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Modeling Microfinance Acceptance among Social Network Women Entrepreneurs

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ABSTRACT

A pilot study was performed to examine a proposed research model in assessing the determinants of the level of awareness and readiness towards applying for microfinance among social network women entrepreneurs in Malaysia. It was deemed necessary to evaluate the reliability of the proposed measures as well as to form an expectation of the viability of the model. 48 usable responses from pre-identified online female entrepreneurs were gathered from an online survey. The confirmatory factor analysis and reliability test were performed to assess the measures' loadings, while the model was examined via partial least squares analysis to deduce the potential relationships among the proposed variables. Only a few of the proposed measures were found to have low loadings, and these were modified accordingly, while the proposed variables demonstrated acceptable reliability alpha values. Among the pre-identified antecedents of attitude towards microfinance, subjective norm was found to exhibit the strongest effect among only three significant antecedents. The attitude then explains the level of intention reliably to apply for microfinance. The actual study intends to collect at least 500 responses from women entrepreneurs who are conducting online businesses on social media.

Keywords: Microfinance, Social Network, Women Entrepreneurs

JEL Classifications: A130, O330, D140

1. INTRODUCTION

The use of the internet technology has become increasingly widespread in recent years and is predicted to further advance in years to come. As access to the internet becomes easier for Malaysians, opportunities, as well as problems, arise exponentially. These changes give rise to a certain phenomenon which needs to be further studied regarding the factors contributing to such phenomenon, its effects to society and policy makers, as well as its future.

The Internet technology itself has evolved to a level that one could not have imagined decades ago. Now, people are undoubtedly affected by the so-called social network applications. To be more specific, they refer to the social networking web applications such as Facebook, Twitter, Blogs, Instagram, and Video sharing

platforms. According to O'Reilly and Battelle (2009), the web is on its way to becoming a robust platform for a culture-changing generation of computer application and services. Hence, most of the entrepreneurs seize this opportunity as the first step to run and expand their businesses as the Internet is able to market their products to both domestic and international consumers. Furthermore, this platform has even made those previously unemployed mothers earn a living via small scale businesses by having a web presence and promoting businesses via social networking sites. Therefore, the existence of the Internet technology and web applications is very beneficial to them because they can earn income by working at home.

There are many factors that have been found to contribute to the success of women entrepreneurs. These include knowledge, spirit, patience, trust, friendship, idea, previous failures; however,

one major factor was found to be the availability of capital or finance (Ali and Rahman, 2013; Deng et al., 2011). For instance, although Chinese women entrepreneurs were found to have developed rapidly in number a shortage of capital stunted the development where half of them perceived a lack of capital as the main difficulty in maintaining a business (Deng et al., 2011). Responding to this problem, many nations including Malaysia have established microfinance institutions to offer loans to those who apply and qualified. Many women entrepreneurs have benefited from this lending facility provided by, among others, Tabung Ekonomi Kumpulan Usaha Niaga (TEKUN), Majlis Amanah Rakyat and Perbadanan Usahawan Nasional Berhad. Nevertheless, whether or not this facility is found attractive to online women entrepreneurs is still very much a question that needs to be answered. Many would expect that these online women entrepreneurs would prefer to use their savings or borrow from families, relatives, and friends to operate their business rather than ask for funding from microfinance agencies due to various reasons.

The proposed study is interested in examining the potential factors influencing the decision of online women entrepreneurs to use microfinance in supporting their businesses. In evaluating the potential results of the actual study, we will uncover the perceptions of online women entrepreneurs on microfinance that lead to their level of awareness and readiness to apply and use microfinance to helping grow their businesses. As this is an exploratory study, we shall approach the online women entrepreneurs in social media like Facebook, Instagram, blogs, and Twitter to get their cooperation in completing the study's survey. Thus, the population of the actual study would be composed of women entrepreneurs who run small-scale businesses using social network sites in Malaysia.

For the pilot study itself, a total of 80 respondents were approached and asked to participate in the survey to check the reliability and validity of the proposed measures. The respondents were identified from online advertising portals such as cari classified, mudah.my, majalah.com and their Facebook pages. In a period of 3 weeks, a total of 50 responses were gathered, but only 48 of them were considered usable. As a result, this paper reports the findings on the reliability and validity of the proposed instruments based on the 48 usable responses.

Access to capital is critical and essential for the development of small-scale enterprises (Leaman et al., 1992). From the extant literature, one of the problems that women entrepreneurs commonly face is in the financing aspect of their businesses, both for start-up and expansion (Ali and Rahman, 2013; Carol et al., 2012; Kwong et al., 2012). In light of the concern to eradicate poverty, the governments of many developing countries have introduced microfinance facilities via certain approved agencies. Microfinance creates self-employment opportunities for the rural people especially women and those who lack the educational, job-specific skills and qualifications. These self-employed would then be able to generate incomes. The programs also require savings scheme apart from the commonly scheduled loan repayment scheme. This government-supported program

is seen capable of improving the quality of life of the formerly relatively poor households, who are the main targets of credit participants. The program is also deemed as an acknowledgment of the government in appreciating the role of women especially the poor rural ones.

Bank Negara Malaysia defines microfinance as the provision of small loans or financing up to RM 50,000 (USD 16,129) to micro enterprises or self-employed individuals for their business activities (Nawai and Mohd Shariff, 2011). According to Mokhtar (2011), Malaysia has four microfinance institutions, namely Amanah Ikhtiar Malaysia (AIM), Yayasan Usaha Maju (YUM), TEKUN, and the People's Credit Cooperation (KKR). AIM is the dominant microfinance institution in Malaysia as it is a poverty-oriented microfinance institution that provides loans only to the poor. Meanwhile, TEKUN is synonym among entrepreneurs who seek this service as it is relatively well established to offer six financing schemes to micro-entrepreneurs in which the value of the loans range from RM 500 to RM 50,000 for both poor and not-so-poor borrowers (Mokhtar et al., 2012).

According to Md Saad and Duasa (2010), Afrane (2002) and Schreiner (1996), microfinance contributes to businesses and life success by increasing business incomes, improving access to life-enhancing facilities, empowering women and making greater monetary contributions to social projects. To further provide the evidence, AIM (2009) revealed that the clients' average monthly household income increased almost triple from RM 326 to RM 932 after borrowing from AIM. This evidence provides some insights to the future borrowers who might have the intention to use microfinance, particularly entrepreneurs to set up their businesses. Moreover, Nawai and Mohd Shariff (2011) asserted that micro-financing provides an easy, fast, and convenient financing facility to the entrepreneurs as it does not require collateral and only needs minimum documentation with a simple procedure. The time is taken to approve and disburse funds also small people especially businessmen to use microfinance. Alternatively, the solidarity group lending and repayment is a strategic approach introduced by microfinance institutions that contribute to the microfinance sustainability and gives benefit to the poor in developing countries for them to easily have access to credit (Armendariz and Morduch, 2005).

However, the barriers or complexity factors are the factors that give a negative image which would discourage entrepreneurs to use microfinance. Two microfinance institutions, TEKUN and YUM reported that the borrowers' characteristics like age and gender, business characteristics and loan features such as repayment period, repayment mode and repayment amount, were among the factors that influenced borrowers in repaying their loans (Mokhtar et al., 2012). The study also found that the longer the period is given to repay the debts, the more likely the borrowers can settle the debt. For example, the weekly repayment period set by TEKUN cause the problems for its borrowers in repaying their loans. Otherwise, the loan repayment period of over 1 year set by YUM gave fewer problems to the borrowers in repaying their loans. At the same time, the flexibility of the lending contract

is needed in TEKUN and YUM because their lending contract has given problems to borrowers in repaying their loan (Mokhtar et al., 2012).

In reaching the objectives of the study, we are utilizing the models and variables known to be valid and common via a literature search. As a result, we are proposing a research model that predicts intention to use microfinance using several pre-identified antecedent variables and attitude as a mediator.

2. RESEARCH MODEL AND HYPOTHESES

For the proposed study, the researchers proposed a conceptual model based partly on the theory of planned behaviour (TPB) (Ajzen, 1991) and diffusion of innovation (DOI) (Rogers, 1962) to measure the relationships between the identified factors impacting the intention of women entrepreneurs to obtain microfinance (Figure 1). Variables making up proposed research model were furthered studied via literature search to identify suitable measures for the questionnaire.

Overall, this model contains several factors that may affect the intention of women entrepreneurs to obtain microfinance, represented by the factor of intention. The effects of the antecedent factors are expected according to decomposition of attitudinal beliefs to develop the business as a result of using microfinance capital. The relationships between these antecedent variables and attitudes and intention are also expected to be moderated by the size and age of the business.

According to Ajzen (1991) in the TPB, intention can be classified as a motivational factors that impact behavior which refers to the people’s inclination in a particular situation such as how hard they are willing to try or how much of an effort they are planning to exert in order to perform the behavior. In other words, both intention and behavioral factor are intertwined that affect individual activity. Clearly, behavior is determined by attitude, and usually, people make a judgment based on the attitude that he/she perform. Thus, most of the previous studies identified that people’s attitude is the main impetus towards an intention to use microfinance. Therefore, we have formulated the following hypothesis related to attitude:

H₁: Attitude towards microfinance mediates the relationships between its antecedents and intention to use microfinance.

Attitude normally is influenced by internal and external factors (antecedents). Internal factors refer to inner strength or weaknesses that someone exhibited in performing an action. In the context of this study, perceived behavioral control and awareness are identified as an internal factor that affects someone decision whether to or not to perform something because it depends on how people manage their inner feelings. For example, if they believe that microfinance is beneficial for their businesses, their perceptions towards it would likely be positive. Likewise, when they are aware of the existence of microfinance and the processes to obtain it are clear, one can expect that they would be more interested to know more about microfinance and then apply for it. Meanwhile, other external factors or outside influence can also impact someone’s attitude towards a particular product or innovation. Amongst others, relative advantage, complexity, religiosity, exposure, subjective norm and descriptive norm are the external factors identified in this study. We believe that attitude is formed by these antecedents which reflect the extent to which someone see the microfinance as being useful for his or her businesses or otherwise. As a result, we hypothesized that:

H₂: Relative advantage, complexity, religiosity, awareness, perceived behavioral control, subjective norm, descriptive norm and exposure are the antecedents of attitude towards microfinance.

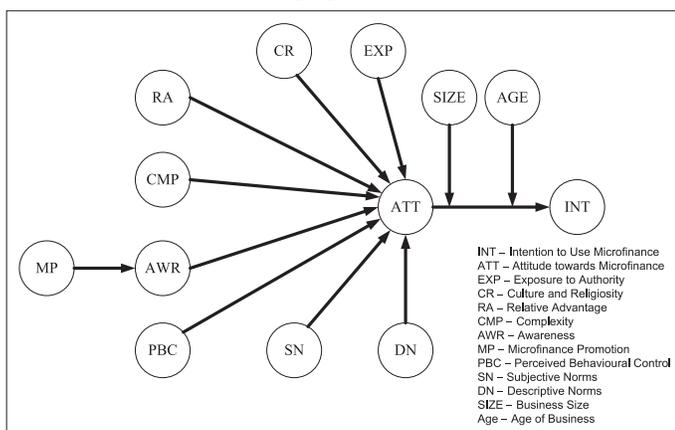
Promotion is one of the effective ways to increase awareness among people (Kotler and Zaltman, 1971). In the context of this study, the microfinance promotion is capable of raising awareness especially among businessman about the existence of this institution. Coulter et al. (2001) stated that advertising brings the big and positive values to the people in introducing the new things that they may not know about it because advertising relates information, provides entertainment and stimulates growth in the economy. Thus, we have formulated the following hypothesis:

H₃: Microfinance promotion is positively related to awareness.

Usually, the role of age and business size is another factor that businessmen/women refuse to apply for microfinance. For example, a small and new business tends to make a loan to start up the business compared to the large and well-known business because normally the beginning of the business is the most difficult stage to be handled by the owner and it requires much money to expand the business; thus, the quick and easy way is to borrow. Conversely, if the business is already developed, less borrowing are then needed. In addition, small businesses always have a problem during financial crises because they are more dependent on bank capital to fund their growth (Mills and McCarthy, 2014). Sometimes, in respect to the size of the business, the owner feels that microfinance is not needed, or they feel ashamed to apply for microfinance. Therefore, we propose the following hypothesis to be tested in the actual study.

H₄: The relationship between attitude towards microfinance and intention to use microfinance is moderated by size and age of business.

Figure 1: The proposed research model



3. RESEARCH METHODS

The actual online survey will be distributed to online women entrepreneurs. The majority of women entrepreneurs from Malaysia will be identified as respondents and sample population through visiting the portal on online business directories, website advertising portals, social network websites and web search engines. The contact information such as their email addresses, website addresses, and business phone numbers will be stored in a database that will be constructed for the purpose of distributing and inviting them to respond to the questionnaires that will be uploaded online. For the pilot study, three social media were selected to reach women entrepreneurs in Malaysia, and they are all invited to give responds regarding questionnaire given. We have identified 80 potential respondents via Facebook, Instagram, and blogs, but only 48 respondents managed to participate.

All measures of variables making up TPB were adapted from Xiao and Wu (2006). There are 6 items (questions) each measuring intention, attitude, subjective norms, and perceived behavioral control. All of the measurements used a Likert scale of 1-10 (1 denoting strongly disagree and 10 strongly agree). In the study by Xiao and Wu (2006), the Cronbach's alphas for intention, attitude, subjective norms, and perceived behavioral control are 0.82, 0.71, 0.84 and 0.77, respectively. These alpha values clearly indicated that the measures reliably represent the latent constructs.

For variables of Roger's DOI, most measures were adapted from Afrane (2002), Kausar (2013) and Schreiner (1996). Both constructs of relative advantage and complexity (barriers) were represented by 6 items, and measured by the same Likert scale of 1-10.

The questions for descriptive norms were adapted from Reno et al. (1993), which were originally designed in the focus theory of normative conduct. The questionnaire contains 6 items on this variable and the measurement used was a Likert scale of 1-10. The result from the study by Reno et al. (1993) showed a positive result with 80% of the respondents choosing descriptive norms as one of the factors that affected their intention and action.

The questions about culture and religion were adapted from previous studies by Dusuki (2008) and Idris et al. (2011). This questionnaire consists of 6 items for this variable. They were measured using a Likert scale of 1-10. The result of the study by Idris et al. (2011) showed that religious is the main factor that contributes to Muslims in Malaysia patronizing Islamic financial institutions. For the microfinance promotion, awareness and exposure variables, we developed the measures ourselves. The measures were presented to two independent academicians at a local university in Malaysia who satisfactorily agreed that the proposed measures can reliably measure the anticipated latent variables.

Overall, the proposed measures which were piloted had achieved the desired reliability and validity level. The full measures can be requested from the main author. The data for the pilot study were gathered from women entrepreneurs who are conducting online businesses on social media such as Facebook, blogs, and

Instagram in January 2015. The descriptive characteristics of the samples are shown in Table 1.

As can be seen from the results, most of the female respondents were Malays, in the mid 20s, single, having attended tertiary education and working in various sectors. The actual study intended to obtain responses from individuals with diverse backgrounds to ensure some level of results generalizability across Malaysia.

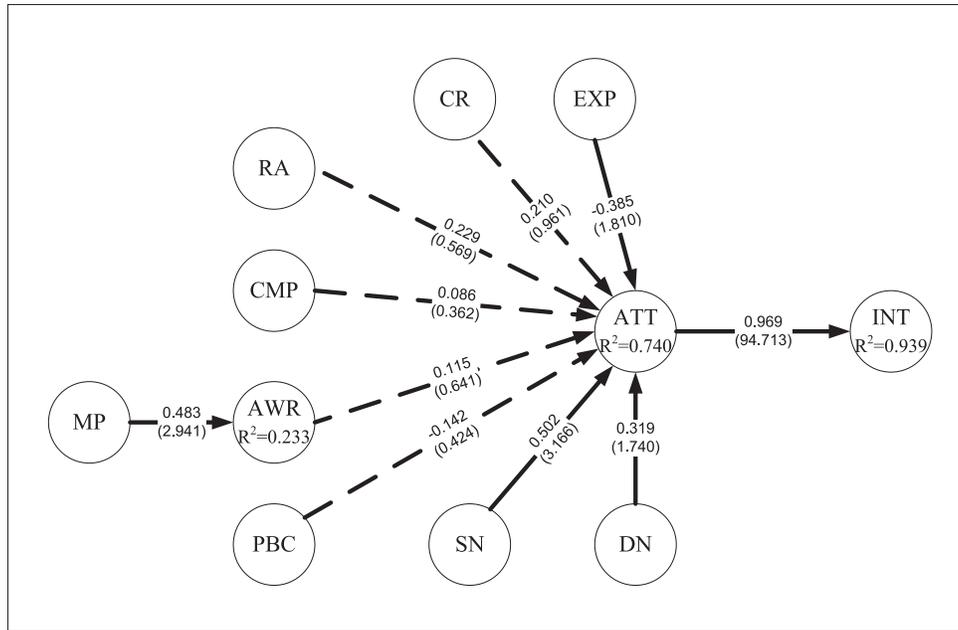
Analysis on pilot data followed a confirmatory factor analysis (CFA) which was carried out using SPSS software. In the actual study, the CFA will be performed simultaneously while examining the convergent and discriminant validity using a Partial Least Squares analysis. The characteristics of the study instruments are described one by one regarding the number of items and reliability.

The results of this analysis revealed that most of the loadings of the proposed measures achieved satisfactory level. The problematic items included one item (INT6) under the intention variable that has a negative loading of -0.351 , item SN6 under subjective norms and MP5 of microfinance promotion are also not significant with the values of loadings were 0.281 and 0.395, respectively. This problem has been identified as due to the negative statements included in the questionnaire for items INT6, SN6, DN6, RA6, MP5, and EXP6. However, items DN6, MP5, RA6, and EXP6 have loadings >0.50 although the values are lower than most of other items. While, items for PBC5 and PBC6 were <0.70 , but we considered them to be moderately high and having the potential to improve when a larger sample is achieved in the actual study.

Negative statements included in the questionnaire were intended to avoid common method bias in this study. Due to this intended

Table 1: Description of samples

Background	N (%)
Age (years)	
20 years and below	13 (27.1)
21-25	-
26-30	28 (58.3)
31-35	5 (8.3)
36-40	-
41-50	2 (2.1)
Marital status	
Single	33 (68.8)
Married without children	4 (8.3)
Married with children	11 (22.9)
Divorced/separated/widowed	-
Race	
Malay	45 (93.8)
Chinese	1 (2.1)
Indian	-
Indigenous	2 (4.2)
Academic qualification	
No formal education	-
Primary school	14 (29.2)
Secondary school	-
Diploma/polytechnic	10 (20.8)
First degree/equivalent	23 (47.9)
Postgraduate degree	-
Professional qualifications	-
Others	1 (2.1)

Figure 2: Results of the structural model

aim of having negative statements in the questionnaire, we have decided to include all of them in the actual study as to minimize validity threat in the research model. All other items have significant loadings greater than 0.60. Therefore, the construct validity was deemed have been achieved in this pilot study.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy KMO analysis was conducted on the pilot study to assess the suitability of the respondent data for factor analysis. All of the variables achieved the suitability construct where the KMO values are >0.5 . The KMO index ranges from 0 to 1, with 0.50 considered suitable for factor analysis (Williams et al., 2012). The reliability test for this pilot study used Cronbach's alpha analysis, and the results showed all variables are good and acceptable to the range of values >0.60 .

The pilot study further tested the model to re-examine the viability of the proposed relationships and the explanatory power of the endogenous variables by using SmartPLS software. The results were expected to provide a glimpse of which hypotheses have the potential of being supported and which one may not follow the earlier expectations. As can be seen Figure 2, four relationships match our earlier expectations while five other relationships could not be supported and that all three endogenous variables were explained satisfactorily by the stipulated exogenous variables. In addition, from the data of these 48 respondents, the relationship between perceived behavioral control and attitude may be a negative one, which contradicts with the expected positive relationship. Nevertheless, the results from the actual study may be different from those found in this pilot test.

4. DISCUSSION AND CONCLUSION

The study was proposed to analyze systematically the driving factors for women entrepreneurs using microfinance to support their online businesses. Specifically, it attempts to uncover the

perception of social network female entrepreneurs on microfinance that leads to their level of awareness and readiness to apply and use microfinance in helping their business grow further. Therefore, the findings of the actual study can provide fruitful insights and ideas to the provider fund agencies as well as related ministries to polish existing, and come up with new and better, policies that satisfy the needs of the population segment to equally enjoy the economic success of the nation.

The actual study which is expected to gather more than 500 responses would provide a glimpse on the microfinance acceptance by female online entrepreneurs. These women entrepreneurs will be identified as the target sample through visiting the portals on online business directories, website advertising portals, social websites and web search engines.

Overall, the research model has been validated through the examination of its measures' reliability and constructs' validity through this pilot test. Some of the items may be discarded in the actual survey while some may be refined to improve the reliability of the final questionnaire. All of the problematic measures in this pilot study were those of negative statements, which were initially added in the questionnaire to overcome the potential method bias. However, they will still be kept in the actual questionnaire to mitigate the same problem. If they are found to be unreliable as well in the real study, the remaining measures are more than sufficient in number to represent the proposed latent variables.

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