FACTORS AFFECTING THE ADOPTION OF FINTECH SERVICES FOR BANK CLIENTS

Faheem Akhter*
Muhammad Waqas**
Sara Sohaib***

Abstract

Evolution of fintech services and the adoption of new emerging technology is what is seen in today's world. Very few researchers have studies on the factors that affect the adoption of fintech services and how human behavior varies as technology changes. Apart from this, the advancement in mobile phones and the increase in the usage of them have increased the demand of the online financial services. In this paper the factors that have an impact of the adoption of fintech services through convenient sampling, have been considered and studied. The perceived ease of use, innovation, trust and government support were also studied. With the help of SPSS, it was concluded that each of these factors have a positive impact on the adoption of fintech services. Our model was based on TAM (technology acceptance model) and was adopted from our base article. The finding of this research can be used to make improvements in the existing fintech services and also in the development of new services.

Keywords: Fintech, Perceived ease of use, Trust, Innovation, TAM, Government Support

Introduction

Fintech technology is referred to as technology that is the combination of both financial and technological sector[1]. Fintech industry consists of those companies that have upgraded their system to the digital technology that helps them in carrying their operations efficiently and effectively[2]. Fintech is all about the invention and techniques that businesses invent to enhance their processes, delivery time, and the services they provide[3]. Fintech is considered to be one that will shape the financial landscape. Now the question that raises in the mind of bank users is that how and why should they adopted this technology[4]. Fintech service is not only associated with the old banking services but it is also associated with how innovations like big data, cloud computing, and mobile

This work is Licensed under a Creative Commons Attribution-Non-Commercial 4.0 International License.
* Faheem Akhter, Ph.D., Assistant Professor, NEDUET
** Muhammad Waqas, Senior Lecturer DHA Suffa University
*** Sara Sohaib, Ph.D. Assistant Professor, Bahria University
[1] Alt, R., Beck, R., & Smits, M. T. (2018). FinTech and the transformation of the financial industry. *Electronic Markets* , 235-243.
[2] Mention, A. L. The Future of Fintech. *Research Technology Managment*, (2019), 59-63.
[3] *Ibid*.
[4] Schindler, J. Fin Tech and FinanciaL Innovation :Drivers and Depth. *Federal Reserve Board of Governors*, (2016), 1-18.

application[5]. Companies that provide Fintech service took the advantage of providing lower labor cost and much easiness in operations[6]. Over the past years, the expansion in digital technology has given a new shape to the consumption and business pattern[7]. The advancement of technology is the key to success for innovation in banking and financial services[8]. Technology has not only evolved the pattern of consumption, but it had also bought changes in the way companies provide product and services. It has expand the capabilities of businesses in a way that with customization need of every customer is satisfied according to their wants. However, as every action has a reaction, so this action will benefit the firms but it will also lead to many threats that business need to face[9]. The Economic condition and growth of an economy is analyzed by its financial position. Now to assess the financial position, the main key is how well the banking sector evolve around the technology. It means how they have shifted their financial operation from training banking system to digital banking system[10]. Previous researches have analyzed that investment in Fintech services has been increased globally from $1.8 billion to $19 million in 2015[11]. The increase has shown positive effect, as 2.5 thousand companies have started operating the service of Fintech. Apart from this, this increase has affected negatively on the employees, as up to 30% of employees has lost their jobs in the banking sector, as they are unable to cope up with the new technology[12]. Study has analyzing about the fintech technology are not easy as many of the users are not aware of it. Many questions arise regarding the Fintech, as how Fintech will shape the landscape of financial sector. Beside this also, to ensure how Fintech security does not affect the security of the user's personal information and the stability about how well their banking activities will be valid. In addition, to know why it is only Fintech technology that is gaining attention around the world[13].

---

[5] Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. Apotion Intention of Fintech Services for Bank Users: An Empirical Examination with an Extendend Technology Acceptance Model . *Symmetry*, (2019), 340.
[6] Powell, G., Anderson, N., Mayo, J., & Ingledew, S. (2013-2020). Research and innovation for Uk Fintech. *A platform for Innovation speech*, 1-63.
[7] Karagiannaki, A., Vergados, G., & Fouskas, K. The Impact Of Digital Transformation In The Financail Services Industry : Insights From An Open Innovation Initiative In Fintech In Greece. *Mediterranean Conference on Information Systems (MCIS)*, (9-2017), 1-12.
[8] Das, A., & Das , D. Perception,Adoption, and Pattern of Usage of FinTech Services by Bank Customers: Evidences from Hojai District of Assam, *International Managment Institue Reprints and permissions*, (2020), 7-22.
[9] Karagiannaki, A. et.al. *Op.cit*.
[10] Zavolokina, L. D. The FinTech Phenomenon: Antecedents of Financial Innovation Perceived by the Popular Press. *Financial Innovation*, (2016), 1-16.
[11] Leong, C., Tan, B., Xiao, X., Tan, F. T., & Sun, Y. Nurting a Fintech ecosysytem: The case of a youth microloan startup in China. *International Journal of Information Managment*, (2017), 92-97.
[12] Akturan, U. &. Mobile banking adoption of the youth market: Perceptions and intentions. *Marketing Intelligence & Planning*, (2012)
[13] Schindler, J. *Op.cit*.

Rationale of Study

To examine the adoption of Fintech services, we have taken customers as an independent variable and other factors that have affected the adoption of fintech services like innovation, government support, and perceived ease of use as dependent variables[14].

- To know what impact does variable innovation has on the adoption of Fintech Services[15].
- To know what impact does variable government support has on the adoption of Fintech Services[16].
- To know what impact does the variable perceived ease of use has on the adoption of Fintech Services[17].

To analyze how the adoption of Fintech, will affect the efficiency and productivity of the financial services for bank users[18].

In addition, to study how the adoption of Fintech has affected consumer behavior by studying through (TAM) technology acceptance model[19].

As technology has an evolved by the time and today's generation has been very accepting when it comes to new online platforms but when it comes to adopting apps like fintech apps they become reluctant and hesitate in approaching search application.

Primary Objective

Therefore, the primary objective of our research is to examine factors that makes people reluctant in adopting the technology of Fintech.

Secondary Objective

The secondary objective of our research is to highlight and understand factors that have an impact on why people does not adopt the Fintech technology these factors are trust issues, continuous innovation, perceived use of ease and government support.

- Adopting fintech services provides ease of use because customers always look for things which require fewer efforts and are quick to deal with. If customers feel that fintech services are user-friendly they are more likely to adopt it. If we look at the traditional banking procedure it is more hectic and time consuming as compared to

[14] Hu, Z., Ding, et.al. *Op.cit*.
[15] Mention, A. L. *Op.cit.*
[16] Hu, Z., Ding, et.al. *Op.cit*.
[17] *Ibid*.
[18] Alt, R., Beck, R., & Smits, M. T. *Op.cit*.
[19] Hu, Z., Ding, et.al. *Op.cit*.

online banking service and this has encouraged people to use have encouraged people to adopt this innovative system.

- Fintech and innovation have direct relationship because fintech has created a new way of performing online banking which has a similar result but with more efficiency and effectiveness as new online platform is formed. It is also noticed that people who are comfortable with innovation they are more likely to adopt such innovations like fintech. Innovation make's things very easier and simpler and that is the reason that millennials are willing to accept Innovation and fintech apps have wider scope.
- Acceptance of online banking services has to be majorly related with trust as once very personal financial data is at risk and just is the major factor that affects people's choices about accepting online banking platforms like fintech. The more Trust users have on such apps there are more chances that they are willing to give it a try.

The scope of the study is to target those people who use physical banks for their daily transactions and those who use banking systems online. In addition, the research would be conducted within few areas of Karachi. This research could be conducted in other areas of Pakistan and will be very useful for future researchers. It will also help to analyze the role of government on the adoption of fintech services. This research will enable to highlight the factors that affect the adoption of fintech services. How Government support and innovation affects customer adoption of fintech services. In this digital Era this research, will open doors for further research on online services. This research will also spread knowledge regarding fintech services among the readers who are unaware of this banking service and will get to know how it will help them in performing banking services. It will also help banks to analyze how fintech services will help the bank to reduce cost by switching from traditional banking system to digital banking system. It has also increased the consumption pattern of customers and according to previous researcher's investment in fintech, services have increased tremendously. The significance of this study is that it provides valuable information regarding how users can adopt the technology of Fintech. In keeping mind the factors that make customers reluctant in adopting such technologies. This study also highlights the factors that affects the trust of customers in adopting online banking services. Government policies have a great impact on potential users influence on technological adoption and continuous use and intention. It will also help banking sector analyze what kind of policies should be formulated in order to attract consumers towards fintech[20]. In regard to this, this study emphasized the importance on the availability of these services and how easily they are understood. As customers will prefer only those services that can make them do their work quickly and efficiently without any hesitation[21].

Literature Review

Our literature review is theoretical review where we are reviewing existing theories, their developed concepts and their relationships. This type of literature was adopted from our

[20] Akturan, U. &. *Op.cit*.
[21] Hu, Z., et.al. *Op.cit*.

base article[22]. It is seen that by the time, more people are demanding easy and convenient financial services and products and this way fintech sector will continue to evolve[23], the government is also increasing its interest for fintech services, they are working on reliability and information technology which may help secure the data of people using fintech services. Although many research papers say that many businesses in today's worlds are afraid of using technology, which is thought of being harmful for the society and at the same time, it is believed as an opportunity[24]. States in his research paper that the increase in usage and advancement of mobile phones has affected the fintech adoption and the usage of it. He also mentioned that security risk is highly involved[25].

Fintech

Today fintech is widely used in financial field, it comprises of cryptographic ledger, big data and smart investment, the major objective of using fintech in the banking sector is to enhance the experience users get and overall achieve more efficiency. By adoption of fintech, strong relations between bankers and users can be developed[26]. Fintech is still new to many and much more is left to be explored. Financial technology has evolved and is now attracted to investors and media both[27]. To make a better tomorrow, fintech provides new technologies that are efficient in terms of cost, processes and improvements. On the other hand, fintech is correlated with innovation[28]. As now days, people are concern with those technology that provide them facilities according to their ease either it could be according to their budget or in terms of time.

Tam

A research work was done by[29] in which a user adoption model "TAM" was introduced which was to replace TRA (theory of reasoned action); TAM was influenced by different models and theories. TAM was created to observe how users encountered technology and get used to it and accept it; the perspective of behavioral science, integrating expectation theory and self-efficacy theory, suggested it. In the research two variables, which were affecting the attitudes of individuals using technology, were studied, perceived ease of use and perceived usefulness. Through research in the paper, it was concluded that perceived ease of use, government and innovation has a positive impact on the adoption of the fintech services.

---

[22] *Ibid.*
[23] Callen-Naviglia, J. &. Fintech, Regtech and the Importance of Cybersecurity, *Issues in Information Systems*, 19(3), (2018)
[24] Nakashima, T. Creating credit by making use of mobility with FinTech and IoT. *IATSS Research*, 42(2), (2018), 61-66.
[25] Stewart, H. &. Data security and consumer trust in FinTech innovation in Germany. *Information & Computer Security*, (2018)
[26] Hu, Z., Ding, et.al. *Op.cit*.
[27] Zavolokina, L. D. *Op.cit.*
[28] *Ibid*.
[29] Hu, Z., Ding, et.al. *Op.cit*.

Perceived Ease of Use

Perceived ease of use is an important factor when adopting fintech services, because customers always look for things, which require fewer efforts and are quick to deal with. Having said that ease of use relates to customers, feeling relaxed when trying to work and learn with fintech services[30]. If the user feels that fintech is favorable, beneficial and easy to work with than users show more interest in adopting the fintech services[31]. Accordingly, we can develop the hypothesis;

Innovation

Fintech and innovation have a direct relationship[32]. Innovation means there are new ways of performing a process, which has a similar result, but with more efficiency and effectiveness, sometimes-new products are formed too[33]. Explains in his article that innovation is the degree to which the customer is ready to experiment with the new products. This plays an important part in consumer's perspective because there are many of them who are unable to perform certain tasks from mobile services and apps that are introduced lately. It is also noticed that people who get comfortable with innovation and adopt it quickly experience less perceived risk[34].

Trust

When talking about adoption of fintech services, trust is usually the major factor as to why someone would or would not like to adopt fintech services. According to[35] the more trust a user have the more easily they adopt and use fintech services.

Government Support

Government support is relevant and important when considering adoption of fintech services. Consumers view government as a trustworthy and reliable body, so if the government invests in the publicity of the products and services and contributes in maintaining the network structures than fintech would likely be more successful with more potential customers (Z. D. Hu, Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. 2019). Support from government is found to be necessary and crucial for banking systems operating online (Z. D. Hu, Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. 2019).

---

[30] *Ibid.*
[31] *Ibid*.
[32] Zavolokina, L. D. *Op.cit.*
[33] Zhang, T. L. Banking "on-the-go": examining consumers' adoption of mobile banking services. *nternational Journal of Quality and Service Sciences*, (2018)
[34] *Ibid.*
[35] Hu, Z., Ding, et.al. *Op.cit*.

Previous researches highlight about the reasons behind why people adopt online banking services but it does not mention the factors, which prevents people from adopting online banking practices. (Hu, et al. 2019). In addition to this, our research has highlighted the factors that affect people choices about online banking services such as fintech.

However, previous researchers are made on the methodology about how to improve the efficiency and user experience of banks but our research is made on what prevents users from adopting fintech services. There are no previous studies that help to analyze customer experience in context with Fintech technology. Therefore, our research helps to examine how customer experience is influenced by the perception of stimuli from firms that adopts the service of Fintech.

Moreover, there are many researches that contribute to the literature of the Fintech service, but since Covid had affected every other sector so as technology sector which brings changes regarding the use of technology or related to adoption of technology. Therefore, over research will help in overcoming this research as we have taken all the measures that will take into account the effect of Covid 19.

Hypotheses

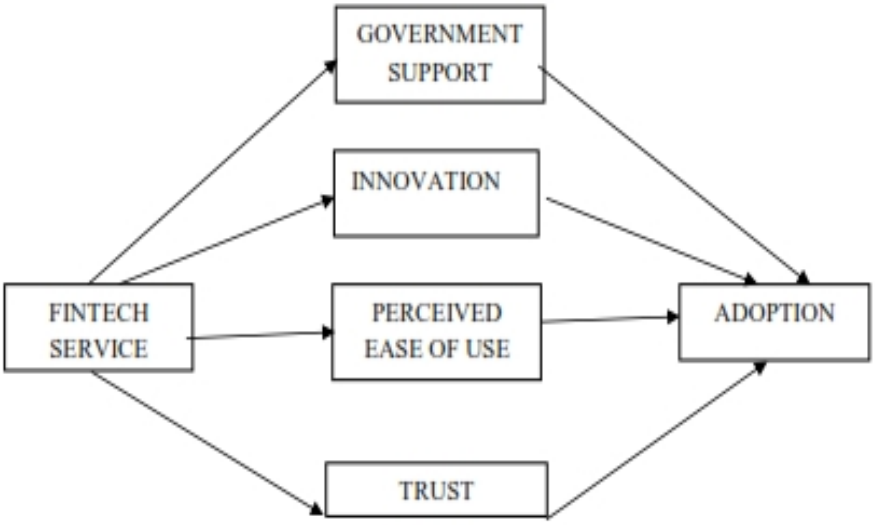
H1: Perceived ease of use has an impact on adoption of fintech services.

H2: Innovation has an impact on adoption of fintech services.

H3: Trust has an impact on adoption of fintech services.

H4: Government support has an impact on adoption of fintech services.

Figure -1
Theoretical Framework



Source: Authore's own forecast from literature review

This theoretical framework describes independent and dependent variable for study and relation that exists between them in context with Fintech services. The framework is very help for both present researchers and future researches as it gives a clear picture regarding our research objective.

Table – 1
Measurement Scale

Latent variables	Measurement items
Perceived ease of use	It is easy to use fintech services I think operation interface of fintech is friendly and understandable It is easy to have the equipment to use fintech services
Trust	I believe fintech services keep my information safe Overall I believe fintech services are trustable
Government support	I believe the government supports and improves the use of fintech services I believe the government has introduced favorable legislation and regulations for fintech services I believe government is active in setting up all kinds of infrastructure such as infrastructure telecom network, which has a positive role in promoting fintech services
innovation	When I hear about a new product, I look for ways to try it among my peers, I am usually the first one to try a new product I believe using fintech services is a good idea

Source: Handbook of Management Scales

Methodology

The purpose of this research is to examine the factors that affect the innovation and adoption of fintech services through studying the habits and decision-making patterns of consumers. Consequently, people were selected conveniently and the questionnaire was floated on internet on WhatsApp, Facebook groups and via email to get maximum responses. The questionnaire was adopted from the research paper that was published in China by[36]. In the questionnaire there were 14 items divided into two parts, one that was measured by a five-point Likert scale, the first part was the basic information i.e., gender, age, income and education. The second part was the questions related to the independent and dependent variables, which were adopted from our base article. In his research "Mobile banking adoption of the youth market: Perceptions and intentions" Akturan, U. found that, people who are young with good educational background with knowledge of computers and wealth are the ones who use online banking systems[37].

[36] Hu Z. et.al. *Op.cit*
[37] Akturan, U. &. *Op.cit*.

Analysis and Discussion

In this research, we tested the sample data using SPSS. The descriptive analysis of 317 respondents such as their level of income, age, gender etc. is mentioned below in the table-1.

Table – 2
Description Regarding Sample

Demographic variable	Category	Percentage
Gender	Male	42%
	Female	57.80%
Age	18-25	73.30%
	26-35	26.70%
	36-45	-
	46-55	-
Employ Status	students	48.90%
	Civil servant	0%
	Business management personnel	0%
	employee	28.90%
	Self employed	15.60%
	other	17.80%
Education	Less than diploma	13.30%
	diploma	4.40%
	bachelor	57.80%
	Master or more	24.40%
Income (rps)	Less than 30,000	51.10%
	30-60,000	17.80%
	60-100,000	6.70%
	100,000 and more	24.40%
Fintech service usage	Never	53.30%
	Occasionally	24.40%
	Usually	11.10%
	Frequently in everyday	13.30%

Source: Authore's own estimation

In this research paper, we have designed our research layout in a way that through this layout we will be able to study those topics that carries both theoretical and empirical knowledge of the data. Therefore, to understand the impacts of hypothesis, we have selected a case study method for our research[38].

The reason why we have selected this method is that case studies are considered significant for evaluating the questions like how and why and this approach help in gaining information regarding non-conceptual issues like digital innovation and adoption of certain services like fintech. Apart from this, case study method helps in attaining information of the theories that are not developed and thus requires intensive study, which would help in strengthening the external validity of the designed research[39]. Moreover, we have designed our research based on real cases. As these real cases, would give a clear picture to our research design[40]. In addition, with such designed layout we would be able to study the impacts of independents variable about the dependent variable. The impacts will be studied through statistical analytic tools. This study is constructed through a deductive approach, as the research focuses on boarder level that covers the adoption of Fintech. As this research, is conducting by assessing specific independent variables that will affect the users that adopt the Fintech services[41].

Moreover this is research is based on descriptive approach, as it shows how digital transformation can affect the financial services. In addition, this approach is useful in analyzing wider impacts, as it shows how Fintech service has shifted the organizations procedure from traditional ways to new ways that involve critical thinking, working with using technologies. The service of fintech, does not bring changes in the way businesses work, but it also changes the leadership style of the business and brings improvement in the experience achieved by customers, employees and stakeholders[42].

This research is analyzed using quantitative tools and facts. These facts are used in order develop the relationship between dependent and independent variables. And to see whether there is a positive or negative relationship between the variables.

The nature of the study is quantitative as it focuses on factors that are affecting the adoption of fintech services. The measures include perceived ease of use, innovation, and government support. We will be using TAM i.e. technology acceptance model, which is used to predict the behaviors of the users when they encounter technology; in this model, attitude is served as a mediator.[43] TAM is widely used to explain technology adoption, this will measure perceived ease of use.[44] This is an explanatory research as it interlinks

---

[38] Karagiannaki, A., Vergados, G., & Fouskas, K. The Impact Of Digital Transformation In The Financial Services Industry : Insights From An Open Innovation Initiative In Fintech In Greece. Mediterranean Conference on Information Systems (MCIS), (9-2017), 1-12.
[39] *Ibid.*
[40] *Ibid*.
[41] Truong, O. (2016). HOW FINTECH INDUSTRY IS CHANGING THE WORLD. 43.
[42] Karagiannaki, A., et.al. *Op.cit.*
[43] Zhang, T. L. *Op.cit*.
[44] *Ibid*.

the relationship between the variables[45]. The sample of 317 participants were collected through a method called purposive sampling. This data is collected through questionnaires from various bank users of Karachi. The questionnaire is addpoted from[46] Zhang, T. L. Banking "on-the-go": examining consumers' adoption of mobile banking services published in international Journal of Quality and Service Sciences. The research unit of our analysis depends on the employee's status, in regard with their education and their income. While the research observation unit depends, on how many times they use the service of Fintech.

To know the significance of the study, we have run different types of analysis such as;

- Correlation analysis is used to analyze the relationship between the independent and dependent variables[47].
- Reliability Analysis defines the reliability of the items according to the scale set[48].
- Regression Analysis refers to the analysis that shows how changes in one variable can affect other variables[49].

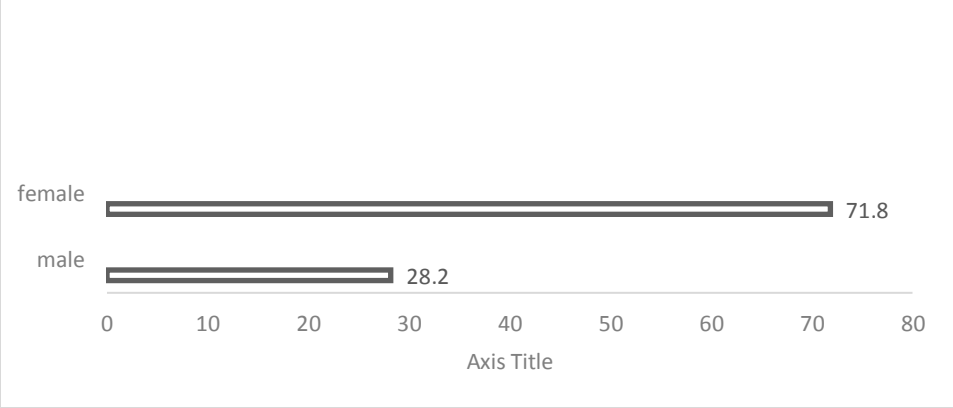
We have run these tests through a tool named SPSS to investigate the relationship between the variables (ease of use, trust, and government support) and adoption.

In this research ethical consideration of the bank, users were taken into account. As we have already mentioned them in the questionnaire will be used for academic purpose only. And we have given them an assurance that their personal information will be saved and their responses will be anonymous.

[45] Hu, Z., et.al. *Op.cit.*
[46] Zhang, T. L. *Op.cit.*
[47] Hu, Z., et.al. *Op.cit.*
[48] Zhang, T. L. *Op.cit.*
[49] Hu, Z., et.al. *Op.cit.*

Descriptive analysis
Gender

Figure - 2
Gender Description



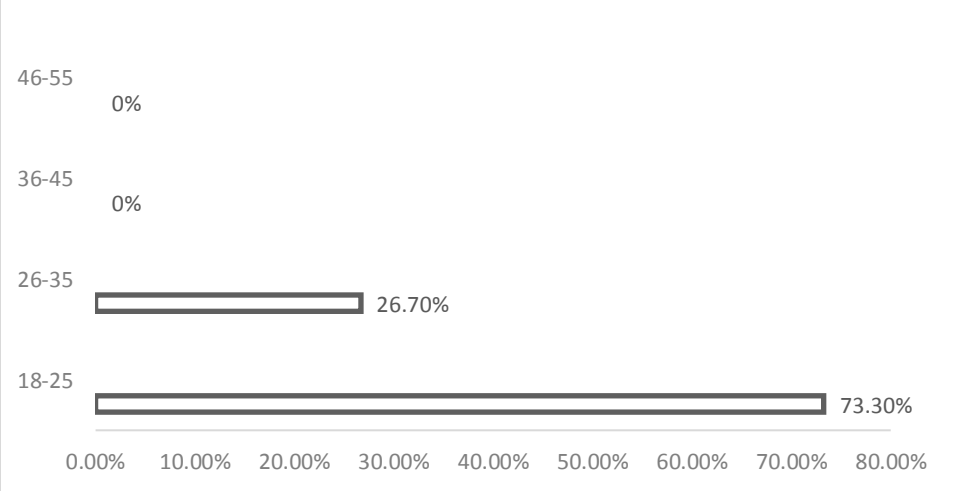
Source: Authore's own estimation

Our respondents were 28% male and 78% female.

Age

Our majority of respondents were from age 18-25 that was 73.3% and only 26.7% were from age 26-35. The rest was 0%.

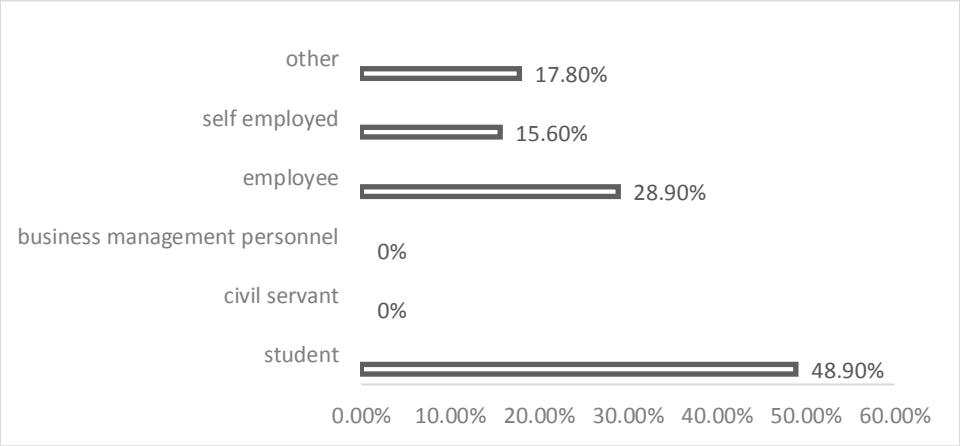
Figure - 3
Age Description



Source: Authore's own estimation

Employ status

Figure - 4
Employ Description

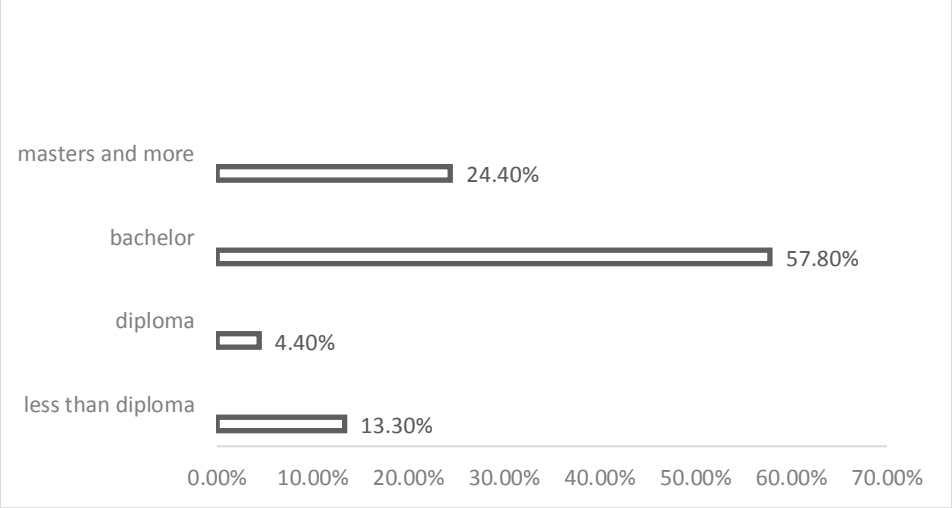


Source: Authore's own estimation

The respondents were mostly students 48.9%, there were 28.9% of employees and 15.6% were self-employed or they did something of their own, rest were 17.8%.

Education

Figure - 5
Education Description

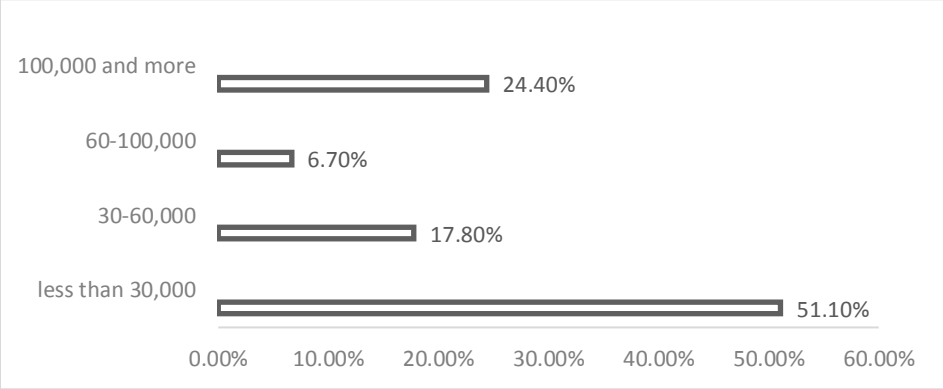


Source: Authore's own estimation

Most of the respondents were with the bachelor degree i.e. 57.8%; few of them were master and more i.e. 24.4%. 4.4% of people were with diploma and 13.3% of them were less than diploma.

Income

Figure - 6
Income Description



Source: Authore's own estimation

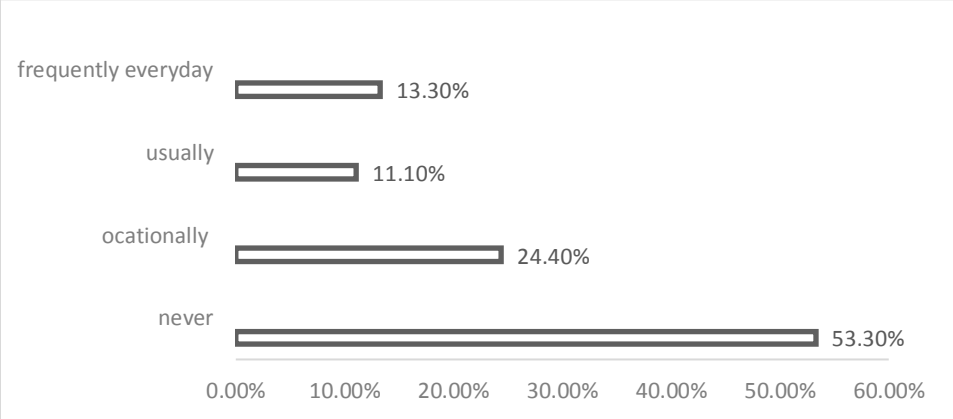
51% of our respondents earned less than 30,000 rupees. Only 17.8% earned 30-60,000 rupees, 6.7% earned 60-100,000 rps, and only 24% of people earned 100,000 and more.

Fintech service usage

53% of our respondents never used fintech services, 24% used the fintech services occasionally. Only 11% used them usually and 13% used the fintech services frequently every day. According to Zhang[50] innovativeness on the consumer end matters a lot and is directly proportional to the usage of fintech services because when people keep themselves updated, they are accepting the new innovations around them and then they increase their usage accordingly.

[50] Zhang, T. L. *Op.cit.*

Figure - 7
Description about Fintech Service Usage



Source: Authore's own estimation

Analysis regarding reliability in context with the above table:

Table - 3

VARIBLES				
INDEPENDENT VARIABLES				
CRONBACH'S ALPHA VALUES	VALUES	No of Iteams	Reliability	Correlation
PERCEIVED EASE OF USE	0.750	03	Good	0.01
TRUST	0.787	02	Good	0.434
GOVERNMENT SUPPORT	0.729	03	Good	0.359
DEPENDENT VARAIBLE				
ADOPTION	0.544	02	Moderate	0.509

Source: Authore's own estimation

Reliability refers to the level of uniformity of the measurement results which confirms the reliability of the questionnaire and to test the internal components of the data Cronbach's Alpha was used.[51]

[51] Hu, Zhongqing, Shuai Ding, Shizheng Li, Luting Chen, and Shanlin Yang. "Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model." *Symmetry* 11, no. 3 (2019): 340.

Reliability refers to the degree to which the items that make the scale 'hang together' to show all the items are measuring the same underlying construct. The reliability of the scale indicated how free it is from convenient error.

The results in the above table indicates the value of Cronbach's Alpha as 0.75 for perceived ease of use, 0.78 of the variable trust and 0.72 of government support shows that results that we have obtained are reliable towards our dependent variables.

While the Cronbach Alpha of our dependent variable of adoption is 0.54 which is considered as moderate reliability, as (Hinton 2014) explained in his book that from 0.5 to 0.7 the reliability is considered as moderate.

Analysis regarding correlation in context with the above table

Correlation is used to analyze the extent to which variables are related with each other's, and it specifies the direction of relationship that exist between the variables.

The correlation between perceived ease of use, trust, govt support and adoption is significant at 0.00 at alpha 0.01. There is a positive direction and moderately related.

Analysis regarding regression in context with the above table

After checking the correlation between the variables, the Regression analysis is used to estimate the relationship between dependent and independent variable (s). It is also used for the prediction and forecasting and it explore the form of the relationship between the dependent and the independent variables.

Table - 4
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591[a]	.349	.343	.56960
a. Predictors: (Constant), Govt Support, PEU, Trust				

Source: Authore's own estimation

The table above shows that R square value of 0.34 shows the proportion of variance in the dependent variable, which can be explained by the independent variable. The rest of 66% is explained by other variables, which we have not included in our model. This value of adjusted r square interprets us that variables are moderately related to the Fintech technology.

Table - 5
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.295	3	18.098	55.782	.000[b]
	Residual	101.227	312	.324		
	Total	155.522	315			

a. Dependent Variable: Adoption
b. Predictors: (Constant), Govt Support, PEU, Trust

The model is significant at 0.00.
Source: Authore's own estimation

Table - 6
COEFFICIENT

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.234	.185		6.684	.000
	PEU	.322	.046	.361	6.978	.000
	Trust	.103	.041	.138	2.521	.012
	Govt.Suport	.237	.051	.247	4.670	.000
a. Dependent Variable: Adoption						

Source: Authore's own estimation

The independent variable PEU is significant at 0.00, which means we will reject our null hypothesis. Which improves that PEU has impact on the innovation and adoption of fintech services. Trust and govt support are also significant at 0.00 which means they have a positive impact on adoption of fintech services.

H_1: The perceived use of ease has a positive impact on the adoption of fintech.
H_2: Government support has a positive impact on the adoption of fintech.
H_3: Trust has a positive impact on the adoption of fintech.
H_4: Innovation has a positive impact on the adoption of fintech.

These findings shows that we will reject our null hypothesis as results depicts that there is a significant impact among dependent and independent variable.

To analysis these results compare to the literature review, we have used tests like Cronbach Alpha, reliability, regression and correlation.

Reliability test is used to define the consistency between the variables and it reflects how reliable are items used in the questionnaire. In this research, to test internal consistency we have used Cronbach alpha and reliability.

The result of the research shows that independent variables like perceived use of ease, trust and government support are reliable as compare to the critical value of reliability and Cronbach alpha's should be greater than 0.7 stated by Zhongqing ,Shuai, Shizheng Luting and Shanlin Yang .

The results shown in table 1 depicts that are Reliability and Cronbach alpha values are more than the critical value, this shows that the model has adequate internal consistency except the value of adoption 0.5 which shows that this variable is generating results that are moderate reliable to the Fintech service[52].

Regression analysis describes the factors that occurs in one variable due to changes in another variable. The above table shows the value of standardized regression coefficient that was attained by the method implicated by the Tam model. Furthermore, R square column shows the variation that occur due to independent variable on dependent variable which is 54 % that shows results are moderated as compare to the existing research change which is 57 %.[53]

Correlation analysis is used to examine how closely dependent variables are related to the independent variable. In regard with previous research, correlation shows how development of technology has related to the innovation of Fintech service[54]. The table above represents that variable are directly correlated to adoption of fintech as r= 0.43, 0.35, and 0.50 as compare to its significant value which is 0.01. This significant value depicts that 99 % of the results are true and support the hypothesis that are present in the current research.

Conclusion

Fintech is described as a technology that analysis the need of providing a financial market that will enhance the financial activities by bringing innovations. This technology is known as Bleeding Edge in terms of technology[55]. (Knewtson and Rosenbaum 2020). About this, the aim of our study was to understand the adoption of fintech adoption with the help of TAM model by evaluating the 317 respondents that contributed a major support towards our hypothesis[56].

---

[52] *Ibid.*
[53] Barbu, M. C., Dabija, D. C., Florea, D. L., & Barbu, C. M. Customer Experience In Fintech. Theoretical and Applied Electronic Commerce Research, (2021), 16.
[54] Hu, Z., Ding, et.al. *Op.cit*.
[55] Knewtson, H. S., & Rosenbaum, Z. A. *Toward Understanding Fintech and its Industry*, (2020), 16.
[56] Gebba, T. R., & Aboelmaged, M. G. Mobile Banking Adoption: An Examination of Technology Acceptance Model and Theory of Planned Behaviour. International Journal of Business Research and Development, (2013), 35-50.

The basic purpose of this research was to study the main purpose of fintech services and to know about the adoption of this service among the bank users. In addition, to know how these services have an impact on the level of communication between the consumers and banking activities[57]. Moreover to know, that even though the technology is increasing, then why the Fintech technology does is not gaining the growth in the real world and why users are reluctant to use the Fintech Technology[58].

This paper shows that all the independent variable (trust, perceived ease of use, government support and innovation) are significantly shows a positive relationship with the dependent variable adoption of Fintech[59]. The findings in regard with[60] "Understanding driver adoption of car navigation systems using the extended technology acceptance model" has helped in gauging the information regarding the impact of each variable that can change the behavior of the bank users.

These finding become more significant as we have generated the idea from the questionnaire of our base article (Z. D. Hu, Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. 2019)[61] with certain changes according to our variables. And to make this findings more appropriate we have conducted different statistical tests like correlation, regression and Cronbach alpha in regard with reliability analysis. The entire result contributes a satisfactory impact on the adoption of Fintech service on users.

Limitations

The limitation of our study is that it focuses only on those users that are those who are aware about how to use technology and our internet users. And our data collection is only associated with the users of Karachi.

Apart from this, we have studied many important factors that can affect the level of adoption of Fintech technology by the users, but still many other factors are uncovered which need to be covered in order to catch the main reason why people are reluctant to use such technology like perceived risk, intention and user innovation[62].

Beside this, the time was very short, as we have conducted this research within 4 months only. And due to lack of time, our sample size small as compare to the number of internet

[57] Zhang, T. L. *Op.cit.*
[58] Naviglia, J. C., & James, J. Fintech, Regtech and The Importance of Cybersecurity. Issues in Information Systems, (2018), 220-225.
[59] Ryu, H. S., & Ko, K. S. Sustainable Development of Fintech : Focused on Uncertainty and Perceived Quality Issues. *MPDI*, (2020), 1-18
[60] Park, E., Kim, H., & Ohm, J. Y. Understanding driver adoption of car navigation systems using the extended technology acceptance model . *Behaviour and Information Technology* , (2015), 741-751
[61] Hu Z. D., Adoption intention of fintech services for bank users: An Empirical Examination with an Extended Technology Acceptance Model, 2019
[62] *Ibid.*

users present in Karachi. In addition, not only the time factor, but also the factor of Covid 19 has also restricted us from collecting wide data.

In addition to this, there lies another limitation that we have not taken those users that wanted to avail the opportunities of easy use of services but are unable to use it either because they are unable to afford such expensive laptops or mobile phone or either they are uneducated which makes them left behind from the world.

In regard with, this we think we have covered the adoption of Fintech technology in regard with perceived use of ease, trust, government support and innovation but we were not able to take in account the effect of Reg Tech and Cybersecurity.

Recommendation and future studies

The finding of this research can applied regarding the usage of Fintech service and these findings can help researchers in conducting further research on the technology of Fintech. As they will be able to evolved more information regarding the consumer demand for more convenient financial products and service.

Moreover, to make the findings more generalized a further research needed to be conduct with a large number of samples that includes all users around the world that carries different profession with different level of income.

In addition to this, a researcher can diversify its research by using further variables of Fintech service that can bring changes regarding the adoption of Fintech Service. Also by taking sample of those users that are aware of the innovation of technology, but are unable to adopt it either due to poverty or due to illiteracy. In addition, a researcher can study Reg tech and Cyber security in regard with Fintech technology in order to get in dept findings.

Bibliography

Akturan, U., & Tezcan, N. "Mobile banking adoption of the youth market: Perceptions and intentions." *Marketing Intelligence & Planning.*, 2012.

Alt, Rainer, Roman Beck, and Martin T Smits. "FinTech and the transformation of the financial industry." *Electronic Markets* , 2018: 235-243.

Barbu, Mihai Constantin Razvan, Dan Cristian Dabija, Dorian Laurentiu Florea, and Catalin Mihail Barbu. "Customer Experience In Fintech." *Theeoretical and Applied vElectronic Commerce Research*, 2021: 16.

Callen-Naviglia, J., & James, J. "FINTECH, REGTECH AND THE IMPORTANCE OF CYBERSECURITY." *Issues in Information Systems*, 2018: 19(3).

Das, Ankita, and Debabrata Das . "Perception,Adoption, and Pattern of Usage of FinTech Services by Bank Customers: Evidences from Hojai District of Assam ." *International Managment Institue Reprints and permissions.*, 2020: 7-22.

Gebba, Tarek R, and Mohamed Gamal Aboelmaged. "Mobile Banking Adoption : An Examination of Technology Acceptance Model and Theory of Planned Behaviour." *International Journal of Business Reseach and Development* , 2013: 35-50.

Hinton, P. R., McMurray, I., & Brownlow, C. *SPSS explained*. Routledge, 2014.

Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. " Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model." *Symmetry*, 2019: 340.

Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. "Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model." *Symmetry*, 2019: 11(3), 340.

Hu, Zhongqing, Shuai Ding, Shizheng Li, Luting Chen, and Shanlin Yang. "Apotion Intention of Fintech Services for Bank Users: An Empirical Examination with an Extendend Technology Acceptance Model ." *Symmetry*, 2019: 340.

Karagiannaki, Angeliki, Georgios Vergados, and Konstantinos Fouskas. "The Impact Of Digital Transformation In The Financail Services Industry : Insights From An Open Innovation Initiative In Fintech In Greece." *Mediterranean Conference on Information Systems (MCIS)*, 9-2017: 1-12.

Knewtson, Heather S, and Zachary A Rosenbaum. "Toward Understanding Fintech and its Industry ." 2020: 16.

Leong, Carmen, Barney Tan, Xiao Xiao, Felix Ter Chian Tan, and Yuan Sun. "Nurting a Fintech ecosysytem: The case of a youth microloan startup in China." *International Journal of Information Managment* , 2017: 92-97.

Mention, Anne Laure. "The Future of Fintech." *Research Technology Managment*, 2019: 59-63.

Nakashima, T. "Creating credit by making use of mobility with FinTech and IoT." *IATSS Research*, 2018: 42(2), 61-66.

Naviglia, Jennifer Callen, and Jason James. "Fintech,Regtech and The Importance of Cybersecurity." *Issues in Information Systems* , 2018: 220-225.

Park, Eunil, Heetae Kim, and Jay Y Ohm. "Understanding driver adoption of car navigation systems using the extended technology acceptance model ." *Behaviour and Information Technology* , 2015: 741-751.

Powell, Gavin, Nicola Anderson, Johnny Mayo, and Stephen Ingledew. "Research and innovation for Uk Fintech." *A platform for Innovation speech*, 2013-2020: 1-63.

Ryu, Hyun Sun, and Kwang Sun Ko. "Sustainable Development of Fintech : Focused on Uncertainty and Perceived Quality Issues." *MPDI*, 2020: 1-18.

Schindler, John. "Fin Tech and FinanciaL Innovation :Drivers and Depth." *Federal Reserve Board OF Governors*, 2016: 1-18.

Stewart, H., & Jürjens, J. "Data security and consumer trust in FinTech innovation in Germany." *Information & Computer Security.*, 2018.

Tezcan, Nuray, and Ulun Akturan. "Mobile Banking Adoption of the Youth Market : Perception and Intentions ." Marketing Intelligence and Planning: 4.4.

Truong, Oanh. "HOW FINTECH INDUSTRY IS CHANGING THE WORLD." 2016: 43.

Zavolokina, L., Dolata, M., & Schwabe, G. "The FinTech phenomenon: antecedents of financial innovation perceived by the popular press." *Financial Innovation*, 2016: 1-16.

Zhang, T., Lu, C., & Kizildag, M. "Banking “on-the-go”: examining consumers’ adoption of mobile banking services."*International Journal of Quality and Service Sciences.*, 2018.