Sustainable Finance and Fintech: SMEs’ Behavioural Intention towards Islamic Crowdfunding

Engku Huda Mursyidah Engku Hassan Ashari1, Aisyah Abdul Rahman2, Astiwi Indriani3
*Corresponding Author

1 Finance, Institut Islam Hadhari, Universiti Kebangsaan Malaysia, & Universiti Malaysia Terengganu, Islamic Malaysia
2 Faculty of Economics and Management, Universiti Kebangsaan Malaysia, Malaysia
3 Department of Management, Faculty of Economics and Business, Diponegoro University, Indonesia

Abstract
A wide array of financial options is accessible to SMEs, including Islamic crowdfunding, besides solely depending on bank loans. This study aims to investigate the factors behind SMEs’ intention to use Islamic crowdfunding using the extended UTAUT model. Empirical data from 525 participants consisting of Bumiputera SMEs from various sectors and employed SPSS for analysis. The results indicate that there is a positive effect of PE, SI, FC and TB, and no significant effect between EE and BI. The finding generates insights into the realized fundraising benefit factor among the Bumiputera SMEs as an extension to the UTAUT model.

Keywords: Islamic Crowdfunding, Bumiputera SME, Behavioural Intention, Unified Theory of Acceptance and Use of Technology (UTAUT),

1.0 Introduction
Small and Medium Enterprises (SMEs) generate huge contributions as the backbone of Malaysia’s economic growth since SMEs (including microenterprises) make up about 97.2% of Malaysian business establishments in 2020, contributing to 48 % of national employment, and 13.5% of exports (DOSM, 2021). SMEs are considered as the source of employment (Laila et al., 2022; Chih et al., 2018; Lawless et al., 2014), enhance income distribution to strengthen the industries (Abdullah 2019) and reduce dependence on imported goods and enhance export performance (Akhtar et al., 2017). This shows that SMEs are one of the most important contributors to Malaysia’s economy. Meanwhile, it is also found that small and medium-sized enterprises (SMEs) play a critical role in sustained global and regional economic recovery because SME business promotes a competitive business environment while providing income distribution in the economic sectors (Ayyagari et al., 2007). The development of SMEs in Malaysia serves a strategic importance in the agenda for socio-economic development, particularly in developing the Bumiputra community. Due to these vital roles of SMEs in the economy, studies on alternatives to assist SME growth are widely conducted among researchers.

When it comes to business expansion and participation, the involvement of Bumiputera SMEs in entrepreneurial activities is alarmingly low, accounting for only 40% of the total 1,226,494 SMEs in Malaysia for the year 2021 (Abd Shukor et al., 2022), even though the Bumiputera community constitutes the majority of the population in Malaysia, making up 69.9% (DOSM, 2022). This scenario
is attributed to the fact that SMEs face challenges related to their creditworthiness (Roy & Shaw, 2021), a lack of collateral (Beltrame et al., 2018), and inadequate historical credit records (Lu et al., 2022). Recognizing the challenges faced by Bumiputra SMEs in obtaining financing, researchers have explored various alternative financing options, and this study aims to explore Islamic Crowdfunding as one of those options. Recent times have witnessed various contemporary financing options for SMEs to kickstart or expand their ventures. These alternatives include angel financing, venture capital, and corporate venture capital, as well as online social trends like P2P lending, crowdfunding, and initial coin offerings (ICOs) (Masiak et al., 2020). Crowdfunding represents a novel approach to securing funds from individuals online rather than relying on professionals (Ge et al., 2016). Crowdfunding involves collecting money or capital investments for a legitimate purpose, project, or business endeavor by seeking contributions from numerous individuals or organizations. Delving deeper into the realm of Islamic-based crowdfunding, the progressive evolution of Islamic finance in Malaysia holds the potential to facilitate the advancement of Islamic crowdfunding, despite it being a relatively new financing alternative within the Malaysian context. The appeal of Islamic crowdfunding primarily stems from its compliance with Shariah, attracting Muslim users, as certain equity and loan-based crowdfunding models do not adhere to Shariah principles (Ishak et al., 2021). Therefore, the research question that this study is trying to explore is: what are the factors behind SMEs' intention to use Islamic crowdfunding? Meanwhile, the objective of this study is to investigate the factors behind SMEs' intention to use Islamic crowdfunding using the extended Unified Theory of Acceptance and Use of Technology (UTAUT) model.

2.0 Literature Review

2.1 Underpinning Theory

2.1.1 Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT, formulated by Venkatesh et al. in 2003, is a model that constructs itself upon the foundation of the Technology Acceptance Model (TAM) and incorporates seven other theoretical frameworks, including the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Combined TAM and TPB (C-TAM-TPB), Innovation Diffusion Theory (IDT), Motivational Model (MM), Model of PC Utilization (MPCU), and Social Cognitive Theory (SCT) (Asastani et al., 2018). According to the UTAUT theory, four constructs, namely performance expectancy, effort expectancy, social influence, and facilitating conditions, serve as pivotal determinants of users' intention to use an innovative technology. DT has demonstrated strong explanatory power and predictive ability in understanding customers' intentions regarding technology adoption (Rahi & Ghani, 2018). Nevertheless, Taherdoost (2018) concluded that IDT is less explanatory than other acceptance models and has lower practicality in predicting outcomes, hence needs to be combined with other theory. Consequently, to explain the adoption of Islamic crowdfunding among Bumiputra SMEs in Malaysia, this study introduces the trialability construct from IDT theory into the extended UTAUT model.

2.1.2 Innovation Diffusion Theory (IDT)

Rogers (1962) introduced the Innovation Diffusion Theory (IDT) to show how innovations are acknowledged and incorporated within a social system. DT has demonstrated strong explanatory power and predictive ability in understanding customers' intentions regarding technology adoption (Rahi & Ghani, 2018). Nevertheless, Taherdoost (2018) concluded that IDT is less explanatory than other acceptance models and has lower practicality in predicting outcomes, hence needs to be combined with other theory. Consequently, to explain the adoption of Islamic crowdfunding among Bumiputra SMEs in Malaysia, this study introduces the trialability construct from IDT theory into the extended UTAUT model.

2.2 Variables and Hypothesis

2.2.1 Intention to Use Islamic Crowdfunding Platform

Behavioural intention is defined as the strength of the users' willingness to perform or not perform a particular action (Islam & Khan, 2021). Several studies have come out with positive results on SMEs intention to use Islamic crowdfunding in their businesses (Huang et al., 2023; Abd Rashid et al., 2021; Aderemi & Ishak, 2022). Owing to the recently discovered features of Islamic crowdfunding: shariah-compliance (Abdullah & Oseni, 2017), efficient (Ishak, et al., 2021), exclusivity and flexible (Aderemi & Ishak, 2022), Islamic crowdfunding possess great potential to be used as financing alternative especially in Islamic country like Malaysia. There are also conflicting results for some of the factors, such as it was found that effort expectancy (Azman & Zabri, 2022), social influence (Azman & Zabri, 2022) and perceived risk (Hapsari et al., 2022) have no significant influence towards intention to use Islamic crowdfunding among entrepreneurs and Islamic crowdfunding users. In addition, factors such as age, marital status, income, internet usage, and perception of Waqf had no influence on the likelihood of using Islamic crowdfunding. Exploring the reasons for negative acceptance towards Islamic crowdfunding entrepreneurs are reluctant to publicly share their business concepts on the Internet (Rahman et al., 2020).

2.2.2 Performance Expectancy

Some studies also revealed that performance expectancy influences users' intention to use Islamic crowdfunding (Huang et al., 2023; Okine et al., 2023; Azman & Zabri, 2022; Hapsari, 2022). The reasons for this positive relationship are, firstly, the respondents in the studies perceived the Islamic crowdfunding model positively, and they do have some knowledge of the underlying concepts and benefits of Islamic crowdfunding, making them prone to use the system (Hapsari, 2022). On the other hand, Husin et al. (2020) asserted an insignificant relationship between performance expectancy/perceived usefulness and users' intention to use Islamic crowdfunding because the platform's usefulness could not directly affect the user's intention to use Islamic crowdfunding. The first hypothesis is to
evaluate the advantages of using Islamic crowdfunding platforms among Bumiputera SMEs and represent them through performance expectancy. Hence, the first hypothesis developed is:

H1: Performance expectancy has a positive relationship with the intention to use Islamic crowdfunding.

2.2.3 Effort Expectancy
Venkatesh (2012) relays effort expectancy (EE) as the degree to which a person finds using a specific system effortless and easy. Several studies indicated that effort expectancy influences users’ intention to utilize Islamic crowdfunding (Huang et al., 2023; Okine et al., 2023; Hapsari et al., 2022; Kazaure et al., 2020). However, a niche study also found insignificant relationships between effort expectancy and behavioural intention of Islamic crowdfunding (Azman & Zabri, 2022). The research results may be partially due to the education level of the respondents, which may lead to a lack of understanding of the benefits of Shariah-compliant crowdfunding. This could be because some entrepreneurs may lack need more digital literacy, which affects their understanding and use of these types of financial technology applications. Despite the fact that the interface for Islamic crowdfunding is easy to use, some business owners may need to gain the necessary technological skills to effectively utilize it, which could be a significant barrier to their use of these types of applications (Azman & Zabri, 2022). Nevertheless, the second hypothesis is generated based on the convenience of Islamic crowdfunding platforms for using Bumiputera SMEs, which will then affect their intention to use it. Therefore, the second hypothesis generated is:

H2: Effort Expectancy has a positive relationship with the intention to use Islamic crowdfunding.

2.2.4 Social Influence
Social influence is defined by Venkatesh et al. (2003) as the extent to which a person perceives the importance of others who believe the new system should be used. Limited number of studies use the UTAUT construct to determine the intention to use Islamic crowdfunding. Azman & Zabri (2022) found the insignificant relationship of social influence on behavioral intention to use the Islamic crowdfunding model. According to the authors, when entrepreneurs use fintech services that follow Shariah, it is seen as a form of endorsement. The insignificant relationship of social influence is also due to Islamic crowdfunding being seen as a fresh and unfamiliar technology in Malaysia. Nevertheless, the third hypothesis of this research is generated based on the extent to which Bumiputera SMEs were influenced by other individuals when raising funds through Islamic crowdfunding platforms. Consequently, the third hypothesis generated is:

H3: Social Influence has a positive relationship with the intention to use Islamic crowdfunding.

2.2.5 Facilitating Condition
Facilitating condition (FC) is the degree to which an individual believes that an organizational and technical infrastructure is in place to support the use of the system (Venkatesh et al., 2003). A simpler definition would be “the availability of enough resources and support for the proper application of technology” (Almogren, 2022). Azman & Zabri (2022) found a significantly positive relationship between facilitating condition and behavioural intention towards Islamic crowdfunding. The authors further commented that their finding aligns with the Malaysian government's efforts to encourage the use of digital technology among Muslim entrepreneurs. These contrast findings had intrigued the current research to dig deeper on this facilitating condition factor towards the intention to use Islamic crowdfunding to finance Bumiputera SME business. Accordingly, the fourth hypothesis generated is:

H4: Facilitating Conditions has a positive relationship with the intention to use Islamic crowdfunding.

2.2.6 Trialability
Trialability is defined as the extent to which an innovation can be tried on a limited basis which allows users to test innovations to give them some meaningful insights on the innovation/technology (Nor et al., 2010). Crowdfunding is an innovation that asist in solving the financial constraints for equity or donation-based projects, and this innovation is adopted more quickly the more they are tested (Rogers, 2003). However, due to the lack of local crowdfunding platforms and limited access to global platforms, past studies did not observe a significant association between trialability and behavioral intentions (Alshebami, 2022). These few insignificant findings which contradict the original theory have motivated this study to further explore the relationship between trialability factor with intention to use Islamic crowdfunding, and to discover if it has the same results with the behavioural intention towards conventional crowdfunding. Thus, the fifth hypothesis generated is:

H5: Trialability has a positive relationship with the intention to use Islamic crowdfunding.

2.3 Proposed Framework
The suggested framework integrates the UTAUT theory, integrating four independent variables (performance expectancy, effort expectancy, social influence, and facilitating condition), to use Islamic crowdfunding as the dependent variable (Hanafizadeh et al., 2014) and one factor from Innovation Diffusion Theory, IDT (trialability) is added. This extension of the UTAUT theory aligns with Venkatesh et al.’s (2003) recommendation, aiming to address the constraints of the original UTAUT model and enhance the overall
comprehension of technology adoption and usage behavior. Unlike UTAUT frameworks, this study did not consider “actual usage,” as suggested by Turner et al. (2010) who highlight a preference for studying “intention to use” in this context. The model indicates that technology readiness influences the connection between UTAUT components and the intention to use, as depicted in Figure 1.

![Proposed Theoretical Framework](image)

The model encompasses the relationships among four independent variables from UTAUT theory (Performance Expectancy, Effort Expectancy, Social Influence and Facilitating condition) and one factor from Innovation Diffusion Theory, IDT (Trialability).

### 3.0 Methodology

#### 3.1 Research Design

The research design adopted in this study is a quantitative method. As for the research population, there is a total of 11,104 Bumiputera SMEs registered with SME Corp (A. Adam, personal communication, October 4, 2022). Employing the G-Power application with power set at 0.95, effect size at 0.15, and accounting for five predictors, the minimum sample size determined for this particular study amounts to 92. Meanwhile, the minimum sample to be collected using Krejcie and Morgan table amounts to 373. Upon gathering and cleaning data from Bumiputera SMEs enlisted with SME Corp, a sum of 525 respondents has been successfully obtained. Meanwhile, the questionnaires are constructed based on previous studies and the items are adapted from several existing questionnaires. The questionnaires that were filled out underwent a pre-test, and their reliability and validity are assessed by the experts. This evaluation is essential since the accuracy of measurement instruments and constructs significantly contributes to the overall quality of the research.

#### 3.2 Response Rate, Validity and Reliability

648 questionnaires were distributed among SME owners meeting the pre-determined criteria. Meanwhile, the number of returned surveys was 525. As a result, this study acquired a total response rate of 81%. Therefore, the non-response bias test was not necessary to be conducted (Yoon et al., 2014). For the validation process, six experts conducted face validity and content validity assessments for the questionnaires in this study. The reliability analysis utilized Cronbach’s Alpha to evaluate the survey items derived from the Unified Theory of Acceptance and Use of Technology (UTAUT) for each variable. The data collected were analyzed using the Statistical Package for Social Science (SPSS). To be considered acceptable, the compound reliability range must exceed the recommended reliability coefficient of 0.70, in line with the guidelines of Hair et al. (2019). The results of Cronbach Alpha’s reliability test are depicted in Table 1 below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Expectancy</td>
<td>0.899</td>
</tr>
<tr>
<td>Effort Expectancy</td>
<td>0.884</td>
</tr>
<tr>
<td>Social Influence</td>
<td>0.903</td>
</tr>
<tr>
<td>Facilitating Condition</td>
<td>0.906</td>
</tr>
<tr>
<td>Trialability</td>
<td>0.909</td>
</tr>
<tr>
<td>Behavioural Intention</td>
<td>0.921</td>
</tr>
</tbody>
</table>

All Variables met the recommended value of more than 0.7, hence, all variables are considered as reliable
4.0 Results and Discussion

4.1 Participants Demographic
This study targeted Bumiputera SME entrepreneurs who are registered with SME Corp Malaysia. Lists of demographic information were asked in the questionnaires such as age, source of business capital, annual sales, number of employees, and so on. The table below depicts some of the demographic details that support the predictor variables in this study.

<table>
<thead>
<tr>
<th>Demographic details</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>40</td>
<td>7%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>90</td>
<td>17%</td>
</tr>
<tr>
<td>Trade and Services</td>
<td>380</td>
<td>72%</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>14</td>
<td>3%</td>
</tr>
<tr>
<td>Source of capital to start a business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own savings</td>
<td>296</td>
<td>56%</td>
</tr>
<tr>
<td>Loans from family members/friends</td>
<td>70</td>
<td>13%</td>
</tr>
<tr>
<td>Loans from Financial Institutions other than banks</td>
<td>33</td>
<td>6%</td>
</tr>
<tr>
<td>Investors</td>
<td>6</td>
<td>1%</td>
</tr>
<tr>
<td>Bank loan</td>
<td>72</td>
<td>13%</td>
</tr>
<tr>
<td>Others</td>
<td>48</td>
<td>9%</td>
</tr>
</tbody>
</table>

Note: Total of participants is 525

The demographic details show that most of the SMEs are from the trade and services sector (72%), followed with manufacturing (17%), Construction (7%), agriculture (3%) and mining and quarrying (0.2%). Meanwhile, the source of capital to start or expand their business are mostly gained from their own savings (56%), and the rest are from loans investors and etc.

4.2 Descriptive Analysis
For this study, descriptive analysis is performed using spss, by deriving the the mean and standard deviation for each variable as shown below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>4.1005</td>
<td>.67784</td>
</tr>
<tr>
<td>EE</td>
<td>3.9871</td>
<td>.69465</td>
</tr>
<tr>
<td>SI</td>
<td>3.9197</td>
<td>.67712</td>
</tr>
<tr>
<td>FC</td>
<td>3.9638</td>
<td>.65688</td>
</tr>
<tr>
<td>TB</td>
<td>4.0567</td>
<td>.71799</td>
</tr>
<tr>
<td>BI</td>
<td>5.5167</td>
<td>1.05166</td>
</tr>
</tbody>
</table>

Overall, for the independent variable, performance expectancy shows the highest mean of 4.1 (SD=0.678). Since the mean is sensitive to extremely large or small values, further descriptive analysis is performed onto each item of the variables as per table 4 below. Based on the analysis, the highest mean is contributed to item of PE2, (mean=4.12, SD=0.74), “Islamic crowdfunding will improve the financial performance of my enterprise”.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE1</td>
<td>4.10</td>
<td>.809</td>
</tr>
<tr>
<td>PE2</td>
<td>4.12</td>
<td>.740</td>
</tr>
<tr>
<td>PE3</td>
<td>4.09</td>
<td>.750</td>
</tr>
<tr>
<td>PE4</td>
<td>4.08</td>
<td>.794</td>
</tr>
</tbody>
</table>

The results from table 3 also show that the trialability factor has the highest standard deviation of 0.72. The meanings of these results are further explained in the discussion section.

4.3 Correlation Analysis
According to Pavesi et al., (1992), the strength of correlations with the value range of 0.41-0.60 is considered moderate, and the correlation value of 0.61-0.80 is considered strong.
Based on the Pearson correlation analysis, independent variables of PE and FC show strong positive correlations with the behavioral intention to use Islamic crowdfunding. Meanwhile, EE, SI, and TB show a moderate strength of correlation with BI. The facilitating condition shows the strongest relationship with behavioral intention to use Islamic Crowdfunding with the correlation value of 0.618, r (525) = p<0.001. Meanwhile, the weakest correlation would be between effort expectancy and behavioral intention to use Islamic crowdfunding correlation values of 0.537, r (525) = p<0.001.

4.4 Regression Analysis
For this study, regression analysis was performed to analyze the impact of performance expectancy, effort expectancy, social influence, facilitating conditions, and trialability on behavioral intention to use Islamic crowdfunding. Table 3 below shows the regression value between variables.

5.0 Discussion
The descriptive analysis results depict highest mean by performance expectancy variable, which shows that most SME think that utilising Islamic crowdfunding would boost their job performance. Meanwhile, the triability factor has the highest standard deviation of 0.72, showing that the opinion of SME owners is diverse, in terms of the ability to try an innovation first (trialability). Some considers that it would affect their usage intention, some consider it does not affect them. This may be because Islamic crowdfunding is still new, and hence some SMEs are willing to try, while the rest are reluctant to try this developing financial technology to sustain their business.

The facilitating condition shows the strongest correlation with the behavioral intention to use Islamic crowdfunding. This maybe because SMEs do believe that a user-friendly technology does affect their intention to use Islamic crowdfunding platform, since most of the respondents consist of those from age 25-35, which indicates young entrepreneurs who are familiar with the internet and new technology. On the other hand, effort expectancy factor shows the weakest correlation with behavioural intention to use Islamic crowdfunding, which shows that the SMEs think that Islamic crowdfunding platform is not that easy to use. Ease of use of a system/technology is an effective motivator for users to adopt it because users do not need to go into detail or having profound knowledge to operate them (Gangwar, Date, & Ramaswamy, 2015). The participants of this study may find that Islamic crowdfunding platform is quite complex and not easy to understand, given their diverse educational level and age.

As the regression analysis performed, it is found that the result is not significant for the relationship between effort expectancy and behavioural intention to use Islamic crowdfunding platforms. This is in line with another niche study that found insignificant relationships between effort expectancy and behavioral intention of Islamic crowdfunding (Azman & Zabri,2022). The research findings might be affected by the education level of the participants, as some entrepreneurs may not fully understand the benefits of Shariah-compliant crowdfunding. This could be because some business owners lack digital skills, making it difficult for them to use these financial technology apps, even if they are user-friendly.

68
6.0 Conclusion
The first hypothesis of performance expectancy has a positive relationship with the intention to use Islamic crowdfunding is accepted. However, the second hypothesis of effort expectancy having a positive relationship with the intention to use Islamic crowdfunding is rejected due to the insignificant results. The third hypothesis of social influence having a positive relationship with the intention to use Islamic crowdfunding is accepted as well as the fourth and fifth hypotheses; facilitating conditions has a positive relationship to using Islamic crowdfunding and trialability has a positive relationship with the intention to use Islamic crowdfunding, all are accepted. This study contributes significantly to existing research by introducing fresh perspectives on the factors influencing behavioral intention. It deepens our understanding of behavioral intention by integrating the Unified Theory of Acceptance and Use of Technology (UTAUT) with Innovation Diffusion Theory (IDT). For Bumiputra SMEs and startups without access to traditional funding, Islamic crowdfunding is a valuable option, albeit demanding considerable time, effort, and knowledge for success. As a result, this research can assist policymakers and government agencies in grasping the awareness of SMEs regarding financing alternatives and facilitating the formulation of relevant regulations and policies. Besides that, the limitations of the study include the questionnaires using a Likert scale having the risk of subjective answers from respondents. In addition, the data for this research is cross-sectional, which requires more studies to be conducted, since it is prone to biased situations. Longitudinal studies can be performed in the future to get more information and to see the consistency of the study.

7.0 References


Asastani, H. L., Kusumawardhana, V. H., & Warnars, H. L. H. S. (2018). Factors affecting the usage of mobile commerce using technology acceptance model (TAM) and unified theory of acceptance and use of technology (UTAUT). In 2018 Indonesian association for pattern recognition international conference (INAPR) (pp. 322-328). IEEE.


Huang, H., Yu, H., Li, W., & Ma, J. (2023). USING TECHNICAL ACCEPTANCE MODEL TO ANALYSE THE SUCCESSFUL CROWDFUNDING LEARNING GAME.
CAMPAIGNS.


