

Factors That Influence the Intention to Adopt Fintech by Yemeni Microfinance Business

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Abstract: This study investigates the factors that significantly affect the intention to adopt fintech by Yemeni microfinance business. This study is to gauge the possible antecedents of fintech services usage by working on a new model based on TAM as well as to answer the research questions posed. This study applies a quantitative research methodology, which includes a numerical measurement and analysis of the factors Service Quality, Trust, and Costs which influence acceptance. It presents a theoretical framework for the construction of hypotheses. The hypotheses were tested to obtain the findings that may be generalized afterwards. 30 respondents participated in this study. After reviewing several related studies, the Likert five-point scale questionnaire was constructed for gathering the required data, which were then analyzed using the SPSS software.

Keywords: Service Quality, Trust, Costs, Technology competency, Technology Acceptance Model (TAM).

I. RESEARCH BACKGROUND

Financial Technology or also called FinTech encompasses an economic industry that comprise companies that utilize technology for increasing the efficiency of financial systems (McAuley, 2015), and essentially, FinTech is associated with companies that offer financial services through the utilization of software or mobile applications. FinTech comes in diverse forms for instance, Peer-to-peer (P2P) lending, mobile payments, trading platforms, equity funding, money transfer, in addition to other subsectors associated with FinTech (Hernández-Solís, 2016). All over the globe, the popularity of FinTech is increasing, especially in the last few years. With the advancement of financial technology, for instance, the use of electronic, digital, and FinTech Service, service productivity has seen dramatic improvement, and this has significantly impacted users of new technology products as well.

FinTech Service is part of the innovative technological applications with significant market prospects (Kim, Park, Choi, & Yeon, 2015). Munch (2015) relevantly viewed FinTech as the diffusion innovation with the ability to transform the world albeit the fact that its rates of adoption are still low, as it is still in its infancy stage. Furthermore, the abundance of FinTech products which can benefit customers greatly. Somehow, the timing seems inappropriate considering that there are unknown challenges which can adversely impact not only customers but the service providers as well. FinTech occupies a highly extensive sector with extensive history. For the majority of people, FinTech generally relates to the newest

mobile app that they can utilize in making payment to their everyday purchases with no requirement of card or physical currency (Wulan, 2017). Nonetheless, in the sector of finance, technology remains a major player.

The use of credit cards began in 1950s with the purpose of easing the burden of bearing cash among people. Then, ATMs were emerging in the 1960s as replacement to tellers and branches. This is followed by the birth of electronic stock trading executed on exchange trading floors in the 1970s. Meanwhile, bank mainframe computers in addition to more refined systems of data and record-keeping were first utilized in the 1980s (Falguni Desai 2013, Nicoletti, B. 2017). Later on in the 1990s, the world began to witness the proliferation of the Internet and FinTech business models, resulting in the establishment of online stock brokerage websites that retail investors can utilize in replacement of the retail stock brokering model that relies on the use of phone. These developments have resulted in a financial technology infrastructure that is almost a routine to most people.

II. THEORETICAL FRAMEWORK

TAM is employed in this study for the examination of the factors impacting user adoptions of FinTech among microfinance businesses in Yemen. The application of TAM will ease the determination of how users establish attitudes towards acceptance of FinTech technology and services in accordance with the characteristics embraced by this technology. In the context of education, TAM has not been commonly used. However, validation of TAM has been shown in many trials with the application of new systems technology. The use of TAM is cost-effective, especially to those trying to make a prediction on if (or not) a given software product has the potential to be accepted by its intentional users. In the comprehension of IS acceptance and usage, TAM is indeed a potent theoretical model (Gefen, D., & Larsen, K. 2017, Garrido, S. M. 2018). As a strong model that gauges the acceptance of user of new technology (Shore, L., Power, V., De Eyto, A., & O'Sullivan, L. W. 2018, Rahman, S. A., Taghizadeh, S. K., Ramayah, T., & Alam, M. M. D. 2017), it is not only the mostly commonly used, but also among the most cited ones in the context of user acceptance of technology (Zimmermann, V., & Gerber, N. 2017; Zhang, X., Han, X., Dang, Y., Meng, F., Guo, X., & Lin, J. 2017).

III. METHODOLOGY

This study selected 30 owners from the owners of microfinance business in Yemento be participants. Data were acquired online (online questionnaires at (www.surveymshare.com)). The questionnaire comprises one part and this part includes five key constructs that have association with behavioral intention to adopt FinTech.

Instrument's Reliability

The purpose of conducting pilot test is to determine the reliability of the instruments of measurement. In the context of testing, Gay and Airasian (2000) stated that reliability refers to how far a test is dependably measuring what it should be measuring. Additionally, the initial reliability of internal consistency of pilot study data is measured using Cronbach's alpha (Cronbach, 1984). According to Zander and Kogut (1995), the Cronbach alpha value is increasable using either the average correlation or the number of items.

Table 1: Scale Reliability Alpha – Pilot Test of Model's Questionnaire (N=30)

Variable	N. of Items	Alpha (a)
Service quality	4	.869
Trust	4	.828
FinTech Adoption	6	.807
Perceived Usefulness	5	.956
Perceived Ease of Use	5	.876
Technology Competency	3	.808
Costs	3	.857

IV. SUMMARY

This research highlights the development as well as testing of a structural model, for the FinTech Adoption in the microfinance business. The model that this study had devised is grounded on the model of technology acceptance in addition to the applicable constructs obtained from the information systems as well as the studies on FinTech acceptance.

This brings to the formulation of a conceptual framework that illustrates the intent of an individual to employ FinTech services grounded on users. The TAM model regards the beliefs of technology competency that an individual possesses as the key determinants to Adoption of FinTech usage. In this work, a conceptual model is introduced. The model includes the incorporation of the technology competency among users

in Yemen towards FinTech services. TAM's extended model is empirically supported by this study's outcomes. This study has enriched the knowledge on the notion of acceptance of technologies inside the realm of research on theories pertaining to technology acceptance, particularly, in terms of online behavior.

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