PERCEPTION AND AWARENESS ANALYSIS OF FINANCIAL TECHNOLOGY (FINTECH) SERVICES AMONGST THE EXPATRIATES IN THE UNITED ARAB EMIRATES

Aamir Shakir\(^1\), Nitin Simha Vihari\(^2\)*

\(^1\) BITS Pilani-Dubai Campus, Dubai, United Arab Emirates
\(^2\) BITS Pilani-Dubai Campus, Dubai, United Arab Emirates

*Corresponding Author

Abstract:
The objective of this study is to analyse the perception and awareness of the Expatriates and start-up businesses of the presence and value proposition of FinTech Services such as Payment/Banking, Lending and Crowdfunding in UAE. Data was collected using a survey-based questionnaire and respondents were chosen using convenient sampling method. Research design is a Cross-Sectional design. Data was collected between February to April 2020. The target audiences were Expats between the ages of 20-40 who have been living in UAE for at least 3 years. The level of awareness of most respondents in the FinTech services such as P2P lending; Robo Advising and Insurtech were fairly limited. The results discovered reflect a positive sign regarding the acceptance of these new FinTech services in UAE. From the findings, we can also notice that majority of the respondents are hoping for FinTech to be able to act as a secondary financing source apart from normal financing methods. And moreover, FinTech development in the UAE market could further increase business activities all throughout. Not many in depth studies on FinTech have been done across the world. In the context of UAE there were even lesser. This paper is one of its kinds in the region, which allows us to understand the awareness and perception of consumers towards technology and the financial industry using a broad spectrum of variables.

Keywords:
Perception, Awareness, FinTech, UAE.
Introduction

‘FinTech’, or ‘Financial Technology’, refers to delivering financial solutions via the employment of technology. The term ‘FinTech’ can be found to have origins all the way back to the early 1990s (Hochstein, 2015). The FinTech (Financial Technology) industry is growing at a rate that is exponential, which has prompted the development of splendid and imaginative models for business. The above mentioned advance technologies have an incredible potential to help and quicken and furthermore to disrupt the operations of finance and banking no matter if it is Islamic or the conventional finance industry. The most dynamic areas of FinTech are digital payments, CrowdFunding, data analytics, digital currencies, computer science and different types of P2P (peer-to-peer) financing. Although, only recently has our world drawn the focused attention of consumers, participants from the industry, academics and regulators, thanks to its swift alteration of basic common financial services. The global investment in FinTech has significantly increased by 2,200 percent from $930 million in 2008 to $22 billion in 2015. It has further doubled to a figure of about $40 billion in 2017 (Accenture, 2017; PWC, 2017). The Disruptive nature of FinTech is now being embraced by financial institutions and to give a specific character to the FinTech movement is very difficult. Innovation in the financial sector has a very long history. Within the paper titled “150 years of FinTech”, Arner et al. (2016) illustrates the FinTech evolution through the 3 major eras: FinTech 1.0 (18661967); FinTech 2.0 1967-2008); and FinTech 3.0 (2008- present). The authors of the paper have argued that the immergence of the trans-Atlantic cable in the year 1866 allowed for the initial combination of technology and finance, which only allowed the play of economic globalization to rise. We are in stage 3.5 of FinTech in emerging markets and in stage 3 in developed countries, which are due to the GFC (global financial crisis) in 2008 and further driven by the Application Programming Interfaces (APIs). Some of the examples in FinTech stage 3 are Kickstarter in 2009, which has introduced us to Crowdfunding services that provide rewards; Bitcoin in 2009, whose primary objective is to reform the mobile payments solutions and lastly Wealthfront in 2008, provides automated investment services done online. FinTech stage 3.5 is seen in the emerging markets in Asia and Africa and some of their examples are M-Pesa in Kenya in 2007, which is a mobile money platform. Arbor Ventures (2017) categorizes two phases of FinTech, phase 1 of FinTech refers to the emergence of technology that aims primarily at moving services online and digitizing customer experience (Mobile payments, lending and online trading with very little participation by banks). Greater computing power and AI with more participation and collaboration among FinTech start-ups and Financial Institutions are driving FinTech stage 2. Philippon (2016) gives samples of Financial Technological innovations like block chain and crypto currencies, machine learning and AI, mobile payment systems and P2P (peer to peer), trading systems and new digital advisory, equity crowdfunding. It is an indisputable fact that finance researches and Islamic banking and students have all recently began exploring the emerging FinTech industry with relation to Islamic finance and banking. A study done by Lacasse, Lambert and Khan (2017) explored the use of Blockchain technology while adhering to Sharia compliance in Islamic finance industry. Another study, (Finocracy & Mirakhor, 2017) focuses more on showing us a view of how Financial Technology can accelerate the adoption of risk sharing Islamic finance. It also provides a view of how blockchain technology has the potential within that risk sharing finance. We have noticed a few general articles on different social sites, magazines, blog sites and newspapers from different authors like (Abdullah, 2017; Hasan, 2017; Mohamed, 2017; Munshi, 2017). All of these studies discussed different aspects such as FinTech opportunity or threat for Islamic finance; FinTech could be a game changer for Islamic finance, smart contracts in Islamic finance, FinTech for Islamic finance. Given the recent developments of
FinTech market in UAE, this study aims to measure the awareness and perception of people on the existence of P2P lending, crowdfunding and other similar services. In addition to that, this study also aims to find out what kind of factors increase the interest of FinTech services among the general population.

**Literature Review**

Saksonova and Kuzmina-Merlino (2017) reported that consumers were unaware of FinTech services in Latvia and their related advancements and new financial products. In the UK, Baek et al. (2014) reported that the level of awareness amongst the consumers and their perception on these alternative instruments for financing within the United Kingdom, was very low. As for the countries in Asia, no specific journal was found on the survey of awareness particularly of FinTech in each country. However, there was a report from Ernst and Young (2017) as shown in Table 1 regarding FinTech Adoption Index in for Asia countries like China, Japan, India, Singapore and metropolis, but still, no data was highlighted for UAE. As there may be a limited reference available for FinTech in Asia, Saksanova (2017) and Baeck et al. (2014) were used as the main reference in this study.

| Country         | Adoption Rate (%) |
|-----------------|-------------------|
| China           | 69                |
| India           | 52                |
| United Kingdom  | 42                |
| Australia       | 37                |
| United States   | 33                |
| Singapore       | 23                |
| Japan           | 14                |

Source: Ernst and Young (2017).

Elmo Lewis proposed an important theory of communication in 1898 called the AIDA (Attention, Interest, Desire and Action) model and the inspiration behind this theory was the observation of the life insurance industry. According to the study, an individual experiences four cognitive phases when they purchase a new product/service or hear a potentially new idea. Attracting attention, creating interest, curating desire and inspiring action are the four cornerstones of the AIDA model (Heath & Feldwick, 2007). The psychological transformation an individual goes through from the moment they see an advertisement to the final purchase can be controlled and the impact of the product’s advertising can be clearly assessed by this model (Kojima et al., 2010). The fundamental principle of this model is still the same despite it being introduced centuries ago and having undergone a plethora of modifications since then. Even today, customers and patrons still need to be aware of a product or service, gets interested in the product due to its benefits which they have been informed about, express a desire to own and finally, to take action i.e. make the decision to obtain this product or service or other relevant actions in relation to procuring the product or using the service (Michaelson & Stacks, 2011). According to Ashcroft and Hoey (2001), even though the AIDA model was never intended for being applied to Internet Services, it can be applied, as it is just another product/service. There are three levels in the AIDA model. A customer’s attention is drawn in the Cognitive level and the customer becoming aware of the product or service is the first step in the communication process. The level at which the customer’s attention is piqued and he/she
is curious about finding more information on the product or service is called the Affective level. This leads to the customer desiring to use the product or service. The next level is where action takes place. The customer acquires the product or service. The creation of attention or awareness in consumers, even advertising is also being able to create desire and interest before it triggers them to take action (Hoek & Gendall, 2003). The previous researches were not done in United Arab Emirates (UAE). This alone opened up the opportunity for allowing us to proceed with such a study. The study conducted by Nasrul (2012) in Malaysia, had published its implications on how SMEs or startups were aware about using FinTech services to finance their businesses. A similar study was understood and implemented here in UAE. Another study done by Yucaoglu and Maggio (2020) spoke about the FinTech Ecosystem and the FinTech Hive which is Located at DIFC (Dubai International Financial Center), the drawback of this particular study was the fact that they did not dwell on the awareness and perception of the consumers that would be using the FinTech service in that FinTech ecosystem.

![Figure 1: AIDA Model Framework based Survey](image)

**Research Methodology**

The research design is a descriptive in nature and the respondents are expatriates living in UAE for at least 3 years before the start of the data collection. The type of data acquired and used was primary and cross-sectional. The Sampling Technique used was Convenience Sampling Method. This survey was decided and reviewed by FinTech experts and by checking various previous studies. A focus group discussion was conducted with 3 academicians and 4 industry practitioners. The discussion saw many deliberations and iterations, from that the following survey items have been extracted and finalized. The items of the survey were tested for face validity and content validity. A pilot study was conducted by randomly choosing 25 respondents who are aware of FinTech services and the results of the study were closely examined and necessary modifications were made to the survey items based on the feedback given by the respondents. The following table indicates the list of items to measure the perception and awareness of FinTech services.
### Table 2: Survey Questionnaire

#### Part A: Demographic Questions
1. Gender
2. Age
3. Nationality
4. What is your current work location?
5. Enter your current occupation?
6. Work Experience

#### Part B: Awareness Based Questions
7. Do you know what a FinTech company is?
8. How many of the following FinTech services are you aware of?
   (Options) (Crowdfunding; Peer to Peer Lending; Internet Banking; Mobile Banking; Robo Advising; Block chain & Crypto Currency; Insurtech)
9. How many of the following FinTech services that you have personally used in the recent past?
   (Options) (Crowdfunding; Peer to Peer Lending; Internet Banking; Mobile Banking; Robo Advising; Block chain & Crypto Currency; Insurtech)
10. Which of the following services would you consider using in the near future?
    (Options) (Crowdfunding; Peer to Peer Lending; Internet Banking; Mobile Banking; Robo Advising; Block chain & Crypto Currency; Insurtech)
11. Can you list some of the FinTech companies that you know which operate either in UAE or abroad?
    (Options) (Crowdfunding; Peer to Peer Lending; Internet Banking; Mobile Banking; Robo Advising; Block chain & Crypto Currency; Insurtech)
12. What is your favourite FinTech Company in the MENA region?

#### Part C: Perception Based Questions
13. Which of the following FinTech services are robust and best suited to your needs?
    (Options) (Crowdfunding; Peer to Peer Lending; Internet Banking; Mobile Banking; Robo Advising; Block chain & Crypto Currency; Insurtech)
14. Which of the following aspects would you consider when you are planning to put your money into FinTech related services?
    (Options) (Quality of Service; Timely and Efficient Service; Transparency; Convenience; Approved by The Government)
15. What do you hope from FinTech innovations and developments in MENA in the near future?
    (Options) (To become alternative source of Income; To offer better interest rate compare to the existing FinTech; To have Islamic-compliant financing option; To have an easy application process; To have a robust or strong borrower protection; To further stimulate business activities in MENA)
16. According to your personal experience, which of the following FinTech services are high at risk?
    (Options) (Crowdfunding; Peer to Peer Lending; Internet Banking; Mobile Banking; Robo Advising; Block chain & Crypto Currency; Insurtech)
17. Do you think FinTech services are risky?
18. Do you think Islamic Banking practices advance the growth of FinTech services in the MENA region? If So, how?
Results
Demographic analysis and a percentage analysis were done using Microsoft Excel. 64 respondents have been successfully obtained. A percentage analysis was done on the data obtained from the survey to provide a demographic profile as presented in Table 3.

| Variables                  | Categories     | Frequency | Percentage |
|----------------------------|----------------|-----------|------------|
| Gender                     | Male           | 30        | 46.9       |
|                            | Female         | 33        | 51.6       |
|                            | Prefer not to say | 1        | 1.6        |
| Age (years old)            | <20            | 3         | 4.7        |
|                            | 21-30          | 43        | 67.2       |
|                            | 31-40          | 9         | 14.1       |
|                            | >40            | 9         | 14.1       |
| Work Experience            | <2 years       | 37        | 57.8       |
|                            | 3-5 years      | 8         | 12.5       |
|                            | 6-10 years     | 10        | 15.6       |
|                            | More than 11 years | 9      | 14.1       |
| Occupation                 | Entry level    | 9         | 14.1       |
|                            | Intermediate   | 7         | 10.9       |
|                            | First level    | 9         | 14.1       |
|                            | Middle Level   | 7         | 10.9       |
|                            | Senior/Top-level | 10      | 15.6       |
|                            | Unemployed     | 22        | 34.4       |

In Q7 of the second section of the questionnaire, the respondent’s were asked about whether they were aware what a FinTech company is and which FinTech services they were aware of. 48.4% of the respondents is aware of what a FinTech company is. 31.3% of the respondents do not know what a FinTech company is and the rest 20.3% of the respondents are ambiguous. The below figure provides the same.
From the Q8 and Q9 of the survey, we found that Internet Banking was the highest in familiarity among the respondents with 50 (78.1%) which goes to show that the world is very trusting to banks as that is how salaries and money can be safely transferred as they are over seen by government entities. The second leading is Mobile Banking with 48 (75%) this is just another example that people are addicted to their mobiles and prefer the flexibility to perform all tasks on their fingertips. As we can notice from Figure 3 and Figure 4 that Banking are widely known and accepted by majority of the public whereas Robo Advising and Insurtech are less known and used.

Figure 2: Response 1 (Q7)

Figure 3: Response 2 (Q8)
Also, in the second part of the survey, the respondents were asked about their experience in using FinTech services such as P2P (peer to peer) lending and CrowdFunding and whether they are planning on ever using these upcoming services in the future. A checkbox question was asked where they respondents had the choice of choosing more than 1 option. As shown in figure 5 through a percentage analysis, the main bulk of the respondents would like to use Mobile Banking 42 (65.6%), Internet Banking 38 (59.4%) and the third being Blockchain and Crypto Currency with 27(42.2%). From many of the new services listed, the public seems to be more inclines into going into Crypto currency, which could be mainly due to the fact that they are more secure.

It can be seen that people are more inclined into following traditional banking practices with the exception of using technology to enhance their use of those services. The public seems to perceive that they only need to use services required in their day-to-day life. And not venture out and try the other more innovative FinTech ideas.
As shown in Figure 6, the respondents were asked which kind of aspect would they consider when putting their money into any FinTech related service. In this particular question, six elements were selected based on the quality of our current financial services and a checkbox question was asked. The result shows that the element ‘Quality of Service’ is the most considered element with 38 (59.4%), followed by Transparency with 35 responses (54.7%) and ‘Approved by the Government’ with 33 responses (51.6%). This shows that people are looking for a good quality and a very safe service to use that they can trust blindly.

Respondents were also questioned what their expectation from FinTech development in the MENA region. List of the expectations were collected from a preliminary study, which was conducted in February 2020, and this was asked as multiple-choice question. Majority of the respondents have chosen that FinTech services are to become an alternative source of Income with 48.4%. Other than that, a majority of respondents also expect that application to sign up for this would be eased with a 40.6% margin. Details of analysis results are shown in Figure 8.
As it can be noticed from Figure 9, greater part of the respondents feels that there is a sure risk factor associated with FinTech services. 59.4% find FinTech services risky and the rest 40.6% of the respondents are not risky. From Figure 10 it can be drafted that Block chain and Cryptocurrency were high at risk and this could be due to the fact that the respondents are themselves unaware of how exactly the business model works and how to use it. Their perception of it being risky is high and the next 2 in the list were Internet Banking and Crowdfunding. In the case of Crowdfunding it can be understood that people are not yet aware of what the service exactly provides and thus their perception of it may end up being a little dull. Whereas, in the case of Internet Banking it probably is due to the fact that the world has evolved and with emerging technologies there are always vulnerabilities that can be exploited. Therefore, some may get worry some when it comes to their money. Whereas when it came to

Copyright © GLOBAL ACADEMIC EXCELLENCE (M) SDN BHD - All rights reserved
Insurtech, the risk factor associated with it was less and it was perceived well compared to its competitive FinTech services.

![Figure 9: Response 8 (Q16)](image)

According to your personal experience, which of the following FinTech services are high at risk? (Choose a Maximum of three)

64 responses

- **Mobile Banking**: 20 (31.3%)
- **Internet Banking**: 23 (35.0%)
- **Crowdfunding**: 23 (35.0%)
- **P2P Lending**: 19 (29.7%)
- **Robo Advising**: 19 (29.7%)
- **Blockchain & Crypto Currency**: 29 (45.3%)
- **Insurtech**: 10 (15.6%)

![Figure 10: Response 9 (Q17)](image)

**Conclusion**

It can be noticed that the awareness and perception of most of the public in the context of FinTech in the UAE market is comparatively low and ranging based on the people who are most up to date technology wise. The awareness and perception of the public on the FinTech market in UAE were measured. The questionnaire can be expanded to and added upon to recreate the results. In brief, based on the answered from Q7 to Q10 and its respective figures, it was deducible that the level of awareness of most respondents in the FinTech services such
a P2P lending; Robo Advising and Insurtech were fairly limited. Based on perception results, from Q13 to Q17 and their respective figures, a greater part of the respondents have an inspirational viewpoint and recognition towards the improvement of the FinTech market. The results discovered reflect a positive sign regarding the acceptance of these new FinTech services in UAE. From the findings, we can also see that majority of the respondents are hoping that FinTech would be able to act as a secondary financing source apart from normal financing methods. And furthermore, FinTech development in the UAE market could further increase business activities all throughout.

The findings suggest that the UAE government and its related authorities need to put in their effort into increasing awareness among the public and also to encourage and back these services by regulating them through their respective government bodies. By increasing awareness, they can move forward and grow. Some of the efforts that could be taken are to increase the literacy of the public in the knowledge of FinTech. There are many evidences to showcase the public involvement to a business’s success. There is also a need to increase the adoption of technology amongst the people, which can be encouraged by the government. From their side, a more concrete policy or regulations should be imposed to increase trust among the people. Now thanks to the effort of the executive vice president of the FinTech Hive at the DIFC (Dubai International Financial Center), Raja Al Mazrouei, who has used her platform to help FinTech start-ups gain awareness not just among the people but by among other businesses and investors. By creating a collaborative workspace, she is encouraging a work place relationship among many businesses that can help each other profit and grow. By being regulated by the government, she has also changed the perception of many for the better and encouraged to venture into new FinTech services. Related incubation workspaces also include Hub71 in Abu Dhabi (AD). That like the Dubai counterpart does the same for start-ups originating from the capital of UAE. The authors would also suggest that such workplaces be encouraged and since a citizen of the country handles them they are more thoroughly regulated and the trust factor increases as their every action is monitored by related entities.

References
Abdullah, O. (2017). Fintech for Islamic Finance. Retrieved from https://islmfintech.com/
Accenture, (2017). Global Fintech investment growth continues in 2016. Retrieved from https://www.accenture.com/id-en/company-news-release-global-Fintech-investmentgrowth-continues (Accessed on July 18, 2020)
Arbor Ventures (2017). Fintech—Past, Present and Future. Retrieved from https://medium.com/@ArborVentures1/fintech-past-present-and-future-eac0f8df2722
Ashcroft, L. & Hoey, C. (2001). PR, marketing and the Internet: Implications for information professionals. Library Management, 22 (1/2), 68-74
Buckley, R., Armer, D. W. & Barberis, J. N. (2016). 150 Years of FinTech: an evolutionary analysis. The Finsia Journal of Applied Finance 3, 22–29.
Di Maggio, Marco, & Gamze Yucaoglu. (2020). FinTech Hive at DIFC: Creating a Fintech Ecosystem in Dubai. Harvard Business School Case 220-066.
Finocracy, A. A. & Mirakhor, A. (2017). Accelerating risk-sharing finance via Fintech: Nextgen Islamic Finance. Retrieved from http://www.icibif.ir/files_site=/files/r_33_170304171220.pdf
GSMA. (2016). GSMA Mobile Economy 2016. Retrieved from https://www.gsma.com/mobileeconomy/2016/global/
Hasan, S. B. M. (2017). *Islamic Fintech – A threat for Islamic banks or an opportunity?* Retrieved from https://www.ethiscrowd.com/blog/islamic-fintech-and-islamic-banks/

Heath, R., & Feldwick, P. (2007). Fifty years using the wrong model of advertising. *International Journal of Market Research, 50*(1), 29-59.

Hochstein, M. (2015). FinTech (the word, that is) evolves, American Banker. Retrieved from https://www.americanbanker.com/opinion/FinTech-the-word-that-is-evolves.

Hoek, J. & Gendall, P.(2003). How Does Sponsorship Work. In the proceeding of the ANZMAC 2003, Adelaide, (pp 9-16).

Kojima, T., Kimura, T., Yamaji, M., & Amasaka, K., (2010). Proposals and development of the direct mail method "PMCI-DM" for effectively attracting customers. International *Journal of Management & Information Systems, 14*(5), 15-21.

Lacasse, R. -M., Lambert, B., & Khan, N. (2017). Blockchain technology-Arsenal for a Shariah-compliant financial ecosystem. Retrieved from https://islamicmarkets.com/publications/blockchain-technology-arsenal-for-a-shariah-compliantfinancialecosystem

Lagrosen, S. (2005). Effects of the Internet on the marketing communication of service to companies. *Journal of Services Marketing, 19*(2), 63-69.

Michaelson, D., & Stacks, D. W. (2011). Standardization in public relations measurement and evaluation. *Public Relations Journal, 5*(2), 1-22.

Mohamed, H. (2017). Smart contracts in Islamic economic transactions. Retrieved from https://journal.wahedinvest.com.smart-contracts-in-islamic-economic-transactions/

Munshi, U., (2017). *Islamic Fintech: Wake up to the Truth*. Retrieved from https://www.linkedin.com/pulse/islamic-fintech-wake-up-truth-umar-munshi (Accessed on June 18, 2020)

Philippon, T. (2016). The FinTech Opportunity Working paper (The National Bureau of Economic Research, USA).

PwC (2017). Global FinTech Report 2017. Retrieved from https://www.pwc.com/gx/en/issues/redrawing-the-lines-FinTechs-growing-influence-on-the-financial-services-2017.html

Saksonova, S. & Kuzmina-Merlino, I. (2017). Fintech as Financial Innovation – The Possibilities and Problems of Implementation. *European Research Studies Journal, 20*(3A), 961-973.

Walker. (2016). Customers 2020: The future of B-to-B customer experience. Retrieved fromhttps://www.walkerinfo.com/Portals/0/Documents/Knowledge%20Center/Featured%20Reports/WALKER-Customers2020.pdf

World Bank Enterprise Access to Finance (2014). Retrieved from http://pubdocs.worldbank.org/en/831911430846153177/MSME-Finance-SurveyGEORGIA-EnterpriseAccessToFinance.pdf