Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah (Journal of Islamic Economics)
Volume 13 (2), Jul-Des 2021
P-ISSN: 2087-135X; E-ISSN: 2407-8654
Page 229 - 254

An Innovative Fintech Model for the Enhancement of Akhuwat Microfinance Practices

Mohammad Shahid[1], Ahmad Khaliq[2], Mohammed Meeran Jasir Mohtesham[3]

Abstract. *To accelerate Akhuwat microfinance growth and lessen its cost to assist the poor, the current study proposes Fintech Rich Hybrid Islamic Micro-Finance (FRHIMF) model. This study adopts a qualitative approach relying on the content analysis of secondary sources, such as research articles, journals, conference papers, and websites. The study reveals that to achieve socio-economic mobility, poor people are in requisite of adequate financing. However, Islamic commercial banks generally finance major businesses and medium- to high-income proficient workers in consumer finance. Thus, the poor are unable to access funding to meet their liquidity constraints and the needs of small business finance. Akhuwat microfinance is a globally renowned institution that has played a vital role in supporting the underprivileged community. The implementation of FRHIMF has greater potential to increase Akhuwat microfinance accessibility.*

Keywords: *microfinance, Akhuwat, poverty, Fintech Rich Hybrid Islamic Micro-Finance*

Abstrak. *Untuk mempercepat pertumbuhan keuangan mikro Akhuwat dan menekan biayanya untuk membantu orang miskin, studi ini mengusulkan model Fintech Rich Hybrid Islamic Micro-Finance (FRHIMF). Studi ini mengadopsi pendekatan kualitatif dengan melakukan analisis konten terhadap sumber-sumber sekunder berupa hasil-hasil penelitian, jurnal, makalah konferensi, dan situs web. Kajian ini mengungkapkan bahwa untuk mencapai mobilitas sosial ekonomi, masyarakat miskin membutuhkan pembiayaan yang memadai. Namun, bank syariah umumnya membiayai bisnis besar dan pekerja terampil berpenghasilan menengah ke atas untuk pembiayaan konsumsi. Dengan demikian, masyarakat miskin tidak dapat mengakses pendanaan untuk memenuhi kendala likuiditas dan kebutuhan pembiayaan usaha kecil. Keuangan mikro Akhuwat adalah lembaga yang terkenal secara global yang telah memainkan peran penting dalam mendukung masyarakat yang kurang mampu. Penerapan FRHIMF berpotensi besar untuk meningkatkan aksesibilitas keuangan mikro Akhuwat.*

Kata kunci: *keuangan mikro, Akhuwat, kemiskinan, Fintech Rich Hybrid Islamic Micro-Finance*

[1, 2, 3]International Islamic University Malaysia
E-mail: [1]shahidazminadwi@gmail.com, [2]ahmadkhaliq@iium.edu.my, [3]meermoh8@gmail.com

Introduction

Contemporary Fintech is an incredible technology. By avoiding FinTech, Muslim nations' under-30 demography may be at a loss. Given the majority of this technologically advanced generation owns a smartphone, it is challenging to suppose they would not take advantage of the option to manage their financial needs digitally, including paying bills, obtaining loans, and even opening a bank account.

"While 76% of MENA companies reported having a bank account, only 26% reported having received credit from a financial institution. Despite this poor credit penetration at the corporate level in Muslim nations, some solutions have been implemented to close the estimated credit gap of about US$ 140 billion" (Todorof, 2018). Apart from alienating the younger generation, Shariah-compliant banks continue to lose perspective 'healthy' debtors as a result of their higher interest rates. Additionally, when Islamic banks agree to finance a project or lend money, they are known to charge higher interest rates than conventional banks. Alternatively, Islamic banks tend to attract many 'poor' debtors to offset economic losses. As a result, non-performing loans have increased significantly (Todorof, 2018). It is beneficial to integrate FinTech solutions that deliver quicker, more consumer-oriented, and cheaper transaction cost to address the issue. Shariah-compliant banks may develop investment products that meet Shariah requirements while also being more affordable (Todorof, 2018).

While embracing FinTech, Shariah finance will largely stay accessible to younger users, many of whom have already been exposed to FinTech-related technology and investment opportunities in the West due to FinTech's unique character. Contrary to popular belief, western financial technology firms are often interested in entering and leveraging the Islamic financial market. That is specifically true for financial technology firms that utilize blockchain technology. For example, the Canadian company Goldmine states that its gold-backed products are Shariah-compliant, following the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) requirements (Vizcaino, 2017).

Islamic finance and microfinance could benefit from recognizing specific FinTech instruments to increase their viability. While most FinTech instruments are adaptable to the Shariah industry's requirements, several of the most acceptable have been identified as peer-to-peer lending and robotic advising (Vizcaino, 2017).

Akhuwat Microfinance renowned microfinancing apparatus. Akhuwat's mission is to eradicate poverty by empowering socially and financially disadvantaged communities. In the provision of loans without interest. It allows needy and neglected families and reveal their business potential, builds their capacities, and provides social advice. All of them aspire to realize their goal of "a society free of poverty based on the ideals of compassion and equality." In addition, Akhuwat pioneered the Islamic Microfinance model and is taught at several western universities as a source of expertise and a popular model. The influence of Islamic social finance, paired with modern technology, could better meet Islamic social finance aims because the technology could assist in reducing the cost of providing services to Islamic social financing through simple means while at the same time increasing the inclusiveness of Islamic social finance (Oseni & Ali, 2019). However, despite the advantages, a lack of literature was found to study the Akhuwat and Fintech integration.

Thus, this study aims to propose Fintech Rich Hybrid Islamic Micro-Finance (FRHIMF) model with the vision to increase its viability for long-term survival. In addition, adopting modern technology and providing online services can reduce operating costs such as administrative costs, collateral issues, and others. Finally, some Shariah-compliant Fintech product which has been applied in many institutions with a positive outcome is proposed in this study.

Background of the Akhuwat Microfinance

The word Akhuwat comes from the Arabic language, which means brotherhood. This is a sign of peace and firmness aligned with Islamic teachings. The Akhuwat organization was born as a person's dream called Dr. Amjad Saqib. It began when Dr. Saqib talked about microfinance programs for poverty alleviation in 2001 with his friends sitting at Lahore Gymkhana. All friends thought that high microfinance interest rates could not relieve poverty. They found the interest-free microfinance system the only option for their nation's economic and social growth and entrepreneurial capacity building. They did not have any idea how this experiment would proceed.

A friend has donated 10,000 rupees, while Dr. Saqib has used this donation to make an interest-free loan. He was initially facing criticism for his interest-free concept of microfinance. Others classed his model as unsustainable. However, this criticism could not shake his deep resolve, commitment, and serious willpower to make the idea viable. Instead, Akhuwat became a pioneer in providing Islamic microfinance and was taught as a source of expertise and a popular model in some western universities.

DOI: 10.15408/aiq.v%vi%i.22498

Initially, the ambition of Akhuwat's founder was to provide support to over 10,000 underprivileged youngsters for further studies in the following years. He dreamed of establishing Akhuwat University that has been effectively set up and operated since 2018. It is also the plan of Akhuwat to select a licensed microfinance bank in the country to assist and facilitate their financial necessities under the Shari'ah principles, especially for those unable to access the traditional banks due to lack of collateral and religious concerns. Chaudhry et al. (2016) claimed that Akhuwat initiated its operations with Rs.10,000 as their first loan made to a widow. This widow did not demand money but rather a helping hand in an honorable way to live her life. Within six months, she agreed to reimburse her loan. She bought a sewing machine and started earning money. She returned after six months as promised. Dr. Saqib felt she was returning to ask for additional loans. She arrived to repay the loan. Dr. Saqib and his friends were delighted to observe the success of their project.

This efficient experiment led to the establishment of the group Akhuwat. They were persuaded of the viability of their model. The lady also delivered a message that helps the vulnerable life in solid honesty with faith and integrity. The treatment of destitute and neglected people does not necessarily lead to a reluctance to repay the debts. The model of Akhuwat is founded on the ideology of the Qard Hasan drawn from the Islamic tradition, namely muakhat al-Madinah. This sends a message to humanity that supporting a needy person with an interest-free loan is more accessible than paralyzing them and dismissing them from their dignity in charity. Welfare is also not a poverty-reduction method. It permanently makes poor individuals reliant and wants help to live effortlessly. It damages the impoverished, their respect for themselves, and their honesty. Each person has specific qualities and a certain capacity to do anything. People with some inspiration and extra help can find excellent ways of living.

Financing and creating capacity are long-term answers to poverty recovery. Akhuwat was formally founded in 2003, and its initial branch in Lahore City was opened. This has progressed, and its goals have been achieved year after year. The version has also gained prominence in both East and West. It is a reflection of the Muakhat phenomenon. This has imprinted a pattern of turning lenders into donors in microfinance culture. Akhuwat 's mission is to eradicate poverty by empowering socially and financially disadvantaged communities. The schemes enable needy and neglected families to provide interest-free loans, unveil their entrepreneurial potential, build their capacity, and provide social advice. All these activities seek to achieve its vision of a society free of poverty, based on the ideals

DOI: 10.15408/aiq.v%vi%i.22498

of compassion and equality.' Akhuwat has started with a PKR gift of 10,000. It was subsequently awarded PKR 1.5 million grants in 2003. It was initially registered under the Societies Registration Act of Pakistan. It is officially listed under the Pakistan Securities and Exchange Commission. Statistics in the first quarter of 2018 reported that Akhuwat has an outstanding loan portfolio of PKR 1.4 billion, 901,513 active loans, 775 branches, 5,693 workers, and a total cumulative loan distribution of around Rs. 58.7 billion (Chaudhry et al., 2016).

Qard Hasan

The word Qard is Arabic, which means to separate by cutting, and also the word Hasan, which means excellent and beautiful, is taken from Arabic. The symbolic meaning of Qard Hasan is a valuable, kind, or costless loan. (Anam et al., 2013; Karim et al., 2008). Qard Hasan is the "interest-free loan extended" insurance of the employee, according to Iqbal and Mirakhor, The investor is looking for God's reward"(Jaafar,2018; Iqbal & Shafiq, 2015).

Nevertheless, Iqbal & Shafiq said that Qard had "a voluntary loan. Qard Hasan is described in the following terms by the International Institute for Islamic Banking and Insurance: "The Qard Hasan is an interest-free loan for welfare or short-term financing requirements. The borrower is simply required to repay the principal amount of the lending. Most Islamic banks offer these interest-free loans to their customers. Although it is not practicable on a broad scale, at least some vulnerable people are targeted, even among bankers and students. The Islamic stance concerning the loan is that the borrower should be given free; a person will only request a loan when they need it. Hence, it is the moral obligation of the lender to aid his needy brother. The creditor should not try to exploit the necessities of somebody. He should provide the poor with free loaning of money. The remuneration for this act is for Allah. It is also referred to as Qard Hasan, reflecting the peaceful existence of the loan act. Due to the unique properties of Qard Hasan, it is highly potential for financial inclusion, which is characterized as an unpaid debt. At the same time, the borrower is liable for the loan repayment; any interest or amount beyond the principal amount is not appropriate for the borrower. The object is benign, and only Allah compensates the lender for that charity deed in which he supports a needy individual without any additional payment being expected.

For this life, the reward is just with God and the afterlife. The Borrower is permitted to overpay the principal sum if he can pay without the lender's intention

DOI: 10.15408/aiq.v%vi%i.22498

or demand. This will be the gesture of the borrower's appreciation towards the lender (Iqbal et al., 2015).

Akhuwat Operations

Akhuwat's sustainable and viable program is the solution for many critics. The success and contributions to resource redistribution are worthy of note. Harmony and brotherhood-based framework suggested that poverty alleviation and nations' economic growth need customized programs for better outcomes. Iqbal et al. (2015) argue that poverty alleviation programs must be planned according to the country's culture and customs. It is ineffective to generalize and apply the same poverty alleviation methods and techniques in all vulnerable countries. Akhuwat is involved in health care, training and business growth, education scholarships, clothing bank. This also allows transvestite to live with dignity by providing good jobs.

Akhuwat's operations reach widely more than a provider of interest-free loans. In addition to microfinance programs focused on Shariah values, it supports society, serving multi-dimensional, marginalized communities. However, Akhuwat has developed the concept of using holy places (i.e., Mosques, Churches) as the centers for public change rather than maintaining them as places of worship (Chaudhry et al., 2016). The Akhuwat organization believes they will feel more responsible for repaying those loans when loans are given to the poor in holy places.

Thomas Krinc, the ILO consultant, complimented the activities of Akhuwat and said that it is a competent framework whose architecture and operations are inspirational. As much more than conventional microfinance, Akhuwat has accomplished what Professor Yunus accomplished in the late 1970s (Chaudhry et al., 2016). Gaama Hishigsuren, Director of Research and Development Institute for Development Evaluation Assistance and Solutions, Georgia, the USA, stated her view regarding Akhuwat as says, Akhuwat is one of the most groundbreaking models of microfinance. This is most cost-effective due to the innovative use of community resources and the participants' cooperative spirit within the group. In terms of microfinance, additional models like Akhuwat need to be promoted, which effectively builds the socio-economic and cultural peculiarity of the local community it serves (Chaudhry et al.,2016). The loan projects of Akhuwat can be classified into three categories. The first is an Enterprise loan which includes agricultural and small businesses loan. The second is Liberation loans which consist of interest-free loans for people who have already earned loans from conventional

DOI: 10.15408/aiq.v%vi%i.22498

banks and have struggled with interest rates payment and want to get rid of it. Such loans are given to them to liberate them from the burden of interest. The third category is consumption loans, including consumption loans, house loans, marriage loans, educational loans, vocational loans, etc.

Akhuwat not only offers interest-free microfinancing but also far beyond interest-free microfinancing in its reach and services. In many different ways, Akhuwat reflects society. It offers housing construction/refurbishment loans for those who desire to renovate or extend their properties by constructing extra rooms but do not have enough money. Marriage loans are granted to those who have no money to marry their children. Akhuwat also offers its services to improve educational standards in society. This provides 100% of the scholarship for youth engaged in higher education but cannot afford the educational costs. Akhuwat manages a bank of clothes that gives the needy new and old clothing. The transvestites (a marginalized party) lead it so that it has a fair social standing and a useful life. Akhuwat also offers training and coaching to build skills to start a business. It supports the development of capacities in society so that the vulnerable can live with dignity through their abilities and not charity.

Sources of Funds

Akhuwat's scheme of Qard Hassan is better than the traditional microfinance model. This organization is funded for its operations by the public, local benefactors, governmental authorities, institutional contributors, and Pakistanis residing abroad. Like traditional microfinance institutions, Akhuwat is not dependent on foreign assistance to reduce interest in loans. Traditional banks are paying high-interest rates because financing depends on the credit line. It is based on locally funded donors. Directorates and employees are very devoted to working hard to collect donations through such fundraising activities. Akhuwat targets loans that comply with Shariah rules and excludes all aspects prohibited by Shariah. Akhuwat has made a significant contribution to financial inclusion.

The recovery rate with a zero interest rate is 99.9 percent. Akhuwat lenders are so pleased with Akhuwat programs that they want to become volunteers. Some borrowers who have benefited from the Akhuwat loan and have been able to grow their company happily become donors for the welfare of others. When they needed money, they had encountered a difficult time, and Akhuwat answered their call. Akhuwat is funded by grants, application fees, insurance, and collaborations with local and international organizations and governments (Mahmood, 2019).

DOI: 10.15408/aiq.v%vi%i.22498

Regulatory and Institutional Framework

Akhuwat operates under the Board of Directors (BOD) supervision, comprising 17 members including philanthropists, civil servants, and business people. BOD functions on an honorary basis and has a term of 3 years. BOD is responsible for the organization's internal administration, strategic policies, publicity, and fundraising. The Board meets quarterly to discuss the policies of the company. There is an Executive Committee under BOD consisting of three members. The committee meets regularly to oversee all of the organization's financial and organizational problems. The organizational structure has been kept very basic to keep running costs low; it consists of four central departments; The Admin & HR Department (ii) Credit Department, (iii) Finance & Accounts Department, and (iv) Internal Audit Department Akhuwat website. (Source: http://www.akhuwat.org.pk accessed on Sep 10, 2021).

The organization is made up of members of Volunteers and Paid. Volunteers from all classes, irrespective of age, education, caste, and gender, are welcomed. Paid workers, Akhuwat follows a distinct recruiting strategy where positions are established, and there is also a minimum requirement for recruiting at various functions. The organization believes in training its workers before beginning their jobs. Therefore, new employees start their jobs as interns, and after extensive training of three months, they are employed as regular staff. Akhuwat is offering interest-free loans in seven broad categories; (i) Family Enterprise Loan (ii) Liberation Loan (iii) Education Loan (iv) Health Loan (v) Emergency Loan (vi) Housing Loan (vii) Marriage Loan and (viii) Silver Loan. Apart from other micro-finance institutions, the loan recovery rate of Akhuwat microfinance continued to be above 99% every year. (Source: http://www.akhuwat.org.pk accessed on Sep 10, 2021).

Challenges in Akhuwat Microfinance

Several issues should be addressed further when learning Akhuwat 's way and some difficulties that Akhuwat may face. Akhuwat has followed the Qard Hasan microfinance strategy, in which loans are issued to the borrower without interest. Nevertheless, MFIs may charge a certain percentage of the administrative / membership fee and allow two or more guarantors as social collateral. Akhuwat charges 5 percent on the loan balance as a membership fee. But when operation expands, and there will be many borrowers, it will be difficult for Akhuwat to maintain administrative expenses with a 5 percent membership fee that is not sufficient to cover the organization's administrative costs that are 7 percent per loan.

DOI: 10.15408/aiq.v%vi%i.22498

The membership fee currently covers 76 percent of overall operating expenses, while the shortfall of 24 percent is covered by a donation from Akhuwat's Board of Directors. When I asked Dr. Amjad Saqib this question, he replied that Akhuwat follows a two-pronged approach. One extends funding opportunities by introducing various methods, such as "Akhuwat online" implementation, and plans to introduce Murabaha's funding approach. But it is not finalized yet. Another obstacle facing Akhuwat is to lend to individuals, even though it has succeeded. The problem organization will face is that if the business goes to default and the individual has nothing to pay and no group-based social collateral, that will pressure them as a community of solidarity. This will add more expense to deal individually and keep the individual's loan case reviewed and monitored. But in response to this argument, Dr. Amjad Saqib said that, as a result, we are using Mosque as a platform for loan lending activities to reduce costs and maintain close relationships with clients. But still, this is a query that holds records of 25,000 borrowers taking less expense or having forms of 2500 groups. To get some clarity on this topic, we posed before Zahid Hussain, admitting that the big problem facing MFIs is a considerable risk and financial back to MFIs resulting in higher interest rates, there are two approaches to deal with the issue of financial risks and high administrative costs; Another is to reduce operating costs by introducing new strategies, and the other is to add even more creativity to social security. On the other side, the difficulties faced by Islamic Microfinance include the unreasonable prices of the goods being sold, the shortage of professional and qualified management and administration, operational inefficiency, inadequate risk reduction, and lack of access for the vulnerable. On the other hand, financial institutions eager to grow were faced with sluggish technology, poor legal bases, Unfitting financial systems, goods, weak socio-economic conditions, gender inequality, and low educational performance. Therefore, the financial institutions' lack of financial literacy remains the primary obstacle (Akhtar et al., 2009; Anam et al., 2013).

The Importance of Fintech in Improving Financial Inclusion

According to the World Bank, there are over 1.7 billion unbanked individuals and over 200 million potential micro, small, and medium-sized companies globally, out of 7.6 billion (MSME). The World Findex Report shows that bank account ownership in high-income economies is much greater at 94% than 37% in underdeveloped countries (World Bank, 2017). Then about 75% of the world's unbanked population lives in developing economies, with India accounting for the most significant proportion (20.8%), followed by China (11.6%), Indonesia

(5.6%), Pakistan (5.2%), and Bangladesh (3.9%). Africa and Latin America have a combined GDP of about 2.7 percent, with Nigeria accounting for nearly 2.7 percent, Mexico accounting for almost 2.6 percent, and Brazil accounting for almost 2.4 percent (Top 25 Developed & Developing Countries List). The Muslim-populated countries that make up over 50 percent of the unbanked global population dominate the unbanked people. Possible revenue from this unbanked retail sector and MSME is projected at 200 billion USD (Center, 2011).

Government Policy Innovation and Financial Technology (Fintech) Are Key Enablers for Increasing Financial Inclusion

Unbanked people are predicted to become more accessible through Fintech and government policy innovation. There are several ways in which fintech can aid in the growth of financial inclusion. Each sector should affect rural mobile payments, make digital verification easier for customers, and use crypto-activities to reduce transaction costs. At the same time, local governments can build credit protection programs, establish cyber safety rules and invest in digital education options. Federal governments can also create incentives for financial firms to reach out to the unbanked and promote the development of a multi-access point financial ecosystem. In the absence of credit history, unique approaches for evaluating credit must be developed to deal with non-banked people (Center, 2011).

Most New Bank Accounts Have Been Opened Via Fintech in the Last Few Years

As per the World Bank, 1.2 billion bank accounts were routinely opened in the financial institution's physical site and by Fintech between 2011 and 2017. Fintech is primarily responsible for this development, with three excellent examples from Kenya, China, and India: 1. Kenya has mobile money developed to enable the non-banked to open savings accounts, use mobile payments and transfer cash. 2. The digitization of the banking system has substantially reduced poverty in China. 3. India had reached 79 percent of its population by offering a digital economy and financial ecosystem platform in 2017 (World Bank, 2017).

Mobile Payments Have Emerged as a Key Tool for Improving Financial Inclusion

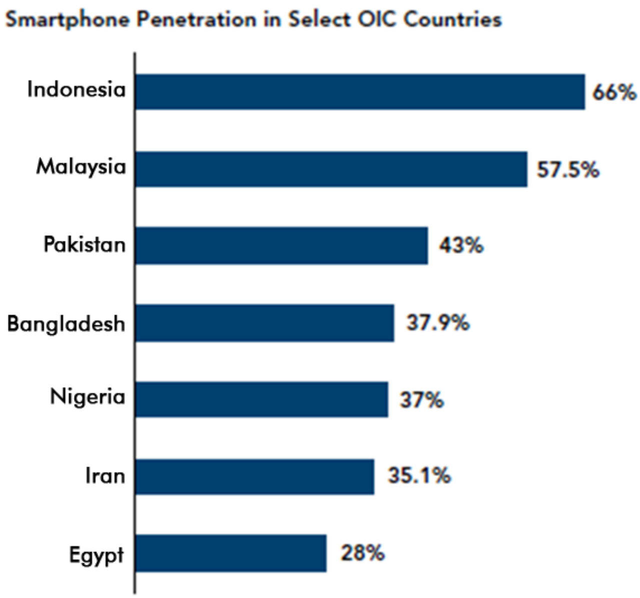
Mobile payments have made the most substantial contribution to financial inclusion compared with other types of fintech. Fortunately, almost two-thirds

DOI: 10.15408/aiq.v%vi%i.22498

of the 1.7 billion unbanked people own a mobile phone (either a simple or a smartphone), enabling them to make mobile payments. Moreover, in the top 50 nations with global mobile phone penetration, most potential Islamic fintech countries provide Fintech with a further possibility for unbanked access.

Figure 1 displays the penetration of smartphones in a selected OIC country sample. Indonesia had the highest penetration rate (66%), followed by Malaysia (57.5%) and Pakistan (43%) in 2018. While the findings are encouraging, a significant gap persists between developing countries and industrialized ones, with an average penetration rate of 96 percent.

Figure 1. In Chosen OIC Countries, Smartphone Penetration



Kenya Has Evidenced that Accessibility to Mobile Financial Services Result in a Savings Increase

M-PESA was introduced in Kenya in 2007 as a mobile money transfer and financial services application (and some other countries in Africa). M-PESA is accepted almost everywhere, and transactions may be done using mobile phones. Other African fintech industries are also thriving – agreements with African fintech companies have expanded by more than threefold, from $80 million to USD 260 million, representing year-on-year growth of 44 percent to 63 percent.

DOI: 10.15408/aiq.v%vi%i.22498

Empirical studies conducted in Kenya demonstrate the impact of mobile banking services on savings. Users of mobile financial services are more likely to save than other users. Along with increasing the frequency of protection, the amount kept increasing. Hence, to promote and mobilize saves, there is a need to strengthen and extend mobile financial savings, especially for low-income and impoverished workers who have limited access to official banking systems. The two types of mobile savings, namely essential mobile savings held on the phone and built-in mobile savings offered by banks, should be promoted. Mobile financial services' accessibility, comfort, affordability, and security are key accelerators in expanding and growth of mobile financial services (Alfred Ouma et al., 2017).

Fintech Development Could Add Usd 3.7 Trillion to the GDP of Developing Countries Globally, Enough to Close the Annual Funding Gap

According to the McKinsey Global Institute, fintech could benefit millions of people by boosting growth and increasing the developing world's GDP by around USD 3.7 billion by 2025. (McKinsey, 2016). Certain SDGs are marketable, combining revenue with social impact and encouraging fintech providers to take the lead in financial integration development. Furthermore, financially inclusive activities can contribute to the attainment of some Sustainable Development Goals related to financial independence and reducing inequality.

Islamic Fintech And Islamic Social Finance, Islamic Fintech Provides Services to Unbanked and Volunteer Masses in OIC Countries

While fintech and financial inclusion have the potential to address many of the SDGs' concerns, many persons continue to be voluntarily excluded from financial services for religious and other reasons. Individuals in OIC countries who do not have bank accounts due to religious concerns can conduct risk-sharing financial transactions without incurring interest. The latter notion implies that both the entrepreneurs and the IFIs support the transaction risk and encourage a partnership-based approach that promotes resilient enterprises and ultimately increases the wealth of associated persons and SMEs. Through Zakah, Sadaqah, and Waqf, the Islamic charity idea provides financial services to the unbanked and needy. Financial inclusion may facilitate the achievement of numerous related SDGs through Shariah-compliant financial services and Islamic social finance (MIFC, 2014).

Table 1. Islamic Fintech and Financial Exclusion

Reasons for being unbanked	Involuntarily unbanked?	Islamic fintech potentially able to resolve?
Lack of money	✔	✔
Lack of proper documentation	✔	✔
Distance to nearest financial institution	✔	✔
Other family member already has a bank account		✔
Lack of trust in the financial system		✔
Religious reasons		✔

Islamic Microfinance is an Effective Poverty Reduction Mechanism in OIC Countries

Microfinance refers to funding with a period of fewer than 12 months. The investment would typically be less than $500, and the perceived higher risk would give a sufficiently high-interest rate or necessary return. Furthermore, there are minimal document requirements, and the intended customer category, such as individuals attempting to start micro-enterprises and micro-entrepreneurs seeking funds to expand into a small firm, is frequently disregarded by banks. Sadly, religious grounds are a possible obstacle to microfinance use in the OIC Member States. Shari'a-compliant Islamic microfinance may be used to improve financial inclusion. Qard-ul-Hasan, a charity foundation, would be the significant contracts in which it could be used;

Murabaha, which entails purchasing and selling goods at a profit; profit and risk-sharing models such as Mudaraba or Musharaka, in which the investor, along with the entrepreneur, is exposed to transaction credit and market risks; Salam which would finance the buying of a commodity using its forward sale; Istisn'a that provides manufacturing finance, or Waqf. Over the whole world, Islamic microfinance increased to 1.3 million in 2013 from 500,000 consumers in 2007 (Karim et al., 2008).

The focus of Islamic microfinance is Bangladesh, Afghanistan, and Indonesia, where 80 percent of the origin has been generated with development opportunities in the Levant and North Africa, where 20-40% of potential clients have cited religious grounds (particularly in Jordan, Syria, and Algeria) to avoid microfinance (Karim et al., 2008). Likewise, Islamic micro-finance will rise in Asia, and the

DOI: 10.15408/aiq.v%vi%i.22498

demand for shari'a-compliant funding is expected to increase. Fintech is to promote financial inclusion for Zakah, Sadaqah, and Waqf. People who fall below the poverty line (i.e., people who live on less than USD 1.9 per day as determined by the UN) cannot save enough money, which precludes people from opening an account at banks. Through Zakah, Sadaqah, and Waqf, Islamic finance may channel disadvantaged people into a social safety net, ensuring they can meet their daily needs. The purpose is to lift individuals out of poverty and self-sufficiency, allowing them to save, invest, and eventually become Zakah, Sadaqah, and Waqf contributors. One of the social finance concerns is collecting and distributing collected money because cash is vulnerable to fraud and misuse.

The ideal option would be to direct charitable donations or government aid payments through bank accounts or mobile payments, which may be handled by blockchain technology. This will reduce the occurrence of fraud while increasing financial inclusion. Fintech can provide comprehensive solutions for the whole Zakah value chain, from payment collection, distribution, and intermediation to increased recipient identification. Technology can also assist in increasing the number of donations received through the network. In Indonesia, the National Zakah Board (BAZNAS) launched Sobatku, a smartphone app for collecting and paying Zakah. Bukalapak, an online marketplace, has also developed an integrated payment channel ('BukaZakah') for endowment, philanthropy, and Zakah. Furthermore, several Zakah organizations have partnered with Fintech for payments to provide collection and payment channels. The adoption of fintech in Islamic social finance may contribute to improved financial inclusion because access to funds will need the opening of bank accounts.

Nonetheless, most recipients conduct a single transaction every period to withdraw all the cash utilized to meet their daily needs in the long run; Islamic finance can help alleviate poverty by empowering the recipients of charitable donations. Concerning this, the proposed model Fintech Rich Islamic Microfinance (FRHIMF) will accelerate the viability of the Akhuwat microfinance and facilitate the underprivileged people to access through technology easily. Eventually, it will meet their needs and uplift their potential entrepreneurial capability (Leveraging Islamic Fintech to Improve Financial Inclusion, 2020).

Literature Review

Islamic social finance plays a critical role in the Islamic financial intermediation process. Numerous Islamic social finance products and techniques exist, including Zakah (obligatory alms), sadaqah (voluntary charity), and waqf' (trust). The Zakah and waqf institutions have shaped fiscal policy throughout Islamic history significantly.

These organizations serve as the foundation for Islamic philanthropy. Solidarity, cooperation, and social and corporate ethics are fundamental in Islamic social behavior. Islamic social finance can play a significant role in addressing global poverty concerns and those specific to the Muslim world. Its primary goal is to combat poverty and raise the living standards of those in society who are the most disadvantaged (IRTI 2017). The impact of Islamic social finance combined with contemporary technology could better achieve the objectives of Islamic social finance because technology will help reduce the cost of providing Islamic social financing services through simple ways, but, at the same time, it will make Islamic social finance more inclusive. In addition, charitable projects related to Zakah, Awqaf, and microfinance always attract more small and medium-sized investors than large organizations due to less complicated risk and credit matrix and processes. Individuals are also more preoccupied with the afterlife, and their rewards from Allah than corporations are. Microfinance projects can benefit from peer-to-peer systems that maximize their impact. It is possible to reproduce Islamic Grameen Banks using fintech on a far greater scale than is now possible. Microfinance services can be provided by a platform that combines Zakah and awqaf services. The majority of the time, Zakah is neither collected nor distributed systematically. Perhaps the most significant social responsibility failing of the modern period is that Muslims are unable to employ Zakah efficiently for the reasons it has been committed. Fintech has the potential to play a critical role in the efficient and sustainable collection and distribution of Zakah to groups of lawful receivers. On the other hand, to revive and maximize earnings, Awqaf necessitates efficient management and, in many cases, financial resources. Risk-sharing or short-term bridge financing can be used by fintech to raise money for awqaf financing. Finterra Waqf and Endowment Blockchain, newly launched, is a viable solution for bridging the financial shortage to develop awqaf assets (Oseni & Ali, 2019).

Bakar and Rashid (2010) emphasized the importance of increasing the efficiency with which Zakah is distributed and the role that social responsibility plays. Regarding the distribution of Zakah funds, several techniques are used to evaluate the qualification of Zakah recipients. Despite advances in technology, there is still potential for improvement to ensure that the system is effective and meets the ultimate goal of Zakah in supporting societal welfare (Nor et al.,2021). It is found that the use of fintech will have a favorable impact on Zakah management because of the increased demand for fintech in financial operations. It is also believed

DOI: 10.15408/aiq.v%vi%i.22498

that Zakah institutions should embrace fintech and implement it in their Zakah administration. The fourth industrial revolution has played a role in globalization by promoting a borderless world in all facets. New technologies such as the IoT, big data analytics, robotics, and the cloud will unquestionably alter current business practices and methods of operation. Hence, the Zakah institution should adopt technological progress to meet current societal developmental demands. Zakah Institution is one of many Zakah organizations utilizing cutting-edge technologies to handle Zakah better. The growth of the Zakah payment system, from manual operation in Zakah offices to an internet payment system or other services provided by other organizations. Technology has shown to be effective and straightforward to employ for current societal Zakah obligation. In Zakah collection, fintech has helped be more efficient because it provided stakeholders with an easier way to access the data (Nor et al., 2021).

Various Islamic financing mechanisms, *Qardh Hasan, Zakah, Social Sukuk,* and *Waqf,* are available to assist in an emergency circumstance. During and after the COVID-19, Islamic banks and financial institutions can use these financial instruments to send cash to the impoverished, vulnerable, small and medium-sized businesses and individuals. Using financial technology (Fintech), these services can simply be linked to one other, and direct payments can be sent to the recipients. Fintech-based financial mechanisms such as waqf, crowdfunding, Zakah, and qard hasan, among others, can be used to combat COVID-19's aftereffects and aid in a quick recovery.

Islamic microfinance institutions (IMFIs) play a critical role because of their reach into underserved and outlying areas of society. In the short term, Zakah, Qard Hasan, and Sadaqat can be used to transmit money directly to the impoverished and needy. These services can be personalized using Fintech-based technology like artificial intelligence; the combination of blockchain technology and natural language processing (NLP) can contribute to the greater goal of poverty alleviation and financial inclusion (Rabbani et al., 2020).

Methods

In collecting the data, the following methods were applied, i.e., library research, content analysis, research articles, journals, conference papers and websites to discover the prominent and renewable experts' views on the emerging Fintech technology to enable socially and financially disadvantaged communities. Overall, the study provides comprehensive and coherent material on the topic. The study has adopted a qualitative approach, as the research paper proposed the Fintech Rich Islamic Microfinance (FRHIMF) model.

Results and Discussions

Enhancing Akhuwat Microfinance Viability Through Fintech Technology

The strategy 'Microfinance Plus' meets both financial and non-financial criteria. On the other hand, the “minimalistic” strategy discusses only financial criteria. There are few studies on the efficiency of the “microfinance plus” and “marginalistic” strategy. Lensink et al. (2018) discover that improving the efficiency of credits and the breadth of access to them, including social intermediation and non-financial services, improves credits' efficiency and the breadth of access to them, in an empirical analysis of microfinance institutions from 77 countries. Other case studies have demonstrated that the “microfinance plus” strategy has an impact on outcomes (Copestake et al., 2011; Dunford, 2011; Halder, 2003; Karlan et al., 2011; Noponen et al., 2004; Copestake et al., 2011; Dunford, 2011; Halder, 2003; Karlan et al., 2011; McKernan, 2002; Noponen et al., 2004; Smith, 2002).

Nevertheless, in Islamic microfinance, the literature recognizes the unique challenges that micro funds face, both obtaining funds and maintaining financial efficiency and long-term viability. To tackle these issues, researchers have developed an integrated approach to Islamic microfinance that considers synergy, economies of scale, and scope economies. According to Akhter et al. (2009), Islamic microfinance institutions should be included in non-profit organizations like NGOs. They also suggest that Zakah and Waqf could be used to raise funds. They also offer preference to reciprocal insurance and capacity-building financing in addition to the microcredits. In one hybrid organization, such services will lead to economic efficiency. Ahmed (2002) also encourages the use of Zakah, Sadaqah, and Waqf to raise financial capital.

According to Ali (2015), Zakah, Sadaqah, and Waqf money will enable the Islamic Microfinance Institution to give free financial aid. Hassanain (2015) also presented an integrated microfinance strategy incorporating Zakah and Waqf to ensure that money to alleviate poverty is philanthropically available. Many organizations, such as Waqf that share the purpose of poverty reduction are recommended by Haneef et al. (2015).

In a two-tier concept of the Mudarabah for commercial reasons, Mobin et al. (2017) propose using cash waqf and Mudarabah for financing and then allocating these funds to enterprises through microfinance organizations. One

DOI: 10.15408/aiq.v%vi%i.22498

partnership with Mudarabah lies between the Waqf and Islamic Microfinance, the other between the Islamic Microfinance Institution and micro firms.

This study presents a hybrid model in the same spirit that involves Fintech in Islamic Microfinance institutions. The Fintech Rich Islamic Microfinance Hybrid (FRHIMF) is a comprehensive microfinance initiative that will provide financial and non-financial assistance.

Micro and Takaful savings, as well as microcredits, are available through financial services. Preparation, reimbursements, and long-term commitment advantages are all examples of non-financial funding. Training provides computational, numerical, accounting, marketing, and financial management skills. Qard Hasan, Murabaha, and Ijarah are used to expand finance to cover operating capital needs and income-producing assets. Fintech is employed in multiple product and distribution processes to have a higher cost-efficiency than the brick-and-mortar paradigm of financial services. The reward structure of many programs encourages clients to stay with the program for a long time—the likelihood of deliberate default or shirk decreases (complacency in work).

Consumers who repay the installment over time receive greater rewards, making the incentives flexible. FRHIMF is a comprehensive microfinance program that provides financial and social intermediation to help clients improve their economic, social, and quality of life metrics.

The FRHIMF provides both financial and non-financial assistance. Non-financial support enables instant aid, enhanced skills, community engagement, long-term commitment, and relationships. Individuals who want to offer their time and money are glad to attend the scheme. The program provides products finance to help clients increase sales by supporting their revenue-generating assets. The program comprises micro-credit, micro-savings, and micro-takeable products, and micro-credit. The whole finance framework enables consumers to receive funding for successful industries and aid with other life requirements and circumstances.

This technique increases consumer confidence and establishes long-term relationships, allowing engaged customers to become change agents through investment impact and volunteer activity. FRHIMF is appropriate for launching in tiny, homogeneous communities in suburban and rural parts of developing Muslim countries, where banking is often not accessible. The scheme has a strong chance of hitting both the supply and demand sides thanks to its electrical crowdfunding network, productive activities, usage of Fintech, and various interactions. The FRHIMF program provides entrepreneurs with a one-of-a-kind program that

DOI: 10.15408/aiq.v%vi%i.22498

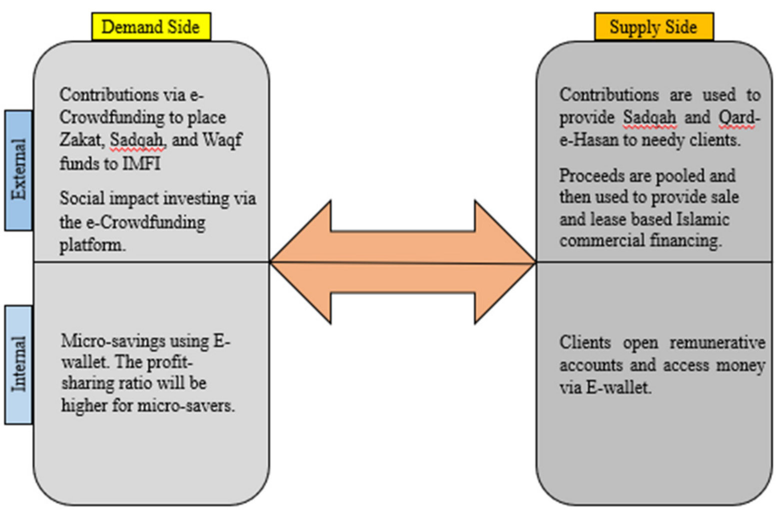
integrates microfinance and human development projects to alleviate poverty and promote self-sufficiency.

The "Impact" of the Programme

The primary objective of a microfinance institution is to provide small loans to needy borrowers who lack a proven marketable source of income. Microfinance is an alternative to traditional banking for the underprivileged. There are no organized financial services offered to the world's two billion inhabitants. Nearly half of all people in the poorest families are unbanked. (World Bank, 2015). Typically, Muslim-majority countries are poorer than non-Muslim-majority countries (Alpay, 2013). As interest in Islam is forbidden, Muslims look forward to interest-free financing solutions. Any exclusion from financial services could otherwise be relevant solely based on faith.

This FRHIMF offers a workable Islamic microfinance model capable of achieving size, sustainability, and outreach. This can have a more lasting and powerful effect on lives than a one-time non-repetitive loan. Financial inclusion is critical for poverty reduction and advancing sustainable development goals (SDGs). Poverty reduction may also have a multiplicative effect on other SDGs, such as food safety (SDG-2), health and education (SDG-3), and cleaner water and sanitation (SDG-6) (SDG-7).

Figure 2. shows an overview of the system's supply-side (FRHIMF's) and demand-side (client perspective) finance and operational structure



DOI: 10.15408/aiq.v%vi%i.22498

Implications of the Proposed Model on Practical and Social Situations

Microfinance success is contingent upon attaining three objectives: scalability, sustainability, and outreach. A fintech is a valuable tool for accomplishing these goals. Islamic tradition views innovation as an opportunity, not a threat. For instance, modern checks and corporations reflect Muslim culture (Koehler,2014). Fintech represents a critical potential for Islamic finance to organize additional administrative procedures efficiently. Online and constructive ownership via automatic transfers enables the rapid transfer of ownership and funds for Islamic transactions and the online receipt and acceptance of real-time transactions.

As a result, Fintech has an opportunity to boost efficiency and competitiveness, which can help achieve three goals: scaling, sustainability, and outreach. Ashraf et al. (2014) found a positive correlation between Islamic microfinance and the extent of Islamic finance in OIC and non-OIC member countries through outreach and good techniques. This microfinance scheme incorporates Fintech into both supply-side and demand-side activities. Fintech's application in e-crowdfunding enables a more inclusive and transparent interaction. By employing a credit screening, asset scanning, and contract mechanics software application, such as real-time offers and receipts, transaction expenses, documentation, and ongoing monitoring can be minimized. The application of the E-volunteers program enables the use of human resources and effective programming of education and training programs. Empirical evidence recommends that microcredit is insufficient to ensure socioeconomic mobility and a durable escape from poverty traps without complementary nonfinancial assistance (Khandker, 2005; Reed, 2011). This suggested microfinance plan encompasses a broader range of activities than microcredit. Microfinance provides a broad range of financial services to low-income individuals and their microenterprises, including credit, savings, insurance, and money transfer.

Microfinance is a broad term that refers to financial services provided to people who cannot access official financial and banking institutions. Microfinance assists the poor in achieving a successful and sustainable escape from poverty and meeting their general financial needs for survival and socioeconomic mobility. If microfinance is limited exclusively to microcredit, the effects would be far from outstanding. Empirical evidence on the performance of microcredit in impoverished countries demonstrates that microcredit alone is insufficient to enable clients to leave poverty and achieve socioeconomic mobility. Conventional microfinance consumers commit suicide in some countries, such as India, because they are under pressure to repay expensive interest-based micro-financial loans

DOI: 10.15408/aiq.v%vi%i.22498

(Samad, 2014). To ensure the success of microcredit, the financial element of the initiative will be supplemented with micro-savings and microinsurance.

Furthermore, poor consumers frequently require non-financial essentials such as financial literacy, business facilitation, primary education, and family health care for their young family members. They also need support and awareness to enhance their lifestyles to make life sustainable, hygienic, healthful, and healthy. Corporate funding is often used to meet expenses related to these non-financial requirements. In that situation, the importance of non-financial support for deeper, effective, and financial intermediation should be highlighted as part of the entire microfinance scheme. Thus, this proposed program provides financial and non-financial assistance to clients seeking economic and social development throughout the pre-financing, financing, and post-financing stages.

Conclusion

This study addresses the operation of Akhuwat microfinance. Established as a dream of its founder Dr. Amjad Saqib, he and his friends were concerned about poverty alleviation in 2001. They believed that high microfinance interest rates could further damage the poverty level. They found the interest-free microfinance system the only option for their nation's economic and social growth and entrepreneurial capacity building. Akhuwat 's mission is to eradicate poverty by empowering socially and financially disadvantaged communities by providing interest-free loans. It enables poor and neglected families, reveals their entrepreneurial potential, develops their capacity, and offers social guidance.

Moreover, Akhuwat seeks to build “a poverty-free society founded on ideals of compassion and equality.” Akhuwat pioneered Islamic microfinance and was taught in certain western universities as a source of expertise and a popular model. This study proposes a Fintech-Enabled Hybrid Islamic Microfinance (FRHIMF) model for Akhuwat microfinance to increase its long-term viability. Moreover, adopting modern technology could reduce its cost, such as administrative cost, collateral problems, and so on, by providing online services. Finally, some Shariah-compliant Fintech product is being proposed, which has been applied in many institutions, and positive results have been come out successfully. Shariah-compliant Fintech model application will hopefully reduce its executive cost and collateral difficulty, further speeding up its feasibility. It will be a strong pillar in eradicating poverty and uplifting poor and neglected families. Moreover, the potential business skills and enhancing self-respect would be an emergence Microfinance model in the future for the entire world.

DOI: 10.15408/aiq.v%vi%i.22498

References

Ahmed, H. (2002). Financing microenterprises: An analytical study of Islamic microfinance institutions. Islamic economic studies, 9(2).

Akhter, W., Akhtar, N., & Jaffri, S. K. A. (2009). Islamic micro-finance and poverty alleviation: A case of Pakistan. Proceeding of the 2nd CBRC, Lahore, 1-8.

Ouma, S. A., Odongo, T. M., & Were, M. (2017). Mobile financial services and financial inclusion: Is it a boon for savings mobilization?. Review of development finance, 7(1), 29-35.

Ali, A.E.E.S. (2015), "Islamic microfinance: moving beyond financial inclusion", European Scientific Journal, Vol. 11 No. 10.

Alpay, S. (2013, January). SWOT Outlook of OIC Member countries. In A presentation at the 2nd International Conference on Islamic Economics and Economies of the OIC Countries (ICIE 2013) (pp. 29-30).

Jamal, A. A. N., & Sheikh, M. A. (2013). Challenges Faced by the Model of Islamic Microfinance for the Development of Micro Entrepreneurs and SMEs in Rural Pakistan. International SAMANM Journal of Finance and Accounting, 1(3), 17-38.

Ashraf, A, Hassan, M.K. and Hippler, W.J., III. (2014), "Performance of microfinance institutions in Muslim countries", Humanomics, Vol. 30 No. 2, pp. 162-182.

Bank, W. (2017) 'Global Findex Report', *World Bank*.

Pew Research Center's Forum on Religion & Public Life • The Future of the Global Muslim Population, January 2011. Togo. Congo. Canada. Guinea Bissau. 221 pages

Chaudhry, A. A., Khan, K. S., Hassan, A., & Amir, I. (2016). Transforming Lives through Empathy, Compassion, Societal Well Being and Management Best Practices Case of Akhuwat, Pakistan. Journal of Management and Research, 3(2), 1-23.

Copestake, J., Bhalotra, S., & Johnson, S. (2001). Assessing the impact of microcredit: A Zambian case study. Journal of Development Studies, 37(4), 81-100.

Dunford, C. (2001). Building better lives: Sustainable integration of microfinance and education in child survival, reproductive health, and HIV/AIDS prevention for the poorest entrepreneurs. Journal of Microfinance/ESR Review, 3(2), 2.

DOI: 10.15408/aiq.v%vi%i.22498

Obaidullah, M., & Mohamed-Saleem, A. (2008). Innovations in Islamic Microfinance: Lessons from Muslim Aid's Sri Lankan Experiment. (Islamic Microfinance Working Paper Series No. 01-09) Jeddah: Islamic Development Bank. Retrieved from http://ssrn.com/abstract=1506075.

Halder, S. R. 2003. "Poverty Outreach and BRAC's Microfinance Interventions: Programme Impact and Sustainability." IDS Bulletin 34: 44–53.

Haneef, M. A., Pramanik, A. H., Mohammed, M. O., Amin, M. F. B., and Muhammad, A.D. (2015). Integration of waqf-Islamic microfinance model for poverty reduction: The case of Bangladesh. International Journal of Islamic and Middle Eastern Finance and Management, 8(2), 246– 270. https://doi.org/10.1108/IMEFM-03-2014-0029.

Hassanain, K. M. (2015) '"Integrating Zakah, awqaf and IMF for poverty alleviation: three models of islamıc micro finance",' *Journal of Economic and Social Thought*, Vol. 2(No. 3), pp. 193-211.

Iqbal, Z., & Shafiq, B. (2015). Islamic finance and the role of Qard-al-Hassan (Benevolent Loans) in enhancing inclusion: a case study of AKHUWAT. ACRN Oxford Journal of Finance and Risk Perspectives, 4(4), 23-40.

Jaafar, A. Z. (2018). An Inquiry into the Sources of Funding for Qard Hasan Based MFIs : A Case Study of Akhuwat. Wharton Research Scholars, University of Pennsylvania. Retrieved from https://www. academia.edu/27550708/Solution_of_Zakah_Problem_in_Indonesia_With_Modification_Action_Research.

Karim, N., Tarazi, M., & Reille, X. (2008). Islamic Microfinance: An Emerging Market Niche. CGAP Focus Note, 49. Retrieved fromhttp://www.cgap.org/sites/default/files/CGAPFocus-Note-Islamic-Microfinance-An-Emerging-Market-Niche-Aug-2008.pdf.

Karlan, D. and Valdivia, M. (2011) '"Teaching entrepreneurship: Impact of business training on microfinance clients and institutions",' *Review of Economics and Statistics*, Vol. 93(No 2), pp. 510-527.

Khandker, S. R. (2005) 'Microfinance and poverty: evidence using panel data from Bangladesh', *The World Bank Economic Review*, 19(2), pp. 263–286.

Koehler, B. (2014). Early Islam and the birth of capitalism. Lexington Books.

Lensink, R., Mersland, R., Vu, N. T. H., & Zamore, S. (2018). Do microfinance institutions benefit from integrating financial and nonfinancial services?. Applied Economics, 50(21), 2386-2401.

DOI: 10.15408/aiq.v%vi%i.22498

World Bank (2020), "Leveraging Islamic Fintech to improve financial inclusion", World Bank, Kuala Lumpur, available at: https://openknowledge.worldbank.org/handle/10986/34520.

Mahmood, H. T. (2019). Impact of Islamic Microfinance on Borrower's Income in Pakistan: A Case Study of Akhuwat (Doctoral dissertation, Hamad Bin Khalifa University (Qatar)).

McKernan, S. M. (2002) "The impact of microcredit programs on self-employment profits: do noncredit programaspects matter?", *Review of Economics and Statistics*, Vol. 84(No.1), pp. 93–115.

McKinsey Global Institute (2016) 'How digital finance could boost growth in emerging economies'.

MIFC (2014) 'Global Financial Inclusion Islamic Finance Meets the Challenge'.

Mobin, M. A., & Ahmad, A. U. F. (2017). Achieving sustainable economic development through Islamic microfinance and the potential of a proposed two-tier mudarabah waqf business model. In Handbook of empirical research on Islam and economic life. Edward Elgar Publishing.

Noponen, H. and Kantor, P. (2004) '"Crises, setbacks and chronic problems – the determinants of economic stress events among poor households in India"', *Journal of International Development*, Vol. 16(No.4), pp. 529-545.

Reed, L. (2011). State of the Microcredit Summit Campaign Report 2011. Washington, DC: Microcredit Summit Campaign (MCS).

Samad, M. A. (2014) 'Islamic microfinance: tool for economic stability and social change', *Humanomics*, 30(3), pp. 199–226.

Smith, S. C. (2002). Village banking and maternal and child health: evidence from Ecuador and Honduras. World Development, 30(4), 707-723.

Todorof, M. (2018, August). Shariah-compliant FinTech in the banking industry. In ERA Forum (Vol. 19, No. 1, pp. 1-17). Springer Berlin Heidelberg.

Top 25 Developed & Developing Countries List (no date). Available at: https://www.investopedia.com/updates/top-developing-countries/ (Accessed: 3 August 2021).

Vizcaino, B. (2017) 'Fintech platforms add Islamic finance capabilities', pp. 1–10.

World Bank (2015) *The Global Findex Database 2014,*. New York.

Year Wise Progress Report – Akhuwat | Islamic Micro Finance . Available at: https://akhuwat.org.pk/year-wise-progress-report/ (Accessed: 25 May 2021).

Jamal, A. A. N., & Sheikh, M. A. (2013). Challenges Faced by the Model of

Islamic Microfinance for the Development of Micro Entrepreneurs and SMEs in Rural Pakistan. International SAMANM Journal of Finance and Accounting, 1(3), 17-38.

Biancone, P. P., Secinaro, S., & Kamal, M. (2019). Crowdfunding and Fintech: business model sharia-compliant. European Journal of Islamic Finance, 12.

Chaudhry, A. A., Khan, K. S., Hassan, A., & Amir, I. (2016). Transforming Lives through Empathy, Compassion, Societal Well Being and Management Best Practices Case of Akhuwat, Pakistan. Journal of Management and Research, 3(2), 1-23.

Obaidullah, M., & Mohamed-Saleem, A. (2008). Innovations in Islamic microfinance: lessons from Muslim Aid's Sri Lankan experiment. Islamic Microfinance Working Paper.

Alam, N., & Gupta, L. (2017). How FinTech can tap into Islamic finance. Wahed. May, 19.

Iqbal, Z., & Shafiq, B. (2015). Islamic finance and the role of Qard-al-Hassan (Benevolent Loans) in enhancing inclusion: a case study of AKHUWAT. ACRN Oxford Journal of Finance and Risk Perspectives, 4(4), 23-40.

Jaafar, A. Z. (2018). An Inquiry into the Sources of Funding for Qard Hasan Based MFIs : A Case Study of Akhuwat. Wharton Research Scholars, University of Pennsylvania. Retrieved from https://www. academia.edu/27550708/Solution_of_Zakah_Problem_in_Indonesia_With_Modification_Action_Research.

Ali, S. N. (2019). Fintech in Islamic Finance: Theory and Practice. Routledge.

Sidio, K.W. (2017), "Islamic finance 2017: state of the art and outlook for the future", CASE – Center for Social and Economic Research, (15 September), Helpdesk Report. K4D.

Todorof, M. (2018, August). Shariah-compliant FinTech in the banking industry. In ERA Forum (Vol. 19, No. 1, pp. 1-17). Springer Berlin Heidelberg.6

43. Vizcaino, B.: FinTech platforms add Islamic finance capabilities (2017). https://www.reuters.com/ article/us-islamic-finance-fintech/fintech-platforms-add-islamic-finance-capabilitiesidUSKBN1580DO (accessed 20-9- 2021).

Ali, S.N. (2019), Fintech in Islamic Finance: Theory and Practice. Springer Nature.

Rabbani, M. R., Abdulla, Y., Basahr, A., Khan, S., & Moh'd Ali, M. A. (2020, November). Embracing of Fintech in Islamic Finance in the post COVID era. In 2020 International Conference on Decision Aid Sciences and Application (DASA) (pp. 1230-1234). IEEE.

DOI: 10.15408/aiq.v%vi%i.22498

Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah *(Journal of Islamic Economics)*
Vol. 13 (2), Jul-Des 2021

Nor, S. M., Abdul-Majid, M., & Esrati, S. N. (2021). The role of blockchain technology in enhancing Islamic social finance: the case of Zakah management in Malaysia. foresight.