Adoption of Shariah Compliant Peer-To-Business Financing Platforms by Smes: A Conceptual Strategic Framework for Fintechs in Bahrain

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Abstract: FinTechs (Financial Technology Firms) are affecting the financial industry, especially that there are many customers moving away from traditional banks and going to FinTech solutions to fulfill their financial needs. These FinTechs provide financial products and services using different technologies covering various financial areas including lending/financing. For instance, Peer-to-Business (P2B) financing platforms are one of FinTech solutions which has been growing rapidly in the past few years making many governments setting regulations to cater this trend. Bahrain is one of the countries that has issued number of regulations for FinTech activities including for Shariah Compliant P2B financing platforms. These types of platforms shall provide Islamic financing solutions for SMEs. However, as a new financial solution in the market it is expected to face some challenges in term SMEs adoption. Therefore, this research aims at building a conceptual framework for the strategic framework for FinTechs in Bahrain. The framework is built based on different sources of academic literature in domain space of Islamic Finance and FinTech (Islamic FinTech), in addition to theories like Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology. The framework variables will be examined through mixed research method approach covering case study, semi-structured interviews, and an online survey. The research outcome shall be a strategic framework for FinTechs in Bahrain to ensure the adoption of SMEs to these platforms.

Keywords: FinTech, P2B lending, SMEs, Islamic Finance

I. INTRODUCTION

Technology has been reshaping many industries throughout the years including the financial industry, especially with the arrival of FinTech in the field. FinTechs or Financial Technology firms are defined as “those offer users with a range of financial services and products that once almost exclusively was the business of banks” (CHISHTI and BARBERIS, 2016). These FinTechs offer financial solutions using various technologies that cover the areas of: payments, lending, wealth management, remittances, insurance, capital markets, and digital currencies etc. (KPMG and H2 Ventures, 2016)

Peer-to-Peer (P2P) lending platforms, are one of the FinTech solutions that matches lenders with borrowers that are credit worthy using an online intermediary platform (Deloitte, 2015). These platforms come in different forms providing both individuals and businesses access to funds such as Peer-to-Peer (P2P), Peer-to-Business (P2B), Business-to-Business (B2B) etc. For example, using P2B platforms, SMEs (Small and Medium Enterprises) can be financed directly by investors without an intermediary of a traditional financial institution (World Economic Forum, 2015). According to the World Economic Forum, FinTechs can help SMEs close the $2 trillion funding gap worldwide (Cann, 2015). Moreover, the Arab Monetary Fund (AMF) during the G24 Ministerial meeting has mentioned that the estimated funding gap for SMEs in the region reaches 300% (Al-Hamidy, 2017), this includes SMEs in Bahrain.

In order to fill the funding gap for SMEs and leverage the potentials of FinTech in the financial industry, the Central Bank of Bahrain (CBB) has issued FinTech Sandbox and number of regulations for FinTechs to start their business in the Bahraini market. One of these regulations is for Shariah Compliant Peer-to-Business (P2B) financing-based Crowdfunding Platforms (Cbb.gov.bh, 2017).

Bahrain is known for being a pioneer in Islamic finance and its focus in the FinTech area has been declared in Deloitte report to be related to payments, crowdfunding, and Islamic finance (Deloitte, 2017). This research therefore, focuses on the Shariah Compliant P2B Financing Platforms as an Islamic FinTech solution and how it can be adopted by SMEs in the Bahraini market. As this solution serves the SME sector mainly, their perspective and adoption of these types of Platforms would highly shape the future of FinTechs business in Bahrain.

II. LITERATURE REVIEW

As FinTech is a new financial solution in the global market, it requires extensive studies to address the issue of consumer adoption to these solutions. Currently, there is a lack of study in the area of consumer behavior and adoption of FinTech. This was agreed by a research conducted on Chinese adoption of FinTech based on a Regulatory Focused Theory (Chang et al., 2016). According to the research, two factors affect the consumer behavior and motivation towards adopting FinTech by the Chinese, and they are prevention-focused factors and promotion-focused factors.
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The research states that by identifying these factors, FinTech companies can better strategize and promote their services to the customers. Meanwhile, EY which is an advisory service firm has published a report on FinTech adoption for 2017 (EY, 2017). The report has covered 20 different markets in order to provide a global perspective of FinTech adoption. EY stated that compare to its 2015 report on FinTech adoption globally, the percentage of the adoption has increased to reach 33% in 2017 from 16% in 2015, with China and India leading the FinTech adoption globally. According to Rogers’ theory on diffusion of innovation, 33% means that the FinTech industry is at “early majority” adoption stage. In this regard, the report mentioned that young adults that are aged between 25-34 (millennial) are the highest users of FinTech solutions compare to other ages. Despite the fact that this report did not tackle SMEs adoption to FinTech in specific, the report confirmed the increased adoption of FinTech globally.

Islamic crowdfunding as one of FinTech solutions has been identified by a research (Achsien and Purnamasari, 2016) as “the use of small amounts of money, obtained from a large number of individuals or organizations, to fund a project, a business or personal loan, and other needs through an online web-based platform in accordance with sharia principles”. Throughout the research, the researchers have explained the Islamic crowdfunding and its potential for the Indonesian market as it’s a country with the largest Muslim population. Accordingly, the research has highlighted that the nature of Islamic finance and crowdfunding are both mutually reinforcing and compatible through conceptualizing the customers as investors, providing investment opportunities that offer higher interest rates, allowing transparency, encouraging risk sharing, demarcating wealth, and investing in real economical actives.

Although there are many mutual characteristics between Islamic finance and crowdfunding, Islamic crowdfunding differs from the conventional crowdfunding from the perspective of absence of ‘riba’ which stands for the interest rate, prohibition of speculation and gambling, investment in halal projects only, and finally existence of Shariah supervisory board that look after the transactions and approve them if they meet the Shariah principles. Additionally, Islamic crowdfunding comes with different business models just like conventional crowdfunding and they are: Zakat\textsuperscript{1}-based crowdfunding, Infaq-Sadaqah-Waqf\textsuperscript{2}-based crowdfunding, Qard-al-Hasan\textsuperscript{3}-based crowdfunding, lending-based crowdfunding, and Shirakah\textsuperscript{4}-based crowdfunding by using Islamic finance modes such as Mudharaba\textsuperscript{5} and Musharakah\textsuperscript{6}.

The research has pointed out major challenges that are being faced by the Indonesian market when it comes to crowdfunding, besides the lack of regulation in this area. These challenges are related to consumer’s trust, weakness in presenting the projects to investors, and shortcoming in project marketing campaigns. These are major issues that require to be addressed to have a successful implementation of these platforms. According to another research (Marzban, Asutay and Boseli, 2014), the Shariah Compliant crowdfunding offers an extensive opportunity for the Middle East and North Africa (MENA) region especially for the Micro and SMEs (MSMEs) segment. After all, a substantial number of Muslim entrepreneurs and investors in the region prefer Shariah Compliant financing. On the other side, these types of platform can help in closing the financial gap of SMEs, which has reached to $2.4 trillion in the developing countries (Marzban and Yeken, 2015).

In order to understand the factors effecting customer’s adoption and perspective about a financing solution like the Shariah Compliant P2B financing platforms, there are number of theories which can be useful. Accordingly, Theory of Acceptance Model (TAM) and The Unified Theory of Acceptance and Use of Technology (UTAUT) have been chosen in this research to understand the customers (SMEs) adoption factors when it comes to Shariah Compliant P2B financing platforms in Bahrain.

A. Technology Acceptance Model (TAM)

This model was proposed by Davis in 1986 and throughout the years it has been further enhanced till it became in its current form (Figure 1). While the model shows the relationship between the human attitude and the intention to use, it also indicates the factors that affect person’s intention such as the believe of usefulness and ease of use of a certain technology.

![Figure 1: Technology Acceptance Model (DuFour et al., 2016)](image)

The core concept of TAM is based on 5 elements and they are: first, attitude toward using, which represents person’s evaluation or feelings being it positive or negative when using a new technology. Second, perceived usefulness,
which indicates the usefulness of a new technology where for instance, a person can believe that by using a certain system he or she will witness an enhancement in the job performance. Third, perceived ease of use, that refers to using a new technology with less efforts, less requirements of labor and time, which leads to ease of use. Fourth, external variables which includes numerous variables related to characteristics of the system, user’s personal attributes, and environmental factors that affect the user’s behavior. Fifth, intention to use that stands for the willingness of a person to use a new technology. TAM on the other hand, has been applied in number of researches especially those related to new systems and technologies. For example, a research (Chuang, Liu and Kao, 2016) has used TAM model alongside attributes related to trust and brand elements to understand the customers behavior when it comes to using FinTech services. The researcher stated that as FinTech services are relatively new tech products in the market, understanding the potential customers as well as existing customers’ attitudes and intentions towards FinTech products and services can address an important issue. Therefore, by using TAM elements besides brand and trust, 440 customers were surveyed to indicate the factors effect on using FinTech services and products. Based on the research, the trust element represented the confidence of the trustor (user) that the trustees’ in this case is the FinTech company will meet their need. The brand on the other hand, is an element that helps users make the right decisions when the quality of the service/product is not clear or known. Accordingly, the research has concluded that all the elements of TAM as well as brand and trust were positively effecting user’s intention to use a FinTech service or product. However, the research has also highlighted that social norms as well as the cost elements which were not considered in this research could be tested in future researches as they might have direct impact on the intention of using a FinTech service. The research has proved that TAM is the right model for testing FinTech service adoption by customers in addition to the brand and trust factors. However, the survey results might defer from a market to another and it might differ from targeting a general FinTech product versus certain FinTech solution like P2B financing platforms. There are many theories and models that explain user’s acceptance and adoption to a new technology, yet TAM is the most utilized by the researchers. According to a research by (Lai, 2017), there are number of factors effecting the speed of consumers adoption to the rapid changing technologies and they are related to convenience, security, customer’s need, and availability of the technology itself etc. The research has studied number of theories and models before concluding that TAM is the most suitable for forming a theoretical framework for the E-payment systems. To conclude, these researches have proved that applying the TAM model to test the adoption of Shariah Compliant P2B financing platforms in Bahrain would be significantly valuable, especially that factors like perceived usefulness and perceived ease of use play a vital role in adoption of new financial technologies.

B. The Unified Theory of Acceptance and Use of Technology (UTAUT)

This model is one of the intention-based models that was a result of reviewing eight other existing theories and models including TAM. According to the researcher (Savolainen, 2016), the behavioral intention which leads to use behavior can be expected through four main variables that are: performance expectancy, efforts expectancy, social influence, and facilitating conditions. These variables are further modified by four elements such as: age, gender, experience, and voluntariness (Figure 2). Each variable stands for an important aspect in technology adoption. For instance, performance expectancy stands for the extent where a user believes that his/ her performance is being affected by the system/ technology usage, efforts expectancy stands for the extent of system/ technology ease of use by the user, social influence stands for the extent to which a user gives an importance to others opinion regarding her/his usage of the new system/ technology, and facilitating condition stands for the extent a user believes in the readiness of the technical and organizational infrastructure in order to support the usage of the new system/technology.

As this model helps in understanding the new technology acceptance and adoption by users, number of researches have considered UTAUT in their conceptual framework by using some of its core variables. For instance, a research on adoption of mobile money usage by MSMEs customers in Uganda (Mugambe, 2017) has used the exact variables of UTAUT except for the voluntariness of use and has added three more variables alongside existing variables- which are habit, price value, and hedonic motivation. Accordingly, the research found that the behavior intention of customers in Uganda get notably affected by variables like habit, social influence, and facilitating conditions. Whereas, variables such as hedonic motivation, effort expectancy, and price
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The model applied in this research has included social influence variable from UTAUT alongside other variables such as complexity, self-efficiency, innovativeness, and perceived danger. Consequently, the research has found that social influence noticeably effects the user intention through its direct influence on user attitude as well as user satisfaction level. Similarly, all other factors were affecting the satisfaction and attitude variables, except for complexity which was found that it has no effect on attitude. In addition to, innovativeness and perceived danger which were found to be non-significant in term of user satisfaction.

Finally, another research on FinTech acceptance in Finland (Cao, 2016) has employed UTAUT model along with TAM, Adoption of Risky Technologies (ART), and Motivational Model (MM) in order to study the factors effecting the adoption of a certain FinTech payment solution in Finland which is called ‘Plastic Card’. Mainly, nine variables were used in this research which are perceived ease of use, perceived usefulness, price value, perceived enjoyment, perceived information, security concerns, social influence, personal innovativeness, and perceived need of minimalism. These variables were divided into three main contexts and tested accordingly, and these contexts are technological context, individual context, and motivational context.

The result of the research indicated that perceived enjoyment, perceived usefulness, perceived innovativeness, security concerns, and price value are variables that have strong impact on behavior intention of FinTech users in Finland. Unlike variables such as perceived need of minimalism, perceived ease of use, perceived information, and social influence where they have weak impact on behavioral intention of the FinTech users. According to the research, the result does not reflect the initial stage of FinTech users where they are new to the technology, but it reflects the current users of FinTech solutions who are continuing their use of FinTech.

C. Gap in literature

The literature discussed in this chapter has proved that FinTech solutions such as P2B financing platforms can solve the SMEs issue of accessing to funds, yet at the same time these researches have indicated that there is lack of researches related to FinTech and it’s important to understand the factors effecting adoption of FinTech solutions by customers. Accordingly, it has been noticed that there is an overall lack of comprehensiveness in the existing literature as some has covered the adoption of P2P platforms by SMEs yet didn’t cover the Shariah aspect, others have discussed the area of SMEs and Islamic financing without in-depth explanation of the adoption of P2P platforms, while some researches have discussed FinTech in general without giving a specific focus on a certain solution etc. Moreover, from Bahrain market perspective, there are limited researches in FinTech areas and almost no study has discussed SMEs in Bahrain and their adoption factors to Shariah Compliant P2B financing platform. Hence, there is an extensive need for this kind of studies, especially that the regulation for this solution has been officially published and the customers are expecting these platforms to enter the market soon.

D. Conceptual Framework

Based on the reviewed literature, theories i.e. TAM and UTAUT, and the gaps identified. The framework will focus on SMEs adoption factors related to the Shariah Compliant P2B financing platform in the Bahraini market. Accordingly, following conceptual model is created to help identifying factors effecting the adoption of Shariah Compliant P2B financing platforms by SMEs in the Bahrain.

The framework has seven independent variables out of which two of them are external variables (Social Influence and Facilitating Conditions), and five of them are internal variables related to the platform like Cost, Brand, Security, Perceived ease of use, and perceived usefulness. All the internal variables in addition to Social Influence variable effect the dependent variable ‘Behavioral intention to use’ which directly effects the adoption of SMEs to these platforms. Facilitating Conditions on the other side, effects directly the adoption as per the UTAUT theory. In order to test the validity of the proposed conceptual framework for FinTechs in Bahrain, the study follows a specific research methodology to validate the variables related to SMEs adoption.

E. Research Methodology

The research will use the research ‘onion’ framework for explaining the research design that can be defined through the following six layers: research philosophy, research approach, research strategy, research method, time horizons, and data collection techniques and analysis procedures (Al Kindy, Shah and Jusoh1, 2016).
Based on the research Onion framework, the research follows the pragmatism philosophy as it addresses social real-life issue related to SMEs and FinTechs in Bahrain. This philosophy combines positivism theory which focuses on social facts through quantitative methods and interpretivism theory which focuses on getting an in-depth understanding of the respondent through qualitative methods. As for the mixed method research approach it’s both inductive and deductive, where at first it collects data to identify the variables affecting SMEs adoption of Shariah Compliant P2B financing platforms and then it tests the hypothesis based on the data collected in the second phase. The research strategy on other side, includes survey, phenomenology and case study. In addition, as the research applies mixed research method, both quantitative and qualitative research methods will be used with a cross sectional time horizon where the data can be collected at any point of time. The data collection will take place through number of techniques such as interviews, case study, and survey. Accordingly, each research question will utilize one of these techniques to gather the relevant data.

III. RESULT

Based on Creswell, the research is based on Sequential Exploratory Design. First it collects and analyses the qualitative data, then it collects and analyses the quantitative data, and finally presents an interpretation of the entire analysis. The qualitative helps in getting an in-depth understanding of the Shariah Compliant P2B financing platforms business model through a case study based on an existing platform, and then conducts semi-structured interviews with 5-25 SMEs that are current users of these platforms in order to understand their perceptions and experience. The quantitative method on the other hand, helps in generalizing the outcome of the research and accordingly contributing to building the strategic framework for FinTechs in Bahrain. The quantitative will be an online survey targeting SMEs based in Bahrain that are potential users of these type of platforms (around 150 SMEs).

IV. FINDINGS

The research outcome for the conceptual framework shall be a strategic framework for FinTechs that will offer Shariah Compliant P2B financing platforms in Bahrain. This strategic framework will be the result of the conceptual framework test, which will be analysed using various research analysis techniques. Thus, the research results will contribute in identifying the factors affecting SMEs adoption in Bahrain adoption to these platforms. In this regard, the strategic framework will help the FinTechs ensure the quick and smooth adoption of SMEs to the solution.

V. CONCLUSION

On the other side, by applying the framework, the SMEs will be able to overcome one of the major challenges they face in the market, which is related to accessing funds. As these strategies will be based on the factors that affect SMEs decision and perceptions, by applying them FinTechs can directly influence the SMEs in the market.

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