuk, 2009), along with the concept that 'entrepreneurs can be made', highlights the importance of institutional variables in shaping one's entrepreneurial intention (C.K Aik, Mingramm, G., & F.A Zainol, 2017).

Business Model for Sustainable Agriculture

While defining the business model concept has been among the first tasks of early researchers (Osterwalder et al., 2005), the definitions have been subject to much debate (Pateli & Giaglis, 2004) and a generally accepted definition has not yet emerged (Al-Debei & Avison, 2010; Morris et al., 2005; Shafer et al., 2005; Zott et al., 2011). Researchers have come up with different definitions in an attempt to explain what the essence, and purpose, of a business model is (Pateli & Giaglis, 2004). Definitions have had different foci and have been more, and less, inclusive. Timmers (1998) provided one of the first business model definitions. This definition influenced the definition of Weill and Vitale (2001) and is quite similar to the definitions of Mahadevan (2000) and Tapscott (2001). These definitions see the business model as architecture, and address the business network as the different roles of the workers and their interactions and relationships. Another early

definition comes from Rappa (2000) who emphasized the monetary aspects, which was also prominent in some other definitions (Afuah & Tucci, 2001; Mullins & Komisar, 2009; Teece, 2010).

These definitions often come with a stronger emphasis on the organization and strategic aspects (Afuah & Tucci, 2001; Morris et al., 2005). Most authors do stress that a business model does not cover the full strategy (Chesbrough & Rosenbloom, 2002). Others, quite explicitly, differentiate between business models and strategy. More comprehensive definitions combine the ideas of an architectural representation of the business network and the generation of revenues for the focal organization (Dubosson-Torrey, Osterwalder, & Pigneur, 2002; Morris et al., 2005). However, others are less inclusive in their business model definition and explicitly differentiate it from other concepts (e.g. strategy) or exclude some specific elements. For example, Timmers (1998) differentiates the business model from the marketing model, which addresses the commercial viability via a competitive advantage, positioning, marketing mix, and product-market strategy. Amit and Zott (2001) see the revenue model as a distinct, yet complementary concept to the business model.

A Business Model Canvas has been proposed by Osterwalder and Pigneur (2005) to be used in business model development and evaluation. The Canvas charts the nine elements of business models: key partners, key activities, key resources, value propositions, customer relationships, channels, customer segments, cost structures, and revenue streams. Previous business model innovation studies focused on large companies or technology while less attention has been paid to micro-small companies, such as farms, that have low technology products (e.g., crops, grains, milk, and potatoes). Because farm products do not involve high technology, farmers are limited when making product innovations. Instead, they focus on the production itself—how to grow, and market, their products at lower cost. Thus, the use of a business model canvas, in this study, would give insight into creating a more sustainable business model for the agriculture industry in the future. In the hands of an agropreneur, the Business Model Canvas could be used to grow a sustainable business model that can be nurtured and shared with other young people within the community who are not fortunate enough to have a university degree. These agropreneurs can then become trainers and mentors who can show other youth how to grow the food for tomorrow.

METHODOLOGY

This section discusses the method used to investigate ABC AgroFarm for farming Melon Manis Terengganu (MMT) using fertigation technology. This study employed field visits to the farm at Marang, Terengganu, Malaysia. Field visits allowed the collection of data through a survey and interviews. Observation or field work is a more approachable method since it also allows the researchers to understand the process of melon farming in detail. The direct interview method was conducted by a researcher with a single sample to develop the case. Case studies are said to be an intensive study, which is defined as an in-depth study with few units of multiple variables. The purpose of an intensive study is to get a complete picture of a situation, a phenomenon, or event (Jacobsen, 2002). In a case study, the focus is on one particular unit. These units can be of different kinds and they

can be defined by both space and time. A unit can be an individual, a group, an organization, or a local community. The use of a case study is suitable when we want to understand the interaction between a specific context and a phenomenon (Jacobsen, 2002).

The study had two main goals during the in-depth interview session. In the first section of the interview session, the study used the Business Model Canvas (BMC) to map the owner's existing business model. According to Johnson et al. (2008), mapping an existing business model has a special and important purpose, in that; it describes the business model intended for innovation. In the second section of the interview session, the study discussed how business model innovation influenced the farm's profitability in order to explore innovation's impact on enhancing the agropreneur's project.

CASE ANALYSIS & DISCUSSIONS

Respondent profile

Mr. M has had a great passion and interest in agriculture, where creating his own farming project has always been his dream. He is a young and energetic 24 year old agropreneur, who graduated with a Bachelor's degree in Business Administration (Islamic Finance) from one of the reputable universities in Terengganu, Malaysia, but with a view to emerge in commercial agriculture. This inspired him to start up a fertigation melon farming project, which he solely owns and runs, and which focuses on the "Melon Manis Terengganu". Now he is a successful agropreneur with, more than, a 2,000 plant capacity and with a view to widen the stream, to recruit more graduate agropreneurs from among young Malaysians. He is a true one man army running the farm unit on his own. Starting with RM25,000 in capital, provided from his family, and some initial funding from a government agency, his 1 acre of land can produce up to 2.5 tons of melon per cycle, with a maximum capacity of 4 cycles per year. The vision of his business is to be the best melon farm, which promotes Good Agriculture Practices (myGAP), in Malaysia, to provide deliberately unique and quality hybrid melons to the consumer, and to contribute significantly to the well-being of society. The mission is to support the government in its national food security agenda and to develop more young agropreneurs who can embark on commercial agriculture.

Profile of the Product: Melon Manis Terengganu (MMT)

Cucumis melo var inodorus cv. Manis Terengganu 1 (locally known as Melon Manis Terengganu) is one of the melon species under the Cucurbitaceae family. The outer surface of the Melon Manis Terengganu (MMT) fruit is smooth yellow-golden flesh, without the netted beige skin of the cantaloupe, while its fruit has a sweet, crunchy flavour, bright orange colour and a musky aroma. The sweetness of MMT fruit at full maturity is 13-19° Brix (Muhamad and Nurul Adillah, 2019) which makes it craved by many who have eaten it. The Melon's fruit has good nutritional value, high antioxidant properties, and essential vitamins that the human body requires (Ismail et al., 2010; Lester, 2008; Lester et al., 2010); thus influencing its market demand (Mohd et al., 2019). This fruit is a good choice for the success of Mr. M's MMT project. Consumer demand for MMT fruit encouraged the agropreneurs to cultivate this melon cultivar since it offers high profit return. The current retail price for a grade A MMT fruit is between RM8 to RM12 per kilogram which at farm price is about RM6 to RM8 per kilogram; depending on the market supply (Tahir et al., 2020). Melon Manis Terengganu is a

short-term plant with fruit harvested 60 days after planting. In general, MMT can be planted three to five seasons per year; thus it can generate a high income for the farmers. In addition, MMT fruit can be kept for 2 weeks, depending on storage condition (Muhamad & Nurul Adillah, 2019) which gives the agropreneurs more time to market their harvest.

Melon Manis Terengganu (MMT) is exclusively planted in Terengganu and is well known as Terengganu's iconic fruit (DOA, 2017). As the MMT cultivation has potential to generate higher profits when compared to other crops, the Terengganu state government has committed to investing more money by opening up more areas to the expansion of MMT cultivation. In 2015 alone, the Terengganu government established more than 400 fertigation facilities around Terengganu state with the aim of cultivating more than 200,000 melon plants. It was estimated that these facilities could produce more than 600 metric tons of MMT fruit, worth RM2 million per season, which would account for about RM6 million in revenue per year (NST, 2015). However, the production of MMT fruit is still low and unable to fulfil the local demand. Many factors may contribute to this problem such as the cost to build the MMT farm infrastructure which is quite high, threat by pests and diseases; and lack of knowledge in agronomy practices amongst farmers.

Fertigation Farming Technology

In agronomy, water and fertilizer are two of the critical elements needed to grow plants. Plants need water for photosynthesis, and to transport nutrients in the plant body (Gonzalez-Dugo et al., 2010), while fertilizer is needed to supply enough nutrients for plant growth (Singh et al., 2013). Nowadays, most farmers use fertigation farming technology to water and to supply fertilizer to their crops with soluble nutrient solutions which are mixed with the water to feed the crops. This fertigation system is able to supply the correct, uniform, and adequate amount of water and nutrients straight to the root zone, thus reducing water usage while improving crop nutrient uptake; thereby saving in the cost of production. In addition, fertigation farming technology helps farmers to cultivate plants on infertile land and maximizes crop yield through this efficient agronomy practice.

There are three types of fertigation system technology that are commonly used in Malaysia which are an open system, a closed system, and a semi-closed system. The preference of the type of system used by the farmer depends on the types of crops, land area, and the farmer's capital. Nowadays, many farmers have upgraded their fertigation systems to incorporate current technology, such as sensors, to detect the amount of water in the soil. Sensors are also used to measure soil acidity (pH), and electrical conductivity (EC) to determine the quality of the water and fertilizer mixture before it is supplied to the plant through the fertigation system.

In Malaysia, many food crops such as leafy vegetables, chilies, cucumbers, tomatoes, and melons have been grown using fertigation farming technology. Among these, the cultivation of melons using fertigation farming technology, was viewed as more promising since this high-valued fruit can provide a better profit to the farmers. In Terengganu Malaysia for example, melon farmers who used this technology proved that they could make a high profit even though they needed to spend more money for business start-up (Utusan Borneo, 2018).

Business Model Innovation

This study used the Business Model Canvas blocks as its main tools in order to explore the business model innovation adopted by the respondent in this study. Our purpose in using these blocks was to help the respondent map the business model while identifying its key components. Table 1 presents comments from the respondent framed by these blocks.

As Table 1 shows, the development of business model innovation starts with the customers in mind. In this particular case, the market segment is in local communities described as urban and sub-urban communities which live in Kuala Terengganu/Marang and Kuala Nerus districts in the state of Terengganu. These communities have more purchasing power when compared to other districts in the state. Thus, selling high quality, premium, Melon Manis Terengganu

(MMT) at RM8-10 per kg is not an issue for this particular market segment. All of the strategies to capture this market then followed, starting from value proposition (high premium quality), to value chain (social media marketing), and customer relationships (money-backed guarantees).

On the production process, there were a few main areas that needed focus to ensure the success of the project, such as, the key resources (land, capital, fertigation systems, inputs), key activities (land preparation, installation of fertigation systems, melon farming/production, marketing), and key partners (mentor company, Department of Agriculture, suppliers of inputs, related government agencies). Among the interesting findings, were the use of the technology in farming; i.e., the fertigation system, and the role of the Mentor Company, in guiding the newcomer agropreneur in this agriculture industry.

Table 1: The Business Model Canvas Blocks

No.	Business Model Innovation	Respondent (Verbatim)
1.	<i>Customer Segments</i> - Local communities (within Kuala Terengganu/Marang and Kuala Nerus districts)	"Since 2,000 polybags/plants, considered as small scale, the locals urban and sub urban communities provided me enough market for my farm"
2.	<i>Value Propositions</i> - Premium quality fruit - Premium services	"My farm focus is on producing high quality premium fruit which around 1.2kg -1.5kg per fruit (average brix at 15-17) with premium personalized customer service"
3.	<i>Value Chain</i> - Use social media to connect the farm to end users - Have regular buyers - local fruits hawkers/fruit sellers/middlemen	"I sell MMT via online by promoting it using social media like Whatsapp, Facebook & Instagram and offline to existing fruit sellers and middlemen"
4.	<i>Customer Relationships</i> - Offer money-backed guarantee to end user customers - Only sell high quality fruits - Always update the farm progress at social media	"To ensure my customers know the expectation production date, I always update my farm progress at social media. I only sell high quality fruit and replace them for FREE if got any defaults"
5.	<i>Revenue Streams</i> - Selling of fruits (MMT and other melon) - Selling of vegetables (rotational crops) - Selling of inputs (fertilizers)	"I practiced rotational crops as a good agriculture practices as well as to get additional incomes since vegetables are short term crops by nature. I also repacked the fertilizers and sell it via online platform"
6.	<i>Key Resources</i> - Land - Capital - Fertigation systems - Inputs	"My major resources to start this project were land and capital where I got it from my immediate family supports. While funding for fertigation systems and inputs, I got it through government agency"
7.	<i>Key Activities</i> - Land preparation - Installation of fertigation systems - Melon farming/production - Marketing	"Main activities as a farmer of course being concentrated at farming activities that includes land preparation, system installation and melon farming. However, marketing is a big challenge that all the farmers must (be) aware in order to success in this industry"
8.	<i>Key Partners</i> - Mentor company - Department of Agriculture (DOA) - Suppliers of inputs - Related government agencies	"My key partners that help me a lot in developing this farm comes from people in mentor company, DOA, various suppliers and government agencies that promote agropreneurship"
9.	<i>Cost Structure</i> - Land preparation and fertigation systems - Equipment and maintenance - Inputs (fertilizers and pesticides) - Transportation - Marketing - Labor - Utilities	"Initial setup mostly goes to land preparation and system installations. Along the farming process, major expenses consist of equipment/maintenance, input and other costs such as transportation, marketing, labor and utilities"

Table 2: The Graduate Agropreneur Business Model

Key Partners - Mentor company - Department of Agriculture (DOA) - Suppliers of inputs - Related government agencies	Key Activities - Land preparation - Installation of fertigation systems - Melon farming/production - Marketing	Value Propositions - Premium quality fruit - Premium services	Customer Relationships - Offer money-backed guarantee to end user customers - Only sell high quality fruits - Always update the farm progress at social media	Customer Segments - Local communities (within Kuala Terengganu/Marang and Kuala Nerus districts)
	Key Resources - Land - Capital - Fertigation systems - Inputs		Value Chains - Use social media to connect the farm to end users - Have regular buyers - local fruits hawkers/fruit sellers/middlemen	
Cost Structure - Land preparation and fertigation systems - Equipment and maintenance - Inputs (fertilizers and pesticides) - Transportation - Marketing - Labor - Utilities		Revenue Streams - Selling of fruits (MMT and other melon) - Selling of vegetables (rotational crops) - Selling of inputs (fertilizers)		

In a nutshell, mentoring involved a long-term, focused, relationship which supported the growth and development of the mentee. The mentor became a source of wisdom, teaching, and support, as well as a buddy that provided advice on how to run the business, based on their experiences. This makes the learning curve, of the mentee, faster when compared to going through the hard knock way of making mistakes and learning from them. The benefits of the mentor-mentee relationship have been discussed by scholars about various platforms. For instance, Botha & Esterhuyzen 2012; Herrington & Kew 2015, highlighted the importance of mentoring for entrepreneurs and small business owners to develop sustainable businesses that create jobs. On the other hand, previous studies on mentoring focused on profiling mentors (Martin 2008), the effectiveness of mentoring programs (Swanepoel, Strydom & Nieuwenhuizen 2010), perceptions of mentoring on venture growth (Ayer 2010) and self-efficacy (Cline 2011). In addition, Botha and Esterhuyzen (2012) established the willingness of small business owners to act as business mentors in their research. They suggested using keen, skilled small business owners, as mentors, to increase the existing number of mentors that can help emerging entrepreneurs to grow successful businesses. In the context of developing graduate agropreneurs, the role of the mentor is very significant in terms of providing the guidance, motivation, moral support, as well as networking. Without a mentor, it might take years in order for them to get noticed in the industry.

Business Profitability

This study revealed that the 4 cycles' returns per year for MMT planting could provide a combined gross income of RM29,405 and net profit of RM8,673 (Table 3). The pattern of gross income shows significant improvement from cycle to cycle starting with RM6,000 for season 1 to RM11,073 for season 4 which reflected the learning curve that was experienced by the agropreneur. The impact of the COVID-19 pandemic in season 2 resulted in the project's stated loss in revenue due to the Movement Control Order (MCO) that was imposed during March-June 2020. Taking season 4 as the best season,

this would mean that the project could provide an average income of RM3,691 per month (RM11,073 / 3 month per cycle) and average net profit of RM1,669 per month. However, certain conditions have to be met to achieve these results. These conditions include; a) suitable environmental conditions (e.g. favourable climate); b) appropriate technology (e.g. fertigation technology) c) available inputs (planting materials, fertilizers, pesticides, etc.); d) availability of capital or credit source; e) favourable market for farm produce, etc.

Table 3: Average Income per cycle (Capacity: 2,000 plants)

No.	Cycle/Season	Gross Income RM	Expenses RM	Net Profit RM
1.	Season 1	6,000	5,322	678
2.	Season 2	2,100	5,200	(3,100)
3.	Season 3	10,232	4,145	6,087
4.	Season 4	11,073	6,065	5,008
	Grand Total	29,405	20,732	8,673

Though profitability is crucial for any business, the business model is the key to building growth and avoiding a flat income curve. Many questions can potentially be raised to improve business profitability. Do we precisely know our customers? How can we improve our revenue with current clients? Is our company involved in the customers' results and performance? Have we experimented by implementing a recurring revenue stream? A business model (Table 2) justifies the logic, the data, and other evidence that supports a value proposition for the customer, and a viable structure of revenue and costs for the enterprise which delivers that value. In short, it's about the benefit that the enterprise will deliver to customers, how it will organize to do so, and how it will capture a portion of the value that it delivers.

A good business model will provide considerable value to the customer and collect (for the developer or implementer of the business model) a viable portion of this as revenue. This study, for example, shows how the business model innovation changed the nature of the agriculture project from its struggling

stage into a profitable venture. By positioning the farm as a premium quality fruit producer, the owner of the farm sold the melon (MMT) at a higher price which meant a higher profit margin. However, selling a premium product also comes with the strategy to tailor the market that has been served which means the customers expect premium and customised service, together with the price they pay. It also means the customer relationship needs to be maintained to ensure recurring purchases and customer loyalty. Money-back guarantees and regular updates on farm progress, on social media, are part of farm strategies nowadays. Furthermore, having multiple streams of income, such as fruit, vegetables, and farming inputs, is a good strategy to sustain cash flow for the project and ensure the survival of an agropreneur's project start-up.

CONCLUSION

These new dynamics in food production and trade have modified the way the government attains the issue of food security. The objective of this document is to identify components to create and capture economic value, in the context of agropreneur development among graduates; the graduate agropreneur business model. The business model canvas provides a lean, dynamic, and flexible way to model a farm enterprise. Value Propositions for the farm business are formulated based on the discovery of market opportunities in the Customer Segment and a leverage of strengths in other parts of the business. Actions, in other building blocks of the business model canvas, flow from the value proposition. This approach to business modelling aids in the discovery of new opportunities and the formulation of strategies to create value by facilitating change in the building blocks of the business model. Further, the business model canvas is a tactile learning process that is particularly effective for the management of education for farmers. The relevance of business models in agriculture relies on the fact that global competition and technological advances urge agropreneurs to look for a new organizational setup and new ways to interact with their institutional environments. In this sense, business models can be seen as tools to ensure a firm's competitive advantage (Davenport et al., 2006; Teece, 2010).

Studies have shown that one of the most important considerations in undertaking an agropreneur project is the availability of a market. The assurance of a market is of prime importance especially if one considers that the produce of agriculture projects is highly perishable, and thus, has a limited marketability. Marketing contracts and other forms of marketing agreements are helpful instruments to guarantee that the farmers have a ready market. In this study, one basic reason why the agropreneur was successful in his project was his nearness to Kuala Terengganu and Kuala Nerus, a market centre with relatively unlimited demand and high purchasing power. The future prospects of MMT, to be effective, definitely depend on the availability of a market and a host of other factors. The agropreneurs' adoption of fertigation technologies will certainly be highly influenced by the economic benefit derived from using such technologies. The market-driven agropreneur projects will certainly go a long way toward transforming projects from their dependence on local demand to a bigger commercial and market-oriented farming enterprise, which should include the export market.

The profitability and sustainability of agropreneur projects have been widely discussed in various forums. It was found to differ significantly among crops, among locations given the

same crop, and even among the farms. Yield, and profitability of agropreneur projects, is affected by a number of interacting factors. These include the effects of the environment (soil, topography, climate), socioeconomic (tenure, capital), and technical (available technology and management requirements) factors that could either be within or beyond the control of the agropreneurs. However, the one crucial question is; "Does the project provide an attractive income to the graduate agropreneurs"? As a graduate from university, there are always opportunity costs in venturing into agropreneur projects as oppose to having a paid job within the government or private institutions. Thus, the agropreneur projects should be taken into consideration since the business attractiveness of agriculture projects will encourage a new generation of farmers; the young, energetic and knowledgeable agropreneurs, to venture into high technology farming that promises substantial income potential.

In view of the current scenario, of a lack of harmonization in the food value chain, without public or private collaboration, in order to attain food security in Malaysia, and to develop more graduate agropreneurs, the following is a proposal to be included in the business model: firstly, a focus on its development including human capital, product development, and market development. Secondly, to provide support to agropreneurs in order to consolidate their activities into a larger scale to enhance a better market structure (which could grow into exportation), encourage more participation, and promote public and private collaboration. The end game is to have so many farmers that Malaysia sustains its own food supply chain as well as surplus enough for the creation of revenue through exportation. Finally, to formulate a more comprehensive policy, providing support so that all components of the industry are available to both the public and private sectors, and which is tailor-made for the agriculture industry in Malaysia.

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Business Communication Skills Acquisition Required by Entrepreneurs for Sustainable Development in Oyo State, Nigeria

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Received: 31st October 2020

Accepted: 15th January 2021

Published: 8th February 2021

Abstract

This study x-ray business communication skills acquisition required by entrepreneurs for sustainable development in Oyo State, Nigeria. Four (4) research questions guided the study. A survey design was adopted. The population was 2600 entrepreneurs registered with Nigerian Chamber of Commerce, Industry, Mines and Agriculture (NACCIIMA) in Oyo State while 10% totalling 260 respondents were randomly selected using simple random sampling techniques formed the sample size for this study. A-35 item structured questionnaire validated by 4 experts was used for data collection. The pilot study conducted yielded a reliability coefficient of 0.78 which was high enough for the instrument to be considered reliable. Mean and the standard deviation was used to analyze the findings. The findings revealed among others that listening and speaking communication skills are highly required by entrepreneurs for sustainable development. Based on the findings, it was recommended among others that in house training should be conducted for entrepreneurs to address communication skill gap for sustainable development.

Keywords: Business Communication Skills, Entrepreneurs, Sustainable Development

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INTRODUCTION

Communication plays a vital role in the fulfilment of all marketing objectives. Therefore, communication is essentially an important ingredient which makes possible various links, contact and interaction among members of a various organization; this is because of its universal nature and multi-disciplinary applications. Durop (2012) perceived communication as the process by which information is passed between individual and organization employing previously agreed symbols. Communication is a vital tool for business success because it is important in bringing about understanding among individuals and groups of organizations (Afolabi, 2018). An entrepreneur must be an effective communicator and no business can build required goodwill without effective communication skills. A poor communication system may result in mismanagement and bad outcome. The major aim of this paper was to show that the success of any business reposes in effective communication and that effective communication is crucial for the progress of business activities. Specifically, it was emphasized that communication skills need to be developed by entrepreneurs to sustain the development of their business. One major purpose of communication in business is to give and reserve information

about the availability of products and services and encourage customers to buy more. According to Nwosu (2014) information is an authentic data processed in form of progress, reports, new products and services development for a useful purpose, decision making and knowledge acquisition. Information in business can by-pass through many channels such as telephone call, email, voice messages, Whatsapp, Instagram and face-to-face conversation. Hence, information is critical to business operations to bring about growth and development of a business. A business refers to all economic activities carried out by people (entrepreneur) and organizations aimed at producing goods and services for satisfying customer needs profitably. Business is concerned with the production and distribution of goods and services which involve risk and uncertainty by an entrepreneur.

The entrepreneur is the coordinator of all other factors of production. He/she is the owner of a business. The one that seizes opportunity around him to make again. An entrepreneur is a person who perceives a business opportunity and takes advantage of the scarce resources to meet with unlimited opportunities profitably. It is a classification of a group of individual who developed business activities where non-

existed before. This symbolizes that entrepreneurs are individuals who possess the ability to see and assess business opportunities, to mobilize resources to exploit the opportunities and put in place necessary action-oriented (Arogundade, 2011).

The attributes of an entrepreneur according to Afolabi (2018) include; provider of employment opportunities and infrastructures, mediators between larger society and his economic unit, risk-takers and innovators. All those attributes of entrepreneurs associated with good business communication skills. Moreover, entrepreneurs interact with people on a daily bases they make use of various medium that include interpersonal, intrapersonal, oral, written and the like. To communicate effectively using these channels they require abilities in some basic business communication skills that include listening, speaking, reading and writing skills.

Listening is the ability to accurately receive and interpret messages in the communication process. According to Afolabi (2018), listening skills are critical for understanding and involves conscious effort in following what is spoken, in recognizing the main points and making sure that they are understood. Effective listening skills are the ability to actively understand the information provided by the speaker and display interest in the topic discussed. Hence, an employee in an organization reacts to instructions he receives and his ability to react effectively depends on his listening capability.

Speaking is rated next to listening to communication. It is the process of transmitting ideas and information orally in a variety of situation. Speaking according to Joughin (2007) is the ability to speak fluently and presuppose not only knowledge of language features, but also the ability to process information and language on the spot. Speaking skills allow the speaker to convey his message in a passionate, thoughtful and convincing manner towards effective communication. Speaking, therefore, provides an avenue for exchanging and obtaining information needed for decision making from which audience feedback is obtained and clarifications made.

Reading is the third importance in business communication skills. Reading is a complex, purposeful, interactive, comprehending and flexible activity that takes considerable time and resources to develop. Reading skill is a cognitive ability which an entrepreneur can use when interacting with the written text. Reading skills lead entrepreneurs to interact and gain meaning from written language (Whalo, Otaiba and Delano, 2009).

Writing is the fourth-ranked basic business communication skills used in organizations today. It is the highest and most complex of business communication skills. Writing is a form of communication that allows the entrepreneur to put his feelings and ideas on paper to organize his knowledge and benefits into convincing arguments and to convey meaning through well-constructed text. Huemer and Mann (2010) state that writing is an intellectual activity of finding the ideas and thinking about the way to express and arrange them into a statement and paragraph that is clear to be understood by the people. Writing skill encourages the individual entrepreneur to focus on accurate language use because they think as they write.

Given the complexities of the Nigerian business environment, effective communication is crucial and important to enable entrepreneurs to keep abreast of what is happening in the business environment, promote favourable competition among businesses and respond to challenges in the world of work. The success of every enterprise depends on communication skill. In any undertaking involving two or more persons, communication is essential because it is the glue that holds an enterprise together. Communication skill is not only vital information and implementation of enterprises activities for sustainable development. Development is a systematic transformation of overall social, economic, political, scientific and technological life of a nation through the effective and well-oriented management system. Mbata (2009) cited in Nwaigburu and Eneogwe (2013), sustainable development means the all-round development of individuals. It concerns not only personality development but also nation-building which goes beyond the construction of bridges, roads and provision of social amenities. Okeke (2008) defined sustainable development as a kind of development that can be initiated and managed properly in such a way as to give attention to continuing and preservation as people explore and explicitly available resources for the enlargement of their existence. Arogundade in Oguejiofor and Ezeabasili (2014) pointed out that the major essential tool for achieving sustainable development should include: improving the quality of basic education, reorienting existing education programme to address sustainable development, developing public awareness and understanding and improving training for all sectors of private and civil society.

Despite the importance of communication skills in society as well as in business organization, entrepreneurs face a lot of challenges some of which include: lack of strategic consistency, insufficient marketing budget, ambiguity on a business issue, scarcity of creativity and innovation and complex cultural and social values. Lesikar and Flatley (2005) observed that good business communication which builds trust and teamwork among employee is a requirement for successful leadership. Hence, business success can only be attained when entrepreneurs are adequately equipped with business communication skills. It is therefore become imperative to x-ray business communication skills acquisition required by entrepreneurs for sustainable development in Oyo State.

LITERATURE REVIEW

Business Communication

Communication may be defined as the process of sharing facts, ideas, information, perspectives or concerns between two or group of people with the concept of reaching a mutual understanding for the attainment of the desired results. According to Keynote (2011), Communication is the process of transmitting information and common understanding from one person to another. In a business environment, the effective communication process is significant to the success of any business activities. Business communication is the lifeblood of any business organization and its major purpose is to facilitate the activities of the organization towards the attainment of business goals. Sherron and Paul (2012), described business communication as the sharing of information between people within an enterprise to promote business growth. Business communications are used to promote a product, service, or an organisation; relay information within the business; or deal with legal and similar

issues. It is also a means of relying on between a supply chain, for example, the consumer and manufacturer. At its most basic level, the purpose of communication in the workplace is to provide employees with the information they need to do their jobs (Barnett, 2008). Also, business communication can refer to how a company shares information to promote its product or services to potential customers. The success of any business depends largely on the efficient and effective use of communication skills.

Senécal, Loughhead and Bloom (2008) defined business communication skills as the ability to convey information to another effectively and efficiently. It also means a purposeful exchange of information between participants. Hence, the transmission of a message that involves the shared understanding between the contexts in which the communication takes place. Therefore, good reading, writing, speaking and listening skills are essential for effective communication for the excellent performance of business tasks. However, this calls for the need to develop proper business communication skills. It is helpful to understand the differences in how to communicate through face-to-face interactions, phone conversations and digital communications, like knowing how to use email, Whatsapp, fax, Telegram and other social media platforms. Business communication skills are the tools that we use to remove the barriers to effective communication. Communication is important and critical for both managers/executives and lower personnel. In the age of digital, global businesses, it is essential for organizations of all sizes to effectively communicate not only within their organization, but also with shareholders, vendors, clients, and customers. Effective communication is at the forefront of significant business processes and must be efficient so that personnel can successfully share and communicate information that helps to run a successful enterprise, and to drive the most critical business processes (Aaron, 2019).

Concept of Entrepreneur

The world view of the entrepreneur as a catalyst towards solving the problem of poverty in the country is increasingly gaining more ground among the committee of nations. This is as a result of their activities and ability to take risks more societal problems have been solved. The entrepreneurs are important agents of change in every society, yet they present the most mysterious features in the cause of economic growth, particularly in developing countries like Nigeria. Although it is an entrepreneur's purposive activity that bridges the gap between plan and reality, the precise way that this agent of change acts is often unpredictable. Examining the concept of entrepreneurship in developing countries is significant to understand the pattern of their growth and development. Entrepreneurship is not a uniformly distributed quality throughout these given societies. The psychological attributes are the key factors in driving the entrepreneurial activities. Certain individuals are achievement-oriented and are prepared to take risks. Entrepreneurship is scattered over a wide range of business functions to bring out the effects within the structure of the business itself (Binuomote cited in Salami, 2019).

The entrepreneur also plays a negotiating role between the larger society and its economic unit. Entrepreneurial action is likely to initiate changes for both the economic unit and its environment. Entrepreneurs recognize business opportunities for their success. Entrepreneurs are people who identify the

strengths, weaknesses, opportunities and threats of their business enterprise and put-up opportunities for its success. Their decisions are based on accurate data and information than a layman who operates by trial and error. What others see as a problem or difficult task may not be perceived as such by those who possess relevant information. (Binuomote, 2011). An entrepreneur is an individual who gathers and coordinating other business resources for production in both the required quality and quantity to make a profit. Entrepreneurs are also seen as people who can see and evaluate business opportunities to gather the necessary resources, to take advantage of them and to imitate appropriate action to ensure success. The owners and managers of the business enterprise are entrepreneurs. They take a risk to build their business enterprises and aim at making a profit as well as the impact on society. These entrepreneurs are conscientious for the success or failure of their business. As risk bearers, they either succeed or make a developmental contribution or they disappear from the market place (Anyakoha, 2009).

According to Arogundade (2011), entrepreneurs are individuals who can see and utilize business opportunities, marshal resources to explore the opportunities and put in place necessary action-oriented for the benefit of society. Inegbenebor and Igbinomwanhia, (2008) indicate that is someone who operates a business of his own, accountable for the risks and the results of the business. He is a self-employed individual who utilizes his cognitive ability and courage by combining the four factors of production such as natural resources, human resources, capital, and creativity for meaningful entrepreneurial activities. An entrepreneur is a provider of employment opportunities and infrastructures. To the economists, an entrepreneur is one who utilizes his savings for the accumulation of materials and other assets into combinations that make their value greater than before, and also one who introduces changes, and innovation into business (Baron, 2007). One of the importance of entrepreneurs is that they are innovators. Thus, an entrepreneur is a person in a large organization who can add more value to the betterment of the business organization. The entrepreneurs are key individuals in the country for promoting socio-economic development of any society. The socioeconomic growth and development can be determined by the numbers of entrepreneurs available in a given society. However, the fundamental ingredients to the entrepreneurial success in any business activities are being able to communicate effectively. It is therefore essential for the entrepreneur to be versatile in all area of the communication process, this is because it helps a lot in sustaining achievement of the business.

Sustainable Development

According to Fatoki (2010), entrepreneurship is the ability of an individual and willingness to undertake a business-like concept, and management of a rewarding business venture with all attendant risks. Typically, entrepreneurship entails making new products in a way that will enhance products quality by developing resources and people in a unique way of adding more goodwill to the business organization. In a business environment, the idea of sustainable development focuses majorly on maintaining constant economic growth accrued from the combination and utilization of business resources. Sustainability development is the development that meets the needs of the present without compromising the

ability of future generations to meet their own needs (UN Brundtland Report, 1987). In the view of Luke (2013) development is eliminating poverty, unemployment and inequality while sustainability is associated with satisfying a national economy's needs for natural resources without compromising generations. The idea of sustainable development as conceived in this study is all-round business strategies undertaken by the entrepreneur to make sure that business upholds the going concern principle. The business achievement could be the acquisition of goodwill and qualified personnel, large market share, high customer patronage, long years of operations etc. Sustenance of these achievements is crucial for business growth and development; therefore, it is imperative for the entrepreneur to efficiently plan and implement good business programmes that will allow a business to compete favourably in both local and international markets.

Social Marketing Theory

Social marketing theory is a collection of theories that focus on how socially valuable information can be promoted. It has always been adopted in the research work related to communication skills required for business success. The aspects of this theory include the following: the creation of audience awareness, target the right audience, reinforce the message, and stimulation of interest. This theory is related to this study because the entrepreneur needs to create awareness by making the potential customers know the existence of the products through any available channels of communication after the products have been advertised to the target market, there is need for the reinforcement of the information through the promotion of the products in various mass media when the entrepreneur succeed in stimulating the interest of the customers, it enhances patronage which in turn guarantee sustainability of business development.

Statement of the Problem

For many developing countries, development of business communication skill is a powerful engine of economic growth, wealth creation and it is crucial for improving employment opportunities among citizens. Business communication skill has several multiplier effects on the economy, spurs innovation and foster new investment in people. However, acquiring business communication skills by entrepreneurs will enable them to create new commercial activities, enterprises and economic sectors for sustainable development. Despite the important roles of communication skills for business sustainability, the observation shows that the non-performance of many entrepreneurs in Oyo State could be traced to inadequate application of communication skills. The resultant effect of this is that business mission and vision may not be achieved as stated. And also, it may be difficult for entrepreneur most especially in Oyo State to compete favourably with their counterparts in other parts of the country if they cannot take advantage of the global deployment of communication resources to source for information. Therefore, businesses succeed only when customers continue to demand their products and services. Hence, effective communication skill is necessary for increasing customers' patronage regularly. It is on this premises that the researchers felt the need to x-ray business communication skills acquisition required by entrepreneurs for sustainable development in Oyo State.

Purpose of the Study

The main purpose of this study was to examine business communication skills acquisition required by entrepreneurs for sustainable development in Oyo State. Specifically, the study sought to:

- i. Ascertain listening communication skills required by entrepreneurs for sustainable development in Oyo State,
- ii. Determine speaking communication skills required by entrepreneurs for sustainable development in Oyo State,
- iii. Identify reading communication skills required by entrepreneurs for sustainable development in Oyo State,
- iv. Examine writing communication skills required by entrepreneurs for sustainable development in Oyo State.

Research Questions

- i. What are the listening communication skills required by entrepreneurs for sustainable development in Oyo State?
- ii. What are the speaking communication skills required by entrepreneurs for sustainable development in Oyo State?
- iii. What are the reading communication skills required by entrepreneurs for sustainable development in Oyo State?
- iv. What are the writing communication skills required by entrepreneurs for sustainable development in Oyo State?

Methodology

A survey design was employed for this study. A total of 2600 entrepreneurs registered with Nigerian Chambers of Commerce, Industry, Mines and Agriculture (NACCIMA) in Oyo State formed the entire population. A sample of 260 respondents was made through simple random sampling techniques. Simple random sampling is defined as a sampling technique where every item in the population has an even chance and likelihood of being selected in the sample. One way of obtaining a random sample is to give each individual in a population a number, and then use a table of random numbers to decide which individuals to include (Ben-Shlomo, Brookes, and Hickman, 2013). A-35 items structured questionnaire developed by the researchers titled: Business Communication Skills Acquisition required by Entrepreneurs for Sustainable Development questionnaire validated by 4 experts in the Department of Business Education, Tai Solarin University of Education, Ogun State was used for the study. The instrument was designed on a four-point scale of Very Highly Required (VHR), Highly Required (HR), Low Required (LR) and Not Required (NR) with numerical values of 4, 3, 2 and 1 respectively. Cronbach Alpha reliability coefficient was used to determine the reliability index which yielded a reliability coefficient of 0.78. Two hundred and sixty (260) copies of the instrument were administered to the respondents through online via email. The mean is explained as the average value of the data set (Sekaran & Bougie, 2010). Whereas the standard deviation is a measure of spread or dispersion, which provides an index of variability in the data. Both mean and standard deviation are descriptive statistics for interval and ratio scale. Both mean and standard deviation are descriptive statistics for interval and ratio scale. Items whose mean scores are less than 2.50 were regarded as Not Required while those

items that ranged from 2.50 and above were regarded as Very Highly Required.

RESULT

Research Question 1: What are the listening communication skills required by entrepreneurs for sustainable development in Oyo State?

Table 1: Mean Ratings and Standard Deviation on the Listening Communication Skills required by Entrepreneurs for Sustainable Development

S/N	Ability to:	\bar{X}	SD	Remark
1.	Determine important ideas	3.56	0.50	VHR
2.	Relate what you hear	3.51	0.51	VHR
3.	Think from the speakers' viewpoint	3.48	0.52	VHR
4.	Listen to message clearly on the telephone and other devices	3.38	0.66	VHR
5.	Note and think on ideas communicated	3.29	0.64	VHR
6.	Remember points communicated	3.46	0.67	VHR
7.	Respond to points raised while engaged in oral communication	3.39	0.66	VHR
8.	Manage and provide the required attention spur for listening	3.24	0.62	VHR
9.	Show patience while listening	3.61	0.55	VHR
10.	Avoid physical distraction	3.65	0.59	VHR
Weighted Mean/SD		3.46	0.59	VHR

Source: Fieldwork (2020)

Table 1 revealed listening communication skills required by entrepreneurs for sustainable development with mean ratings ranged from 3.24 to 3.61 and a weighted mean of 3.46. Based on the finding the standard deviation of all items was ranged from 0.50 to 0.67 meaning closeness and very highly required.

Research Question 2: What are the speaking communication skills required by entrepreneurs for sustainable development in Oyo State?

Table 2: Mean Ratings and Standard Deviation on Speaking Communication Skills required by Entrepreneurs for Sustainable Development

S/N	Ability to:	\bar{X}	SD	Remark
1.	Capture and retain the attention of the audience	3.79	0.87	VHR
2.	Speak politely to customers	4.35	1.21	VHR
3.	Pronounce words courteously	3.99	0.87	VHR
4.	Give information on the cellular phone and other devices	3.79	0.87	VHR
5.	Make a presentation based on a prepared note	3.99	0.87	VHR
Weighted Mean/SD		3.99	0.87	VHR

Source: Fieldwork (2020)

Information in table 2 revealed that speaking communication skills are very highly required by entrepreneurs for sustainable development with mean ratings ranged from 3.79 to 4.35 and the weighted mean of 3.99 while the standard deviation ranged from 0.87 to 1.21 meaning closeness and very highly required.

Research Question 3: What are the reading communication skills required by entrepreneurs for sustainable development in Oyo State?

Table 3: Mean Ratings and Standard Deviation on the Reading Communication Skills required by Entrepreneurs for Sustainable Development

S/N	Ability to:	\bar{X}	SD	Remark
1.	Read documents, letters, business books, journals, periodicals regarding the line of business and its environ	3.02	0.61	VHR
2.	Receive information from computer	3.18	0.57	VHR

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3.	Pick out the major points in a report	3.67	0.48	VHR
4.	Survey business materials properly	2.98	0.58	VHR
5.	Handle graphics and illustrate materials carefully	3.51	0.51	VHR
6.	Read with alertness SMS and MMS message on the phone	2.82	0.68	VHR
7.	Acts fast on messages	3.00	0.56	VHR
8.	Criticize the writer's message after reading through	2.98	0.58	VHR
9.	Read the document on the internet and act on them promptly	3.49	0.51	VHR
10.	Access information from an electronic database	2.87	0.57	VHR
Weighted Mean/SD		3.15	0.57	VHR

Source: Fieldwork (2020)

Table 3 revealed the mean ratings and standard deviation of respondents on the reading communication skills required by entrepreneurs for sustainable development with mean scores ranged from 2.82 to 3.67 and weighted mean of 3.15 while the standard deviation ranged from 0.48 to 0.68 meaning closeness and very highly required.

Research Question 4: What are the writing communication skills required by entrepreneurs for sustainable development in Oyo State?

Table 4: Mean Ratings and Standard Deviation on the Writing Communication Skills required by Entrepreneurs for Sustainable Development

S/N	Ability to:	\bar{X}	SD	Remark
1.	Write messages in a clear and concise form	3.58	0.57	VHR
2.	Choose the correct sentence style and use appropriate vocabulary	3.32	0.61	VHR
3.	Avoid misspelling of words	2.86	0.71	VHR
4.	Send invitation notices to organizational members	3.01	0.64	VHR
5.	Develop major points into paragraphs with clarity	2.98	0.60	VHR
6.	Present points logically suited for the purpose	2.92	0.58	VHR
7.	Present reports to management and external audience	3.16	0.75	VHR
8.	Choose appropriate means of sending written messages	2.67	0.73	VHR
9.	Express oneself contentiously	2.81	0.62	VHR
10.	Evaluate things from readers' point of view	2.56	0.80	VHR
Weighted Mean/SD		2.99	0.66	VHR

Source: Fieldwork (2020)

Information in table 4 above showed mean ratings and standard deviation of respondents on the writing communication skills required by entrepreneurs for sustainable development with mean scores ranged from 2.56 to 3.58 and the weighted mean of 2.99. Based on the findings the standard deviation ranged from 0.57 to 0.80 indicating very highly required.

CONCLUSION

It has been confirmed that the end products of good communication most especially in business activities is the attainment of a business goal. This is because effective communication brings more cordiality between the business and customers. This formed the bases that business succeeds in the acquisition of all forms of communication skills. Proper handling of customer complaints depends largely on the ability of the entrepreneur listening capacity to their problems and at the same time need to communicate with them in a very clear language. Understanding communication skill is essential since it is the basic process through which entrepreneurs accomplish their set objectives culminating in their success for sustainable development.

Recommendations

Based on the findings and discussions of the study, the following recommendations were made: Business bodies should organize in-house training for their members on the significance of listening skills to the progress of the business. Also, the publication of journals on the importance of listening skills acquisition could be made available or distributed among the members in their respective business location. When the customer complaints are listened to, it enhances their patronage. Every individual entrepreneur should thrive as much as possible to develop their speaking skills to a very significant level that could be of help to the business. The importance of reading skills in a business environment cannot be over-emphasized. The understanding between the entrepreneurs and customers matters because it is when the duo understands each other business transactions succeed. The government at all level should make it as a resolution for any potential entrepreneur to possess good skill in writing. This will go a long way in helping them to write a good order, issuance of cheque without error, receipt and most significantly aid in proper record keeping.

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Conceptualizing Asnaf Entrepreneurship for Zakat Institutions in Malaysia

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Received: 5th January 2021

Accepted: 24th January 2021

Published: 9th February 2021

Abstract

The aim of this paper is to propose a conceptual framework to explore the challenges of the current practices of the asnaf entrepreneurship program and to establish Islamic entrepreneurship ecosystem as a mechanism in the development of the program among zakat institutions in Malaysia. This research will use qualitative study methods in gathering the primary data from informants among officers in zakat institutions, the asnaf entrepreneurs, the business advisors/experts and academicians. The collected data will be assessed to verify on how the program may help to develop the economy of the asnafs. Even though there is no ideal case as regard to the Islamic entrepreneurship ecosystem in this current world, zakat institutions may provide such alternative ecosystems. The findings of this research is expecting to enhance zakat institutions, Muslims societies, general publics, and policy makers on how this program may elevate the economic status of the asnaf from zakat recipients to become the zakat payers. Thus, the results of this research are anticipated to provide the landscape on how the asnaf entrepreneurship program may positively increase the income of the participants specifically and the societies in general.

Keywords: Asnaf Entrepreneur, Small Medium Enterprises, SMEs, Islamic Entrepreneur and Zakat.

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INTRODUCTION

Asnaf entrepreneur is not a newly invented group under eight (8) asnaf as mentioned in the Al-Quran Surah At-Taubah Verse 60. But it is an identified individual of productive asnaf those under any of eight categories which has capability to become an entrepreneur. His or her life status and financial condition normally becoming the distress that put him/her under the asnaf category. Under this category, asnaf is considered as non-bankable and excluded from the main stream of financial services (Al-Mubarak, 2016). Therefore, the initiation of asnaf entrepreneurship program targeted to this group is to elevate them from poverty, to 'graduate' from asnaf status and at the later stage to become 'muzakki' (zakat payers). This program is actually under zakat.

Zakat is one of the five (5) pillars in Islam and consider as an act of worship. In Al-Quran and Al-Hadith, zakat always pairs with 'as-solah' and it is always discussed in the chapters of 'Ibadah' in many books of Fiqh. On the other hand, according to Qardawi (2009) zakat is an act of worship which relates human being with the other human being and with the purpose of devotion to Allah Azzawajalla which covers at least three aspects which are, first (1) to release individual from the burden of slavery, second (2) to assist in closing the gap between those who have wealth with the one who has not (the insufficient versus the sufficient), and the third (3) is to use the fund to spread and defend the message of Islam (dakwah).

Due to this trend, creative and innovative solutions on how to collect and distribute zakat are becoming among the main agendas in zakat management studies. According to Qardawi (2009) the law of Islam remains constant while the ruling and implementation probably may change according to the place, time and circumstances.

On this basis and the aim to empower the productive asnaf to generate income up to the level of graduation from the asnaf status, thus Zakat Institutions in Malaysia have introduced an asnaf entrepreneurship program which has a high potential to success provided both sides are giving full commitment in realizing it.

The Zakat Institutions have introduced the economic upgrading program which is known as 'Bantuan Pembangunan Ekonomi' under LZS (Selangor, 2017), 'Skim Bantuan Ekonomi' under MAIWP (Majlis Agama Islam Wilayah Persekutuan, 2018) and 'Pembangunan Usahawan Asnaf' under MAIDAM (Abdul Ghafar, Zakaria, Yusoff, Kamaludin, & Abdul Ghani, 2017) by giving away the capital assistance, advisory and business support to the asnafs who are eligible for it.

Abdul Hamid (2013) highlighted that the conversion successful rate from the whole participants were between 30%

to 60% or 3 to 6 (participants) from 10 participants who exit (graduated) from the asnaf status. This percentage was meaningful as the impact of one entrepreneur may give a chain of benefits for others. Among the benefits are the employment opportunity, infaq, economic development and community support.

It is a local multiplier effect which benefits the local economy through the linkages of expenditure (Karlsson, Gråsjö, & Wixe, 2015). This is a good program that the success is not measurable based on the conversion rate from asnaf to muzakkis only but also the other indirect impact to the economy. Therefore, this study will support practitioners and scholars to investigate the challenges of the current practices of the asnaf entrepreneurship program and to establish Islamic entrepreneurship ecosystem as a mechanism in the development of the program among zakat institutions in Malaysia. In order to do so, this study is organized as follows: First (1st), the literature review on the asnaf entrepreneurship in Malaysia, the concept involves, and the critical analysis of the related entrepreneurship elements. Second (2nd), the problem statement. Third (3rd) is the description of the research methodology and samples. Fourth (4th) is the discussion about the proposed conceptual framework. And finally, the summary which provides the probability for the future discovery.

PROBLEM STATEMENT

The entrepreneurship program needs to become the flagship in upgrading the status of productive asnaf. The potential and the achievement of the program recorded by LZS, MAIWP and MAIDAM in converting the asnaf entrepreneurs to become the zakat payers have triggered the interest of other zakat authorities to replicate the similar program (Abdul Ghafar et al., 2017).

In 2016, MAIDAM spent as much as RM4 million while RM0.757 million and RM15.4 million for MAIWP and LZS respectively. The expenditure amount was reduced to RM0.116 million for MAIDAM, RM0.72 million for MAIWP and RM7.84 million for LZS in 2017. The declined for LZS in 2018 to RM4.17 million. However, MAIDAM (RM2.95 million) and MAIWP (RM1.08 million) show the incline trend in the same year. (Abdul Ghafar et al., 2017; MAIDAM, 2018, 2019; Majlis Agama Islam Wilayah Persekutuan (MAIWP), 2017; Majlis Agama Islam Wilayah Persekutuan, 2018; "Ringkasan2017.pdf," n.d.). All of these three Zakat Institutions reduced the distribution in year 2017 under asnaf entrepreneurship program and two (2) of them had increased back the amount in year 2018. The distributions were based on the maqasid shariah as instructed and determined by the institutions.

However, Muhamat, Jaafar, Rosly, & Manan (2013) stated that this program is still being questioned whether it is beneficial to the recipients or not. It is mainly due to the fact that any program initiated by the government is not really meeting their targets' needs Andrews (2018). On top of that, Shane (2009) pointed out that the effort of establishing the new start-up is not a good policy. This is due to the nature of this establishment which is not innovative, unable to create job opportunities and only create minimum wealth.

However, in the case of LZS, for the year of 2016, there are 175 participants out of 300 recipients that have graduated from

asnaf status. Out of these, only a few numbers have elevated their business from micro to small or at least to maintain the status quo as micro entrepreneurs. The remaining are not successful in the business or out of radar and uncontactable.

On the other hand, MAIDAM has allocated as much as RM654,853 in the year of 2014 for 295 participants. The allocation was only 0.83% from total distribution for that particular year. It was used by the participants as capital in various types of businesses such as food and beverages services, automobile workshops, grocery stores, clothe stores, tailor shops and many more. However, based on the study done by Abdul Ghafar et al. (2017) at least eighty percent (80%) of the total participants have yet to reached the satisfied level in business operation. He opined that there was an entrepreneurship talent gap that needed to fill in to improvise the output of the program.

Meanwhile in 2018, MAIWP has distributed as much as RM1.08 million toward 460 recipients under the similar program. According to Majlis Agama Islam Wilayah Persekutuan (2018), it was a 'high impact' distribution to improve the economic status of the asnaf from a recipient to a contributor. This program has produced ten (10) participants who have earned between RM8,000.00 to RM30,000.00 per month each and it was considered as an achievement.

The entrepreneurship program under zakat institutions need to properly identify the type of asnaf that has potential to be a successful businessman. Abdul Halim et al. (2012) had identified the zakat recipient who is currently in hardship but has potential to develop, grow and graduate from asnaf status as the one that is appropriate to receive this support. However Rahman & Ahmad (2011) had questioned whether this investment will give a successful return or otherwise. Any failure of this allocation or arrangement will jeopardise the right of the other asnaf toward the pool of funds. Therefore, the need for introducing the comprehensive entrepreneurship model dedicated to asnaf entrepreneurs is very important

RESEARCH METHODOLOGY

The method to be used in this study is in-depth interviews by way of case study method. The case study will be used as a methodological approach in gathering the data and organising the research. There will be fifteen (15) case studies to be developed in order to capture the data from the zakat officers, asnaf entrepreneurs, business advisors and academicians. The outcomes of these research processes will be represented in many ways, among them are tables and graphics.

Basically there are three (3) types of case study which are (1) exploratory, (2) explanatory and (3) descriptive (Yin, 2003). This research will be using the exploratory case study in order to answer the 'what' challenges that asnaf entrepreneurship program faces in this current practices and 'how' to establish the Islamic entrepreneurship ecosystem that will benefit the society. Based on this methodology, the informants are from three (3) zakat institutions (LZS, MAIWP and MAIDAM) which consist of zakat officers, asnaf, business advisors/experts and academicians in this field. This research will use semi-structured interviews which will be conducted face to face. This will give further advantage in term of objectivity and focus (Merriam, 2009)

The researcher will use some guided questions as a prelude to the interview session in introducing the research and directing the discussion toward the issues of asnaf entrepreneurship program. After the interview, the researcher will proceed with a transcribing process meticulously by using 'Microsoft word' software. This report will be shared with the informants in order to reaffirm the contents that tallied to what be informed earlier in the interview process. Based on this method, it will strengthen the level of validity and trust ability of the received data. The results from the interviews will be used in preparing the conclusion for this research. It will answer the last objective of the research which is to propose 'Al-Qawiyun Al-Amin' entrepreneurship model of asnaf entrepreneurship programs among Zakat Institutions in Malaysia context.

The study focuses into these three (3) states which are Lembaga Zakat Selangor, (LZS), Majlis Agama Islam Wilayah Persekutuan (MAIWP) and Majlis Agama Islam dan Adat Melayu Terengganu (MAIDAM) as a scope of study. These three (3) states have put their effort not only to increase the collection through a lot of awareness programs but also to upgrade the eligible zakat recipient to the level of zakat contributor. The purpose of doing this is to upgrade the Muslims economy, to reduce poverty and to increase the number of zakat contributors.

LITERATURE REVIEW

The Underlying Theory of Asnaf Entrepreneurship

In this section, the researcher will discuss the theories which are related to this research. It will start with Theory of Planned Behavior (TPB) in discussing asnaf entrepreneur matter and to be followed with Resource Based View Theory (RBV) in focusing into the Zakat Institution perspective. Theory of Planned Behavior (TPB) was developed by Ajzen in 1985 (Ajzen, 2012) based on the Theory of Reasoned Action (TRA) which was expanded by Fishbein & Ajzen (1975). Originally, TRA proposed that there were two (2) variables that will stimulate the behavioral intention which were (1) attitude toward act or behavior and (2) subjective norms. In the case of TPB, the developer had added the perceived behavioral control as the third predictor in determining the behavioral intention. It was defined as the willingness of a person to execute certain specified action.

Meanwhile, RBV is a theory that was developed by Wenerfelt in 1984 (Usop, 2019) and promoted at the later stage by Barney (1991). It is known as a theory that promotes the sustainability competitive advantage of the entity or organization through four (4) practical indicators which are value, rareness, imitability and substitutability (Barney, 1991). According to Usop (2019), this theory used only four (4) main sources which are human resources, organization, physical resources and capabilities. These four (4) main sources are important in generating the competitive advantage of the entity or organization.

In detail, the resources are very important in determining the competitiveness of an entity according to this RBV theory. There are at least two (2) types of resources controlled by the entity which are tangible and intangible resources. The ability of the entity to generate the competitive advantage by using both resources is known as capabilities. Both theories are to be used respectively according to its suitability based on the needs and requirements of each angle.

As regards to the Islamic entrepreneurship, Kaye N & Hassan M (2011) mentioned that an Islamic entrepreneur is not much different from a normal entrepreneur, he or she is a mere business player but having certain guidelines and standards. He/she will only be involved in (1) productive and socially desired halal activities and (2) held responsible for the sustainability of the environment and natural resources. He/she will never be (1) greedy, (2) misled by misrepresenting products, concealing defects or misleading consumers, (3) hoard and (4) accept interest (riba). He/she will act at the best level of (1) decency, (2) honesty, (3) frankness, (4) compliance to the contract, (5) trustworthy. In other words, an Islamic entrepreneur is assuming to exhibit the best conduct of behavior and to carry out the business in the best halal entrepreneurial approach (Usop, Zainol, & Muhamad, 2018).

Concept Involves

According to shari'ah point of view, zakat is denoted as the activity of contributing a part of a person wealth to the other group of people based on their certain requirements as instructed by the Almighty Allah Azzawajalla (Zakat, Mara, Alam, & Manan, 2013). On the other hand, it also refers to the portion of wealth that is subjected under this contribution. According to Al-Nawawi as mentioned by Al-Wahidi (2008), this portion of wealth is known as zakat because it encourages the remaining wealth to grow and shields them from neglect. Furthermore, Ibn Taimiyah highlighted that zakat will improve the soul of the payer and will clean his wealth. On top of that, Al-Azhari mentioned that zakat also increases the inner and material of the poor concurrent to the positive impact to the donor (Qardawi, 2009).

Allah Azzawajalla has specified the recipients who are entitled to receive the distribution of zakat as stated in the Al-Quran: *"The alms are only for the poor and the needy (faqir and miskeen), and for those employed in connection therewith (amil), and for those whose hearts are to be reconciled (muallaf), and for the freeing of slave (riqab), and for those in debt (al-gharimin), and for the cause of Allah (fi-sabilillah), and for the wayfarer (ibnu sabil)-an ordinance from Allah. And Allah is all-knowing, wise."* (Al-Quran At-Taubah: Verse 60) (Mawlan Sher Ali, 2004)

Basically there are eight groups of people who are entitled for the distribution of zakat named as (1) faqir, (2) miskeen, (3) amil, (4) muallaf, (5) riqab, (6) gharimin, (7) fi sabilillah and (8) ibnu sabil (Al-Quran At-Taubah: Verse 60) & (Sofyani, 2019). The Islamic scholars especially the four schools of thoughts (al-mazahib al-arba'ah) have their own extension and limitation as regard to the definition and meaning of each group. There are some similarities between each other and also disputes. However, the dispute does not lead to the clash but an opportunity for the followers to choose and practice.

Part 1, Article 3 of Federal Constitution of Malaysia stated that the religion for the Federation (Federation of Malaysia) is Islam. Other religions are allowed to be practiced in peace and harmony. This constitution has positioned Islam in a very strategic condition which allows many parts of Islam to be properly implemented and executed.

Elements of the Entrepreneurship

Mapunda (2007) highlighted that Barringer and Ireland (2006) mentioned that many have wrongly assumed as regard to the facts of entrepreneurs are born to be and have some inherited

entrepreneurs elements but in reality it is not. Almost all individuals are potential candidates to become successful entrepreneurs. However, in real facts not all business establishments survive and succeed (Cooper, 1995).

On the other hand, there are a few common key elements of entrepreneurship as suggested by scholars that are usable for analyzing the capacity and capability of asnaf to become a successful entrepreneur. Among them are (1) the business reasoning (Markman & Baron, 2003) and (Saravathy, 2001), (2) the knowledge hiccup (Blais, 1997), (Ibrahim & Soufani, 2002) and (Yusoff, Zainol, & Hassan, 2018), (3) the experience hiccup (Abdul Halim et al., 2012) and (Hazlina, Jamaliah, Syarifah Norzehan, et al., 2012), (4) the entrepreneurship trait problem (Gartner, 1998), (Johnson, 1990), (Jovanovic, 1982), (Munoz, Welsh, Chan, & Raven, 2015), and (Papadaki, Chami, & Branch, 2002), (5) the ability to control problem (Rotter, 1954) and (W. B. Gartner, 1985; Shapero, 1975). (6) the ability to tolerate with ambiguity (Palamida, 2016), (Chattopadhyay & Ghosh, 2008) and (Morgan & Sisak, 2016), (7), the innovative and creative issues (Churchill & Lewis, 1983) and (Tehseen & Ramayah, 2015). (8) self-efficacy (Cassar & Friedman, 2009) and (Baum & Locke, 2004; Stajkovic & Luthans, 1998), (9) the entrepreneurial alertness (Hills, Lumpkin, & Singh, 1997) and (10) the attitude towards entrepreneurship (Gnyawali & Fogel, 2018).

The Challenges Elements of the Entrepreneurship

Many recognize the importance of a support system and business conducive environment to the prosperity and success of entrepreneurship. However, the appropriateness of the support system and types of the environment are not similar between each and every type of entrepreneurs. On the other hand, it shares the same scope and framework across the types of business

UNEP Finance Initiative Innovative Financing for Sustainability (2008) reported that the common failure of the business is due to the poor financial management (Drexler, Fischer, & Schoar, 2013), funding and financial issues (Harper, 1997 and Yousef, 1998), business management and entrepreneurship issues (Barringer & others, 2015 and Mapunda, 2007) and strategic and operational issues (Linder & Williander, 2017), (Hazlina, Jamaliah, & Syarifah Norzehan, 2012).and (Ramli, Ahmad, Wahid, & Harun, 2011) .

The Reliability Elements of the Asnaf Entrepreneurship

The success of the program is dependent on to the success of the content of the program itself. As regard to the asnaf economic development program in general and asnaf entrepreneurship in particular conducted by zakat Institutions, this is the addendum program which attached into original religious program i.e. zakat distribution, with the purpose of elevating the efficiency and effectiveness of the distributed zakat fund (Abdul Halim, Said, & Syed Yusuf, 2012) and (Zainol, Daud, Abdullah, & Yaacob, 2014).

On the other hand, zakat itself has its own purposes (also known as maqasid al-zakat) which are at least (1) to satisfy the distribution of wealth among societies, (2) to clean the wealth from others right and purifying their heart (3) to avoid the societal problem which caused by poverty and (4) to develop the Islamic identity (Al-Mubarak, 2016).

Therefore, the assessment on the reliability elements of the program is very important in identifying the strength and gap for the improvement. Thus, in this section, it will cover the aspect of fund and replenish-able (Ramli et al., 2011), sustainability (Kamali, 2016)., justice (Mohieldin, Iqbal, Rostom, & Fu, 2012), success rate (Abdul Hamid, 2013) and maqasid shariah (El-Mesawi, 2006; Nurmaizura Marzuki & Hairunnizam Wahid, 2017).

The Islamic Entrepreneurship

Islam is a religion of Allah that revealed to the prophet Muhammad SAW since more than 1400 years ago (Haneef, 1997). It consists of three (3) basic components which are Aqidah (faith and piety), Shari'ah - Islamic Law (activities and relationships) and Akhlaq – (code of conduct) (Kayed & Hassan, 2011).

Aqidah is about the consciousness of the existence of Allah SWT (The Creator) and the consciousness of His presence in all parts of our life (Ismail, 2012). Those with this faith are known as Mukmin. This Mukmin is required to follow certain requirements based on the guidance revealed by Allah SWT to the Prophet Muhammad SAW in order to perform ibadah (the act of obedience to Allah SWT) and muamalat (the human to human/mankind/other creatures' relationship) (D. Ahmad, 2012). This guidance is known as shari'ah with the purpose of guiding the human being to the comfort of the worldly life and hereafter (Hassan, 2011). Meanwhile, akhlaq comes forward as a code of conduct for human being to act among them, with other creatures and also with the Almighty Allah (Kayed & Hassan, 2011)

Entrepreneurship falls under muamalat (shari'ah category). The basic principle of muamalat is permissibility of everything except those forbidden by the shariah as compared to the ibadah which based on the basic principle of forbidden except those permissible by the shariah (K. Ahmad, 2009). As an example, all businesses are permissible except those involved in haram transactions such as gambling, riba and alcoholic drinks (muamalat). Meanwhile, Muslim is not allowed to create his own method of ibadah as an example to perform Zohor five (5) rakaats instead of four (4) rakaats as directed by the shariah.

The Islamic Entrepreneurship starts with the intention of seeking the pleasure of Allah and at the same time to gain halal income. As compared to the western entrepreneurship which is self-centred and individual profit oriented (Kayed N & Hassan M, 2011). In Islam, the entrepreneur will act according to the shariah by preserving the akhlaq of Muslims in gaining reasonable income and expending moderately for themselves and the ummah as a whole.

Furthermore, Allah SWT has laid down two (2) main factors in selecting the correct candidates to be appointed for certain appointments which are 'Al-Qawiyun' and 'Al-Amin'. These two (2) main factors are extracted from Al-Quran Surah Al-Qasas, verse 26 which means, '*One of the two women said, 'O my father, hire him; for the best man that thou can hire is the one who is strong and trustworthy.'*' (Surah Al-Qasas : Verse 26) (Mawlan Sher Ali, 2004).

RECONSIDERING ASNAF ENTREPRENEURSHIP PROGRAM THROUGH THE CONCEPT OF AL-QAWIYYUN AL-AMIN FOR ZAKAT INSTITUTIONS IN MALAYSIA

This research is conducted to examine the challenges of the current practices asnaf entrepreneurship program among Zakat Institutions in Malaysia. The past literatures have highlighted that entrepreneurship programs are among viable alternatives in developing the economy of the societies. Thus the followings are the propositions:

Table 1: A propositional framework Asnaf Entrepreneurship Program for Zakat Institution in Malaysia

Asnaf Entrepreneurship Program	Zakat Institution
Enhancement of the Asnaf Entrepreneurship Program	Developing the economy
Integration with the Entrepreneurship Elements, Recognizing the Challenges and The Reliability of the Program	Business and entrepreneurship efficiency
Assessing the Al-Qawiyun Al-Amin and The Islamic Entrepreneurship Environment	The Islamic Entrepreneurship Ecosystem and The Asnaf Entrepreneurship Model

1st Proposition: Through the enhancement of the Asnaf Entrepreneurship Program, mission to develop the economy may be achieved through upgrading the zakat institution;

2nd Proposition: Through the integration with the entrepreneurship elements, recognizing the challenges and the reliability of the program, mission to develop the economy may be achieved through upgrading the asnaf entrepreneurs and businesses;

3rd Proposition: Through the assessment of the Al-Qawiyun, Al-Amin and the Islamic entrepreneurship environments, a mission to develop the economy may be achieved to upgrade the zakat institution.

4th Proposition: The enhancement of the Asnaf Entrepreneurship Program requires business efficiency to upgrade the zakat institution;

5th Proposition: The integration with the entrepreneurship elements, recognizing the challenges and the reliability of the program requires business efficiency to upgrade the zakat institution;

6th Proposition: The assessment of the Al-Qawiyun, Al-Amin and the Islamic entrepreneurship environments may lead to the establishment of the Islamic Entrepreneurship Ecosystem and The Asnaf Entrepreneurship Model.

CONCLUSION

It This research aims to explain that the relationship between the asnaf entrepreneurship program and the zakat institution will give a positive impact to the development of the asnaf economy. The result of this research will improve the perception of the zakat stakeholders that the asnaf entrepreneurship program is effective in upgrading the economy of the asnaf in specific and the society in general. This research is also anticipated to be beneficial for the other zakat authorities to replicate the same program in their respective territories in empowering the productive asnaf.

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Exploration of Frontliners' Experience Wearing PPE during the Covid-19 Outbreak

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Received: 5th January 2021

Accepted: 10th February 2021

Published: 21st February 2021

Abstract

Safety health issues are at the forefront of dealing with infectious diseases during the Covid-19 crisis. In the context of this critical pandemic event, this study focuses on discovering frontliners experiences with Personal Protective Equipment (PPE) during the crisis. A thematic analysis has been used to identify themes and subthemes for this study. Researchers interviewed individuals to understand the experiences and reactions of frontliners dressed in PPE while on duty. The dominant themes documented in the study are as follows; physical discomfort, mental strength, the call of nature, dehydration and sweating, and communication interruption. Idealistic sacrifice and resistance working in difficult times during Covid-19 while serving the country ought to be appreciated and acknowledged by the nation.

Keywords: Frontliners, Experiences, Wearing PPE.

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INTRODUCTION

At hand is an escalating worldwide outbreak of a respiratory infection caused by a novel coronavirus known as Covid-19. This impact of the Covid-19 response in China is encouraging for the many countries where Covid-19 is beginning with small chains of transmission in many countries and large chains resulting in extensive spread in a few countries, such as Italy, Iran, South Korea, and Japan (Roy MA. et al, 2020). Most countries are likely to have spread of Covid-19, at least in the early stages, before any mitigation measures have an impact. The last similar pandemic of such terrible nature was the 1918 influenza outbreak. The recent outbreak of Covid-19 rampantly escalated in China and its universal spread has already impacted global health systems and the economy (European Centre for Disease Control and Prevention, 2020). Even though most Covid-19 cases were originally associated with travel, the intrapersonal spread is now being reported in other places all around the world. Tourists from China then spread the Covid-19 to other countries, causing the World Health Organization (WHO) to declare the epidemic a global health emergency on January 30, 2020 (World Health Organization, 2020). In China approximately 3,400 healthcare workers were infected with Covid-19, with at least 13 dying from the disease (State Council Information Office of the People's Republic of China, 2020). The infection numbers of Malaysian healthcare workers have reached 325, together with three deaths (Syafiqah, 2020). For the Ministry of Health, keeping their employees safe is not an option. Health Ministries around the world have upgraded their advice for healthcare

staff to tell them to wear more protective gear such as personal protective equipment (PPE). There was an exponential rise in reported cases seen in Italy and the United States. According to the Istituto Superiore Sanita, Italy had 12,462 confirmed cases and 827 deaths as of March 2020 (Remuzzi & Remuzzi, 2020). The United States also confirmed cases since February, with 4,226 cases reported 31.0% of cases, 45.0% of hospitalizations, 53.0% of intensive care unit admissions, and 80.0% of deaths occurred among the elderly (Centre of Disease Control, 2019). The pandemic's magnitude, resilience, and rapid transmission caught many by surprise.

LITERATURE REVIEW

According to current evidence, Covid-19 virus is transmitted between people through respiratory droplets and contact routes. The virus that causes Covid-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or speaks. These droplets are too heavy to hang in the air. They quickly fall on floors or surfaces. People can be easily infected by breathing in the virus if they are within one meter of a person who has Covid-19, or by touching a contaminated surface and then touching their eyes, nose, or mouth before washing their hands. It may also be spread by infected people who do not show any noticeable symptoms. Because the disease is easily spread, WHO has clear guidelines on the maximum Personal Protective Equipment (PPE) required for healthcare workers and frontliners (World Health Organization, 2020). A few months back most people did not know about PPE. But now, a lot of talks are centered

on insufficient PPE for frontliners during the Covid-19 crisis. Health Ministries all over the world, keeping employees safe is not an option. All frontliners such as doctors, medical assistants, nurses, and cleaners obligatory wear an apron, gloves, mask, and goggles every time they come within two meters of people who might have Covid-19. All healthcare workers working in or out of a hospital should wear a mask if there is a possibility, they are close to someone who might have Covid-19. Healthcare personnel in most Asian countries wear extensive protective gear evocative of that used for hazmat incidents.

The process of putting on and removing PPE is complex and requires practice. PPE for healthcare workers is more complex than that for the public and is dependent on the level of exposure to a Covid-19 patient. A wrong step may easily cause contamination. In China, nearly 3,400 healthcare workers were infected with Covid-19, with at least 13 dying from the disease. As of April 11 (2020), 224 healthcare workers in Malaysia were infected with Covid-19 (Adrian, 2020). A private hospital in Sungai Petani, Kedah had to shut down temporarily after a pregnant patient admitted for delivery failed to disclose that she was close contact with a Covid-19 patient (Gendeh & Wong, 2020). Investigations so far showed that none of these infections were caused by the handling of positive cases at Covid-19 wards, but were from within the community. PPE becomes even more significant in these circumstances. Everyone is presumed Covid-19 positive until confirmed otherwise, meaning that frontliners at the hospital should be permitted to wear PPE's in most situations (Gendeh & Wong, 2020).

Jonathan S. et al. and Wang et al., (2020) stated there are five main risk factors of Covid-19 transmission among healthcare workers been reported. The risk factors are the lack of personal protective equipment (PPE), proximity to contaminated patients, overload of work, poor control of infection, and the pre-existing medical conditions. As a significant risk factor for Covid-19 is inadequate PPE and Covid-19 risk factor among healthcare workers was exposure to infected patients, primarily through work in high-risk departments and contaminated fluid. Heinzerling A. et al. (2020) asserted that healthcare workers need to use PPE to minimize high risk of them exposure to the Covid-19 spread. Yansen (2020) also supported the work overload resulted in lack of rest, long-time exposure to infected patients and working under pressure also risk factors to healthcare workers. In addition, extended working hours also contributed to transmission of Covid-19 in Wuhan, China.

We have caught a glimpse of a brief explanation of Covid-19 crisis from the beginning of its transmission to the rational use of PPE in healthcare settings. The purpose of this survey is to understand and feel the experiences of frontliners dressed in PPE during the Covid-19 crisis.

METHODOLOGY

The method used for this study is qualitative in nature using thematic analysis. Thematic analysis was the most relevant to the aim of this study. It was believed a principally useful approach as it specifically identifying, analysing, reporting patterns and decodes numerous aspects of research issues (Braun & Clarke, 2006). The researchers conducted a qualitative study consisting of transient interviews to understand the experiences and emotions of frontliners

dressed in PPE while on duty during the Covid-19 crisis. Because of time being limited to working hours, to interview them properly was impossible. Permission granted earlier from the management and head of unit from the frontliners departments.

SAMPLING AND RECRUITMENT

The researchers recruited frontliners from different professions working in private health premises in Kuala Lumpur. A purposive sample of frontliners included those who were having experienced working during the outbreak of Covid-19 during the past two months from February to March 2020. The sample was derived from staff who have a break during lunch hour and volunteer to participate in the study. Following primary contact, participants were given an information sheet about the study. When they agreed to participate, consent forms were provided and received before arrangements were made for interviews. The participant was given the opportunity to ask questions both prior to and on the day of the interview. Written informed consent was obtained before each interview session to record and transcribe the interviews. Participants were informed that they could withdraw from the study at any time. To ensure confidentiality data was anonymized. The main goal of this survey was to focus on the characteristics of a population of interest, which will best enable researchers to address their research uncertainty. Inclusion criteria were designed to ensure that all frontliners were eligible to share their experience, affliction, and sacrifice. As a result, participants were from two different professions even with a small number of respondents.

DATA COLLECTION

The researchers conducted semi-structured interviews in the Malay language during the final week of April 2020. The interview guides were developed in English, then translated into Malay, then back-translated. The researchers then transcribed interviews word by word. Interviews conducted in Malay were translated into English after transcription. The researchers manually analyzed the transcriptions on a case-by-case basis, followed by a cross-case analysis of shared themes.

DATA ANALYSIS

Demographic characteristic

There were six female participants in this study. The participants' ages ranged from 25 to 48 years old. The socio-demographic characteristics are shown in Table 1. Four of the participants are married and on each was divorced and single. The majority of frontliners were in nursing (n=4), followed by general workers or cleaners (n=2) in the department. Most had been working in the department for over 5 years.

Table 1: Demographic characteristics of participants

Demographic	Frequency	Percentage (%)
Gender		
Female	6	100
Ethics		
Malay	4	66.7
Indian	2	33.3
Age		
25 - 48	6	100
Marital Status		
Married	4	66.7
Single/Widow/Divorce	2	33.3
Professions		
Nursing	4	66.7
General worker/cleaner	2	33.3

The questions primarily asked participants to explain their feeling and experiences wearing PPE while working for the past two months during the Covid-19 crisis. The participants reported details of their experience in PPE while working in the department handling Covid-19. We analyzed the interviews by assigning codes to mean units, structural and surfacing information, and views expressed in conversation. For applied thematic analysis, codes were grouped into subthemes and themes. These themes corresponded to the specific familiarity of wearing PPE during the Covid-19 crisis among frontliners. All researchers independently coded the data manually through case by case and cross-case analyses. The disagreement was infrequent and resolved through discussion. In this survey, researchers explored frontliners' reactions and experience dressing in PPE while handling potential Covid-19 patients. Exemplar quotes for each theme are displayed in Table 2. The results and analyses of the interview data revealed five major themes in the discussion of unpleasant of wearing PPE as follows:

- i. Physical discomfort
- ii. Mental strength
- iii. The call of nature
- iv. Dehydration and sweating
- v. Communication interruption

1. Physical discomfort

All study participants experienced a significant amount of unease when dressed in PPE while working in the department. Most of them reported feeling uncomfortable, especially when they must treat patients and doing several tasks, such as difficulty maintaining tactile sensitivity through gloves and moving from one place to another. Not only that, frontliners have faced challenges in wearing PPE, including difficulties in verbal communication and interactions with patients and family members. They said that in February 2020, during the beginning of the Covid-19 crisis in the country, most of them felt pressure to dress in PPE although it was not a common practice while treating the patients. In this study, all of the respondents were of a consensus that wearing PPE for 8 hours is exhausting due to the humid temperature of the country. The following quotes from the participants show that they have experienced similar problems.

- "And we need to be like this for 8 hours for one shift.... too long."

- "I have to wear this suit several pieces you know.... and my attire. Please imagine I have to wear this for the whole day and sometimes I have to work more hours."
- "Can you imagine dress in PPE you need to control to go to the toilet and cannot drink lots of water. And of course, you will feel exhausted."

All of them said that they were required to conserve PPE clothing by reducing the number of times they put it on, since PPE was in short supply, resulting in fatigue and discomfort. Many reports emphasized that pain or discomfort such as headache, facial pain, and ear lobe pain arising from tight-fitting face masks caused in limited permissibility for a prolonged period. Failing to meet their physical and emotional needs brought a sense of vulnerability.

2. Mental strength

Regardless of profession, all the participants in this study were of a consensus that they must be strong mentally while dealing with the situation, dress in PPE during the Covid-19 crisis. As general workers working in the crisis department, participants have the opinion that PPE is used to guard them against infection with the Covid-19 virus. They must tolerate the situation although they are uncomfortable and drenched in sweat.

Wearing PPE for a lengthened duration may result in dehydration among the staff. All the frontliners among the study participants involved with Covid-19 were required to attend training and demonstrate competency in putting on and removing PPE. They also have been required to follow the procedure to put on the PPE in a designated area. All the participants approved these circumstances. For those who work in the department, they must reorganize their life. Examples include drinking less water, consume healthy food, and cutting down on bathroom breaks with the purpose of preserve the PPE. The issues raised by the participants in these interviews showed that they must be more tolerant and endure the situation well. We have seen the emergence of psychological resilience, as the staff remain calm during the Covid-19 crisis and move on from the potential negative effects of PPE-related stressors. The following statements from the participants address these issues.

- "When all of this starts, we have to change our lifestyle in terms of food intake. And toilet training.....hahaha try to avoid the toilet."
- "I love to drink. Begin from now on, I have to train myself psychologically to drink less water and get rid of the toilet."
- "Now to wear the outfit we may take 2 to 3 minutes and we have to wear it in the particular location assign by the department. Another concern is, when you want to remove the clothes there is a procedure you need to follow."

The responsibility of risking their life while on duty need to be understood

In real world practice, donning of the PPE is often felt burdensome and uncomfortable by the frontline healthcare workers, especially if a long period of exposure to such equipment is necessary during the outbreaks of emerging infectious diseases.

3. The call of nature

All participants declared that they were worried about the toilet issues at the beginning of the crisis when the PPE was compulsory. They should manage and adapt well to the circumstances with resilience. One of the nurses mentioned that they must prevent habitual drinking and do that after tasks are complete. She continued by saying that less drinking is better to stop us from going to the toilet. The general workers added that most of the staff needs to eat, drink, and use the toilet before putting on PPE. All of them stated that they must train their stomachs and avoid toilet breaks. This situation is very challenging, but after a certain period of handling Covid-19 with PPE, most of them became accustomed to the circumstances and did not need a toilet break. Below are illustrative responses that were transliterated under this theme.

- "I have to do all the business with the toilet before I get into PPE. Or else, I will be in trouble."
- "Please get ready with nature's call. Organize our needs properly. I mean food as well. Try and avoid to pee and the major one after dressing in PPE."
- "It's a new thing and avoids the toilet especially when we are older than the rest of the staff. But, we manage to learn and organize ourselves to stay away from the toilet."

The participants felt helpless in the initial weeks of the outbreak, as little information about the disease and the methods of control were available from their previous education and training. Especially for the toilet issue, they too worried if they need to go the toilet while working. They avoid from having heavy meals before starting their task when on duty.

4. Dehydration and sweating

One of the major issues raised by the participants which are a subset of the comfort element is dehydration and sweating. During the Covid-19 pandemic, wearing PPE may have become the new normal for healthcare providers. For the healthcare workers' task, multiple layers of non-woven clothing, barrier fabrics, gloves, and eye protection are not optional, no matter how hot the environment happens to be. PPE may cause an increase in body temperature by preventing heat from being lost through sweat dehydration. A study from Doll (2017) stated that overheating due to PPE is quite common. All the participants have described that the main issue is dehydration when putting on PPE is compulsory. Not only dehydrated, sweating due to overheating when they do physical work contribute to uneasiness particularly with humid weather such as Malaysia. The multiple layers of protective clothing cause abundant sweating. Liu, Luo & Haase (2020) supported this situation when they reported that immense sweat levels among healthcare workers adopting PPE, increasing thermal distress, and fatigue during the Covid-19 crisis. As the condition progresses to dehydration, symptoms include lethargy, dizziness, weakness in muscles and dry mouth would appear too had confirmed by the participants in this study. All symptoms mentioned by the participants from the previous statement had the same results validated by (Houghton, Meskell, & Delaney, 2020). Besides, exposure to heat can result in heat cramps, exhaustion, and heat syncope. Study from (Wen, Qi, Lyon, Liang, Wang, & Feng, 2020) and (Jiang, Song, Zhou, Liu, Chen, & Bai, 2020) exaggerated the situation that dehydration from overheating and sweating can cause heat illness, ranging from a mild heat

rash to a life-threatening heat stroke as well as unconscious or syncope (Kooblall, Cadogan, Hopkins & Casserly, 2020).

Most nurses revealed that they must control drinking while working. The general workers added that less drinking is better to stop them from the toilet visit. Both professions disclosed the condition of controlling liquid intake contribute to dehydration too. One of the participants realized that the dehydrated issue occurs because they are cutting drinks in order not to waste PPE and raising the risk of dehydration. Another participant also reacts that those working on her ward were afraid to take off their masks to drink because this means that they must throw it away after drinking. Furthermore, Jiang et al. (2020) mentioned that hefty sweating and extensive period of wearing PPE during work would cause skin injuries. One of the nurses has sensitive skin. She said that red marks and bruises on her face (face shield) can be detected after wearing PPE during long shifts as well as blemishes too around the mouth (mask). The general workers have encountered a different problem. For them, gloves are a vital issue when performing their tasks. They develop skin irritation and sweaty hands when wearing gloves but immediately remove them, wash their hands, and consider alternatives. The nurses added that those involve with surgeries are more tough and difficult. Because a prolonged period during an operation may cause health care workers fatigued and dehydrated due to excessive sweating. The following quotes from the participants show that they all had the same problems:

- "You may feel thirsty, exhaustion, dizzy, and your energy decrease...you may feel it for several hours of working."
- "You see my skin but only several parts I felt so itchy after dressing in PPE about 8 to 9 hours."
- "Gloves. It makes our work slow. Sweaty hand another issue for me."
- "Blemishes around my mouth because of the mask."

It is essential to understand that operating in PPE is not simply working in an intolerant environment especially dehydration and sweating. They knew that the treatment must go on and they cannot risk patient safety.

5. Communication interruption

Wearing a protective face mask as a part of PPE makes communication much harder to understand. People cannot see frontliners mouth moving so patient or colleagues may not be aware of our speech, may sound a bit inaudible and it is much harder to read facial expression when only the eyes are visible. Wearing a face mask makes recognizing people very difficult as their faces are hidden. Most of the nurses from this study come to an understanding that the difficulties in verbal communications and interactions with patients and family members are encountered by them while in a PPE suit. With the challenge of a mask and face shield, interactions with the patients must be repeated especially with the elderly. They said that most of the staff have to be more patience and talk a bit louder to those patients and colleagues as well so that they may listen clearly. Grote and Izagaren (2020) have verified this situation when the use of masks has made communication between patients over the age of 70 with healthcare professionals harder. One of the participants declared that in

a medical emergency that requires PPE to be worn, and where safe and effective communication is essential, this difficulty is a concern for those involved with it. Many studies have shown that almost 70% of communication is based on non-verbal indications from eye contact, lip patterns, facial expressions, and body gesture which are essential for anyone as well as people with communication difficulties. Parush, Wacht, Gomes, & Frenkel (2020) supported this situation when they managed to confirm an effect of PPE discomfort has influenced the communication difficulties, explicitly in hearing and understanding speech. Another circumstance given by the nurses in this study is the intubation process is likely to be challenging given the need to wear PPE. The difficulty of communicating in a large group in PPE and the technical difficulty the intubation medical practitioner may face operating in PPE. Thampi, Yap, Lijia, & Ong (2020) have organized simulation training working in PPE. for patient's intubation. They have found that communication to be specifically challenging during the simulation training sessions due to the incapacity to hear. And when the family members of Covid-19 patients call on the telephone, they must answer, but in an awkward situation due to the suit. They must remove the mask and face shield to answer the call and put it on again. In this

study, all of them approved that wearing PPE downgrade the communication effect not only with the patients but also with the teammates too. Relevant excerpts from the interviews are as follows:

- "A bit difficult to talk to the patients especially the elderly. They cannot hear us, so we must speak out loud. Because of the mask, they cannot read our lip too."
- "Another issue is to talk among colleagues. Face shield and a mask covering our mouth cause to disadvantage. We cannot hear clearly what the other party speak."
- "Main problem if any of us involved with the operation task. The instruction is given by the superior, we cannot get distinctly. For me, I personally afraid I could make a mistake with this situation."

The participants highlighted the difficulty in understanding every word from the mouth due to PPE attire. They have to speak outload not only to the colleagues but also to the patients.

Table 2: Transcriptions and themes from the interview

Main themes	Sub-themes	Interview transcriptions
Physical discomfort	<ul style="list-style-type: none"> Uncomfortable Astronaut Exhausted Many pieces Hot 8 hours New suit Awkward Discomforted 	<p>"Very uncomfortable especially if you want to go to the toilet. And of course, to drink as well. I am psychologically and physically exhausted with the PPE. But we have no alternative.</p> <p>"You just like an astronaut...so many pieces and you will feel so hot. You know that our country already with this kind of temperature...so imagine so many pieces at one time for 8 hours."</p> <p>"For me as general workers, it's a new suit. You feel awkward and discomforted. But we have no option. Compulsory to wear especially do all the cleaning part in the department related to Covid-19."</p>
Mental strength	<ul style="list-style-type: none"> Our life Organize our stomach Food Drinks Too long Difficulty to do the job quickly Illustrate the situation Time-consuming to wear and strip off Specific location Procedure to follow 	<p>"Several main issues that the public need to think about us when doing our job. Of course, in our life as healthcare workers, to organize our stomach, I mean food and drinks. Especially drinks. And we need to be like this for 8 hours for 1 shift too long."</p> <p>"Normally when I go and treat the patients it's easy with our uniform. But now hahaha the outfit sometimes give you difficulty to do the job quickly. For example, the glove instead of our hands and fingers in dealing with health facilities.</p> <p>"Now to wear the outfit we may take 2-3 minutes and we have to wear it in the particular location assign by the department. Another concern is, when you want to remove the clothes there is a procedure you need to follow...Donning...doffing..."</p>
The call of nature	<ul style="list-style-type: none"> Prepare physically and mentally Toilet calling Do your business before dress in Organize our need properly Its program naturally Manage to learn Stay away from the toilet Several pieces Sweating Thirsty 	<p>"We have to prepare physically and mentally in managing ...hahaha toilet calls. So be prepare and if possible do your business before dressing in the outfit."</p> <p>"Please get ready with nature's call. Organize our needs properly. I mean food as well. Try and avoid to pee and the major one after dressing in PPE. In the beginning, it's hard to manage from visiting the toilet. But after several weeks its program naturally."</p> <p>"As a cleaner, certainly we have a problem with the toilet issues. It's a new thing and avoids the toilet especially when we are older than the rest of the staff. But, we manage to learn and organize ourselves to stay away from the toilet."</p> <p>"I have to wear this suit several pieces gloves, apron, face shield, etc... you know and my attire and sweating of course and smelly too."</p> <p>"Several pieces of cloth with PPE and our weather. My God, it's so terrible sweating and needs to control drinking habit."</p> <p>"You may feel thirsty, exhaustion, dizzy, and your energy decrease...you may feel it for several hours of working."</p>
Dehydration and sweating	<ul style="list-style-type: none"> Exhaustion Energy decrease Dizzy Control drinking 	<p>"Gloves. It makes our work slow. Sweaty hand another issue for me."</p> <p>"Blemishes around my mouth because of the mask. Sweating around my mouth."</p>

Communication interruption	<ul style="list-style-type: none"> Speak Out loud Read Lip Difficult Hear Clearly Repeat Instruction Distinctly 	<ul style="list-style-type: none"> "A bit difficult to talk to the patients especially the elderly. They cannot hear us, so we must speak out loud. Because of the mask, they cannot read our lip too." "Another issue is to talk among colleagues. Face shield and a mask covering our mouth cause to disadvantage. We cannot hear clearly what the other party speak." "We have to be extra endurance and patience. When we speak to the patients they seem to get us to repeat the instruction given." "Main problem if any of us involved with the operation task. Instruction given by the superior, we cannot get distinctly. For me, I personally afraid I could make a mistake with this situation."
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DISCUSSION

Lai J. et al. (2020) mentioned that different backgrounds and professions have been infected either from patients or in the hospital. Wingfield and Taegtmeier (2020) declared that healthcare workers have the concern that they can be a transmission agent to others, which has contributed to distress among them in Liverpool. They also mentioned the same situation in China among healthcare staff. As human beings, we express thanks to the healthcare workers for their noble contributions and sacrifices. They have shared their experience dressing in PPE with less major effects in terms of dizziness, thirst and hunger, difficulty concentrating, restricted respiration, toilet break mobility or other problems. The physical and mental resilience among the healthcare workers while serving the nation must be valued and appreciated. The principle of this survey is to understand and be familiar with the experience of frontliners dressed in PPE during the Covid-19 crisis. The intention of this study is similar to that reported by (Gordon & Langmaid, 1988), as the idea of qualitative research is centrally concerned with understanding things rather than with measuring. WHO has recommendations which emphasize the importance of rational and appropriate use of all PPE for frontliners during the Covid-19's crisis.

Therefore, frontliners need to take responsibility to properly use PPE while dealing with Covid-19, and management should ensure that the staff members they supervise make proper use of PPE (World Health Organization, 2020). Additionally, WHO also vouches for staff training due to these practices being uncommon to most of the staff. In this study, all participants have reported that they felt discomfort with PPE while treating patients and doing most of the work in the department (Windarwati, Ati, & Paraswati, 2020; Ong et al., 2020; Yuan et al., 2020; Yuzana, Zakirah & Azliha, 2020).

The issues that they mentioned are an adaptation to the situation such as managing toilet visits, organizing food and drinking intake, dehydration and exhaustion, and difficulty in working in a humid environment. Whatever issues that they discussed with researchers, they follow PPE procedures to protect themselves from getting Covid-19. This situation is happening presently and is being experienced by frontliners all over the world. Workers wear PPE and follow the rules because they should believe it is the right thing to do (Cook, 2020). To put it briefly, physical and psychological resilience among frontliners while serving the nation during Covid-19 must be respected and appreciated.

CONCLUSION

This survey has provided several healthcare workers an opportunity to share their personal stories about working during the Covid-19 crisis as frontliners in the country. The ability of frontliners to work in PPE is deserving of respect as

they save lives. However, further studies could focus more on the demographic issues such as male and several other professions as frontliners. In addition, more research would need to be conducted with larger samples so that generalizations could be made to the Malaysian workforce more generally during the Covid-19 pandemic. These results have shown the resilience of the frontliners and their capability to work through tough times during Covid-19 and come out unharmed. Resilience brings skills to adapt to changes in the work environment among frontliners in these circumstances.

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Mitigating the Effect of Covid-19 on the Society Through the Islamic Social Finance

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Received: 06th January 2021


Accepted: 02nd February 2021

Published: 18th March 2021

ABSTRACT

As at the end year of 2019, the Covid-19 pandemic outbreak had caused an unparalleled human crisis around the world. The disease is causing not just a health problem but also an economic crisis. Numerous countries fell into meltdown and more people fell into poverty. The government may not be sufficiently and solely able to take the economy back to its track. The concentration has now moved from the spread of the virus to the economic consequences the pandemic brought upon the community. Therefore, the aim of this study is to conceptually explore the role of Islamic Social Finance (ISF) in mitigating the effect of the Covid-19 pandemic on the people and the entire community. The method employed by the study is the review of past literature to enable the study to gain insight into the role of ISF. Based on the insight from literature, the study document that Islamic social finance via zakat and waqf decreases the effect of the Covid-19 pandemic on society. Specifically, the study found based on reviewed literature that zakat is positively associated with a decrease in the effect of the pandemic on the people. Similarly, the study found that waqf is positively related to the decrease of the effect of the Covid-19 pandemic on the people and the entire global economy. The study has contributed to the body of knowledge by looking at the role of ISF in terms of the effect of the Covid-19 crisis on the society which is still an ongoing phenomenon. The study has implication for the government and policy-makers in terms of adopting Islamic social finance principles and products to address the Covid-19 crisis, thereby enhancing the social wellbeing of the people and the development of the global economy.

Keywords: Covid-19 pandemic, Islamic Social Finance, Zakat, Waqf

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INTRODUCTION

In the first quarter of 2020, a transmissible virus known as coronavirus was discovered in Wuhan City, China. The case was there since December 2019, however, the news just started spreading at the beginning of January 2020. Since the circulation of this deadly virus, the World Health Organization (WHO) was motivated to announce it a world pandemic. On January 10 2020, the causes began to be obtained and identified the hereditary code, named as new coronavirus. The ensuing research has indicated a connection which is near the coronavirus that caused "Severe Acute Respiratory Syndrome" (SARS) in Hong Kong in 2003. At that point, WHO named it as the novel coronavirus (nCoV-19). The contagious virus is transmitted directly from human to human transmission, which results in the fast increment of the positive cases. On February 11, 2020, WHO named this virus covid-19 (Hambari, Arif & Zaim, 2020). Covid-19 is another sort of corona contagion which was not discovered previously in human. The major source of this disease is yet unknown, however, considering the past encounters, it must likely be transferred to the human from animals. Basically, it is a large disease that has basic symptoms like cough, normal cold, to more critical illness like SARS. As time passes and passing

hour, the adverse impact of this covid-19 is manifoldly increasing (Haider Syed, Khan, Raza Rabbani & Thalassinou, 2020). The spread of covid-19 pandemic has prompted the rise of several policies taken by the public authority such as the policy of maintaining distances or social distancing from larger numbers of people. These policies are considered to be factors that can greatly slow the spread of the deadly covid-19 illness. The approaches to handle the spread of covid-19 universally have multiplier consequences on several aspects of life not only towards health but also towards other aspects such as economy, small and medium enterprises (SMEs), industries, business and all the socio-economic sectors around the globe (Ferdaus, Hidayatullah & Zahrati, 2020; OECD, 2020).

Other consequences of Covid-19 like the economic meltdown; closure of borders and shops; restriction of movement; absolute inhouse lockdown of people; and the suspension of economic activities severely affected the global economy negatively (Koonin, 2020; McKibbin & Fernando, 2020). Consequently, there has been tumbling stock markets, the interest rate is slashed by central banks, and the industrial production is nearly zero, thereby leading into enormous loss

of a job, hence a financial catastrophe is around the corner (Segal & Gerstel, 2020). As the issue at hand is obvious to everyone, the amount of damage to be done by this pandemic will greatly depend on the measure of remedial activities taken by the government to minimize the damage. Otherwise, the coronavirus as affirmed earlier will to adversely affect the country's economy, SMEs and industries (Segal & Gerstel, 2020). Along these lines, it was anticipated by economic scholars that there is no particular time and date for the end of the pandemic. Furthermore, the effect of covid-19 on the economy may probably place numerous people in poverty. There will be a lack of food because of the disturbance of agricultural products and less of food importation because of movement restrictions. Therefore, Islamic finance has an aggregate task to perform in rebuilding the country after decimation by covid-19 through Islamic social finance. Islamic social finance is important in addressing the current challenges and resuscitating the global economy. Islamic finance has great potential like capitalizing on Islamic social financial mechanisms such as waqf and zakat. As such, the objective of this study is to conceptually explore the role of Islamic social financing in mitigating the negative effect of Covid-19 on society. Hence, the extant literature on Islamic social finance indicates that zakat and waqf enhance the wellbeing of the society in a critical situation similar to the pandemic (AbdulKareem, AbdulGaniyy, Mahmud & Yazid, 2020). So, Islamic finance can equally serve as a mechanism to alleviate hardship and provide relief to the community during and after the covid-19 pandemic.

Therefore, Islamic social finance from the perspective of the effect of Covid-19 has theoretical and practical significance. This is because the concept of Islamic finance in relation to the effect of the pandemic on the society still calling for scholarly attention. Moreover, Islamic social finance via Zakat and waqf practices have played a significant role in the provision of economic and social wellbeing thereby mitigating the suffering of the people and the society. This is, the adoption of the zakat and waqf in various countries enables the amelioration of the impact of the deadly virus among the people. The remaining part of the study is outlined thus: literature review, methodology, result and discussion and lastly the conclusion.

LITERATURE REVIEW

Conceptual definition

The covid-19 pandemic appeared at the beginning of 2020, which attacks human life and rapidly transforms into a universal pandemic. It is an acronym in which 'CO' represents corona, 'VI' stands for virus, and 'D' is for the disease. The diseases were called 2019 novel coronavirus or 2019-nCoV. The Covid-19 virus is a new virus which is linked to the same family of viruses as SARS (Hambari, Arif & Zaim, 2020). It has resulted in involving various dimensions such as lifestyle, social, economic and health crises. Furthermore, covid-19 has led to an increase in the level of unemployment, poverty and development of many social problems, thereby limiting government spending. Several people in various countries face difficulties in life. Hence, this study is complementary to

past studies which have similar theory and issues in their discussions concerning Islamic social financing model based on zakat and waqf mechanisms for covid-19 pandemic economic recovery (e.g. Hudaefi, Junari and Zaenal, 2020; Ferdous, Hidayatullah and Zahрати, 2020; Ainol-Basirah and Siti-Nabiha, 2020). Islamic Social Finance (ISF) is contemplated as a means for mitigating the Covid-19 effect. According to Azman and Ali (2019) defined ISF "as a sector comprising traditional Islamic institutions based on philanthropy - zakāt, ṣadaqah and waqf; institutions based on mutual cooperation e.g. qarḍ and kafālah; and also the contemporary Islamic microfinance institutions"(p. 49). The scholars emphasize the primary objective of ISF which is "to meet the needs of the poor and to make a dent in their ever-rising levels of poverty. Economic justice, inclusive participation and shared prosperity are the principles behind ISF" (Azman & Ali, 2019, p.49). The principles of ISF originates from the value of Islamic philanthropy that incorporates standardized giving behaviours to attend to the needs of the unprivileged. This is consistent with the view of the United Nations that ISF helps the government as well as communities to actualize a wide range of needs for development (Azman & Ali, 2019)¹. From this perspective, zakat and waqf can be one of the social wellbeing nets that conceivably assist vulnerable people in different forms such as food, education, health, and the survival of SMEs. This is because, according to Azman and Ali (2019), "zakat with its defined set of beneficiaries in need and rapid disbursement, can be vital for crisis response. While waqf is well-suited for building resilience through institutions, infrastructure, and permanent sources" for funding similar crises like the Covid-19 and this is in agreement with the view of the United Nations Development Program in its Sustainable Development Goals (SDGs).

The concept of Zakat was based on the annual payment under Islamic law regarding the creation of wealth which is used for religious as well as charitable purpose as one of the five tenets or pillars of Islam. Faafar (2017) stressed that Zakat is one of the five pillars of Islam alongside the other four pillars². Zakat is derived from the Arabic word of (زكى) or (زكو) which indicates to be pure, to increase and to grow. Zakat literally denotes righteousness, honesty, integrity, purity and growth (Faafar, 2017). Qaradawi (1999) described zakat as required by Allah to be given to those that are eligible (the poverty-stricken) as mentioned by Allah. Zysow (2012) defined zakat payment as the obligation for the benefit of recipients of zakat, for instance, the poor, the collector, and the travellers. All the Muslims who are qualified to pay zakat must pay a minimum 2.5% of their wealth every year to poor people, destitute, needy and others. Zakat is an obligatory charity instrument is Islamic finance that can be utilized multi purposely, mostly for poverty alleviation among Muslims society (Hassan & Ashraf, 2010). Al-Quran has mentioned eight (8) recipients of zakat, however, there is consensus among jurists that the most significant of zakat can be used for alleviating poverty by paying it to the poor and needy. Zakat is significant in Islam and it is mentioned more than 30 times in Al-Quran (Haider Syed *et al.*, 2020). Allah says in Surah Al-Maida, Verse 12:

¹ Islamic social finance: The Future of Humanitarian Partnership?, "bond.org, accessed on 9 June 2019, <https://www.bond.org.uk/news/2019/02/islamic-social-finance-the-future-of-humanitarian-partnership>.

² Shahadah (Belief in Allah and there is nobody to worship except Allah), Salah (five times daily prayers), Sawm (fast in the month of Ramadan), and Hajj (Islamic pilgrimage).

“Behold, I am with you; if you establish Prayer and pay Zakah and believe in My Prophets and help them, and lend Allah a good loan, I will certainly efface from you your evil deeds, and will surely cause you to enter the Gardens beneath which rivers flow. Whosoever of you disbelieves thereafter has indeed gone astray from the right way” (Surah Al-Maida, Verse 12).

Consequently, in the context of the present study, Zakat is seen as a mechanism for alleviating or mitigating the poverty, suffering, and other difficulties created by the Covid-19 pandemic.

Similarly, waqf is one of charity that is highly recommended in Islam. Documentary and literature have demonstrated that waqf is one of the significant instruments used for social development. The idea of waqf emanated from the Arabic word of “*waqafa*” which means the opposite site or stall on the place. Literally, it signifies “causing a thing to stop and standstill”. It likewise means to make it dependent on, keeping, stop, holding and detention (Abdulkareem, Mahmud, AbdulGaniyy & Aliu, 2020; Baalbaki, 1988). Technically, waqf implies confinement of something specifically by the owner or waqf institutions that all the benefits derived from it should be given as a charity for the benefits of the needy, for the sake of Almighty Allah and with intentions of getting rewards from Almighty Allah (AbdulKareem, Ogunbado, AbdulGaniyy & Mahmud, 2019; Gwadabe & Ab Rahman, 2020). Therefore, the concept of waqf could be deployed in the Covid-19 case to alleviate its negative effect on the economy and the wellbeing of people.

Impact of Zakat to the Social Development

Suprayitno, Aslam and Harun (2017) conducted a study in Malaysia regarding zakat and sustainable development goals in five (5) states in terms of human development. The study document that zakat enhances human development as it increases the wellbeing of the less privileged. The author further stressed that zakat is one of the most significant sources of fund available within the financial system and Islamic economic; it is the main income for Muslims countries besides tax such as agriculture products tax, land tax and others. Moreover, Zakat is a wealth distributed to ‘the have-not’ following the ordinance of Allah which is in accordance with the Al-Quran, Sunnah and teachings of Islam (Suprayitno *et al.*, 2017). Another study by Hidayatullah and Priantina (2018) described that zakat can be distributed to victims of disasters. From this perspective, the Covid-19 pandemic has been considered as a disaster, hence it is conceivable to use funds of zakat to assist the people affected. In an investigation of the role of zakat in mitigating the effect of Covid-19, Hambari, Arif and Zaim (2020) posit that zakat is one of Islamic social security fund that is required by the society in the face of the present pandemic globally and Malaysia specifically. The scholars re-emphasize that zakat organizations should focus on the Covid stricken communities and places to fulfil their necessities in ameliorating its effect by providing health facilities, education and awareness, food and other relevant materials.

In their own submission, Chamani, Anshory, Hudaefi, Junari and Zaenal (2020) affirmed in a report that zakat institutions have a significant and vital role to assist the public authority in preventing the impact of covid-19 in the economy given its position as a charitable organization. This vital role can be

executed in different dimensions such as education and social orientation to enhance the wellbeing of the people affected by the pandemic. Among the suggestions for institutions of zakat is the health sector, regarding a zakat institute for the study and provisions of vaccine for the covid-19 pandemic to forestall the spread of the disease. Moreover, the study conducted by Chamani *et al.* (2020) in the capital of Malaysia demonstrates that zakat institution has played an important role in assisting people during the covid-19 pandemic. This can serve as a reference for other countries to take zakat as essential mechanisms for social financing. With collaboration with several parties, the procedure of overcoming the covid-19 pandemic will be lighter (Hambari *et al.*, 2020). As clarified in the above mentioned, it is obvious that zakat has an important role in preventing a covid-19 pandemic. In the same vein, Hambari *et al.* (2020) posit that several people in various countries face difficulties in life. Zakat is one of Islamic social financing that can play an essential role in overcoming the difficulties by providing supports to societies. Besides, the institutions of zakat in Malaysia play a significant role to help the government in dealing with the covid-19 pandemic in the country. During the period of implementation of movement control order (MCO) by the government, zakat institutions provided fund to assist people through the different programs for the victim of covid-19 (Hambari *et al.* 2020). This effort demonstrates that institutions of zakat have an important role to play by assisting people amidst the crisis and beyond.

Further, an Indonesian investigation relating to the use of zakat to cushion the effect of Covid-19 and other related crisis by Sulaeman and Ninglasari (2020), recommends that zakat could assist the government and policy-makers in their plans to mitigate or minimize the negative effect of the deadly pandemic. Similarly, Ibrahim (2015) in his study entitled investigating the role of Zakat in Establishing Social Welfare and Economic Sustainability found that zakat plays a significant role in mutual assistance to Muslims communities. That is, zakat assists to redistribute wealth, reduce inequality, alleviate poverty and as well assist in demonstrating the willingness of the rich Muslims to submit themselves to the commands of the Almighty Allah by worshipping Him and assist in implementing His injunctions. This view was equally upheld by Owoyemi (2020) in another study relating to zakat management in Nigeria. Ferdaus, Hidayatullah and Zahrati (2020) examine business incubation Model based on Productive Zakat for Economic Recovery of SMEs for Post COVID-19. The study strongly emphasizes on the utilization of zakat product for community development schemes which has gigantic potential in reestablishing the economy of the people affected negatively by the covid-19 pandemic. It is demonstrated by the authors that zakat in Malaysia helps various people during the MCO by offering various innovations and empowerment for the community-based business programs that can provide multiplier impacts on the community. More so, the outcomes of the study conducted by Haider Syed *et al.* (2020) shows that Islamic social financing has enormous potential to fight any sort of pandemic, especially through Zakat which has proved to be an effective mechanism to fight the covid-19 pandemic around the world.

Likewise, Islamic social finance has great potential and variety of economic mechanisms including zakat that can effectively alleviate the suffering of the Muslim communities (Noordin 2018). In a similar vein, zakat has been one of the Islamic social programs that have a significant role to safeguard and

promote Muslim wellbeing during the period of the caliphate. The zakat management and distribution during the second caliph was efficient and effective to the extent that zakat was offered to all the needy in communities (AbdulKareem et al., 2020; Ashurov, Alhabshi, Othman, Habibullah & Yusof, 2020). All these demonstrate that zakat can play a potential role in improving the wellbeing of communities especially during the covid-19 pandemic and after.

Impact of Waqf to the Social Development

Waqf is one of the major Islamic economic mechanisms utilized for the socio-economic development of communities. Waqf involves "religious endowment" which likewise alludes to a devout or charitable donation. Generally, waqf has been the mechanism for social development that incorporates maintenance and provision of mosques, libraries, scholarships, shops and educational institutions (AbdulKareem, 2017; Kahf, 1998). Also, waqf serves as an instrument for eradication of poverty and socio-economic development of Muslim societies. Awqaf institutions, which are plural of waqf, play an important role in the history of Islam, starting from the era of Prophet (SAW) up to 19th century. The waqf institutions have significant impacts on the social lives and economy of many societies. It has established a network which covers all the areas of human life such as education, health, religious, social and economic sectors (AbdulKareem et al., 2020; Gwadabe & Ab Rahman, 2020).

Ihsan and Ibrahim (2011) stated that waqf has been portrayed as a powerful concept discovered by the academicians and Islamic scholars as an essential instrument for the wellbeing of the masses. For a long time, waqf has played a significant role in the social development and economy of different Muslims societies. Thus, "its popularity as a unique and progressive development tool shows a decreasing trend in the Muslim community nowadays" (Mahat, Jaaffar & Rasool, 2015, p.295) based on challenges that are in the process of been overcome. Moreover, waqf experiences innovative changes in its instrument with the establishment of various waqf products that accommodate the wellbeing and needs of the communities and revive the economic circumstances that seem vigorous in the contemporary worldwide economic meltdown (Suhaimi & Ab Rahman, 2014). In a study conducted by Khalil, Ab Rahman, Thaidi and Rahman (2020), waqf could ease the burden faced by the community during and after enforcement of MCO in Malaysia. The benefits of waqf are not only to the advantage of community and society but also to the public authority and country development. More so, Ainol-Basirah and Siti-Nabiha (2020) investigate waqf projects and income generation by institutions of waqf in Malaysia and found an improvement in its application in mitigating the suffering of the vulnerable people during the pandemic. However, the authors suggest further improvement on waqf to meet the post-pandemic needs of society to stabilise the economy.

Faturohman, Rasyid, Rahadi, Darmansyah and Afgani (2020) explore the application and potential of waqf institutions in the Islamic Development Bank in Indonesia, Malaysia, Kuwait and Egypt. The outcome of the study revealed that waqf can support financial activities through the waqf properties use for various purposes, for example, infrastructure, health, food and education. In the same vein, the efforts to stimulate community economic empowerment could be achieved through cash waqf for financing SMEs. Also, the contribution and role of

cash waqf can grow local economic activities according to the potential of regions (Merlinda, Qurrata, Yusida, Purnamasari, Seprillina & Hussain, 2020). Besides, the waqf mechanism plays a significant role in Muslim communities as it assists the poor, the orphans, and the aged through the provision of business activities, health, training and education (Razak, 2020). In his submission, Ratnasari (2020) posits that waqf can play an important role to improve various activities such as waqf hospital particularly for Covid-19 pandemic victims, waqf isolation house, waqf polyclinic, waqf masks, waqf universities, waqf ventilators and others.

METHODOLOGY

This study is conceptual and it explores past empirical and theoretical studies conducted on the concepts of Islamic social finance such as waqf and zakat as mechanisms to alleviate the impact of the covid-19 pandemic on the individuals and the economy generally. The main method employed is the review of extant literature to deduce or gain more insight into the roles of ISF in mitigating the effect of the Covid-19 pandemic. Consequently, the study examines previous articles and relevant materials from reputable journals, textbooks, newspapers and internet sources on the concepts of zakat and waqf which are principal instruments of ISF. Based on insight arising from the findings of previous literature, the study deduces its proposition and conclusion.

RESULTS AND DISCUSSIONS

Based on the literature reviewed above, it can be considered that Islamic social finance can counter the emerging danger of Covid-19 pandemic. This is because extant literature document evidence of the positive and favourable association between Islamic social finance in the form of zakat and waqf and social development. To this effect, Zakat and waqf are vital concepts in Shariah or Islamic law that have enhanced the economic development of several nations via poverty alleviation and equity in wealth redistribution. This is based on the fact that Zakat is one of the five key pillars of Islam which entails the mandatory payment of the minimum of 2.5% of the wealth of qualified Muslim faithful. Hence, the objective of distributing zakat is to alleviate poverty and to help the poor to meet their basic needs particularly during the pandemic emergency (Hanum, 2019). This is consistent with the general view that zakat is not just for religious activity, but a fundamental mechanism to accomplish social-economic development (Retsikas, 2014). Therefore, via zakat distribution, economic growth could be accelerated and the underprivileged empowered and this is applicable to tackling the effect of the pandemic during and after the Covid-19 economic crisis. As such, zakat plays a crucial developmental role in the society by strengthening and uplifting vulnerable communities through self-empowerment and several other types of intercession. On the other hand, the insight from past investigations reveals that waqf is also an important tool of social wellbeing that conceivably assist susceptible populace in different sectors such as SMEs, education, and health as well as cushioning the effect of the pandemic. Hence, waqf is known as a voluntary mechanism for helping the general public as events and situations permits (Faturohman et al., 2020).

Islamic social financial mechanisms in this regard are premised on the establishment and provision of a better environment as well as ensuring the safety of the lives and dignity of the human being. These can be done by providing

the zakat and waqf based fundamental necessities desirable for economic upgrade and health care services for the improvement of individuals and their comforts due to the economic crisis occasioned by the Covid-19 pandemic. The present study based on insight from prior literature concludes that zakat and waqf have played a very significant role in reducing or mitigating the difficulties of the people and society during and after the Covid-19 pandemic. It is therefore evident that zakat and waqf have provided greatly to meet the needs of the vulnerable in the form of medical facilities (such as ambulance, medical equipment and isolation centres) to curb the spread of the deadly virus Covid-19. Also, through zakat and waqf financial supports were given to the victims of Covid-19 to mitigate their afflictions thereby enhancing their survival. Hence, through zakat and waqf funds were given to the poor people who were affected by the pandemic to re-start businesses that were endangered by the imposition of lockdown and various restrictions by the government to prevent the spread of the virus. More so, the study discovered that zakat and waqf have potential immunity in curbing the health and economic effect of the Covid-19 pandemic in most countries.

CONCLUSION

This study aims at conceptually exploring the role of Islamic social finance via zakat and waqf in mitigating the effect of the Covid-19 pandemic on the people and society at large. Based on insight from literature this study concludes that ISF enhances the wellbeing of the masses affected by the Covid-19 and other related crisis. From the theoretical perspective, this study discovered that studies on the role of ISF and Covid-19 crisis are still ongoing as the pandemic has not been totally subdued globally. This is because reports of new cases relating to Covid-19 and even Covid-20 are globally evident and this requires further application of the ISF principles to cushion the situation. From the practical angle, this study concludes that the government and policymakers need to intensify efforts in the practice and application of ISF principles to mitigate the effect of the Covid-19 pandemic. To this effect, this study discovered that measures were taken by the public authority to curtail the spread of the virus through the imposition of lockdown, closure of Airports and suspension of all business activities which negatively affect individuals and the entire economy. However, this study equally found based on previous investigations that Islamic social finance via its products like that zakat and waqf helps in alleviating the effect of the pandemic. Zakat and waqf institutions have played a significant role in the provision of economic and social wellbeing and ameliorate the suffering of society using different programs in different countries.

This study is conceptual therefore future study should engage empirical investigation to explain the role of ISF in mitigating the effect of Covid-19 pandemic. Also, the study is limited to the application of Islamic social finance principles like zakat and waqf to mitigate the effect of Covid-19 pandemic. Subsequent investigations may extend the scope of the study to include Sadaqat, Infaq, Qard Al-Hassan and other ISF instruments to enhance the generalizability of the study. Consequently, it is recommended that government from various countries, Islamic banks and policymakers should work hand in hand to implement Islamic social finance as an alternative way to develop the social wellbeing of the people across the world. Moreover, zakat and waqf can be adopted in strengthening the economic stability by utilizing the funds

not only for easing welfare of the low-income people and underprivileged but also to finance the business activities of SMEs which are considered to be the hub of most economies which are equally affected by the deadly virus Covid-19 pandemic. Conclusively, the concept of ISF (zakat and waqf) in itself is an important basis for economics to reduce the gap between the poor and the rich in the society and to strengthen the global economy.

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A Conceptual Framework for the Effect of Project Complexity on Success of Railway Construction Projects: The Moderating Role of Effective Communications to All Stakeholders

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Received: 17th January 2021

Accepted: 14th February 2021

Published: 17th March 2021

Abstract

The aim of this study is proposing a framework for the roll of effective communications to all stakeholders in moderating project complexity to improve project success. This paper deeply reviewed the studies published in project complexity and its effect on success of construction project. This research reveals that effective communications as the most important factor can play a significant role in influencing the relationship between complexity and project success. It was confirmed from previous studies that the negative impact of project complexity on success of construction project is conclusive. Complexity dimensions identified by the Project Management Institute (PMI) into three groups are: human behaviour, ambiguity, and system behaviour. Many empirical studies proved there is a positive and significant relationship between project complexity and project success. Thus, there is a need for a moderating variable to enhance the success of complex construction projects. In this study the main contribution is bridging this gap of knowledge by empirically examining the relations between complexity of construction projects and project success with the interaction of effective communications to all stakeholders as a moderator. This study will enhance development of construction projects in Malaysia and assist scholars and practitioners to achieve maximum project success.

Keywords: Railway Construction Projects; Project complexity; Effective communications to all stakeholders; Project success.

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INTRODUCTION

In recent years, project complexity has been one of the most important areas of current project management research. Project complexity has become an important factor in project classification. However, within classification method, project complexity is treated as a black box, and factors influencing complexity of project require further understanding (Lan, Qing-Hua, & Long-Long, 2015; Maylor, Richard, & Stephen, 2008). The main challenge facing CEOs is the complexity in growing volatile and uncertain globe. More than half of CEOs, however, voiced doubts about the capacity of their organization to handle it, and when asked to look down the path for five years, four out of five CEOs anticipated the complexity level to rise (PMI, 2013b).

Complexity is used in the literature to explain one of the reasons of cost overruns, schedule delays, and poor project performance. Researchers have concentrated on project complexity because understanding this subject is crucial for successful management (Kermanshachi & Safapour, 2019). The more projects become complex the more focus on project complexity concept and its impact on project management process. It is widely known in literature that project complexity is one of the important causes of project failure. Complexity makes completing projects very difficult and extra efforts are

needed to succeed. Thus, systematic approach and efficient stakeholders management are demanded to achieve best outcomes of project performance (T.S & Sherif, 2018).

Construction projects well fit the complexity definition from the aspect of many different parts are being interrelated (Lan et al., 2015). Construction projects are historically suffering of poor performance and failure in terms of time delay, cost overruns, low quality and even safety issues because of project complexity. Early identifying and measuring complexity of construction project will drive to better understanding and great success in reducing associated risks (Kermanshachi & Safapour, 2019; Wood & Gidado, 2008). It is a common practice that projects fail in terms of cost overrun and schedule delays due to increasing complexity or underestimation of project complexity (M. Bosch-Rekveltd, Jongkind, Mooi, Bakker, & Verbraeck, 2011).

Transportation projects are progressively complex and in transportation projects many factors are contributing to complexity, thus it is not an easy task to manage this complexity. It becomes a challenge and more difficult to execute complex transportation projects. Therefore, it is imperative to systematically evaluate complexity in transportation projects. A total of 258 transportation projects have been analysed and found 90% are over budget and for the rail projects the

average cost overrun is 45% (Chapman, 2016; A. T. Nguyen, Nguyen, Le-Hoai, & Dang, 2015).

An investigation on the influence of complexity on project success shows a strong relation between project success and project complexity. Generally, complexity is an equivalent measure of project difficulty and project success should be measured relatively with project complexity. Project success consists of three definitions. Firstly, project efficiency that is based on the triple constraints or iron triangle. Secondly, project effectiveness that comprises of product, client and organizational dimensions. Thirdly, project complexity success which contains project management success and project success (Mikkelsen, 2018). The traditional success criteria "Barnes' Iron Triangle" was one of the first endeavours to assess project success based on cost, time and performance. Over time, those criteria are expanded taking stakeholder satisfaction into account. Researches reveal that no single pattern has been developed to evaluate project success in different areas of application (Albert, Balve, & Spang, 2017). Project complexity concept is necessary well understood to enhance project manager contingency and increase project success (Kermanshachi & Safapour, 2019). Complex projects in construction industry are increasing rapidly over the time. However, grasping project complexity is a crucial success factor in construction project management. Literatures have proven that project success is extremely influenced by complexity level in construction projects and classic project management approach is not adequate to handle that complexity. Reducing associated risk in complex projects is important for successful project management (Luo, He, Jaselskis, & Xie, 2017b). As reported by Project Management Institute (PMI) that organization ability to continue and succeed is significantly affected by ability to meet project cost, schedule and goals. Organizations facing complex and high-risk environment should address the imperative needs to improve the rate of project success (PMI, 2013c).

Effective stakeholder management is a vital success element for complex construction projects. Complex projects require systematic and effective management skills to achieve project success (T. S. Nguyen & Mohamed, 2018). In project management, communication is a critical competence when effectively implemented and all project team members are linked to the general elements of goals, actions, and strategies. If those elements are not properly shared by project managers and understood by stakeholders, project deliverables are in danger and budget incur risk. PMI reports uncovered that effective communications to all stakeholders is the most important success factor in project management (PMI, 2013c). Effective communication is an important factor which given insufficient attention in stakeholders communication. Tactics of effective communication can prevent project schedule delay and over budget. Recognizing techniques and skills for effective communications is necessary for project success. Project managers, engineers and designers often put communications low priority on their list. This placement is warranted as long as no major issues or problems. But when anything goes wrong, proactive, consistent, exception and effective communications with stakeholders will play a critical role in putting the project back on the right track quickly and finishing within budget and on time (Leonard S, 2016).

Railway projects is very important for economic and moving passengers and goods. Alike to other infrastructure projects, railway construction projects are large-scale, long implementation period, very complex in nature, complicated site conditions, and huge investment, also include many stakeholders. Therefore, such type of projects are associated with high risk which impacts project goals in terms of schedule delays, cost overruns, safety issues, and not meeting standard quality (Andrić, Wang, & Zhong, 2019). Railway projects are mega projects that are very complex and unique in nature. Railways construction projects are associated with big cost risk and this risk needed to be understood in details for effectively project management. It was confirmed that railway is the highest infrastructure projects with cost overruns of around 45%. Poor communication between project teams is one of the risk factors that lead to cost overrun in construction projects specially the railway projects (Fariq, Ismail, & Ab Rani, 2020). Malaysian railways is challenging to develop reliability and speed and become a road alternative. However, railway transportation is one of the best country transport mode. Railway transportation in Malaysia is consist of the heavy rail (commuter rail), light rapid transit (LRT), monorail, airport rail link and funicular railway line (Abd Aziz, Kassim, & Mohd Masirin, 2018).

The main objective of this study is to investigate the role of the effective communications to all stakeholders as a moderating factor on the relationship between project complexity and success of the railway projects in Malaysia. Furthermore, this study has the following sub-objectives:

- Investigating the influence of human behaviour on project success of railway projects.
- Investigating the influence of ambiguity on project success of railway projects.
- Investigating the influence of system behaviour on project success of railway projects.
- Investigating the moderating effect of effective communications to all stakeholders on the relationship between project complexity and success of railway projects.

Literature review

Project complexity

In current developing environment, it is well known that complexity of construction activates is increasing because of intense interrelation between the different parts in uncertain and changing patterns (Luo, He, Xie, Yang, & Wu, 2017). Many studies of project complexity identifies factors that influencing the entire project life cycle. However, there is still no general agreement among practitioners and academics about factors driving the project complexity (M. G. C. Bosch-Rekveltd, 2011). Gidado (1996) classified complexity factors into two groups. The first group including factors pertaining to inherent complexity (e.g., task difficulty, analysability, and technical complexity) and uncertainty factors. The second group consists of factors pertaining to interdependencies between different types of technologies, overlap of construction elements, and rigidity of sequence. Based on the previous grouping of complexity factors, Williams (1999) placed the numerous elements and interdependency under the structural complexity, attaching an extra component of

uncertainty in means and goals. Further study to explore complexity factors was conducted by Remington & Pollack (2007), who categorized influencing factors into four categories: structural complexity, technical complexity, directional complexity, and temporal complexity. Maylor et al. (2008) determined complexity factors in five categories. The first category is mission, the second is organization, the third is delivery, the fourth is stakeholders and the fifth one is team. Vidal and Marle (2008) identified the essential complexity drivers as project context-dependence, project interdependence, project variety, and project size. Wood and Ashton (2010) grouped the primary factors influencing project complexity in six categories: uncertainty, organizational complexity, inherent complexity, element interaction, number of trades, and rigidity of sequence. Lebcir and Choudrie (2011) attempt to develop a complexity model and identified four drivers of complexity in construction projects: uncertainty, interconnectivity, project newness, and project size. Xia and Chan (2012) determined main complexity measures in building projects as the following: building methods, project structure and function, urgency of the project schedule, geological condition, project scale/size, and neighbouring environment. Shane et al. (2015) expanded the traditional three-dimensional project management model (cost, schedule, and technical) and added two more factors: finance and context. These two extra factors are considering the influence of external risks. He et al. (2015) developed a six dimensions model of project complexity. The model includes information complexity, cultural, organizational, technological, goal, and environmental complexity.

Findings from literature review show that most scholars confirmed the interdependency between projects elements and their impact on project complexity (Gidado, 1996a; Tatikonda & Rosenthal, 2000). In addition, interfering between project components, dynamic behaviour of project components, and goals complexity are the most important drivers influencing project complexity (Gidado, 1996a; Stephen & Maylor, 2009; Williams, 1999). Thus, project complexity as an inherent characteristic to construction projects, which is resulting of the interactions between number of different elements with structural, uncertain and dynamic patterns. While most literature has shown different perspective and classification of project complexity, still there is a common agreement on confirmed factors particularly organizational and technological complexity (Baccarini, 1996; M. G. C. Bosch-Rekveltdt, 2011).

As a practice guide, Project Management Institute (PMI), (2014) has classified the causes of complexity in projects into three comprehensive categories: human behaviour, system behaviour, and ambiguity. This three components model are describing the most factors causing project complexity.

Complexity theory (CT) defines the complex system within a specific field of interest and studies the interactions through the different elements of that system (Chu, Strand, & Fjelland, 2003). The complex system is defined as a system consists of many interdependent elements that interact continuously and spontaneously into a complex structure overtime (Lucas, 2000; Valle Jr, 2000). Managing a complex system is still difficult and challenging as prediction is not reliable and sense-making is also needed to occur (Sargut & McGrath, 2011). The challenge is shifting from the traditional control and command approach to accepting and adopting ambiguity. In the literature of project management, numerous views of project complexity

have been presented as: types, key aspects, characteristics, dimensions, or complexity factors. However, in this study, the PMI dimensions of project complexity is chosen in the theoretical framework because it is developed from comprehensive literature review and because it is a practice guide that introduced by leading experts to integrate with PMI's basic standard. Therefore, research hypotheses are developed as the following:

Hypothesis 1- Project complexity has a negative influence on the success of railway construction projects.

1. H1.1- Human behaviour has a negative influence on success of railway construction projects.
2. H1.2- Ambiguity has a negative influence on success of railway construction projects.
3. H1.3- System behaviour has a negative influence on success of railway construction projects.

Project success

In construction industry, project success definition is still ambiguous and no common set of criteria to evaluate success (Chan, Scott, & Chan, 2004; Joslin & Müller, 2015a). Different stakeholders performing the same project have different project success evaluation standards (Joslin & Müller, 2015b; Lim & Mohamed, 1999). Concepts of project success and project performance are similar but project success is more significant (Chan et al., 2004). Project performance emphasizes on measures during project execution with project influence after implementation is also included. However, project success has a wider time range (Lim & Mohamed, 1999). The traditional project success criterion is named the *golden triangle*, which comprises of cost, time, and quality (Atkinson, 1999; Jugdev & Müller, 2005; Molenaar, Javernick-Will, Bastias, Wardwell, & Saller, 2013). These indicators are very important but insufficient to assess the new elements of project success (Atkinson, 1999; Ika, 2009). Moreover, project manager responsibilities and roles expand over the typical golden triangle covering other aspects such as cultural, relationships, also managing stakeholder (Lam, Chiang, & Chan, 2011; Meng, Zhao, & Shen, 2011; Ozorhon & Cinar, 2015; Wong & Cheung, 2005). Bosch-Rekveltdt (2011) suggested that evaluation of project success have to include different aspects. Not only completing the project within the estimated cost and schedule, success measures have to include end user satisfaction and the available deliverables. Lim and Mohamed (1999) investigated success measures of construction projects from different perspectives. The macro-perspective essentially focus on the relation between project planning and end-user satisfaction, while micro-perspective essentially focus on traditional success criteria: cost, time, and quality. Bryde and Robinson (2005) explained that project stakeholders (owners and contractors) are rating project success differently. Owners consider satisfaction of stakeholders, while contractors just use the classical constraints: schedule, budget, and quality. Chan et al. (2004) reviewed literature and developed a success standard model for construction projects. This model including cost, time, quality, environmental performance, health and safety, user satisfaction, participants' satisfaction and profit-oriented value. Lin et al. (2005) identified project success factors based on entire project lifecycle into three groups: preliminary, construction, and operation success. Yu et al. (2006) classified critical success factors for construction projects into five categories: human-related factors, project-related factors, input-related factors, output-related factors, and process-

related factors. Al-Tmeemy and Harun (2011) analysed building projects and grouped success criteria in three categories are product success, project management success, and market success. McLeod et al. (2012) developed a three dimensional framework of success criteria to evaluate the project success. This framework placed all stranded success measures in three categories are: process success, product success and organizational success.

According to the literature, project success is very wide and not just including project process but also contains the results after project completed. Various project stakeholders and participants are part of the project and strongly related to project success. According to the previous literature review, the approach of McLeod et al. (2012) is chosen in this study for selecting project success measures because this framework evaluates project success considering the influence of various stakeholder perspectives. They classified project success criteria into three primary categories: process success, product success, and organizational success.

Relationship between project complexity and project success:

Numerous studies stated that project success is dependent on the project complexity and conventional project management approach is not enough to address the complexity. Better understanding of project complex is required for effective project management (Luo, He, Jaselskis, & Xie, 2017a). Researches have proved that negative relationship is exist between project complexity and project success in construction projects (Luo, He, Xie, et al., 2017). Complexity of construction projects are increasing because of various factors and absence of complexity management is one of the main causes of project failure (Brady & Davies, 2014; Miller & Hobbs, 2005; Mirza & Ehsan, 2017; Shenhar & Holzmann, 2017). Scholars and practitioners focus on project complexity to improve the chance of successful project delivery (Bakhshi, Ireland, & Gorod, 2016; Luo, He, Jaselskis, et al., 2017b). In project management, all stakeholders are pursuing success as their ultimate goal (Chan et al., 2004; Chan, Scott, & Lam, 2002). Mega construction project is associated with high degree of complexity, which cause many difficulties and restrain successful project delivery (Kardes et al., 2013; Zeng et al., 2018). In mega construction projects, project managers and owners are suffering from low success rate because of ambiguity and of project complexity. In another words, complexity is the main problem that results in project failure in construction projects (Bakhshi et al., 2016; Ma & Fu, 2020). Complexity level is high in infrastructure projects due to their large scale and the degree of uncertainty and risk in process of project development. Associated problems such as unreliable scope, limited budget, and delivery methods with other external problems like technology, economics and environmental issues all together results to increasing complexity of infrastructure projects (Chen et al., 2004; Gidado, 1996b; Naderpajouh & Hastak, 2014). Studies on large scale projects pointed out that project complexity become more common regardless of their performance issues. Thus, cost overrun and schedule delay in complex infrastructure projects are usual than exceptional (Eriksson et al., 2017; Flyvbjerg, 2014; Locatelli et al., 2017).

Role of effective communications to all stakeholders on success of complex projects:

Construction industry is based on projects with various and fragmented companies constructing the temporary organisation (Alashwal et al., 2011; Vrijhoef & Koskela, 2005; Ye et al., 2015). In construction projects, coordination requires huge information exchange among stakeholders and project team. Thus, communication is essential for successful project delivery (Cheung et al., 2013; Laufer et al., 2008; Senescu et al., 2013; Yong & Mustaffa, 2013). Poor communications between project stakeholders is a main reason of project cost overruns, redoing work, and disputes (Ceric, 2014; Doloi et al., 2012; Hamzah et al., 2012; Mahamid, 2016; Memon et al., 2011; Sambasivan & Soon, 2007; Simpeh et al., 2015). Naoum & Egbu (2015) and Srdić & Šelih (2015) emphasise that inadequate information exchange is one of the causes for poor project performance.

Previous researches showed that communications is a critical element contributes into project success. Communication theories such as communication accommodation theory and diffusion theory are used to improve communication management (Anantamula, 2015; Gallois & Giles, 2015). According to (PMI, 2008), Project communication management includes all activities involves information creation, collection, sharing, storage and ultimately arrangement of project information. Park et al., (2017) classified critical success factor for effective communication into three categories: two-way communication, active stakeholder participation, or minimization of dissatisfaction. Management of effective communications promote collaborative culture to develop a coherent project team. In addition, effective communication encourages participation in making decision to set up a learning platform for project team (Livesey, 2016). This is in line with the claim of Dainty et al., (2007) that communication can be a learning approach for both organization and individuals to build trust and create collaborative work environment. Senge (2006) stated that team learning process can be aligned with effective communication to achieve high-performance in team-based environment. In addition, effective communication is critical to control schedule and budget. Effective communication through the project team enhances knowledge and support team connection (Liu & Cross, 2016). PMI (2013) reported that 50% of complex project failure is attributed to the lack of effective communications between stakeholders. Consequently, the above theories and literature shows significant moderating effect of effective communications to all stakeholders on the relationship between complexity and project success. The following hypothesis is proposed as:

Hypothesis 2: effective communications to all stakeholders moderates the relationship between complexity and success in railway construction projects.

Proposed model:

The conceptual framework is developed based on underpinning theories and concepts to fill theoretical gap in literature. This study will examine the effect of effective communications to all stakeholders on project complex to improve success of construction projects. With considering previous literature, this is the first study intended to develop such unique research pattern as shown in Figure 1.

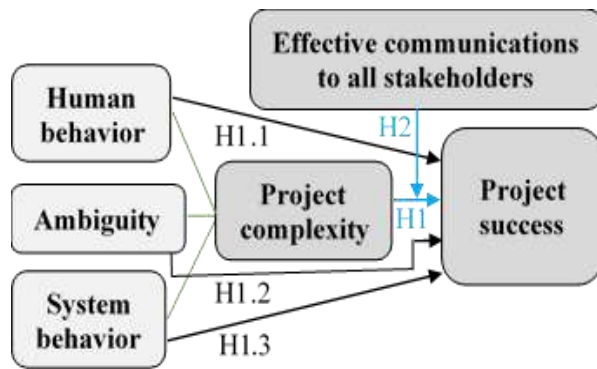


Figure1. The conceptual framework showing the integration of effective communications into project complexity to improve success of construction projects

METHODOLOGY

The conceptual framework of this study is developed in a process of four steps. The first step is identifying the different variables affecting success of construction projects in the literature. Then followed by identifying some gaps among project complexity, project success and effective communications to all stakeholders. The second step is conducting a comprehensive literature review with research focusing on complexity, effective communications and project success. The third step is comparing the results from previous studies and connect the relationship between the three variables, which leads to consistency in these results. The fourth step is developing and suggesting the conceptual framework, which is constructed based on identified variables. Thus, in this conceptual paper, the cause and effect relationship between dependent and independent variables need to be examined empirically to validate the theoretical framework.

CONCLUSION

The current study proposed a unique conceptual framework, which is different in contribution from all previous studies. Specifically, the major contribution in this study is introducing the effective communications between stakeholders as a moderating variable into the relationship between complexity and project success. Previous literature suggested that effective communications in complex construction projects will increase the success rate. In another words, that poor communications in complex construction project is the main reason cause project failure.

This study is contributing to the theory as it is introducing a different moderating variable into the complexity model. Furthermore, this study is significant to the literature because it is unique in Malaysian context (especially the railway construction projects). Effective communication to all stakeholders enhances project success in complex projects (T. S. Nguyen & Mohamed, 2018b). Many researches evaluated cost overruns phenomenon in transportation projects throughout project life-cycle (Cavaliere, Cristaudo, & Guccio, 2019b). However, none of these researches has included Malaysia railway projects. In spite of the fact that Malaysia is increasingly using railway projects to convey services and goods to its people.

The current proposed conceptual framework can provide practitioners and academicians with better insight into the application of successful project delivery. This study will assist researchers, practitioners, and interested individuals to

identify the important factors for effective communications, complexity or project success. In addition, the future work of this research is to conduct an empirical study in construction transportation industry to fulfil the knowledge gap in the project management literature.

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Shari'ah Governance of Islamic Non-Banking Financial Institutions in Malaysia: A Conceptual Review

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Received: 3rd February 2021

Accepted: 12th March 2021

Published: 18th March 2021

Abstract

It is widely recognized that Malaysia is among the leading countries in the Islamic banking industry. This is due to its comprehensive regulatory framework from the *Shari'ah* aspects, particularly *Shari'ah* governance. Bank Negara Malaysia (BNM), as the regulator, is closely monitoring all players in this industry so that they can follow all its policies and regulations closely. Nevertheless, the Islamic Non-Banking Institutions (NBFIs), seem to be contrary in this aspect. In fact, it is not compulsory for the NBFIs to adhere to the BNM's policies, particularly regarding the *Shari'ah* governance framework. Therefore, this study aims to explore *Shari'ah* governance practices among selected Islamic NBFIs in Malaysia. Since this study is a conceptual review, it adopts library research to achieve its objective. The finding reveals that there are different practices of *Shari'ah* governance among the Islamic NBFIs due to different sizes of their institutions and the complexity of their products. While the flexibility may bring benefits for the NBFIs, their respective regulators should enhance the *Shari'ah* governance aspects by providing a comprehensive policy as well as improving its enforcement particularly from the check and balance perspective. Also, the study suggests that the Islamic NBFIs should establish an association among its members to promote coordination, strengthen the governance, and exchange views, particularly on *Shari'ah* aspects.

Keywords: *Shari'ah* Governance Framework, Islamic Finance, and Islamic Non-Banking Institution

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INTRODUCTION

In general, financial institutions can be categorized into banking and Non-Banking Financial Institution (NBFI) (Fadzlan Sufian, 2008). As for the former, banking institutions typically comprise of commercial banks, financial companies, and merchant banks, while the latter is considered a sub-sector for banking institutions that is usually not accepting deposits. NBFIs encompass the insurance or takaful sector, cooperatives, micro-financing, fund management, and pawnbroking. Without any doubt, non-banking institutions are also vital components of the financial system's development as they play significant roles in the society as well as contribute to the country's economy (Aminul & Jamil, 2004).

Similar to banking institutions, non-banking institutions also provide *Shari'ah* compliant services to the society, especially for Muslims who direly need these services because of their religious obligation. Such services include the Islamic unit trust, *Ar-Rahnu*, Islamic mortgage, and Employee Provident Fund (EPF). In fact, history shows that the first Islamic financial institution in Malaysia was not pioneered by the Islamic banking institutions, instead, it has come from a non-

banking institution namely the Lembaga Tabung Haji (TH), which was established in 1963 (Baig, 2016) TH has been functioning as the only institution that serves for pilgrimage management as well as provides a savings and investment service for Muslims in this country (Ishak, 2011). Like their Islamic banking counterparts, the Islamic NBFIs should have similar governance infrastructure to ensure their activities are *Shari'ah* compliant all the time.

After the first Malaysian Islamic bank was established in 1983, known as the Bank Islam Malaysia Berhad (BIMB), this country has experienced a remarkable progressive growth in Islamic finance. It is currently leading the world in terms of the comprehensiveness of its *Shari'ah* governance framework and government supported infrastructure towards the Islamic finance industry (Khiyar, 2012). In general, all Islamic banking activities must comply with the requirements set out by the Bank Negara Malaysia (BNM). Nevertheless, it is not required for the Islamic NBFIs to comply with the *Shari'ah* governance policies issued by BNM. Generally, the NBFI has its own act. For instance, Islamic cooperative institutions must adhere with the guidelines issued by the *Suruhanjaya Koperasi Malaysia*

(SKM), while the EPF must comply with the EPF Act 1991 (Wan Amir & Rusni Hassan, 2020). Also, TH must comply with the Tabung Haji Act 1995 (Nurhasanah, 2015).

Despite the Islamic NBFIs playing a significant role in the economic growth as claimed by Puad et al., (2017), studies regarding *Shari'ah* governance of the Islamic NBFIs in Malaysia are still limited. Given the fact that the *Shari'ah* governance framework is an important limb in the Islamic financial institution's structure, the international setting body such as the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB), have issued the *Shari'ah* governance standards and policies as guideline principles for the Islamic banking institutions. In Malaysia, the *Shari'ah* governance framework has been issued by the BNM for Islamic Banks and Takaful companies (Hassan & Salman, 2017). Although the Islamic non-banking institutions have begun their operations in Malaysia for more than 50 years, there is no comprehensive standard framework of *Shari'ah* governance issued for the Islamic NBFIs. Also, a comparative study is applied to compare between the Islamic NBFIs standards with the *Shari'ah* governance framework issued by the BNM. It is noted that Takaful companies and Development Financial Institutions are required to comply with the regulations issued by the BNM, hence, the research focuses on the issue of the inadequacy of a *Shari'ah* governance practice for the Islamic NBFIs that are not governed by the BNM. As the Islamic NBF industry in Malaysia is too broad, the study is limited to the selected Islamic NBFIs which are among the largest Islamic NBFIs in Malaysia. As case studies, the research has selected among the most famous Islamic NBFIs, which consisted of market-marker or fund manager companies, Islamic cooperatives, and government link investment companies, which provide *Shari'ah* compliant services.

Despite this study utilizing secondary data, it significantly contributes to the existing literatures in the area of *Shari'ah* governance, particularly for the Islamic NBFIs, which is still few.

OVERVIEW OF NON-BANKING INSTITUTION IN MALAYSIA

The Concept of Non-Banking Institution

In view of the complexity of the banking system and the geo-economic differences in each jurisdiction, consequently there is no standard definition for the NBFIs. This terminology has been referred differently based on the legal framework of every country. Some countries refer to the NBFIs as 'shadow banking.' Also, this terminology could be used interchangeably and carry the same meaning. During the global financial crisis in 2008, the term 'shadow banking' became popular. Nevertheless, the Financial Stability Board (FSB) has decided to change the term 'shadow-banking' into "non-bank financial intermediation" in its report (FSB Report, 2020).

As among the earliest used terminology, 'shadow banking' is defined as a "levered-up financial intermediary whose liabilities are broadly perceived to be similar in money-goodness and liquidity as conventional bank deposits" (Gabrieli et al., 2017). Nevertheless, Amar & Farid, (2010), argued that connotation does not carry a real meaning of a NBFIs, rather it reflects a 'shadow economy'. In addition, 'shadow banking' is defined as "non-depository (non-bank

credit providers to small-and mid-sized businesses without access to bank credit' (Zabala & Josse, 2018). On top of that, Onger (2014), defines a NBFIs as "a financial institution that does not have a full banking license and cannot accept deposits from the public". This definition implies the main characteristics of a NBFIs, which is, it does not accept deposits from the public. In spite of that, the definition may not be applied in Malaysia, as Tabung Haji, one of the Islamic NBFIs, has been accepting deposits from the public for a long time (Khaliq Ahmad, et al., 2012). Hence, it can be concluded that 'shadow banking' or Non-Banking Institution's definition varies from one country to another.

The most practical definition may be set by the Financial Stability Board (FSB), which refers to "credit intermediation involving entities and activities outside the regular banking system" (FSB Report, 2020). The definition was then supported by Muhamad Amar (2013), when he refers to a NBFIs in Malaysia as "a credit intermediation system that involves entities and activities outside BNM's regulatory perimeter" (Muhamad Amar, 2013). Therefore, it can be concluded that, in the Malaysian financial system, the NBFIs is an entity which is not a licensed bank by BNM but is actively involved in offering financial products and services. In fact, a NBFIs in Malaysia seems to have similar characteristics to other banking systems as it provides similar financial services, except that BNM does not regulate it.

In terms of regulatory requirements, the NBFIs have important inter-linkages with the financial system. However, a NBFIs is usually less regulated and not being directly supervised by the BNM. Apparently, under the Central Bank of Malaysia Act 2009, the provision in this act has given the power to BNM to collect data and information on NBFIs, to conduct ongoing surveillance and oversight of the NBFIs, and take necessary risk mitigation measures in ensuring financial stability (BNM, 2011). Hence, the role of BNM is only to monitor from time to time or as necessary, and to provide advice as a pre-emptive measure of which to avoid any harm to the overall financial system (BNM, 2016). For instance, in year 2016, BNM has issued a warning letter to TH in order to strengthen its risk management practices further because its liabilities was growing more than its assets which ultimately might jeopardize TH's position in the future (The Edge, 2016).

In terms of its roles, similar to the conventional banking system, an Islamic NBFIs is one of the vital components in the financial system development, plays significant roles in the society, and contributes to economic development (Aminul & Jamil, 2004). One of the main purposes of the establishment of a NBFIs is to facilitate the financial services to a specific segment of society (BNM, 2011). In other words, a NBFIs is established to serve specific social objectives, which the banks are unable to do so. For example, commercial banks are generally profit-oriented, risk-averse, and extremely strict regarding credit approval. Consequently, the bank will only provide loans or financing to the 'bankable' customers based on their creditworthiness.

Apart from that, among the roles of a NBFIs is playing a complementary role to the banking institutions, making financial system to be more inclusive and accessible, particularly for special needs such as providing financial services to the rural area, assisting small scale businesses, granting capital to start-up companies, and so forth (Onger,

2014). Moreover, it is identified that a NBFI plays a vital role in the developing economy, acting as a back-up facility if the primary banks failed (Ongeri, 2014). In more detail, NBFIs can protect the economy from economic recession and enable speedy recovery for economic growth after the crisis. It is also suggested that the capital market plays a vital role in providing an avenue to the investors for alternative savings in the bank (Nawal, et al, 2013).

SHARI'AH GOVERNANCE FRAMEWORK PRACTICE IN ISLAMIC NBFI

As the study attempts to explore the *Shari'ah* governance practices among the Islamic NBFIs, it is imperative to understand the classification of NBFIs in Malaysia. According to the Malaysia Financial Stability and Payment System Report 2011 issued by the BNM, the NBFIs may be categorized into three main categories, as illustrated by the Financial Stability Report, (2011), as follows:

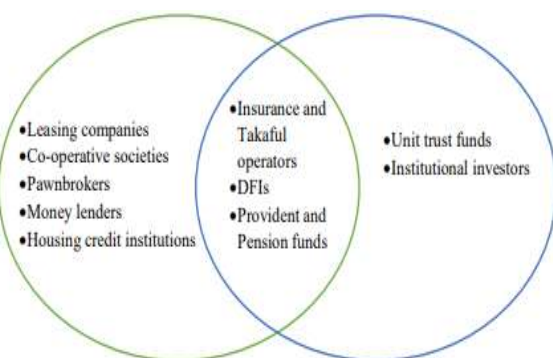


Figure 1: Non-Banking Institutions in Malaysia

It is noted that not all NBFIs in Malaysia provide Islamic financial services and products. Hence, this study is only limited to the 'Islamic NBFIs'. Besides, despite takaful companies and development financial institutions being positioned in the NBFI sector, in this study, both institutions are excluded because they are regulated and directly supervised by the BNM. Notably, both institutions are required to comply with the *Shari'ah* governance frameworks of BNM.

Shari'ah Governance Practices for Islamic Banking and Takaful in Malaysia

The *Shari'ah* governance framework is an additional layer to the existing corporate governance where it reflects a few important elements such as integrity, transparency, accountability and responsibility (ISRA, 2011). The main function of *Shari'ah* governance is to ensure that the institution adhere to the *Shari'ah* law and regulations (Iqmal & Kamaruddin, 2020). Malaysia is among the countries which prefers a pro-active model, where in this model there is a strong intervention by the central bank (Z. Hasan, 2010). In this regard, the BNM has taken efforts to develop a sound and robust *Shari'ah* governance framework for the Islamic banking and Takaful industries (Laldin & Furqani, 2018). The commitment of BNM is evidenced by continuously developing and issuing *Shari'ah* governance since 2005, with the issuance of the Guidelines on the Governance of *Shari'ah* Committee for the Islamic financial institutions. Briefly, this guideline emphasized more on the *Shari'ah* committee, such as procedures of the appointment of a *Shari'ah* committee, its roles and responsibilities, and its relationship with the respective *Shari'ah* committee at the institutional level with the *Shari'ah* Advisory Council of BNM.

As the Islamic financial institution industry began to mature and gain experience, BNM had issued a more comprehensive *Shari'ah* governance framework, which came into effect in 2011. As compared to the previous one, this updated framework introduced four dedicated *Shari'ah* control functions: namely the *Shari'ah* Review, *Shari'ah* Audit, *Shari'ah* Risk, and *Shari'ah* Research as illustrated below: -

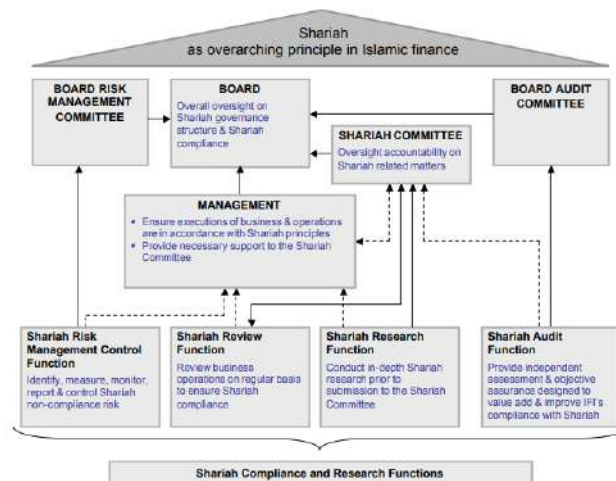


Figure 2: *Shari'ah* Governance Framework BNM 2010

Pursuant to the rapid development and complexity of the Islamic finance industry in Malaysia, the efforts to further enhance the *Shari'ah* governance framework remain as the first concern by BNM. In this regard, in September 2019, BNM has issued a revised *Shari'ah* governance framework known as the *Shari'ah* Governance Policy Document (SGPD 2019). Among the key highlights in this SGPD (2019) is to strengthen the oversight accountabilities of the BOD, and to promote a sound *Shari'ah* compliance culture to be implemented within the IFIs. The *Shari'ah* committee is expected to establish a comprehensive methodology in the decision-making process during the meeting. In addition to that, the management is expected to ensure the effective implementation of the *Shari'ah* governance policies, procedures and practices. Finally, BNM has also strengthened the overall *Shari'ah* non-compliance risk management in the IFIs through the *Shari'ah* control functions. Interestingly enough, the *Shari'ah* research role has been taken out of the SGPD 2019, and that function has been taken over by the *Shari'ah* Secretariat.

It is noted that Malaysia has also adopted a two-tier model of *Shari'ah* governance. The highest authority, namely the *Shari'ah* Advisory Council, sits at the national level, whereby the *Shari'ah* committee works at the institutional level (as depicted below). The *Shari'ah* Advisory Council's ultimate objective is to reduce opinion differences, ensure harmonization of *Shari'ah* ruling, and promote good governance within the IFIs (Grassa, 2015).

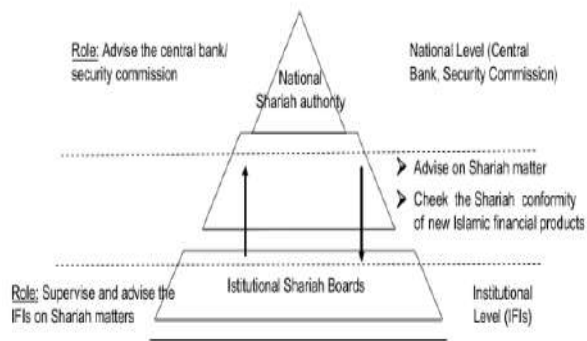


Figure 3: Two-Tier *Shari'ah* Governance Model

***Shari'ah* Governance in Islamic Fund Management**

Even though Malaysia has led every Muslim country in terms of the Islamic capital market infrastructure, nevertheless, it is argued that there is still a scarcity of a comprehensive framework for *Shari'ah* governance in the Islamic capital market sector (Hassan & Salman, 2017). Further, Nawal et al., (2013), argue that there is a lack of study discussing *Shari'ah* governance in the Islamic capital market.

In Malaysia, the Islamic capital market is currently being regulated by the Security Commission. Therefore, the *Shari'ah* Advisory Council of Security Commission (SAC of SC) is responsible for advising on *Shari'ah* issues concerning the Islamic capital markets. In parallel with the *Shari'ah* governance structure of Islamic banking and takaful, Malaysia's Security Commission has also adopted a two-tier model of governance. SAC of SC was established in 1996 and positioned at the national level to provide guidance and advice to the investors, the government, and the industry. While at the institutional level, it is required for the respective Islamic capital market products and services to appoint a *Shari'ah* advisor so as to ensure *Shari'ah* compliance (Hassan & Hussain, 2013). Nevertheless, Razinah et al. (2017), further commented that the role of the Security Commission Malaysia, as the primary regulator of the ICM, is essentially needed to strengthen that a robust *Shari'ah* governance is being adequately implemented.

Generally, the primary purpose of establishing the Guidelines on Islamic Fund Management issued by the Security Commission Malaysia under CMSA 2007 is to guide the Islamic fund management company's operation and activities. In this guideline, it is required for the fund management company to appoint a *Shari'ah* advisor, either in individual capacity or corporation, regardless of being a Malaysian or foreign company or person (SC, 2009).

R. Hassan & Hussain (2013), argued that there is inconsistency in terms of the minimum experience of a *Shari'ah* advisor in the guidelines issued by the SC. Surprisingly, there is no minimum number of compositions for a *Shari'ah* advisor to be appointed as required by the SC and no specific requirements on the *Shari'ah* control function. Hence, the function will be undertaken by a 'compliance officer' who is principally responsible for reporting any *Shari'ah* non-compliance event to the *Shari'ah* advisor and board (SC, 2007). Nevertheless, (A. N. Hasan, Abdul-Rahman & Yazid, 2020), opined that the current guidelines by the SC is adequate to ensure the Islamic fund management industry is *Shari'ah* compliance.

***Shari'ah* Governance in Islamic Cooperatives**

With the emergence of Islamic cooperatives in Malaysia, it is imperative to establish a comprehensive *Shari'ah* governance framework in the Islamic cooperative sector. Unlike the Islamic banking sector of which the BNM are supervising their activities, the jurisdiction of cooperatives in Malaysia will be under the supervision of the Malaysia Cooperative Societies Commission or *Suruhanjaya Koperasi Malaysia* (SKM) (Harith Hamidi, 2017).

In parallel with the development of the IFIs in Malaysia, SKM as a primary regulator for this sector has successfully issued its own *Shari'ah* Governance Framework for the Islamic cooperatives in 2015. This guideline is issued under section 86B of the Cooperative Societies Act 1993, to regulate cooperatives in operating its business or activities based on the *Shari'ah* principles (SKM, 2015). Nevertheless, it is argued that the *Shari'ah* Governance Framework issued by SKM is merely mirroring the *Shari'ah* Governance Framework of BNM 2010, except for a few requirements which slightly differ with BNM (Issyam, et al, 2016).

Notably, the Islamic cooperative has adopted a single-tier model whereby the *Shari'ah* committee is only established at the institutional level (Harith Hamidi, 2017). Issyam et al. (2016), further pointed out that the absence of a centralized *Shari'ah* Advisory body at the national level might attract reputational risk issues, particularly regarding court's legal cases. Unlike Islamic banking and takaful industry, the *Shari'ah* Advisory Council of the BNM's ruling shall be binding upon the court and arbitration (Z. Hasan, 2010). Thus, the study suggested that SKM should establish a central *Shari'ah* Advisory body at a national level, similar to the Islamic bank.

Without any doubt, the main pillar of *Shari'ah* governance is the establishment of a *Shari'ah* committee to monitor the activity of the institution in accordance with the *Shari'ah* principles. For the Islamic cooperative sector, the *Shari'ah* committee may be established into three segments as follows (Harith Hamidi, 2017):-

- I. An internal *Shari'ah* committee
- II. An external *Shari'ah* committee
- III. A *Shari'ah* Committee for the whole group of cooperatives

The minimum composition of a *Shari'ah* committee shall consist of three members (SKM, 2015). Due to its complexity and size, it is reasonable and adequate for the Islamic cooperative sector. As for qualification, it is required that the majority of the members in the *Shari'ah* Committee shall at least hold a bachelor's degree in *Shari'ah*, which includes a study in Usul Fiqh (the origin of Islamic law) or Fiqh Muamalat (Islamic transactions/commercial law).

Further scrutiny to the *Shari'ah* Governance Framework issued by *Suruhanjaya Koperasi Malaysia* (SKM, 2015), observed that there is no specific mention of a *Shari'ah* control function such as *Shari'ah* Review, *Shari'ah* Audit, *Shari'ah* Risk, and other support functions except that it is required for the institution to appoint at least one officer who is responsible for *Shari'ah* Secretariat matters. Apart from that, an internal audit is responsible for ensuring effective control mechanisms and the *Shari'ah* compliance aspects of the Islamic cooperative are in place.

Shari'ah Governance Ar-Rahnu (Pawn Broking)

One of the non-banking institutions that provide the customers with financial services is the *Ar-Rahnu* institutions (pawn broking). In general, an *Ar-Rahnu* provider can be categorized into three primary types of institution (Shah & Sharif, 2017):

- i. *Ar-Rahnu* under Islamic banking institutions
- ii. *Ar-Rahnu* under Islamic co-operative
- iii. *Ar-Rahnu* under corporation

Generally, the *Ar-Rahnu* providers under type (i) and (ii) are under the purview of BNM, which is not the subject in this discussion. Hence, the study attempts to review only existing literature for type (iii), where the regulator is under the Ministry of Housing and Local Government.

Regarding the *Shari'ah* governance in this sector, the National Fatwa Committee of Malaysia has suggested that an *Ar-Rahnu* provider should appoint an internal *Shari'ah* Advisor to monitor its business and operations according to the *Shari'ah* principles (JAKIM, 2015). Nevertheless, it is argued that there is no proper guidelines on *Shari'ah* governance issued for *Ar-Rahnu* providers (Shah & Sharif, 2017). The study posited that there is inconsistency in the implementation of the *Shari'ah* Governance Framework guidelines issued by the regulatory body level to the *Ar-Rahnu* institutions (Shah & Sharif, 2017). This is because some of the service providers are established under different regulators, as mentioned earlier. Therefore, it is suggested that in order to standardize the implementation of a *Shari'ah* Governance Framework among the *Ar-Rahnu* providers in Malaysia, it is primarily related to the appointment of an internal *Shari'ah* committee for the *Ar-Rahnu* institutions. This research concluded that if an *Ar-Rahnu* service provider is not under the supervision of BNM, the implementation of the *Shari'ah* Governance Framework may be questionable and lack enforcement, and also ineffective (Shah & Sharif, 2017).

Unlike conventional pawn-broking institution, *Ar-rahnu* has charged the fees based on Islamic contract which are free from the element of *riba*, *gharar* (uncertainty) and *maysir* (gambling). Previously, the practice was based on a combination of several contracts, including *Qardhul hassan*, *Wadhiah Yad Dhamanah*, and *Ujrah* as a single product (Hadiyan et al., 2020). However, this product has been criticized by the Shariah scholars due to issue of *hiyal* (legal trick) in permitting the prohibition of *riba* (Ahmad Faizal et al., 2017).

As a respond to this issue, the SAC of BNM in its meeting on 25 June 2019 and 31 July 2019 viewed that the current practice of *Ar-rahnu* product which based on the above combination is prohibited from *Shar'iah* point of view (BNM, 2019). Nevertheless, the new regulation issued by SAC of BNM is only applicable to the Islamic banking, Islamic Development Financial Institutions and Takaful, not for the Islamic NBFi. This is could trigger *Shari'ah* issues on the status of al-Rahnu among the Islamic NBFi. Consequently, to what extend that the Islamic NBFi has taken initiative to comply with this ruling? Moreover, despite *Ar-Rahnu* has been existed in Malaysia for than 20 years but there is no specific guideline or act that govern the overall Islamic pawn-broking. Hence, the research is viewed that *Ar-rahnu* institutions particularly Islamic NBFi should review and restructure their product in line with the updated version SAC of BNM's ruling.

Shari'ah Governance in Government-Linked Investment Companies (GLICs)

In Malaysia, GLICs are the government's investment arms in allocating some or all of their funds to publicly listed companies on Bursa Malaysia, which are known as Government-Linked Companies. In general, there are seven prominent GLICs: these are the *Employee Provident Fund* (EPF), *Khazanah Nasional Berhad*, *Kumpulan Wang Amanah Pencen*, *Lembaga Tabung Angkatan Tentera*, *Lembaga Tabung Haji* (TH), *Menteri Kewangan Diperbadankan*, and *Permodalan Nasional Berhad* (PNB) (R. A. Rahman, et al, 2019). It is identified that among the GLICs involved with Islamic finance practices are the PNB, EPF, and TH. The research begins with *Shari'ah* governance of PNB, EPF, and lastly a discussion on TH.

In the recent PNB Annual Report (2019), there is slight information on the *Shari'ah* governance implemented in PNB, where the *Shari'ah* Department is reporting directly to the President & the Group Chief Executive. Nevertheless, there is no further specific illustrations on the *Shari'ah* control function. Apart from that, there are seven members of the *Shari'ah* Committee appointed by PNB. The PNB's SAC also has declared that the products being managed by the institution comply with the *Maqasid Shari'ah* and *Siyasah Shar'iyyah* principles. The study conducted by Wan Amir & Rusni Hassan (2020), revealed that there is no *Shari'ah* control functions such as the *Shari'ah* Review, *Shari'ah* Audit, and *Shari'ah* Risk, except for *Shari'ah* research in PNB.

Nurshuhaida et al. (2013), have conducted a study on *Shari'ah* compliant investments in EPF and pointed out that there is an urgency to establish a proper *Shari'ah* governance framework in EPF. This is due to the fact that the EPF investment is mixed, comprising both non-*Shari'ah* and *Shari'ah* compliant investment instrument. The study suggested that EPF needs to create a dual investment portfolio, whereby the funds collected by the EPF is to be separated into two different pools of fund, namely a conventional fund and an Islamic fund (Nurshuhaida et al., 2013). Hence, EPF should incorporate a proper *Shari'ah* governance process to monitor the *Shari'ah* compliance status of the Islamic fund portfolio.

Since the previous study was conducted in 2013, a *Simpanan Berasaskan Syariah* (savings based on *Shari'ah* principles) has been introduced in August 2016, with an initial RM100 billion funds allocated to the Islamic portfolio. Accordingly, in 2017, EPF has established a sound and robust *Shari'ah* governance structure as per diagram below (EPF, 2017).

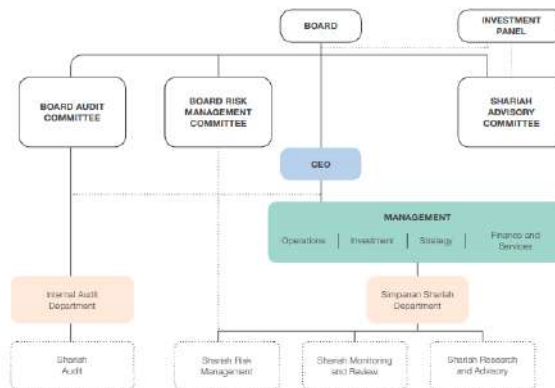


Figure 3: *Shari'ah* Governance Structure of EPF

It is noted that the *Shari'ah* Committee of EPF consists of five qualified *Shari'ah* members (EPF, 2017). The *Shari'ah* committee is the authority for the ascertainment of *Shari'ah* matters and to advise the Board and the Investment Panel in ensuring that the management of *Simpanan Shari'ah* complies with *Shari'ah* principles. The *Shari'ah* committee's ruling shall be binding under section 23D(2) of the EPF Act 1991 (EPF, 2018).

TH is one of the pioneering Islamic financial institutions in the world, and the first IFI established in Malaysia. TH's main services are to provide savings and investment services that comply with *Shari'ah* principles (Suhaini Abdul Majid et al., 2016). Any activities that violate the *Shari'ah* principles may deviate from its objectives to provide *Shari'ah* compliant financial services for Muslims in Malaysia.

The development of the *Shari'ah* governance aspect in TH involved several phases. In the early phase, TH sought advice from the National *Fatwa* Committee of Malaysia or forwarded *Shari'ah* issues to the *Shari'ah* committee of Bank Islam (subsidiary of TH). The study also emphasized that to safeguard TH as an Islamic financial institution, the investments in TH are not involved with the banking industry (except for Bank Islam) and insurance company (except for Takaful Malaysia Berhad) (Joni Tamkin & Zarrina, 2005). For the second phase, according to Usman (2016), TH has established the Investment Advisory Committee (subset board committee) to ensure the success of its investment activities. Interestingly enough, the initiative was taken by TH as a control mechanism in ensuring *Shari'ah* compliance. The appointed investment panel members must have a *Shari'ah* background and professional expertise in finance and economy in Malaysia. In the recent phase, TH finally successfully established its own *Shari'ah* Committee in 2010, starting with three members (Annual Report TH, 2010). Further to that, the research by Suhaini Abdul Majid et al. (2016), revealed that TH had established a *Shari'ah* division in 2014, which is accountable for ensuring all policies, procedures, and necessary processes comply with *Shari'ah* principles.

RESULT AND DISCUSSION

Any organization that claims to uphold the principles of *Shari'ah* in their business and operation activities must establish a sound and robust *Shari'ah* governance framework, regardless of whether it is a banking institution or non-banking financial institution (Azmir & Shahrul, 2020). This is due to the fact that Islamic NBFIs are also exposed to the additional type of risk which is known as the *Shari'ah* non-compliance risk. Hence, it is crucial to implement good *Shari'ah* governance practices in ensuring end to end *Shari'ah* compliance.

Since Islamic NBFIs are not subjected to compliance with the SGF of BNM, and there is no standard that has been issued to this sector, it is vital to examine the current practices of *Shari'ah* governance in the Islamic NBFIs. The matrix table below indicated the *Shari'ah* governance implementation in the respective Islamic NBF institutions: -

Table 1: *Shari'ah* Governance Framework Islamic NBF

	FM	Cooperative	Ar-Rahnu	PNB	EPF	TH
<i>Shari'ah</i> Committee	√	√	X	√	√	√

<i>Shari'ah</i> Research	X	√	X	√	√	√
<i>Shari'ah</i> Review	X	X	X	X	√	√
<i>Shari'ah</i> Audit	X	X	X	X	√	X
<i>Shari'ah</i> Management	Risk X	X	X	X	√	X

Source: Researcher's compilation

Based on the above matrix table, almost all the Islamic NBFIs have their own *Shari'ah* committee except for the *Ar-Rahnu* provider. Nevertheless, there are differences in terms of *Shari'ah* committee's composition numbers. While for the *Shari'ah* control functions, only PNB has all the *Shari'ah* control functions, and other institutions have no clear requirements for the internal arrangements. Thus, the finding of this study presented that there is inconsistency in terms of the *Shari'ah* governance process of Islamic NBFIs.

Understandably, the primary reason is due to differences in regulators, guidelines and Acts that govern each Islamic NBF. For the Islamic fund management, the regulator is the Security Commission, while Islamic Cooperative is governed by the *Suruhanjaya Koperasi Malaysia*. It is noted also that except for the *Ar-Rahnu* service that is operated by the Islamic cooperative and subsidiary of the Islamic bank, there is no specific *Shari'ah* governance except for rulings by the National *Fatwa* Committee. GLICs have been created by the government to serve specific mandate and purpose. In general, they must comply with the respective act, hence the *Shari'ah* governance is done in-house, and at the best effort basis. To ease understanding, the table below summarizes the requirement of each institutions:-

Table 2: Legislation and Guideline

No	Institution	Regulator	Act and Guideline
1	Islamic Fund Management	Security Commission	<ul style="list-style-type: none"> Capital Market Service Act (CMSA) 2007 <i>Shari'ah</i> Advisor Guideline Islamic Fund Management Guideline
2	Islamic Cooperative	<ul style="list-style-type: none"> <i>Suruhanjaya Koperasi Malaysia</i> 	<ul style="list-style-type: none"> Cooperative Societies Act 1993 <i>Shari'ah</i> governance framework (SKM)
3	<i>Ar-Rahnu</i> (corporation)	<ul style="list-style-type: none"> No Regulator 	<ul style="list-style-type: none"> No specific guideline issue except National <i>Fatwa</i> Committee
4	PNB	<ul style="list-style-type: none"> Minister of Finance 	<ul style="list-style-type: none"> <i>Minister of Finance (Incorporation) Act 1957</i>
5	EPF	<ul style="list-style-type: none"> Minister of Finance 	<ul style="list-style-type: none"> EPF Act 1991
6	Tabung Haji	<ul style="list-style-type: none"> Prime Minister's Department (religious affairs) 	<ul style="list-style-type: none"> TH Act 1995

Source: Researcher's compilation

CONCLUSION

In summary, the Islamic NBF is different from the Islamic banking institution in terms of its business objectives and the Islamic NBF also plays an important role to complement the gap left by the Islamic banking sector. Nevertheless, both institutions are part of the Islamic Financial Services, where it is expected that all of them must ensure that the business activities and operations are following the *Shari'ah* principles. Hence, *Shari'ah* governance is a vital organ in the Islamic NBFIs, that promotes transparency, fairness, and justice to all

the contracted parties, which would ultimately enhance the confidence of the public, investors, and all the stakeholders.

Despite the fact that it is not compulsory for most of the Islamic NBFIs to follow the SGF of BNM, the current implementation of *Shari'ah* governance is adequate because most of them have their own *Shari'ah* committee, and at least there is an effort by the Islamic NBFIs to appoint an internal *Shari'ah* compliance officer to assist the *Shari'ah* committee in managing *Shari'ah* compliance issues. The composition of *Shari'ah* committee members in an Islamic NBFIs depends on the size and complexity of the product. For example, the Islamic fund products are straightforward issues because the status of *Shari'ah* compliance stocks relies on the *Shari'ah* Advisory Council of the Security Commission. Apart from that, the product and services offered by the Islamic cooperatives are also not involved with complex products such as derivatives, structured products, and trade finance products, as normally, the Islamic cooperatives are only offering personal financing. As such, generally, Islamic NBFIs do not require a large composition of *Shari'ah* committee as compared to the Islamic bank. Moreover, without highly being regulated by the BNM, it gives an advantage to the Islamic NBFIs by having more flexibility on how to establish a comprehensive governance depending on their needs, size and complexity of products and services.

On the other hand, even though the current implementation of the SGF among the Islamic NBFIs appear to be well-adequate, the respective regulators such as the SKM and the MOF should shift their attention to the *Shari'ah* governance aspects by issuing comprehensive *Shari'ah* governance guidelines, policy and more enforcement on the *Shari'ah* governance implementation. Such *Shari'ah* governance should be more consistent with the latest practices of the Islamic banking industry. Pursuant to the rapid development of the Islamic banking industry, consistency is important. Otherwise, the Islamic NBFIs would be left behind where *Shari'ah* governance is concerned.

Earlier finding highlighted that the establishment of the *Shari'ah* control function is still in the infancy stage. Nevertheless, check and balance for the institution is essential to ensure the *Shari'ah* resolution issued by the respective *Shari'ah* committee is being adopted by the senior management. Hence, it is suggested that all Islamic NBFIs should make it compulsory to have the *Shari'ah* Audit function as a third line of defense. Apart from that, to ensure consistency among the Islamic NBFIs, the study also suggested that the Islamic NBFIs should establish an association among its members to promote coordination, strengthen the governance, exchange views from the *Shari'ah* committee and so forth. Using this platform, from the Human Capital perspective, in order to produce a pool of *Shari'ah* officer talents, more collaborations could be initiated between the industry and universities.

While this study is limited due to the lack of empirical analysis, it could be considered among the preliminary studies on the *Shari'ah* governance framework for Islamic NBFIs. Hence, for further studies, it is recommended to carry out empirical studies regarding the gap analysis between the *Shari'ah* Governance Framework of BNM and the respective Islamic NBFIs.

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Understanding the Determinants of Wearable Fitness Technology Adoption and Use in a Developing Country: An Empirical Study

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Received: 24th January 2021

Accepted: 10th February 2021

Published: 21st March 2021

ABSTRACT

On account of slow adoption rate of Wearable Fitness Technology (WFT), the device designers need to comprehend the determinants behind the adoption and use of WFT. Which antecedents affect the intention of WFT wearers remains unclear and a brainteaser for designers, especially in developing countries. This study, therefore, examined the factors liable to influence the WFT users in a developing country using the extended 'Unified Theory of Acceptance and Use of Technology' (UTAUT2) model and 'Perceived Reliability'. The desired data for assessment the model was assembled from 260 Bangladeshi respondents using a self-administered questionnaire through online platforms. The Partial-Least-Squares-Structural-Equation-Modeling (PLS-SEM) technique was followed by operationalizing SmartPLS 3.3.3 software to test the proposed hypotheses mentioned in the model. The outcomes of the test confirmed that the facilitating conditions and habit are the most influential determinants for intention-to-use and actual use of WFT followed by performance expectancy and facilitating conditions respectively. Contrariwise, effort expectancy was unearthed to have no notable impact on behavioral intention whereas price value showed negative association with intention. The documentation of the findings could benefit WFT vendors and those policymakers who have strong desire to enter in developing countries' market.

Keywords: Wearable Fitness Technology (WFT), UTAUT2 model, Technology Adoption Developing country

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INTRODUCTION

Fascination for wearable fitness tracker is burgeoning day by day which evoked and motivated health-conscious people to monitor, store and transmit their health-related information to keep the body physically fit and attain health goals (CTA, 2013). A survey carried out in 2020 by the American College of Sports Medicine opine that wearable devices are going to be the indispensable part of the health-conscious people during the forthcoming decade (Thompson, 2019). Market research report notified that the global market for wearable technology is projected to flourish to \$51.60 billion by 2022 which was reported \$15.74 billion in 2015. The wearable tech market continues to elevate at an unparalleled rate of 15.51% from year 2016 to year 2022 (Markets and Markets, 2017), which means that this wearables market push upward a significant number of smartphone vendors to penetrate in this market. A new market research report circulated by Meticulous Research anticipated that by 2025, the compound annual growth rate of 11.3% drive this market to reach \$62.82 bn. A study performed by Statista (2020) point out that the total number of figures who use fitness devices under the umbrella of 4G network was 526 million in 2017 which is probable to turn into 900 million real users in 2022. This recommends that these wearable devices are now acting as an indispensable part of modern lifestyles.

A tiny hardware which is installed in these digital trackers, includes an apps to check the physical fitness and monitor the lifestyles of users, such as these devices are used for counting the steps taken, measuring overall distance travelled, monitoring heart rate, calculating calories burned each day while walking or exercising, checking quality of sleep and most importantly, providing reminder throughout the day (Kaewkannate & Kim, 2016). With the rising interests of consumer to stay active both physically and mentally, the fortune of wearables in upcoming year is very encouraging in the Internet of Things (IoT) arena. According to their functionality, there are three types of Wearable devices: 'notifiers' signal us about the world where we live; 'eyeglasses' make simulated realities watch by the user and 'trackers' install sensors to keep data (Lunney et al., 2016). Most of the times, the third kind of wearable devices, namely WFTs, are seen as wristbands; but sometimes they can come up as devices which can be attached in the body, ear buds, or may be smart fabric made outfit. Among many others forms of wearable devices available in market, the most used ones are smart wristband, smart watches, fitness trackers, Fitbit, Jawbone (Talukder et al., 2019). According to NPD Group (2014) wearable trackers have turned into an over \$0.33 billion industry at an eye-catching exponential rate. Users can watch their activities in the visual dashboards of these devices and

they can also follow-up their medical record and dietary condition by virtue of unique lifestyle apps.

Despite its efficacy, potency, ease of use and many other qualities that it claims to have, the intention to accept this kind of technology among customers fall behind far away if we compare their adoption rate with other well-known long-lasting technological devices (Chau et al., 2019). Though customers in Bangladesh is becoming more and more technology oriented (Sagib & Zapan, 2014), still the country is struggling hard to cope with the proliferate features of wearable technologies (Debnath et al., 2018). The reason for lagging behind in adopting WFT is insufficient understanding about users' motive in using wearable technology (Lewy, 2015; Li, 2016; Chau et al., 2019). Since the commercialization process of wearable technology in developing countries is still now observed in its preliminary stage, that's why, a good number of prior studies keep their focus on technical development, consequently the research for understanding of its diffusion process is inadequate (Kim & Shin, 2015; Lunney et al., 2016). Moreover, if customer display their snail-paced adoption rate for accepting IT product, technological development in that culture face a severe impediment. Therefore, to boost up the diffusion process, extensive marketing research regarding factors underlying intention-to-use of tech products are carried out which provides a deep intuitive understanding for addressing meaningful implications for firms (Dutot et al., 2019). In addition, Ledger & McCaffrey (2014) alleged that within half-year of purchasing a fitness device, roughly 30% of wearer don't use these devices again. A longitudinal study claims that within first week of owning a fitness tracker almost 25% users dismount their devices where 50% return their devices within the second week of the research period (Shih et al., 2015). For this reason, some researchers opine that effectiveness of wearable fitness devices is being seriously challenged (Patel et al., 2015). Therefore, to successfully increase the adoption rate in developing countries, we need to better realize the factors that play a pivotal role to their use and disuse. Further, Sagib and Zapan (2014) noted that shopper behaviors studies regarding technology adoption in Bangladesh is historically scant. This paper opted to use the UTAUT2 (Venkatesh et al., 2012) for understanding the determinants of intention to accept WFT and their use behavior to provide a fruitful insights to the policy maker, designer and marketer of these devices in developing country context.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Different established models have been used for predicting the determinants coupled with the adoption of wearable fitness health technologies (Kim & Chiu, 2019; Lunney et al., 2016). The UTAUT is extensively employed in the domain of technology adoption research (Chauhan & Jaiswal, 2016; Parameswaran, Kishore, & Li, 2015; Šumak & Šorgo, 2016). Venkatesh et al. (2003) developed the UTAUT model with four independent variables, namely performance expectancy, effort expectancy, social influence and facilitating conditions. The UTAUT is an amalgamation of determinants that influence the behavioral intention and spell out the use of new technology. It is proven that the UTAUT has been postulating superior outcome than other technology acceptance models such as TRA, IDT, TAM, TPB etc. (Shiferaw & Mehari, 2019). Though the UTAUT model has the better explanatory power with explaining 70% of the variance respect to intention-to-use (Venkatesh et al., 2003), the model was designed for

investigating organizational technology acceptance. Further, researchers documented that the variables included in the UTAUT model might be inadequate determinants of technology acceptance and usage (Al-Mamary et al., 2016). Consequently, the UTAUT is further extended as UTAUT2 for investigating individual technology acceptance and use with additional three independent variables (price value, hedonic motivation and habit) in the original UTAUT (Venkatesh, Thong, & Xu, 2016). The UTAUT2 has shown better performance than the UTAUT with explaining 74% of the variance respect to intention and 52% in consumers' technology usage (Venkatesh et al., 2016).

Our study employed UTAUT2 since this model has been extensively used in health related technological research. However, the model is further extended incorporating the 'perceived reliability' (PR) variable in the model. Barua, Aimin, & Hongyi (2018) suggested that reliability of technology is an imperative basis that encourage the consumers to adopt or not to adopt technology. Alam et al. (2020) noted that PR is a major concern that encourage consumer to use health technology in Bangladesh. Further, Alam, Hu, & Barua (2018) also documented that the reliability of health care technology plays a commanding role in decision making process of Bangladeshi tech product users. On the other side, researchers in wearable fitness technology adoption and use also incorporated some other external variables in the original technology acceptance model depending on the different context of use (Kim & Chiu, 2019; Talukder et al., 2019). For instance, Talukder et al. (2019) incorporated 'compatibility' and 'innovativeness' as external variables in the Chinese context and found that they contribute significantly in adoption of wearable fitness technology. In the Korean context, Kim & Chiu (2019) combined two models namely, technology readiness model and technology acceptance model, for investigating sports wearable devices adoption by Korean customers. Lunney et al. (2016) extended the TAM incorporating 'subjective norm' in the model for exploring the US consumers' intention-to-use WFT. Based on the literatures about WFT adoption, this study considered to extend the UTAUT2 incorporating perceived reliability. Consequently, the proposed framework is presented in the Figure 1.

HYPOTHESES DEVELOPMENT

Performance Expectancy (PE)

PE mention the degree to which a person considers that by using a new innovative technology s(he) will be able to do a specific task (Venkatesh et al., 2012). It is found that PE triggers the intention of a user to accept a new-found technology (Alam et al., 2020; Lean et al., 2009). If new innovation become apparent as more expedient in executing specific performance in the daily and occasional life of customers, they put endeavor effort to grasp that new creation. (Martínez-Pérez et al., 2013; Alalwan, Dwivedi, & Williams, 2016). Prior research also point out that the impact of PE on behavioral intention to wear WFT is noteworthy (Gao et al., 2015). Therefore, from aforementioned argument, we propound the following hypothesis:

H₁: PE has a positive effect on individuals' behavioral intention to adopt WFT.

Effort Expectancy (EE)

EE signifies the extent of putting endeavor regarding usage and handle of a technology in a simple and easy-going fashion (Cimperman et al., 2016; Kohnke et al., 2014). The easy

accessibility of a technology positively correlated with the user's adoption behavior (Barua, Aimin & Akter, 2016), especially when a new innovation introduces or discover recently or already existing but seen, experienced or acquired for the first (Cimperman et al., 2016). That is, if consumers perceive that the new technology will not make their life burden, rather easy to learn, simple to operate and convenient to carry the technology make the life simple and easy-going, the firmness of adopting the fitness wearable will be strengthen in their life (Goulão, 2014). WFT is still relatively a new invention in developing countries like Bangladesh. It is, therefore, operationalize simplicity and easy accessibility have a substantial impact on end user to adopt WFT. In case of WFT, some studies confirmed that effort expectancy has a positive direct effect on consumer intention to use WFT (Gao et al., 2015). The above arguments make it possible to postulate the following hypothesis:

H₂: EE positively influences the behavioral intention to adopt WFT.

Social Influence (SI)

SI signifies the efforts undertaken by the important social groups who make an endeavor to change another person's belief system so that s(he) will readily admit the new-found technology (Zhang et al., 2017). SI proclaims that besides the opinions of peer groups, friends & family, colleagues, social networks have noteworthy dominance to propel the individual's decision to adopt new technologies (Tsu Wei et al. 2009). Consumers keep faith on the members of their immediate social circle for adopting new products (Venkatesh et al., 2003), i.e., the fitness wearable, especially, when they have insignificant experience of the related innovation. As stated, WFT is still a new concept in developing countries like Bangladesh, therefore, their adoption decisions are expected to be greatly influenced by others' suggestions, especially, when this kind of products would be comparatively new to them. Prior research suggested that SI has positive impact on users' intention to accept technology (Chiu & Tsai, 2014; Rasmi et al., 2018). Thus, the following hypothesis is postulated:

H₃: SI has a positive effect on behavioral intention to use WFT.

Facilitating Conditions (FC)

FC demarcated the point to which an individual perceives that physical and organizational structures provide adequate resources and support systems that are needed for operating a fitness-wearables technology (Venkatesh et al, 2012). Boontarig et al. (2012) also argued that FC has remarkable impact on intention-to-use and use of technology. Different functions are available in fitness wearables which vary among brands and technological platforms. Accordingly, consumers' opinions may vary across a number of devices. This is because, different configurations are available in WFT across the product category. Consistent with the UTAUT2 model, it is suggested that FC positively influences use and intention to use wearables. Therefore, the stated argument urges to develop the following hypotheses:

H_{4a}: FC has a positive influence on intention to use (BI).

H_{4b}: FC is positively associated with actual use of WFT.

Hedonic motivation (HM)

HM signifies the amount of perceived fun or pleasure resulting from using a technology (Venkatesh et al., 2012). Utilitarian motivation distinct WFT from other types of IT-related products, that's why, for experiencing personal amusement or

enjoyment, individuals seem to pay more attention to use these kind of devices (Gao et al., 2015). For example, by wearing the sensor, users can continuously examine their fitness-related metrics (Wei, 2014). Perceived enjoyment assists the end user to show more inclination to use these devices (Hew et al., 2015). Therefore, the following hypothesis was posited:

H₅: HM positively influences the behavioral intention to use WFT.

Price Value (PV)

PV can be defined in its essence as consumers' cognitive trade-off value between the perceived values of the technology and the cost incurred for using those (Venkatesh et al., 2012). From inclusion of price value in the UTAUT2, it is conferred that there exist a significant association between PV and behavioral intention (Arenas-Gaitán, Peral Peral, & Ramón Jerónimo, 2015). Study supports the view that PV play a strong role for capturing consumers' behavior to adopt WFT (Zhang et al., 2012), though, some WFT would be expensive to buy for price sensitive users (Gao et al., 2015). This suggests that in spite of higher price value, if wearers consider that total perceived benefits (TPB) of accepting a technology are higher than the total perceived cost (TPC), they show more interest to wear WFT (Talukder, et al., 2019). So, the researchers have speculated the following hypothesis:

H₆: PV is positively correlated with the intention to use WFT.

Habit (HT)

HT is a regular tendency or practice, people show spontaneously owing to accumulation of learning behavior (Venkatesh et al., 2012). Amoroso and Lim (2017) identified that delighted customers show an eagerness to accustomed behavior, which compel them to wear these devices incessantly. Chuang (2011) confirmed that HT is one of the most prominent antecedents of intention to adopt WFT. In previous studies, it is explored that HT have a positive effect on behavior intention and usage behavior (Baptista and Oliveira, 2015). We, therefore, hypothesize that:

H_{7a}: HT is positively associated with the intention to use WFT.

H_{7b}: HT positively influences the use behavior.

Perceived Reliability (PR)

Shareef et al. (2012) demarcated that PR is an inside feeling of wearers regarding how much s(he) have faith and self-reliance on a new innovation that the technology will execute a task more precisely and dependably. Gunawardana & Perera (2015) opine that PR is a vital dimension of perceiving appropriate service quality from the technology. Moreover, among other antecedents which act as a driving force for strengthening BI of an end user, PR is the prominent, finally which motivate him/her to wear the device (Sharma and Sharma, 2019). In prior studies, PR is recognized as a strong variable, which increase the volition power of users to wear WFT (Warrington, Abgrab, & Caldwell, 2000). By relying on the previous work, the following hypothesis is asserted:

H₈: PR is positively correlated with the intention to adopt WFT.

Behavioral Intention and Use Behavior (UB)

It has been experimentally proven that the dependent variable, BI is the best predictor of actually accept the technology by end user (Taylor & Todd, 1995). It refers to the extent to which a person has developed conscious plans whether s(he) will undertake some specific action in future (Venkatesh, 2010). Though it is difficult to observe behavioral intention of a user

invaluably, using a wearable provide a clear indication of a desired response undertaken by end customer (Reyes-Mercado, 2018). Furthermore, existing literature confirmed that there is a positive association between behavioral intention and actual usage behavior (Goulão, 2014; Cimperman et al., 2016) Therefore, causal link between behavioral intention and the wearable use can be hypothesized as:

H₉: BI is positively correlated with the actual use behavior of WFT.

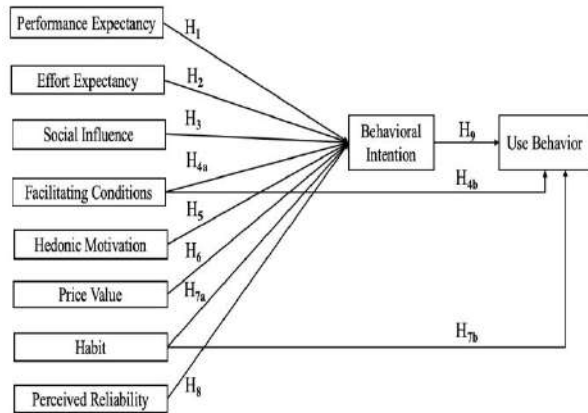


Figure1. Research Framework

METHODS

Instrument development

The instrument was designed based on the previously validated and extensively used scale to confirm the content validity for measuring the determinants of intention and use. Some items were faintly amended to fit the background of the study. However, the scales for measuring SI, PE, EE, and FC were adopted from Venkatesh et al. (2012) and Venkatesh et al. (2003). HM, PV, HT and BI were evaluated operating the scales of Venkatesh et al. (2012). PR was estimated adopting the scales of Gunawardana & Perera (2015); McKeenie, Ganguli, & Roy (2011); Walker et al., (2002). AUB was tested using the scale of Moon & Kim (2001).

Questionnaire Design, Data Collection, and Participants

The questionnaire was split into two parts - demographic profiles such as gender, age, education and occupation were incorporated in the first part and second part was assigned for representing the indicators of proposed model constructs. All the items of the instrument were assessed on 5-point Likert type scale that conveys '1- Strongly Disagree' and '5- Strongly Agree'.

The data was collected through a survey method with a purposive sampling technique considering the respondents willingness to participate in this survey. The questionnaire was developed on the Google Forms, and since the face-to-face interview was difficult in this ongoing COVID-19 pandemic situation, therefore, following the study of Barua et al. (2020), who suggested that online data collection procedure is best suitable in the pandemic situation, the questionnaire was distributed using email and social media networks such as messenger, WhatsApp, etc. The full rights were given to respondents to response the instrument according to their understanding on WFT to avoid the methodological bias of the study. Further, no incentive was provided to the participants for avoiding the biased responses. However, 260 responses were collected in total within a three-week period in the month

of December 2020. From them, 4 responses were deleted since their inability (due to the outliers and non-response problems) and finally, 256 responses were recorded for final analysis.

However, for determining the sample size, we used the recommendation of MacCallum et al. (2001). They noted that the ratio of respondents and factors of the model should be 20:1 or larger for adequately explaining the model (MacCallum et al., 2001). Therefore, the sample size of this study is quite representative since it is a ten-factor model which requires 200 sample size for assessing the model validation and testing the hypotheses.

Profiles of the Participants

Most of the respondents are found young and currently engaged in graduate and post-graduate education. Table 1 shows that 77.34% respondents fall in the age group 18 to 25 years and 84.76% are students. 54.68% of the respondents shows that they have the experience of using WFT for 1 to 2 years. Seniors citizen are very rare to use WFT in context of Bangladesh.

Table 1. Participants' characteristics

Variables	Frequen cy	%	Variables	Frequen cy	%
Gender			Education		
Female	133	52.0	SSC	04	1.56
Male	123	47.9	HSC	12	4.68
Age			Honors	175	68.3
18-25	198	77.3	Masters	61	5
26-35	44	17.1	Others	4	1.56
36-45	09	3.51	Experience in Using WFT		
46-55	05	1.97	Less than 1 year	45	17.5
Professional Experience			1- 2 years	140	54.6
Student	217	84.7	3 - 5 years	59	23.0
Service	22	8.59	More than 5 years	12	4.68
Business	14	5.48			
Freelance	03	1.17			

DATA ANALYSIS AND RESULTS

The model of this study and proposed relationships between construct were investigated using Partial Least Squares-Structural Equation Modelling (PLS-SEM) technique. As a component-based tactic PLS-SEM is used for measuring reliability, validity known as measurement model and the relations between variables recognized as structural model (Cheng, & Yang, 2014). PLS is widely used as path modeling approach by the academicians and practitioners in the field of marketing and management due to numerous reasons. Requirements are fewer in PLS analyses compare to covariance structure analysis. First, for instance, compare to covariance-based SEM, a multivariate normal dataset is not required in PLS (Jain et al., 2012). Second, PLS increases the prediction quality of endogenous variables (Yi et al., 2013). Third, a dataset with small sample size is also recommended in PLS. The dataset of this study is comparatively small too but adequate for assessing the model. Fourth, PLS-SEM is more suitable for explorative study. The current study is also explorative in the sense that the UTAT2 model is extended with adding the external variable 'perceived reliability'.

Consequently, SmartPLS 3.3.3 software, as a technical means for PLS-SEM analysis, was employed for attaining the purpose.

Measurement Validation

Measurement model ensures that the instrument's items for individual variable are both reliable and valid for measuring the variables. Table 2 indicates that the Composite Reliability and Cronbach's Alpha values are of greater than 0.775 for all the constructs used in this study, where the threshold level is 0.70 (Fornell and Larcker, 1981). Cronbach's alpha, as superiority of PLS, measures the correlation among the variables instead

of measuring the absolute reliability of the variables where Nunnally (1967) suggested that 70% (PLS) composite reliability is an indication of an acceptable internal stability for the model and less than 60% PLS is inferred as the dearth of reliability. As next criterion for measuring the validity of the model, Table 2 shows that the AVE is more than 0.638 where it is suggested that the AVE larger than 0.5 denotes more than 50% of variance of all indicators can be described by the construct (Fornell and Larcker, 1981). Further, Table 2 demonstrates that the indicators' loading varied from 0.757 to 0.887. Therefore, convergent validity is established.

Table 3. Correlation Matrix

	1	2	3	4	5	6	7	8	9	10
1. BI	0.867									
2. EE	0.478	0.815								
3. FC	0.489	0.302	0.865							
4. HT	0.500	0.350	0.398	0.816						
5. HM	0.459	0.401	0.358	0.247	0.833					
6. PR	0.369	0.271	0.082	0.298	0.210	0.829				
7. PE	0.570	0.585	0.403	0.486	0.348	0.305	0.799			
8. PV	0.286	0.297	0.248	0.456	0.172	0.243	0.378	0.829		
9. SI	0.408	0.301	0.155	0.352	0.295	0.278	0.313	0.231	0.833	
10. UB	0.610	0.422	0.502	0.635	0.294	0.267	0.578	0.395	0.253	0.831

BI - Behavioral Intention, EE - Effort Expectancy, FC - Facilitating Condition, HT - Habit, HM - Hedonic Motivation, PE - Performance Expectancy, PV - Price Value, SI - Social Influence, UB - Use Behavior

Table 4. HTMT Ratio for Discriminant Validity

	1	2	3	4	5	6	7	8	9	10
1. BI										
2. EE	0.57									
3. FC	0.56	0.35								
4. HT	0.60	0.42	0.46							
5. HM	0.56	0.49	0.43	0.30						
6. PR	0.43	0.32	0.10	0.35	0.25					
7. PE	0.69	0.71	0.47	0.58	0.43	0.36				
8. PV	0.35	0.37	0.29	0.56	0.21	0.30	0.47			
9. SI	0.47	0.34	0.17	0.42	0.35	0.32	0.37	0.27		
10. UB	0.73	0.51	0.57	0.75	0.36	0.31	0.69	0.48	0.29	

Subsequently, the discriminant validity, that compares the different indexes of a variable with other variables' indexes in a model, was evaluated. Discriminant validity is considered to be acceptable if AVE is found higher than the common variance amongst a variable and other variable. Table 3 shows that the square root of the AVE is greater than the

ratios in Table 4 also shows that the model is discriminately valid. Therefore, obtained results for discriminant validity are acceptable.

respective correlation. Further, item cross-loadings for all constructs were reviewed and found that no item loads were greater on another variable than the variable it was intended to measure. Table 3 also denotes that all transverse values are higher than the off-transverse values in the respective rows and columns. Besides, heterotrait-monotrait (HTMT)

Table 2. Reliability and Convergent Validity

Constructs	Items	Loadings	Cronbach's alpha	CR	Average Variance Extracted (AVE)
Performance Expectancy	PE1	0.830	0.811	0.876	0.638
	PE2	0.774			
Effort Expectancy	PE3	0.780	0.831	0.888	0.664
	PE4	0.811			
	EE1	0.782			
	EE2	0.790			
Facilitating Condition	EE3	0.860	0.888	0.922	0.748
	EE4	0.825			
	FC1	0.879			
	FC2	0.879			
Social Influence	FC3	0.867	0.854	0.901	0.695
	FC4	0.833			
	SI1	0.887			
	SI2	0.850			
Price Value	SI3	0.835	0.775	0.868	0.687
	SI4	0.757			
	PV1	0.824			
Hedonic Motivation	PV2	0.866	0.780	0.872	0.694
	PV3	0.794			
	HM1	0.773			
Habit	HM2	0.849	0.832	0.888	0.665
	HM3	0.875			
	HT1	0.832			
	HT2	0.770			
Perceived Reliability	HT3	0.845	0.849	0.898	0.687
	HT4	0.814			
	PR1	0.845			
	PR2	0.858			
Behavioral Intention	PR3	0.798	0.834	0.901	0.751
	PR4	0.813			
	BI1	0.885			
Actual Use Behavior	BI2	0.861	0.850	0.899	0.691
	BI3	0.854			
	AU1	0.790			
	AU2	0.834			
	AU3	0.823			
	AU4	0.875			

Structural Model Evaluation

At this stage of analysis, this study assesses the proposed hypothetical relationships between the variables. Bootstrapping method with 5000 resampling size was operationalized for inspecting the relationships and the structural model' elucidatory power (Hair et al., 2011). The

scores of structural modeling are offered in Table 5 and Figure 2. The Table 5 indicates that the hypotheses – H₁, H₃, H_{4a}, H_{4b}, H₅, H_{7a}, H_{7b}, H₈, H₉ were significant. However, surprisingly, the relationships between PV and BI (H₆), and EE and BI (H₂) were insignificant.

Table 5. Hypotheses Confirmation

Hypotheses	Relationships	Beta	T-value	P Values	Comments
H ₁	PE -> BI	0.215	3.344	0.001	Confirmed
H ₂	EE -> BI	0.094	1.654	0.098	Rejected
H ₃	SI -> BI	0.140	2.449	0.014	Confirmed
H _{4a}	FC -> BI	0.228	3.499	0.000	Confirmed
H _{4b}	FC -> UB	0.188	3.668	0.000	Confirmed
H ₅	HM -> BI	0.159	2.779	0.005	Confirmed
H ₆	PV -> BI	-0.044	1.016	0.310	Rejected
H _{7a}	HT -> BI	0.161	2.424	0.015	Confirmed
H _{7b}	HT -> UB	0.402	6.513	0.000	Confirmed
H ₈	PR -> BI	0.151	2.796	0.005	Confirmed
H ₉	BI -> UB	0.317	4.415	0.000	Confirmed

R² and Q²

R² and Q² values indicate the explanatory power of a model. Hair et al., (2011) suggested that a model can be considered as weak, moderate, or strong if the R² values are 0.25, 0.50, or 0.75 respectively. The R² values obtained for BI and AUB in this model are 0.533 and 0.543 respectively, indicate moderate fit of the model. On the other, Stone–Geisser's Q² was checked for predictive relevance (Geisser, 1975; Stone, 1974). Blindfolding technique in SmartPLS was employed to measure the Q². The effect size is considered as small, medium, and large by the Q² value of 0.02, 0.15, and 0.35 respectively (Henseler, Ringle, and Sinkovics, 2009). This study revealed that the model has 0.043 predictiveness regarding BI and 0.034 predictiveness in case of UB.

unerringly investigated to capture an optimum level of acceptance among customers. In Bangladesh, the findings revealed that HT, FC, PE, PR, HM and SI have enormous impact on BI, whereas FC and HT have remarkably shaped the actual behavior of wearer. Unexpectedly, the influential power of EE and PV are not mentionable in case of WFT usage in Bangladesh. Wills et al. (2008) and Maillet et al. (2015) have also acknowledged its authenticity, though the result was mismatched with the findings of the UTAUT model. The most plausible reason behind this perhaps users are now quite accustomed with technology, e.g. smart phone. For this reason, they did not find that usage of WFT create any kind of challenge in Bangladesh. Since young generation constitute a great proportion of smartphone users' segment who have sufficient proficiency to operate the function of IT related products, therefore, they can smoothly run the WFT devices. Surprisingly, the results also show that PV has trivial impact on WFT adoption, perhaps because most of the WFT users pay more attention on intrinsic motivation of the devices. WFTs have some unique features in regard to task performances and personal entertainment different from other IT-related products which act as a catalyst to gain quick market access regardless of PV (Gao et al., 2015). Furthermore, Oliveira et al. (2016) found no significant relationship between PV and behavioral intention. Okumus and Bilgihan (2014) noted that the more and more HM experienced from using WFT, wearer would show more eagerness to use these devices due to the merriest nature of this sub-continent people. Therefore, HM was considered as a key determinant in prior research and its relevance also reported in this study (Venkatesh et al., 2003). Furthermore, if users put more weight on total perceived benefit derived from using WFT (Chan et al., 2012), in that case, the price issue is not essentially significant for WFT adoption.

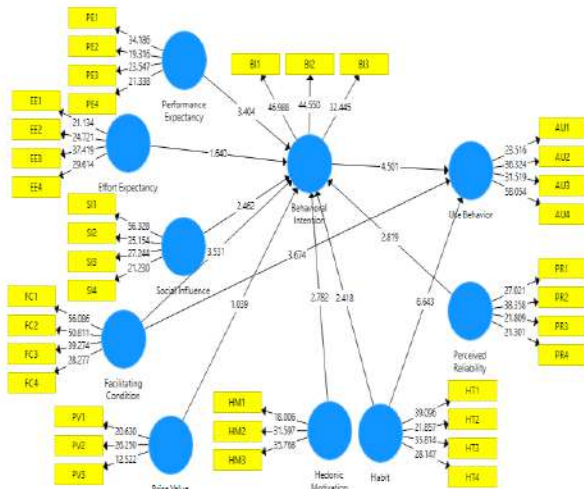


Figure 2. Structural Model and Hypotheses Testing

Discussions and Implications

Akin to the research questions and objectives of this study, the researchers conducted a quantitative analysis by using a modified UTAUT2 for better understanding of WFT usages behavior in a developing country like Bangladesh. Side-by-side PR is incorporated as an external predictor of WFT adoption. Aligning with the discussion in theoretical framework section and the findings of the result section, it is explored that different contributing factors affecting the intention-to-use and actual usage behavior should be

In contrast, HT produce a considerable impact on intention-to-use WFT followed by FC. This unquestionably point out that satisfied customers show an eagerness to habituate behavior, and hence they show more inclination for using these devices continually (Amoroso and Lim, 2017). Also, prior studies explore that HT is one of the most important antecedents of intention to adopt WFT (Chuang, 2011). Incessant use behavior makes a habit of wearers, as they are accustomed to

wear 24/7 to check their body fitness related health metrics e.g., measuring heartbeat, body temperature, steps taken, calories consumed etc. (Mackinlay, 2013; Mancuso et al., 2014), which in turn, forming their intention to adopt WFT. In addition, FC had a strong relationship on BI towards WFT in Bangladesh. Phichitchaisopa and Naenna (2013) and Aggelidis and Chatzoglou (2009) support this findings, which ensures FC have a vital role for adopting WFT by the end users.

In line with previous research related to WFT adoption (Gao et al., 2015), this study confirm that PE and SI were the strongest predictors of BI which suggests that perceived and considerable work-related benefits and the positive words-of-mouth of influential and important peer groups (Rana et al., 2017) may in fact motivate the adoption of WFT devices. The young generation is becoming more and more accustomed to social media, i.e., Facebook, Twitter, Youtube in where different reference groups acquainted with them spread positive word of mouth which significantly shape their attitudes in formulating their intention to experience a particular technology (Dwivedi et al., 2016; Sun et al., 2013). Since, in Bangladesh, usage of WFT devices is at the beginning stage, recommendations and experiences of early adopters shared in the social network would persuade the intention of potential wearers to adopt a new idea substantially (Alam et al. 2019). Moreover, consistent with prior research work, PR, the additional construct, was proven a robust determinant of increasing customer satisfaction toward a new innovation (Gunawardana and Perera, 2015) and wearers demand data shown in the dashboard of these devices should be more accurate, reliable and consistent over the time frame (Elliott et al., 2013). Therefore, PR is also considered as an important antecedent to inspire WFT wearers for wearing these devices. However, BI has remarkable impact on the actual usage behavior, which is consistent with previous studies conducted by Goulão (2014); Gao et al. (2015) and Cimperman et al., (2016).

Theoretical Contribution

In this study, we studied antecedents that are unique in molding the behavior of end user substantially to adopt a WFT device in a new environment (i.e. Bangladesh), mainly based on a more integrative model of UTAUT2 (Venkatesh et al., 2012). By considering PR, an important contributing construct in developing country context, this study provides invaluable insights on cause-and-effect relationship among the focal antecedents of BI and UB (PE→BI, FC→BI, FC→UB, SI→BI, HT→UB, HT→BI, PR→BI and HM→BI). This quantitative study discovered an interesting path relationship which makes a clear distinction from basic UTAUT2 model. Unexpectedly, EE→BI and PV→BI have trivial impact in case of WFT adoption in Bangladesh, due to close acquaintances with the configurations of smartphones and other IT-related products and perhaps the end user perceive that the prices set for these devices are quite reasonable. In addition, these kinds of devices relatively new in this market, which means that there is little information about this device and many people were unaware of the device should be considered.

Managerial Implications

Because of majority of customers reside in Bangladesh show their increasing attachment toward Self-service Technologies, WFT is expected to gain market acceptance at a fast pace. Vendors as well as device designers of WFT would get

valuable insights from this study, which they can exploit for designing these technologies in a new-fashioned way for the end users. However, the findings recommend that since Bangladesh is still in its infancy stage of making WFT available on the market, a deep intuitive understanding about the role of PR assist the vendors of WFT for alleviating perceived risk experienced by the end user, which in turn, motivate them to use these devices. Therefore, marketers should communicate proper information with consumers for educating them about the benefits of using these wearable devices (Andaleeb, 2015). The findings of this study also suggest that precise and accurate information about physical activity help consumers to construct PR on WFT. In that case, by eliminating consumers' fear arising from inaccurate data obtained from WFT, developers can inspire persons to keep faith on WFT and increase their physical activity level by continual monitoring their movement and by extension improve their fitness (Byambasuren et al. 2019). If consumers are convinced that the data obtained from WFT devices are accurate, their PR would be strengthened, in turn, acting as a strong force for adoption intention. However, WFT vendors need to envisage the role of PE, FC, HT, SI and HM for inducing the intention-to-use WFT in developing countries. Since PE and SI have noteworthy implication in molding the users' behavior in favor of marketing the product in developing countries, developers of WFT should install innovative features in these devices and to boost up the penetration of WFT, marketers should plan to undertake lucrative promotional strategies to properly educate the market (Andaleeb, 2015). In addition, by disseminating positive words of mouth of various persuasive reference groups in social media would multiply the market at an unprecedented speed (PWC, 2017; Mohamed et al., 2011). The aforesaid suggestions are expedient in fostering the acceptance intention of WFT among users.

Limitation and Future Direction of The Study

Like others, this study is not out of some limitations. For instance, this study considered only one external variable in the UTAUT2, but some other variables such as self-efficacy, lifestyles could also influence the consumers. Further, the model did not consider the any moderating variables in the model but it could provide some additional strong findings. This study collected data only from Bangladesh, hence generalizability of the model is restricted. Therefore, future study can conduct longitudinal surveys for better explanation of adoption and use behavior. However, the findings of the study would help the WFT designers to properly combine the determinants as suggested and also will help the marketers to initiate the proper marketing strategies.

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Review of Islamic Law Against Execution of Collateral Auctions on Islamic Banking Institutions in Aceh, Indonesia

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Received: 15th February 2021


Accepted: 4th April 2021

Published: 8th April 2021

ABSTRACT

This article review Islamic law quoted from jurists' opinion and legal experts on the use of auction trading theory in the collateral sale. Every financial transaction in Islamic banking required a guarantee. It is intended to save bank funds if the customer defaults. Based on constitutional act Number 4 of 1996 of mortgage rights, Islamic banks have the right to confiscate the asset (guarantees) of a customer who has reached the due date without intention to pay. However, the bank cannot carry out unilateral execution to make direct sales. The formal procedures which banks must follow to disburse funds from customer guarantees are usually long and often meet various obstacles. This article analyzes normatively and empirically the bail auction guarantees implementation on Islamic banking in Aceh based on the Islamic law concept from the al Quran, Hadith, and the scholars' Ijma'. Although conventional law is still used in the auction rules, the implementation of guarantees as applied to Islamic banking has adopted many Islamic laws. However, in the practice, there are still many problems that arise from the Islamic law scope which uphold the philosophy of maslahah and the concept of justice. The paper, therefore, employs qualitative approach and secondary date to investigate Shariah perspective against execution of collateral auctions on Islamic banking institutions in Aceh, Indonesia.

Keywords: Islamic Law, Execution of Collateral, Auctions, Islamic Banking

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INTRODUCTION

The relationship between the debtor and the creditor as regards loan is often accompanied by a guarantee. This is done to prevent losses from the creditor due to others default and moral hazard actions from the debtor. With the guarantee system, the creditor has the right to both goods and collateral as they are in the control of the creditor and not for settlement of accounts receivable of debtors (Abdullah, 2010). The conventional banking guarantee system is also applied in the provision of financing facilities in the Islamic banking industry. This is because not all financing goes as expected. Distribution of funding for the activities of the community in the form of financing the economy contains the element of risk of failure or also called Non-Performing Loan (NPL). NPL is the constraints that often arise in the implementation of financing by Islamic banks to customers such as non-current financing, financing that the debtor does not meet the promised requirements, and the financing does not keep the instalment schedule. These things have a negative impact on both parties (debtor and creditor; AbdulGaniyy & AbdulKareem, 2020).

A non-performing loan is a potential loss suffered by the bank in relation to the provision of financing facilities to customers. Such risks can occur at any time (Kodithuwakku, 2015). Therefore, preventive measures in the form of guarantees for financing or credit are obligations that must be done to secure

Islamic bank funds, the majority of which are sourced from third party deposits both juridically and physically (Suyatno, 1999; Errico, & Sundararajan, 2002). As a collateral object that is controlled by the bank as its securities, the bank does have the right to unilateral execution, to seize collateral on maturing financing while the debtor does not have the good faith to pay it off. This is based on Law Number 4 of 1996 concerning Mortgage Rights and Execution of Guaranteed Goods, the creditor can immediately request execution of the collateral object if the debtor customer defaults on paying debts, through auction sales execution (Muljadi, & Widjaja, 2007; Nurul Musjtari, Riyanto & Setyowati, 2018).

Based on the concept of collateral from the perspective of Islamic law, Islamic finance and banking may involve collateral as security to protect themselves against the possibility of customers' default. The concept of collateral is rooted in the idea of al-Rahn (pawn/pledge) in fiqh muamalah, the management of the Shariah-compliant bank as the collateral recipient has the right to sell the collateral if the debtor cannot fulfil its obligations as at when due (Ali, & Nu'man, 2008). There are various verses from Quranic text and Sunnah emphasising on collateral in Sural al-Bakarah verse 283: "And if you are on a journey and cannot find a scribe, then a security deposit (should be) taken". Also, in another hadith of the

prophet (SAW) narrated by Aisha wife of the prophet (PBUH) "Allah's Messenger (PBUH) bought food grains from a Jew on credit and mortgaged his armour to him" (as collateral) (Adamu, 2018). Besides, financial institutions have an essential role in expanding the rate of financial development of the society, particularly Indonesia is the country with the biggest Muslim populace on the planet, which is upwards of 213 million individuals or 87 per cent of the entire populace. Financial institutions are exceptionally close to the country's economic activities, starting from basic financial transactions to extremely complex financial traffic both at the international and local levels. Regarding the quick improvement of Islamic banking and finance in the country as well as one of the backbones of the economy, the development of Islamic finance and banking in the country is faster than in the nations particularly Malaysia (Solihah, Widjajaatmadja & Husaeni, 2019). Currently, Indonesia Islamic banking has increased by 40 per cent in the previous five (5) years. Bank Indonesia hopes that market shares Islamic finance can infiltrate the 30 per cent figure in the long haul, while as of August 2019 the financial of Islamic banks have reached Rp 193.98 trillion, and it is predictable that in a long time Islamic banking can reach 30% contrasted to existing financing. One of the prudential standards in financial governance in the operations of the Bank is the collateral as an assurance of the bank to guarantee that the debtors perform the agreed-upon accomplishments in the agreement. In the Islamic Banking Act No. 21 of 2008 in Article 1 (26) described that "Collateral is an additional guarantee, either in the form of movable or immovable objects

METHODOLOGY

This research is based on the qualitative method that makes use of both primary and secondary sources of information. The primary data source encompasses the expert's views obtained through interview. These experts encompass bankers, Shariah scholars. The respondents are considered appropriate due to their experiences and participation in the topic under the study. According to Obikeze quoted in Biereenu-Nnabugwu (2006), the in-depth interview technique of gathering data supports gaining access to processes, structures and it can eventually lead to the discovery of unexpected phenomenon. While the secondary data source utilized for the study encompass published and unpublished material gathered from archives, library, and search engines such as journal articles, books, policy documents, among others. The population of the study is Islamic banking institutions operating in Aceh. Due to its too wide scope, the authors restrict the population of the study to only three Islamic banks, namely Bank Syariah Mandiri, Bank BRI Syariah and Bank Aceh Syariah. The methodology employed for sample size determination is Non-Probability Sampling techniques with Purposive Sampling namely the sample chosen deliberately with various considerations.

RESULT AND DISCUSSION

Definition of Auction in Positive Law

Generally, the term auction derived from the Netherlands language, *vendu*, or auction officially entered into legislation in Indonesia since the year 1908. That is, with the enactment of *Vendu Reglement* (Auction Regulation, Staatsblad 1908 No. 189) and *Vendu Instructie* (auction instructions, Staatsblad 1908 No. 190). In Article 1 of *Vendu*

that are handed over by the owner of collateral to a Sharia Commercial Bank or Sharia Business Unit (UUS), in order to guarantee repayment of the obligations of the recipient customer". In view of this article, a significant assurance is to ensure the interests of Islamic banks from the actions of debtor client that may be inconvenient to the bank. With the collateral Islamic banks can ensure its interests and interests of the client's creditor can be well protected. The management of the Islamic bank can hold the collateral to cover all bills that an indebted person should pay. On other hand, the guarantee is utilized as a guideline for the Islamic bank to ensure that the customers or debt carry out all their obligations and will be sized by the Bank if the customer default to perform his/her obligation as the time given. With the collateral, the customer will have a determined commitment to carry out his/her duties to the Islamic bank (Disemadi, 2019: Solihah *et al.*, 2019). More so, in certain cases bank as the aggrieved parties cannot immediately seize the object of the customer's guarantee let alone sell it. Banks must take formal procedures in confiscating collateral objects, namely having to go through a long process based on the determination of the court and execution through the auctioneer to utilize the guarantee as a way to pay off the debtor's obligations. In practice, banks often face various obstacles, both from the owner of the collateral object and from another party such as the legal system. Based on the statement of the problem discussed on the implementation of guarantee auction of NPL, this study, therefore, proposes to examine the practice of guarantee auction on NPL according to *fiqh muamalah*.

Reglement, the definition of an auction is the sale of goods in public or the sale of goods that are open to the public (Harahap, 2005). The definition is then clarified in Article 1 paragraph 1 of the Regulation of the Minister of Finance Number 27 / PMK 06/2016:

"Auction is the sale of goods that are open to the public either directly or through electronic media by offering prices verbally and/or in writing preceded by an effort to attract interested parties".

For comparison, the definition of the auction was also formulated by several scientists, including Roel, who stated that auctions or general sales as:

"A series of events that occur when a person wants to sell an item or more, both personally and by means of their power, gives the opportunity to those present to make an offer to buy goods or goods offered until at a time when the opportunity disappears" (Fadhli, 2018; Effendi, 1994).

From this understanding it appears that the auction must meet the following elements:

- a) Auction is a way of sale that is done at a given moment and place.
- b) Implemented by announcing it in advance to collect interested parties or bidders.
- c) Implemented by offering or forming a special price, namely by offering a price orally or in writing that is competitive.
- d) Participants who submit the highest bid will be declared be winners or buyers.

According to article 1 No. 4 and 5 of the Regulation of the Minister of Finance No. 27 / PMK 06/2016 which classified auctions into 2, namely the execution auction and non-execution auction. An execution auction is a general sale to carry out or execute a court decision or determination or documents equivalent to a court decision, such as a Mortgage, Mortgage Right or Fiducia Guarantee. Whereas a Non-Execution auction is a general sale outside the implementation of a court decision or determination consisting of the auction of state property/control and voluntary auction of private property (Anwar, Yaswirman & Ulfanora, 2019; Monica, Djaja, 2020; Trisna, 2016). The Regulation of the Minister of Finance No. 27 / PMK 06/2016 also explains that those who have a position to conduct an auction are the Auction Office, which is the Office of State and Auction Financial Services (KPKNL) whose position is within the Directorate General of State Receivables and Auctions (DJPLN) or Office of the Official Class II Auction (Febrianto & Ayunda, 2020).

Therefore, in some case of guarantee auction execution at NPLs in Islamic banking, bank management cannot immediately sell collateral objects for defaulting customers under their control. Even though the collateral item of the customer has been bound by charging the mortgage. Because banks do not have special powers to carry out auction sales execution of customer guarantees except with voluntary sales made by customers.

Procedure for Auctioning Guarantee Executions on Islamic Banking

Regarding the provisions of the imposition of a security interest in the collateral for loans, the state has issued legal regulations to Act No. 4 of 1996 concerning mortgage rights on land and objects related to land. The law regulates collateral between banks and debtors in debt transactions as well as regulations concerning procedures in the event of default (not paying) if the debtor does not carry out his obligations (Patrik, 2006). The most common utilized collateral is land rights due to the price and value tends to increase. The institutional guarantee considered effective and safe by banking institutions is the underwriting right. This is because it is not difficult to recognize the objective of the underwriting right and also is easy and clear in the execution of its execution. Moreover, it must be paid ahead of time from different bills with the returns from the auction of the underwriting right article and the underwriting certificate has executive power. Based on the abovementioned, it is clear that legitimate security is given to creditors via law act No.4 of 1996 concerning mortgage (Andara, Dewi, & Ramadhan, 2020). In practice, if the debtor customer is in arrears to the stage of bad credit, then the bank will send a warning letter to the debtor customer to carry out his obligations in instalment payments as agreed. The warning is usually submitted at least 3 (three) times to meet the conditions for the default of the debtor.¹

If a bank has sent a warning letter but the debtor does not also make payment of his obligations, then the Bank through the

legal provisions as contained in Article 6 and Article 20 of the Indonesian Law No. 4 of 1996 concerning Mortgage Rights, will conduct an auction process against debtors guarantees. The Bank submits an application for the Mortgage Guarantee to the KPKNL (Service Office for State Assets and Auctions) which is one of the work units at the Directorate General of State Property of the Republic of Indonesia's Ministry of Finance.² When the KPKNL acts as a facilitator for the auction, the basis of the legal rules used in Article 14 of the Indonesian Law No. 4 of 1996 concerning Mortgage Rights which implies that the holding of mortgage rights has the same executive power as the court's legal decision that has permanent legal force (*inkracht van gewijsde*).³

KPKNL is only authorized to conduct the auction as requested by the creditor after being equipped with requirements such as documents that must be included in the application. If the application for the auction has been completed by the creditor and are in accordance with the provisions established, the auction process can be carried out in accordance with applicable regulations. For processing auction applications, the head of KPKNL or class II auction officials must examine auction documents and formal legal requirements subject and the object of the auction. The head of the KPKNL or class II auction official must also refuse if the auction requirement document is incomplete or does not fulfil the formal legality as the subject and object of the auction. The auction requirements document is:

- a) Photocopy of the seller's appointment decision, unless the auction applicant is an individual or an agreement/power of attorney to appoint the auction hall as the seller.
- b) List of items to be auctioned.
- c) Letter of approval from the dependent rights holder, in the case of the auction object in the form of land and/or buildings with ownership rights documents for building or use rights on the land.
- d) Written information needed for submission/deposit of net auction results.⁴

Moreso, the requirements document that must be attached to the execution auction according to Article 6 of the Mortgage Rights Act (UUHT) consists of:

- a) Copy of credit agreement.
- b) Photocopy of mortgage certificate and deed of mortgage right.
- c) Photocopy of land certificate burdened with mortgage rights.
- d) Photocopy of debtor details/debtor's liability that must be paid.
- e) Photocopy of proof that the debtor defaults, among others in the form of warning letters.
- f) Statement from the creditor as an auction applicant whose contents will be responsible if there is a civil claim and/or criminal claim.
- g) Photocopy of notification letter of the plan for auction implementation to the debtor by the creditor, which

¹ Interview with Miftahuddin, Deputy Head of Bank Aceh Syariah Branch Meulaboh.

² A copy of Regulation of the Director General of State Assets number 2 / KN / 2017 concerning Technical Guidelines for Implementation of Article 2 and Article 3

³ Interview with Zulfahmi, Area Collection and Recovery Manager of Bank Syariah Mandiri.

⁴ A copy of Regulation of the Director General of State Assets No. 2 / KN / 2017 concerning Technical Guidelines for Implementation article 5

is submitted to KPKNL before the auction is carried out.

- h) Letter of a statement from the creditor that the content states that the limit value is determined based on the assessment result from the seller by mentioning the name of the appraiser, number and date of the appraisal report.⁵

Based on the requirements of the auction request above, the receivables that must be submitted to KPKNL are the state of bad debts and the amount which is definitely legal. So before that, the Bank must have carefully researched the amount of bad credit and the physical condition of collateral and/or debtor/debt guarantor assets. So before handing over problem loans to KPKNL, the Bank must first attempt to collect and if it does not succeed, the credit submitted to the KPKNL must be in the form of bad credit.⁶

The Law of Auction According to Fiqh Muamalah

Auction in fiqh muamalah is categorized as a form of selling transaction, but there are general differences. In selling transaction, there is the right to vote, can be exchanged in public and vice versa, while the auction does not have the right to vote, may not be exchanged in public, and the implementation is carried out specifically in public (Ahmad, 2004). Selling auction models (*muzayadah*) in Islamic law is *mubah* (permissible). Buying and selling by auction do not include the practice of usury even though it is called *al-bai' muzayadah* from the word *ziyadah* which has additional meaning as the meaning of usury, but the additional understanding here is different. In the *muzayadah* increased is a more price offer in the sale and purchase agreement made by the seller or if the auction is carried out by the buyer then the increase is the decrease in the offer. Whereas in the practice of usury the additional in question is an addition that is not agreed upon in advance in the loan and borrowing contract of money or other usury goods (Ibnu Rusyd, 1992).

It's was mentioned by prophet Muhammad saw:

عَنْ أَنَسِ بْنِ مَالِكٍ رَضِيَ اللَّهُ عَنْهُ ، قَالَ : قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ : " مَنْ يَشْتَرِي هَذَا الْجِلْسَ وَالْقَدَحَ ؟ فَقَالَ رَجُلٌ : يَا نَبِيَّ اللَّهِ ، أَنَا أَخْذُهُمَا بِدِرْهَمٍ ، فَقَالَ النَّبِيُّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ : مَنْ يَزِيدُ عَلَي دِرْهَمٍ ؟ فَقَالَ رَجُلٌ : أَنَا أَخْذُهُمَا يَا نَبِيَّ اللَّهِ بِاثْنَتَيْنِ ، قَالَ : هُمَا لَكَ

Meaning:

"From Anas, he said, the Messenger of Allah sold a saddle and a bowl of water saying who would buy this saddle and bowl? A man replied I was willing to buy it for one dirham. Then the Prophet said again, who dares to add? So, a man gave him two dirhams, then sold the two items to the man." (At-Tirmizi)⁷

Analysis of Islamic Law on the Execution of Auction on Islamic Banking

In Islamic legal literature, the sale of collateral objects carried out by financial institutions that provide loans to debtors without their knowledge is not permitted. According to the *fuqaha*, this application can be carried out in two modes where

the debtor postpones the payment of his debt obligations and the amount of the creditor's debt can be covered if the object is sold. According to Muhammad and Abu Yusuf (classical economists) allowed to sell assets (object of the mortgage) of the debtor if the *qadhi* (judge) had issued a ruling on this matter and no reason was found to delay the sale. In all cases the sale must be made with the approval of the *qadhi* and attended by the parties in the market of goods to be sold, the sale can also be done by auction or get the highest possible price in accordance with the market price at the time of the auction (Az-zuhaili, 2011). According to the description above, the payment of debts decided by *qadhi* by selling collateral objects that are on the creditor to pay off debtor debts by force or not, is permissible in Islamic law, because this is the most important rules in the court system to protect the benefits and rights of parties, and the creditor. The sale of the item is in accordance with the auction conducted at this time, in which the sale decided by the *qadhi* in accordance with law is called the execution auction. The provision for the auction of collateral in *fiqh muamalah* is almost the same as the practice of auctions conducted by Islamic banking institutions in Aceh through KPKNL. Although the law used is still conventional, but the implementation of the auction for the customer guarantees in Islamic banking institutions in Aceh has adopted many Islamic law values. Nonetheless, in practice, both the KPKNL and the bank management still face various kinds of problems in the execution of the auction. These constraints can affect the implementation of auction sales and the results of auction sales.

Obstacles in auction execution

Based on the results of the research, the authors found various kinds of problems in terms of the auction execution of this guarantee, among others as follows:

- a) Disagreements regarding the auction price limit
Problems regarding auction price limits are one of the problems that are often encountered when an auction of execution is to be carried out. The debtor customer as the owner of the collateral object feels that the collateral object is sold at a price limit below the market price so that it is detrimental to the customer. Actually, an analysis of the price of the object of the customer guarantee has been carried out when binding the deed of rights before the funds are disbursed. However, this problem can be caused by several things, among others because there is a deliberate element of the customer itself, such as the condition of the collateral has been damaged and is no longer perfect as at the time of the mortgage agreement. Natural factors are also the cause of the decline in the price value of collateral objects, such as places and areas that are often flooded, and others. Besides that, it could be as a result of an error from the asset assessment team, an error in giving the license, or the expertise in assessing the price of an object is not yet right.
- b) Resistance to the auction execution

⁵ A copy of Regulation of the Director General of State Assets No. 2 / KN / 2017 concerning Technical Guidelines for Implementation article 6.

⁶ Interview with Febriano Iriawan Ishaq, auction service section on KPKNL.

⁷ Quoted from Sohari Sahrani, Ru'fah Abdullah, Fiqh Muamalah, (Bogor: Ghalia Indonesia, 2011), page 80

According to Harahap (2005) in the case, the purpose of resistance against the execution submitted by the executed party is to:

- i) Postpone the execution,
- ii) Cancelling execution with the stated decision about to be executed non-binding,
- iii) Decrease the value of the number to be executed.

But of all these objections, not all resistance submitted by the executable party can be granted. Nevertheless, it is permissible to postpone execution if the execution resistance uses reasons that can be applied casuistically. If the factual and fundamental reasons are found in the resistance, the Chairman of the Court may grant a stay of execution until the decision of the resistance gains permanent legal decision. Conversely, if resistance is executed at all has an underlying reason, it is forbidden to grant a stay of execution.

c) Debtors do not want to vacate the mortgage
Mortgage Rights Act made it clear that the debtor must discharge their dependence right on a security object at the time of default and when the auction was about to be executed. But in reality, there are still many debtor customers who still occupy the collateral object and are reluctant to make it vacant.

d) Lack of buyers
Another problem that is often encountered when auction execution is the lack of buyer interest, this can be caused by internal factors or external factors. Internal factors are still a dispute when the collateral object is auctioned, so buyers are more careful to buy the auction object that is still in dispute. Among the disputes that often arise are as the author has described above, namely, the debtor does not want to discharge the mortgage and the auction execution still occurs resistance from the debtor. While external factors are the economic condition of the people who are still in difficult economic conditions, so they do not have the ability to buy the object of the auction.

e) Analysis of Islamic Law Against Obstacles to Execution Auction
As a system of life, Islam gives honour to every dimension of human life, including the world of economics. The Islamic economic system seeks to bring alive economic values with the values of faith or ethics. That is, economic activities carried out by humans are built with the dialectics of the value of materialism and spiritualism. The economic activities carried out are not only based on material values, but there are transcendental supports in them so that it will be worth worshipping. Besides, the basic concepts of Islam in *muamalah* (economic) activities are also very concerned with the values of humanism.

Ulama and the *fuqaha* have agreed that the law of every *muamalah* transaction is basically *mubah* (permissible) as long as there is no text which prohibits it. The *fiqh muamalah* asserts that human connection is set with each other both in terms of law and justice personally, society, economics law, international law, criminal law, family law among others. But other principles of *muamalah* must also be applied in every

transaction in Islamic banking. The following are other basic principles that must be applied in *muamalah* transactions:

a) Realizing the benefit

Generally, the meaning of *maslahah* (Public Good) is to maintain the goal of shariah and to gain benefits/avoid harm. According to Dahlan (2010), one of the advantages of Islamic economic theory is that it makes moral a major variable. Therefore, *maslahah* is a goal that must be conveyed in every economic transaction. The execution of the auction of collateral goods carried out in Aceh actually has an element of *maslahah* for both the debtor (customer) and the creditor (Islamic bank). *Maslahah* for the creditor is the ability to withdraw funds quickly and cover losses from the customer's bad debts. Likewise, for the debtor, the auction sale guarantee is the last alternative for him to be able to pay off his debt arrears because the debt is an obligation that must be repaid immediately. But the obstacles that occur in its implementation can obscure the value of the *maslahah*. This is because it can affect the process of conducting auction sales and harm some parties involved in the transaction.

b) Maintain the values of justice

Islam is the complete code of subsistence, existence and the method with more importance on future strategy. It does not just comprehend the need of how to run the financial system of the nation but weights on the need for execution of equity and justice in the right sense and at right time. It places more noteworthy significance on accomplishing harmony through the methods of justice for the populaces of the earth (Sofi & Nika, 2016). The magnitude of maintaining justice in our lives is to confirm equality for all to reach good accomplishment and economic wellbeing. Islamic system tries to realize the principle of justice in daily economic activity by discarding secular and sacred compartmentalization (Baidhaw, 2012). Justice is objectives to be realized by all legal, means. In Islamic law, justice directly is the command of Allah. Which Allah said:

"O you who have believed, be persistently standing firm for Allah, witnesses in justice, and do not let the hatred of a people prevent you from being just. Be just; that is nearer to righteousness. And fear Allah; indeed, Allah is Acquainted with what you do." (QS: Al-Maidah: 8).

This concept must also be applied in the execution of the auction. Justice issued in the auction is the price limit which should be sold in accordance with the auction price. The nice thing is that no party feels tormented from the auction execution.

CONCLUSION

In any financing activity, the management of Islamic banks always requires customers to include the collateral for the financing. Third-party guarantee and collateral both serve the same objective forms of financing as security for Islamic finance and banking require from the customers during the documentation process before funding. This prerequisite is utilized as a support document to fall upon in the event of a transaction or borrowers' inability/default to fulfil commitments. In Islamic banking, customer's are motivated towards prompt repayment obligations. To feel secured from possible default,

Islamic financial institutions can hold important assets title and other forms as assurance such as liquid asset, gold, land title and other valuable properties. If customer financing runs smoothly until the repayment stage, the collateral items will be returned to the customer. However, if the customer defaults, does not fulfil the promise in accordance with the contract, and does not pay off the obligation, the collateral will be sold through auction sales at the KPKNL as the official institution in charge to conduct the auction transaction. Money from the auction sale is used to cover the remaining debt obligations of the customer to the Islamic bank. The rest will be returned to the customer. The legal provisions concerning this execution auction are law number 04 of 1996 concerning mortgage Rights and Regulation of the Minister of Finance Number 27 / PMK 06/2016 as implementing regulations. Although it still uses conventional legal rules, in practice the law has adopted a lot of Islamic law and in accordance with the concept of fiqh muamalah. However, the auction of the guarantee in its implementation often encounters various obstacles that interfere with the execution of direct and indirect executions. These obstacles obscure Islamic values that uphold the concept of welfare and justice.

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Islamic Financing as Mechanism for Socio-Economic Development: A Conceptual Approach

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Received: 23 February 2021

Accepted: 5th April 2021

Published: 9th April 2021

Abstract

This study has critically reviewed both empirical and theoretical literature and the importance of Sukuk being an Islamic finance mechanism as a major player to solve socio-economic problems and human development in general. It is observed that Islamic finance products, especially Sukuk have gained prominence across the globe. Considering part of its importance to human life, previous studies have established that it is working successfully in several countries through the adoption of Sukuk to tackle socio-economic vices such as the alleviation of poverty, lack of shelter, illiteracy that in the long-run has positive impacts on the small and medium enterprise; economic; rural and sustainable development. Given this, the study focuses on the effectiveness of the concept of Sukuk as a mechanism to solve socio-economic vices listed above. As earlier mentioned, the Islamic finance market is succeeding with its approach in a comprehensive manner towards empowering people and their wellbeing. In support of this, the proceed generated from Sukuk investments can be used by investors to improve the education of their wards and personal health condition. The outcome of this study revealed that Islamic finance products, bearing Sukuk in mind is capable of solving socio-economics vices facing the world.

Keywords: Islamic finance; Poverty; Lack of shelter; Illiteracy and Socioeconomic development.

 OPEN ACCESS

INTRODUCTION

It is noteworthy that for decades the economic conditions of countries in African regions have been declining (World bank, 2011). These countries` state of affairs has made them have a negative effect on the livelihood of citizens cum with depleting quality of life. During the 1980s the economic conditions of Africa has been declining monumentally, the regions considered as developing countries such as countries in Sub-Saharan Africa which the performance of their economy has proved to be the poorest. (World Bank, 2011). The increase in the level of poverty vis-a-vis high-level unemployment equally accounted for people with technical know-how emigrate in mass to developed countries seek employment and enjoy a better way of life (Chimenya, & Qi, 2015).

Socio-economic development is a broad term, this concept has to be understood considering different frameworks that make it up. Social, biological, language, political, science, and literature are essential areas that required development in order to empower the poor. In the context of socio-economic framework, the term development can be referred to as an effort targetted towards an improvement within an individual`s lifestyle through gainful employment, acquisition, development of skill, education, and income. This is a process of social transformation and economic-based on

environmental and cultural factors. In addition, social development can be considered as a process of transformation of social institutions in which it improves society`s capability towards meetings its desired objectives, by extension, economic development is equally known as the developing countries` resources and economic wealth for the wellbeing of people (Requena, 2016).

It is equally important to establish that socio-economic development be linked with the adopted definition of the word `development` given here, there is laid emphasis on progress in terms of social and economic factors within a geographical area. In addition, it is imperative to give an illustration that economic development is a process of increasing the level of prosperity through an increased production vis-a-vis both the distribution and consumption of goods and services. However, social development connotes the complexity of social dynamics which focuses on people`s social concerns as objectives of development, in the same way, it is people-centric in nature. Its indicators provide comparative information about areas such as employment, civic participation, health, income, education, and poverty (Fritz, J. M. (2010).

To ensure that Islamic financing is adopted as a mechanism to avert social-economic problems, it is important to discuss

the potentials of a key Islamic financing indicator known as Sukuk. By so doing Sukuk can be seen to be a continuous and concerted effort that would be required to refine the socio-economic development through the provision of innovative financial propositions that could move the industry towards contributing to the socio-economic development agenda. The application of Sukuk to combat socio-economic palaver will not only give an expansion to the frontiers of the Islamic finance industry by making available innovative products but it would equally assist in its growth sustainability (Kassim & Abdullah, 2017).

In this regard, Sukuk has the capability of providing innovative products that are in compliance with Islamic laws which can be used to tackle social menaces such as lack of shelter, poverty, and illiteracy. Obviously, it would improve the prospect of Islamic financing in its realization of social balance and economic justice. To a certain extent, Sukuk would assist in the fulfillment of the demand for a project that of no commercial value but that can bring about high social to people such as school, road, social enterprises, hospitals, and financial inclusion (Chamberlain, 2013). By extension, Sukuk equally provides monetary support for the building of infrastructure projects in underdeveloped countries which are designed for social improvement and making such countries developed economically.

The Sukuk negates the provision of funds for businesses that take part in the trading or production of materials with alcoholic contents, gambling, or drugs that can adversely affect consumers' wellbeing. It supports and encourages business activities that are of benefit to mankind and that are capable of improving the socio-economic condition of people, these are companies that directly or indirectly engage in technological efforts or sustainability of the environment (Kassim & Abdullah, 2017). In view of the above, this study aimed at examining the ability of Sukuk to be a key Islamic finance mechanism towards the provision of economic safety-net for underdeveloped countries towards addressing social-economic issues such as poverty, shelter, and illiteracy. These indicators were chosen for this study based on the critical review of past studies such as Ahmad (2015); Sulaiman, Adnan & Nor (2009), and Islahi (2003) who established that if Islamic finance is empowered and managed efficiently the issue of poverty, lack of shelter and illiteracy can be easily alleviated which would at the long run enhance the socio-economic development of the society and likewise it would establish justice and equitable distribution of wealth in the community. Further to above, it has been equally established by Islamic Development Bank (2015) that Islamic finance assists in stimulating the activities of the economy as well as entrepreneurship towards alleviation of issues confronting socio-economy, also it assures social and financial stability, and encourages human development and fairness for all in tandem with Sustainable Development Goals (SDG) (Muazir & Musari, 2016). In ensuring a better livelihood for all, SDG being new global development blueprint for 2015 till 2030 are comprised of 17 goals and 169 targets, it covers the followings: poverty eradication, education, shelter, and ecosystem sustainability among others, all in the realm of economic, social and environmental sectors which serve as the pillars of sustainable development (SD) (Ekperware, Olatayo & Egbetokun, 2017). By highlighting the Sukuk issuances in sectors that have a high social impact on people such as education, environment, and

healthcare. Therefore, this study presents the roles of Sukuk in its contribution to the improvement of the socio-economy of the country.

LITERATURE

What is Sukuk?

Nowadays, the term Sukuk is gaining more attention than how it was in a few decades back, the word "Sukuk" is coined from the word "Sakk" which connotes a deed, cheque, or a legal instrument (Omar, Abduh & Sukmana, 2015). In addition, there are several definitions of Sukuk. According to Islamic Financial Services Board (IFSB) defines Sukuk as a "certificate which represents the fair ownerships of an asset whereby all the shareholders have equal right on the subject matter" (Ogunbado, 2019). In its own submission, the SCM (2004) described Sukuk as a certificate which replaced the value of a given asset. While, Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) defines it as "certificates of equal value representing, after closing subscription, receipt of the value of the certificates and putting it to use as planned, common title to shares and rights intangible assets, usufructs, and services, or equity of a given project or equity of a special investment activity" (AAOIFI, 2008). The Security and Exchange Commission of Nigeria (SEC) postulates that "Sukuk is the investment certificate which proved an undivided share of ownership of the tangible asset, usufruct, and services or the asset of a particular project or any special investment activity using Shariah guideline and concepts and approved by the Security and Exchange Commission. As a mandatory Shariah requirement Sukuk holders must have interest or ownership of the underlying asset" (Hassan, Kayal & Oseni, 2003). Moreover, Sukuk in contemporary Islamic finance simply means a certificate, document, bond, or note that represents ownership in an underlying asset. Sukuk provides the Sukuk holder with a dividend of the asset along with risks from such and profit or said ownership (Ogunbado, 2019). It is equally known as "Islamic bonds" or debt securities that may be issued either by the Corporate or Sovereign (AbdulKareem, Mahmud & AbdulGaniyy, 2020). The Sukuk holders who subscribe to Sukuk investment show that they possess ownership of the property for a stated period of time (AbdulKareem. et al., 2020). In a study conducted by Shinkafi, Yahaya, and Sani (2019) the outcome of study revealed that there are positive and significant impacts between Islamic finance and economic development in the Middle East.

Efforts towards establishing cases whereby Sukuk have been successfully used for tackling socio-economy development are, for instance in Malaysia as described by standard and poor given that it issued Sukuk worth of USD29.8 billion between the period 2006 and 2012, it invested this huge sum in the capital project such as Senai Dersu Expressway, Maju Expressway, Kuala Lumpur International Airport (KLIA), all these capital projects were undertaken under the initiative of National Economic Transformation Program with the aim of transforming Malaysia into a high-income country (AbdulKareem & Mahmud, 2019). Without a doubt, applying Islamic finance particularly the Sukuk is proven to be increasing the infrastructures globally, it has become a key driver of socio-economic development since there is a need to build well-performing infrastructures for the sustainability of socio-economic development which transform into the welfare of general populace (AbdulKareem & Mahmud,

2019). Furthermore to buttress the rationale behind chosen poverty, lack of shelter, and illiteracy that serve as indicators of socio-economic development. It can be established that socially responsible investment (SRI) is equally affirmed that Islamic finance especially Sukuk have attracted traditional socially responsible investors. Besides, the funds raised through Sukuk will be utilized in compliance with Shariah's principal investment. On equal note, these funds raise can as well be utilized to build specific developmental projects such as educational projects, low-cost housing programs to tackle lack of shelter, ongoing vaccination program for covid_19 pandemic, and renewable energy projects (Asutay&Hakim 2018; Razak, Saiti & Dinç, 2019). Having highlighted the rationale behind chosen indicators of Islamic finance can be proven that proceeds yielded from some underlying assets of Sukuk can be to subdue poverty, provision of shelter to the populace, and make provision for the establishment of schools to combat illiteracy.

Poverty:

According to World Bank research, one percent decrease in the rate of development of any developing country's make an additional twenty million people sink into poverty, furthermore on equal note when there is a slowdown in economic development this will lead to a negative effect on the level of poverty among people (Hasan, Magsombol & Cain, 2009; Ibrahim, 2010). During the previous 70 years ago, Bilateral Donor and United Nations (BDUN) and the Multilateral Development Banks (MDB) agencies have poured in billions of dollars to encourage growth in developing nations. World Bank (WB) alone had distributed more than USD500 billion to fund projects in developing nations. These struggles have no doubt produced substantial outcomes in terms of expanding access to health services, education, building infrastructures, building capacities, and enhancing access to sanitation, electricity, and water. However, the results of this "development" have barely filtered down to the poor as the increment in world income was accompanied by a steady rising of world inequalities (AbdulKareem, AbdulGaniyy, Mahmud & Yazid, 2020; Bashir, 2018).

According to Bin Syed Azman and Ali (2016), Sukuk are financial models that can be used to assist in the reduction of common social problems such as poverty. Moreover, it equally provides economic security for the country. Besides, Sukuk are regarded as one of the major instruments of Islamic finance that has the characteristics of being interest-free. It does not support uncertainty or speculation in the outcome and no assurance assets. The increase in demand for the Sukuk serves as an important source of income for both public and private sectors, it does not only decrease the deficit in the country's budget but equally, assist in the creation of stability of the exchange rate of general prices in the market and its effect on nation's economic growth by making numbers of available employment increase and assist in the reduction of poverty. In their own submission Amaliah and Aspiranti, (2017) suggested that the issuance of Sukuk should be kick-off government towards the development of microfinance institutions for real sectors' growth to be achieved rapidly and reduction of poverty and unemployment to be achieved. Another positive effect Sukuk provides is that is the elimination of social issues such as lack of shelter, lack of quality education, unemployment, and socio-economic security. Through the adoption of Sukuk best

innovative products that can tackle social vices that Sukuk can provide a solution (Ali, Oravampurath & Ziyaad, 2020).

Lack of Shelter

Without a doubt, the shelter has been one among the first level that is the major needs of humans, it takes place next to clothing and food in a hierarchical order of human basic needs (Physiological needs). It's important to affect human culture, health and portrays the human level of civility. Its inadequacy or poor state brings about a low level of human growth, crime, unrest, and lower human's level of productivity. The issue of inadequate housing is alarming all over the world. Obviously, quite a number of people across the globe still cannot boldly show-off a roof to be called a befitting home of their own. However, this issue of global inadequate shelter is more bearable in developed countries but more pronounced in less_developed countries. According to UN House Settlement Program (UN-HABITAT) has estimated that about 600 million residents in urban and about 1 billion residents of rural areas in developing countries are living in homes that are overcrowded with poor quality of water, with lacking sanitation, and unsafe storage and preparation of food. Also, the steady increase in population is a factor that inhibits the solution to inadequate shelter globally, even in developed countries where this phenomenon is being controlled, yet it is scary in metropolitan centers whereby housing is somehow expensive and cumbersome to get by (Brown, 2003; Hasan, 2011).

As a result, societal challenges such as lack of shelter, illiteracy, lack of good health care, and poverty among people across the world. It is realized that Islamic finance institution is capable of making a contributory factor towards solving these problems. Thus, in the last decades, Islamic finance has been seen to have been giving its socio-economic role the adoption of Shariah measures in reviving economies (Mohsin, Dafterdar, Cizakca..... Obaidullah, 2016). For the purpose of this study, for fundamental human rights where every individual must be allowed to have a fair chance of improving his or her economic conditions to be achieved. It is imperative for the policymaker to adopt Islamic finance as a solution to alleviate the problem of shelter inadequacy confronting people. By adoption, Islamic finance through Sukuk has the potential to create employment which later transforms into an increase in people's income, this income can be used to cater for other human basic needs such as shelter, education, and their health.

Illiteracy

Almost half the population of adults in the world are illiterate, on an equal note more than half of this population is functionally illiterate yet adults' basic education still one of the least concerning spheres of education. It is important to state a working definition of the word 'illiteracy', also at what levels of functioning in writing and reading do one is considered literate? When these questions' answers are readily available then the word 'illiteracy' would be easily understood. Besides, prior to 1950 many governments were considering literate as one's potential to write, read and compute at fairly in the elementary level were considered as a criterion for literacy (Harman, 1970). Besides, the experts' committee on Standardization of Educational Statistic by UNESCO (1951) has proposed that somebody who has understanding, can form, write and read a simple and statement on his or her

daily life, further to this, a working definition was given by UNESCO that a literate person is one who possesses necessary skills which makes him has the ability to engage in every activity that is required by literacy to perform effectively in a given job, community or group and who possess potential to write and read effectively (Jones, 2018; Barley, Bechky & Milliken, 2017).

According to Bhatia 2013, several people among the poor cluster who are socially disadvantaged and the majority of people who are residing in the rural area than people in urban areas are equally illiterate and in this group, women are more illiterate than men, it is obvious that the low number of female literacy is a factor for their full dependency on men for writing and reading activities (Chaurasia, Priya & Agrawal, 2019). It has been established that the impacts of illiteracy on the life of concerned have always been negative when people cannot write, read or tackle a numerical problem they tend to confront enormous problems such as the inability to open a bank account, carry out online transactions or secure a good job, even if they are to get a job at all they can only get menial jobs such as domestic labor, carpentry, cleaning, etc which cannot really sustain them for their livelihood (Chaurasia, Priya & Agrawal, 2019).

A high number of illiteracy has been a major setback for the country's progress and development, this occurs when large percentages of people are unable to function in a given setting. In any developed economy and any sector of employment, a written word occupies a very important position of which; this assertion is equally stated in Millenium Development Goal which states that quality inclusive education for all to tackle the menace of illiteracy remains the key instrument towards achieving these goals, in order to achieve a poverty reduction to enhance health, people empowerment and ensuring the sustainability of environment (Sachs & McArthur, 2005). The illiterates and poor people in that setting are suffered most to secure employment in such an environment due to lack of skill to conduct themselves with the requirements of the job, in the long run, the lack sufficient food to take and lack proper nutrition. As result, they lack skills which make them be at disadvantage to secure a good job (Chaurasia, Priya & Agrawal, 2019; Richmond, Robinson, Sachs-Israel & Sector, 2008). Past studies have shown that the Islamic finance market is recording growth with an approach aiming at human increase people's income through assisting small and medium enterprise and human well-being (AbdulKareem, Mahmud, Abdulganiyy & Yazid; Irfan, 2020). Interestingly, Islamic finance products especially Sukuk provides a useful instrument to fill the gap as social intermediation for illiteracy. This study suggests that the application of Sukuk will strengthen both social and development finance through effective intermediation between illiterates, the poor, and the investors. Sukuk is an important product in Islamic finance. It can harness the potential of investment by providing an effective way for better economic impact for the illiterates and the poor as targeted segments of society.

METHODOLOGY

The conceptual approach was adopted for this study and it explored past studies previously conducted on the concepts of Islamic finance, socio-economy, poverty, shelter, and illiteracy to establish the viability of Islamic financing through Sukuk to alleviate poverty. These past studies used covers

journal articles, conference papers, and reputable textbooks on socio-economic development bearing in mind Islamic finance as a mechanism for its development. Furthermore, the approach used for the study is secondary-based whereby forty-two relevant materials were gathered using google scholar, research gate, emerald website, and other reputable online sources. Only about 6 percent of the total materials used whereby published between 2003 and 2013 while the rest were recently published and were published between 2014 till date. These materials were critically searched for; whereby duplicate materials found after download were removed; screened according to their relevance for the study, only the materials found useful were retained and critically reviewed to come up with the write-up.

Results and discussions

As proven in the literature reviewed above, it can be concluded that Islamic financing is capable of solving issues associated with socio-economic development, it is ascertained that extant literature have shown the positive impacts of this concept on socio-economic development. In view of this, these determinants: poverty; lack of shelter, and Illiteracy can be mitigated when Islamic finance is chosen to tackle them. To bring home the point, treating these concepts is in support of the general view that Islamic finance is not just about imbibing Islamic decrees but a fundamental mechanism for achieving socio-economic development (Retsikas, 2014). In a similar vein, the views of past researchers indicate that Sukuk being among the products of Islamic finance is an important mechanism of social-economic development that without a doubt proven to be assisting populace in various sectors positively which in the long run directly affecting human endeavors such as education, shelter, health among others (AbdulKareem. et at., 2020). In addition, Islamic finance has its foundation built on the provision of better economic development to make life easier for peoples' well-being, protect human dignity and ensure the safety of life, to actualize these, Islamic finance must be embraced for the upgrading of the economy and improvement in social services. Having stated above, it is noteworthy to add that Islamic finance particularly Sukuk have played a very important role on the growth of the socio-economy of countries.

Conclusion and Recommendation

Having discussed issues of poverty, illiteracy, and lack of shelter confronting people and highlighted the Islamic finance using Sukuk as a mechanism to tackle these aforementioned socio-economic vices. This study serves contribution towards eradicating socio-economic vices to reduce poverty, lack of shelter, and eradicate illiteracy among the poor. It can be resolved that education plays a crucial role in the alleviation of poverty; therefore, its attainment is an asset that capable of making the poor secure good job to reduce poverty, provide shelter for themselves. Since Islamic finance is different from its traditional finance counterpart which supports interest however the Islamic finance prohibits such by making it easy for people to transact. Islamic finance improves the local development of housing (shelter) and education. It also provides credit facilities to investors or entrepreneurs for poverty alleviation, economic growth, and rural development. On an equal note, it has the potential of alleviating poverty, while there is a low level of poverty among people as it aimed at creation of wealth among people thus they can be able to gain access to education

which eventually lead to growth in socio-economic development and improve wellbeing.

No doubt, since Islamic finance has proven itself as an effective mechanism for the alleviation of poverty, this assertion can be linked to views of several scholars who have earlier conducted studies and came up with findings that Islamic finance has been seen as a fruitful way to support the poor towards achieving better socio-economic life. On this note, it is recommended that governments at all levels and in different countries should strengthen and promote Islamic finance through supervision and regulations. Furthermore, governments should make interest-free financing possible and easily accessible, on the issue of the regulation mentioned above its presence will create the right incentives and confidence for investors to give support to long-term investments. transportation industry to fulfil the knowledge gap in the project management literature.

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