Impact of Fintech on Islamic Banking

MSc Research Project
Financial Technology

Umair Qurban
Student ID: X22106383

School of Computing
National College of Ireland

Supervisor: Victor Del Rosal

National College of Ireland

MSc Project Submission Sheet

School of Computing

Student Name:	Umair Qurban ……
Student ID:	X22106383 ………………………………………………………………………………………………..……
Programme:	MSc in Fintech ………………………………………………… **Year:** 2022/2023 ……………………………..
Module:	Research Project (MSCFTD1) ……
Supervisor:	Victor Del Rosal ……
Submission Due Date:	14th August 2023 ……
Project Title:	Impact of Fintech on Islamic Banking ……
Word Count:	6274 20 ……………………………………………… **Page Count**………………………………………………………..

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

ALL internet material must be referenced in the bibliography section. Students are required to use the Referencing Standard specified in the report template. To use other author's written or electronic work is illegal (plagiarism) and may result in disciplinary action.

Signature:	Umair Qurban ……
Date:	14th of August 2023 ……

PLEASE READ THE FOLLOWING INSTRUCTIONS AND CHECKLIST

Attach a completed copy of this sheet to each project (including multiple copies)	□
Attach a Moodle submission receipt of the online project submission, to each project (including multiple copies).	□
You must ensure that you retain a HARD COPY of the project, both for your own reference and in case a project is lost or mislaid. It is not sufficient to keep a copy on computer.	□

Assignments that are submitted to the Programme Coordinator Office must be placed into the assignment box located outside the office.

Office Use Only	
Signature:	
Date:	
Penalty Applied (if applicable):	

Impact of Fintech on Islamic Banking

Umair Qurban
X22106383

Abstract

Fintech technology is considered as one of the most emerging fields in the banking sector. It helped organisations to improve their work while maintaining financial services effectively and efficiently. The advancement in financial technology had increased the demand for financial institutions which gave them a rise in the market. The present research is based on the impact of Fintech on Islamic banking. The researcher made the following research objectives that include; To identify the factors of fintech for Islamic banking, and to explain the issues and barriers faced by Pakistan in adopting Fintech in Islamic banking. It had been found that facilitating conditions and performance expectancy are the barriers for the financial institutes of Pakistan. Furthermore, to understand the role of fintech in Islamic banking owned by Pakistan's banking sector, to evaluate the difference in the adoption of fintech of Islamic banking and, to explore the methods by which Islamic banking has recognition in the industry with the help of Fintech. In Islamic Banking, the fintech technology has made the potential growth which enables consumers to use electronic banking. This proposal aims to examine the significance of Fintech in Islamic banking. In this regard, the researcher made the questionnaire as the main and authentication of the research. While concerning the responses, the analysis through statistical tools has been made to examine the relationship between the variables.

Keywords: "Islamic Banking", "Fintech", "Financial Technology" and "Financial Services"

1 INTRODUCTION

1.1 Background

According to Varma et al. (2022), fintech is the technology that helps in managing financial functions and procedures. Fintech normally used to have a piece of knowledge about the new technology which can be beneficial in managing the financial affairs of the company or any individual. Fintech not only focuses on providing new technology for the regulation of transactional records of the individual or any company, but it also makes sure that the technology is delivering its concept to the consumers. The main concept of developing the Fintech technology is providing software that helps in providing the concept of regluing in the financial process of any company or individual (Varma et al., 2022). Having an organised system of transactional records are the focal point in the banking system. In addition to that Alshater et al. (2022), banks offer different services to their customers and deal with numerous transactions, transfers, and much more. For all these services the bank keeps the records which are called fiscal records. Generating these statements is the most confidential and critical thing as it requires to be accurate and free from any error. A little mistake in these statements can create a big difference in the result which can cause serious issues. To maintain accuracy and generate error-free records banks usually take the help of software design for respective purposes. Fintech is widely used in the banking sector as online banking is the best example of Fintech in banking. It gives a better experience to the consumers to use the banking facilities without any errors and issues.

According to Alshater and Othman (2020), in Islamic banking, the principles are different from conventional banking as it follows the rules of Shariah. The difference in Islamic banking Fintech is some methods that are being used in conventional fintech which are not acceptable under Islamic law. For instance, the P2P is most popular method in Fintech which is about purchase to pay means that are profit or interest based. This method is rejected by Islamic banking as interest-based methods are prohibited in Shariah. According to the report of the Islamic Financial Development Report (2019), finance of Islamic banking is approx. three trillion dollars in the industry, which is a notable amount. So, it gives rise to the industry to investigate that what are the methods of Islamic banking in fintech which have been adopted. This research is to investigate the impact created by fintech in the context of Islamic banking.

1.2 Statement of Research Problem

This research mainly focuses on the factors of fintech system acceptance on Islamic banking and its impact on customers. To distinguish what services are adopted by Islamic banking from the fintech. As Fintech is being adopted by the banks of Pakistan, there are some issues in understanding technology (Thakor, 2020). As Pakistan is still under development and people there do not have a vast knowledge about the new technology. This study focuses on the influence of the banking sector especially on Islamic banking. According to the IIPS (2022), Pakistan is among the 64 countries that ranks 9th in the Global Islamic Fintech Index. There are hardly any companies that specify which ideas they are

following but Pakistan specifies that they use Shariah in most of their agenda, that is why the research revolves around Islamic banking.

1.3 Research Objective

- To identify the factors of fintech for Islamic banking.
- To explain the issues and barriers faced by Pakistan in adopting the Fintech in Islamic banking.
- To understand the role of fintech in Islamic banking owned by Pakistan's banking sector.

1.4 Research Questions

- To what extent factors related to fintech have impacted the Islamic banking system in Pakistan?

1.5 Research Hypothesis

- H_1: Social influence has a significance influence on the Islamic FS acceptance
- H_2: Facilitating conditions has a significance influence on the Islamic FS acceptance
- H_3: Effort expectancy has a significance influence on the Islamic FS acceptance.
- H4: Price has a significance influence on the Islamic FS acceptance.
- H5: Perceived Credibility has a significance influence on the Islamic FS acceptance
- H6: Performance expectancy has a significance influence on the Islamic FS acceptance

1.6 Significance of Study

This study covers all the main points of the impacts of factors related to fintech system in the Islamic banking sector. This study focuses on the Pakistan banking sectors how customer accept Fintech system and the factors behind it. Previously there were studies in which the researcher has identifies the concept of Fintech in the banking sector but those studies did not have any specialised area on which they focused (Saba et al., 2019). This study mainly discusses the Islamic banking sector. Few researchers covered the text of Pakistan's banking sector, this study will explain all the doubts any individual or company have about the adoption of Fintech.

2 LITERATURE REVIEW

2.1 Overview

The aim of this chapter has to critically analyse the impact of fintech methods on the Islamic banking sector especially in Pakistan by utilising the previously directed studies on a similar topic. This chapter comprises a brief overview, with a detailed review of the concept of fintech, which determines the benefits of fintech in the banking sector. This chapter also contains a brief overview of Islamic banking as well as the impact of fintech on Islamic banking systems. In this chapter conceptual framework and possible hypotheses are also mentioned. At last, a literature gap was also found in this chapter with an overall summary.

2.2 Concept of Fintech

The study by Khudhori and Hendri, (2021) said that the innovative technology that is utilised in the banking sector are considered as Fintech. Fintech helps the banking institutions or sectors to handle their financial matters effectively and efficiently to innovate traditional banking methods for providing financial products and services. In addition, Dorfleitner et al. (2017) mentioned that the aim of Fintech in the banking sector was to attract the clients of the banks with their services and products that are automated, efficient, user-friendly and transparent than traditional banking systems. Fintech is a third-party service provider that can distribute financial instruments as well as insurance services to the customers. It is the most recommended financial technology for the customers of banks because it offers secure services related to finance; it also provides safety cutting-edge (Saba et al., 2019). Therefore, "Fintech", that is, innovative technology, was introduced for the public to make more accessible financial services.

2.3 Benefits of Fintech

The main reason behind the fintech growth has occurred due to the 2008 financial crisis that impacted globally, according to Chemmanur et al. (2020) stated that to reduce the cost of traditional financial products and services, Fintech was introduced. It is the more appropriate method for the firms and companies. However, Fintech in the banking sector had new challenges and risks related to laws and regulations. Additionally, Thakor (2020) found that Fintech has positively affected the method of old-style financial services; this innovation in the banking industry lowers the cost of verification, reducing the charges of searching. Similarly, it is the more secure method of transmitting the information. To speed up financial services and offer more mobility in the banking industry, Fintech was introduced. Another reason behind the arrival of Fintech was the demand for affordable services and prices of finance. By using the method of Fintech, clients can easily operate their transition of banking to gather receivables and pay arrears (Ali et al., 2021). Hence, Fintech had a great impact on the banking sector by delivering convenient and cheaper services of finance. This technology had a great option of accessibility among the customers. The primary goal of developing Fintech technology is to create software that aids in the concept of regulating the financial operations of any business or person. The center of the banking system is the organisation of

transactional records. The goal of fintech in the banking industry was to draw customers to the banks by offering services and goods that were more automated, effective, user-friendly, and transparent than conventional banking systems.

2.4 Islamic banking

Based on the tenets of the Islamic faith that were associated with transition commercially was considered Islamic banking. For Islamic banking services, the principles are derived from the holy book "the Quran". The system of the Islamic banking model leads toward success that can support the achievement of economic opulence (State Bank of Pakistan, 2016). This study also mentioned that based on Islamic Shariah, their banking system would not deal with those transactions of money that contained riba or interest rate. In the recent study of Marzuki and Nurdin (2020), the most significant factor for Fintech in Islamic banking was adopting the compliant shariah. Correspondingly, Baber (2020) proposed that for Fintech, the adoption of compliant shariah in the Islamic banking industry had a significant impact on the retention of clients by offering advisory, payments and services of compliant shariah. The previous study found out that at the global level, facilitating the clients in terms of Fintech Islamic banking, 127 firms work on compliant shariah.

2.5 Impact of Fintech on Islamic Banking Globally

Alshater and Othman (2020) studied that Fintech in the Islamic banking system had no differences compared to conventional banking. Nevertheless, in Islamic banking, the focus is on compliance with Islamic shariah. On the other hand, Alshater's (2022) fintech operations differ between conventional and Islamic banking. The difference occurs due to the business model of Fintech among the two systems. The most thriving model in the business of Fintech is the P2P model, that was based on profit interest lending. In accordance with this, Ararawi (2020) argue that fundamentally the P2P model, which was based on profit interest lending, was rejected in the system of Islamic banking. Because the Islamic banking system was not deal with those transitions of money that contained interest rates or riba. Furthermore, financial technology related to Islamic banking services mainly emphases on distributing those financial services and products that conform with the Sharia requirement with new ways of affordable expenses in a unified manner (Rabbani et al., 2021).

The technique of Fintech in the Islamic sector of banking that was still in the embryonic phase. Only a few banking service providers in the market know about the techniques of Fintech. On the other side, Kocianski (2016) claim that the fintech technique is also supported by Sharia; however, it protects expenditures of banking through the Islamic system by giving high revenues to the clients. The five principles of Fintech are compliance with the principle of Islamic Shariah, and these are easy compliance, expandability, innovation, light assets and lastly, low margin of profit (Lee and Teo 2015). To the clients, the range of solutions related to finance was provided by financial technology. In Muslim areas or states, the development of financial technology was expanded due to the utilisation of mobile phones and the use of banking applications around the globe (Tercan, H. and

Meisen 2022). Thus, it is important for the Islamic banking system to introduce fintech technology that helps in validation for the transition of money as well as reserve the security of money transfer.

2.6   Impact of Fintech on Islamic Banking in Pakistan

A range of social and cultural variables might impact the acceptability of Islamic financial services (IFS) in Pakistan. Islamic finance is a financial system that runs based on Shariah, or Islamic law (Butt and Khan 2019). In Pakistan, where Islam is practiced by most of the people, these variables have a crucial influence in influencing IFS acceptability. Here are some major considerations about the societal effect on Islamic financial services acceptability in Pakistan:
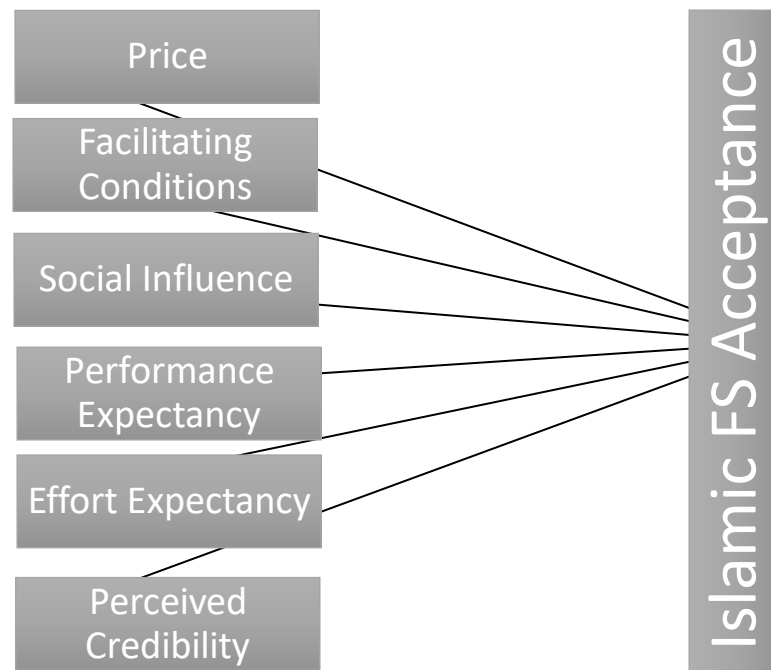
Chali et al. (2022), have indicated that most Pakistanis regard Islam as fundamental to their life. Many people and companies in Pakistan want to conduct financial transactions that are consistent with their religious views. Individuals are more inclined to adopt Islamic financial services because they comply to Shariah norms. who want to arrange their financial affairs in conformity with Islamic beliefs. Facilitating conditions are critical in any community (Mohamed, and Al Taitoon 2019), including Pakistan, for the acceptance of Islamic financial services (IFS). The circumstances and resources that make it simpler for consumers and enterprises to accept and use a certain invention or service are referred to as facilitating conditions. Here are some enabling factors that may influence Islamic FS acceptance in Pakistan:

Acceptance requires the availability and accessibility of a diverse variety of Islamic financial goods and services (Noreen et al., 2022). Individuals are more likely to explore and use Islamic banking, takaful (Islamic insurance), Islamic mutual funds, and other IFS options if they have easy access to them. Acceptance of Islamic financial transactions may be substantially facilitated by a solid technical infrastructure that allows smooth and efficient transactions. Islamic-compliant online banking, smartphone applications, and digital payment systems can attract tech-savvy clientele.

Effort expectation is a technology acceptance notion that refers to the perceived ease of use and simplicity of dealing with a technology or service (Rabbani et al., 2021). In the context of the acceptability of Islamic financial services (IFS) in Pakistan, effort expectation is a crucial factor in deciding whether people and companies are ready to embrace and utilise these services. Here's how effort expectations affect Islamic FS acceptance. Islamic financial institutions in Pakistan should provide user-friendly interfaces for their digital platforms such as mobile applications and online banking systems (Rabbani et al., 2020). Potential consumers are more likely to embrace IFS if these interfaces are straightforward, easy to browse, and take little effort to comprehend and utilise. The procedures for using Islamic financial services should be reduced and simplified. Individuals may see services as more convenient and user-friendly if opening an Islamic bank account, asking for an Islamic loan, or investing in Islamic funds is simple and takes few paperwork or processes (Varma et al., 2022).

2.7 Conceptual framework

Boxes on the left: Price, Facilitating Conditions, Social Influence, Performance Expectancy, Effort Expectancy, Perceived Credibility — all connected to: Islamic FS Acceptance

Figure 1 Conceptual Framework
Source: Self-Made

2.8 Literature gap

The literature gap in the research study was the area of the main topic which contains limited information for the research study. It was also considered as the problem statement that was not answered by the existing research as well as studies. In the recent study of Marzuki and Nurdin (2020), there was a gap in their literature that this study was conducted in the country of Indonesia specifically, hence, the recommendation that they made in their studies may not apply to the other developing countries and societies. Furthermore, in the study by Baber (2020), the research gap can be observed, if this study discussed the outcomes more in detail so it will be extra valuable as well as appropriate for the practitioners or experts specifically for the managers of Islamic banking by making improvement in fintech system.

2.9 Summary of Chapter

At the end of this chapter, it is concluded that it contains the literature on fintech, and Islamic banking as well as identifying the significant impact of fintech on Islamic sector of banking in Pakistan. By increasing the volume of business, the banking systems introduced the technique of Fintech through transferring the transitions of money online from mobile phones, including payments bills, equity expenses, and expenditures of insurance. Fintech also increases the interest of clients through payment online. Fintech had a great impact on the banking sector by delivering convenient and cheaper services of finance. This technology had a great option of accessibility among the customers. This research study was conducted to recognise the impact of fintech on the Islamic banking system of Pakistan.

3 RESEARCH METHODOLOGY

3.1 Research Philosophy

This research follows the positivism philosophy of research in the data collection method. According to the Ikram and Kenayathulla (2022) positivism philosophy revolves around the fact that the data collected is purely the respondents' responses. The researcher has not inserted any personal thinking or information in the collected data. Just like that, the collected data of this study is by the questionnaire and surveys which were filled by the respondents. The data collected is mainly from the customers and employees of the Islamic banking sector who knew Fintech and gained knowledge about the influence of Fintech after using it.

3.2 Research Design

The research design being followed by the researcher for this study is quantitative research. In quantitative research, research provides numerical pieces of evidence of the data collected and gives the validity and reliability of the research (Thakor, 2020). This research follows the pattern of quantitative research so the researcher first observes the thickness of the topic from the previous research about the impact of Fintech in Islamic banks. Made the research questions and objectives, which are the source of starting research. The data collection method is primary, the questionnaire was made with the help of the research questions and was filled by customers and employees of the Islamic banking to get accurate results.

3.3 The population of The Study

According to the Banerjee and Chaudhury (2010), the population of the study refers to the audience selected for the data collection of the research. This group of people become the source of the data collection, their beliefs, and experiences were then transformed into statistical data, to obtain the result of the research (Saba et al., 2019). The population of this research was the employees of the Islamic banking sector and the customers who use the fintech services of the Islamic bank. They were a good fit for the research as they are linked with the Islamic bank and can give information about the Fintech being used in their respective bank. Benefits and issues, they might face while using any type of Fintech in Islamic Banking.

3.4 Sample Size and Sampling Technique

The sample size is referring to the number of respondents selected from the population of the study to have more accuracy in data while data collecting (Islam and Aldaihani, 2022). This sample size may vary with the demand of the respondents according to the study. In this research, the sample size was maintained by only surveying those respondents who are connected to Islamic banking. The IT team of the banking sector was also categorised as the sampling size of the study as they can be beneficial for providing knowledge about Fintech. For the sampling technique, purposive sampling is used in this study. To eliminate the factor of any error and misinformation about the topic.

3.5 Source of Data

According to Tercan and Meisen (2022), the source of data is the methods from which the research took to collect data for the research. In this study, the researcher obtained the data by constructing a questionnaire which was made with the help of research questions. The questionnaire is the main and authentic source of the research. The questionnaire had a variety of closed-ended questions regarding the impact of Fintech on Islamic banking attached in Appendix 1. The data was collected by the selected population of the study; the responses were then transformed into the shape of proper systematic data. Another source of knowledge could be the literature review of previously done research. The available data about the Fintech Islamic banking was also considered as the source of data.

3.6 Research Instrument

The research instrument is the term refers to the tool which was used for the data collection of the study (Mashuri et al., 2022). These tools help the researcher to adopt the research instrument to get accurate results for the study. The instrument of research in this study is the questionnaire attached in Appendix 1. The questionnaire is made of closed-ended questions as the research design is quantitative, closed-ended question helps to provide the numerical data of the research.

3.7 Validity and Reliability of the Research Instrument

According to Mohajan (2017), validity of the research instrument refers to the fact that much reliable data is being collected by using the instruments set for the research. In this study, the research instruments were questionnaire surveys. The validity and reliability of these instruments are higher as the questionnaire has consisted of closed-ended questions that comprise the options set by the researcher (Varma et al., 2022). Those options were the ones which are the most suitable answers to the question. The respondent has the authority to select the options only which gives the validity of the accurate result.

3.8 Method of Data Analysis

The conversion of the raw state of collected data into systematic or statistical data is referred to the data analysis (Thakor 2020). In this study, the data analysis was done by the regression method. The regression method identifies which variables are beneficial for the research and which were not suitable in the context of research (Freund, 2006). When the researcher collected the data collected the data was then analysed by the SPSS method. This analysed data was further used for the conclusion of the research.

3.9 Ethical Consideration

Ethical consideration is the main point in the research as the research mainly focused on data collection. During the data collection, the researcher has the data which was the personal data of the respondents. The researcher makes sure that all the data collected and the personal information of the respondents are confidential. The researcher makes sure that the collected information was only used for research purposes.

4 CHAPTER 4 EVALUATION AND RESULT ANALYSIS

4.1 Chapter Overview

The present chapter is based on the data analysis, and findings gathered with the help of participants who responded to the questionnaire. In this regard, the chapter incorporates descriptive statistics and regression analysis to evaluate data. In the last, a discussion has been made to support the findings.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Effort_Expectancy	126	2.67	5.00	3.9974	.50684
Facilitating_Conditions	126	2.00	5.00	3.9405	.61517
Performance_Expectancy	126	2.00	5.00	3.8532	.64828
Price	126	1.00	5.00	3.6230	.73399
Social_Influence	126	2.00	5.00	3.6825	.66062
Islamic_FS_Acceptance	126	2.50	5.00	4.0278	.60102
Perceived_Credibility	126	2.00	5.00	3.9563	.51776
Valid N (listwise)	126				

Table 1 Descriptive Statistics

Source: Self-Made

Table 1 above shows the descriptive statistics of the entered variables, including effort expectancy, facilitating conditions, performance expectancy, price, social influence, Islamic FS acceptance and perceived credibility. In the descriptive statistics, minimum, maximum mean and St. Deviation have been determined.

4.2 Demographics

Statistics				
		Age	Qualification	City	Do you use Fintech
N	Valid	126	126	126	126
	Missing	0	0	0	0

Table 2 Statistics

Source: Self-Made

The briefing regarding the demographics of 126 participants has been shown in the above table 2 while incorporating their age, qualification, city and interest in Fintech usage.

Age					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	18-25	38	30.2	30.2	30.2
	26-30	50	39.7	39.7	69.8
	31-35	23	18.3	18.3	88.1
	36-40	3	2.4	2.4	90.5
	40+	12	9.5	9.5	100.0
	Total	126	100.0	100.0	

Table 3 Age of Participants

Source: Self-Made

The Table 3 shows the age of respondents who had participated in the survey, people aged between 18-25 are found at (30.2%), and 26-30 with (39.7%) which is relatively high compared to the other age groups. Moreover, people with 31-35 shows with (18.3%), 36-40 are (2.4%) with the lowest frequency and in the last 40+ are (9.5%).

Qualification					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Graduate	57	45.2	45.2	45.2
	Intermediate	34	27.0	27.0	72.2
	Masters or Above	35	27.8	27.8	100.0
	Total	126	100.0	100.0	

Table 4 Qualification of Participants

Source: Self-Made

The table 4 showed the qualification of the participants were masters (27.8%). Furthermore, the intermediate participated (27%), and respondents who were graduates had the highest percentage (45.2) in the questionnaire.

City		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Abbottabad	1	.8	.8	.8
	Gujrat	1	.8	.8	1.6
	Hyderabad	17	13.5	13.5	15.1
	Islamabad	7	5.6	5.6	20.6
	Karachi	76	60.3	60.3	81.0
	Lahore	2	1.6	1.6	82.5
	Multan	6	4.8	4.8	87.3
	Peshawar	3	2.4	2.4	89.7
	Rahim Yar khan	3	2.4	2.4	92.1
	RAWALPINDI	1	.8	.8	92.9
	Sahiwal	9	7.1	7.1	100.0
	Total	126	100.0	100.0	

Table 5 City of Participants

Source: Self-Made

In table 5 the researcher had asked the participants from various cities in Pakistan—only one respondent (each) from Abbottabad, Gujrat and Rawalpindi. Total 6 participants were selected from Peshawar and Rahim Yar Khan (3 each). Moreover, more participants were chosen from Karachi (76 sample size) and Hyderabad (17). Additionally, the Islamabad (7), Lahore (2), Multan (6) and Sahiwal (9) participants contributed to the questionnaire session, which makes a total of 126.

Do you use Fintech		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	2	1.6	1.6	1.6
	Yes	124	98.4	98.4	100.0
	Total	126	100.0	100.0	

Table 6 Usage of FinTech

Source: Self-Made

According to Alshater et al. (2022), Fintech is used to recognise innovative technologies; in this regard, the researcher asked about utilising Fintech participants. 124 participants (98.4%) had shown a positive response towards the utilisation of Fintech, and only 2 (1.6%) had not used Fintech.

4.3 Regression Analysis

According to De Menezes et al. (2021), regression analysis is vital in investigating the impact of dependent and independent variables. The regression analysis had helped the author to analyse appropriately that which feature is the most imperative that can be considered in the future for further research. The table of model summary for the present study is assessed below.

4.3.1 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755[a]	.570	.548	.40395

a. Predictors: (Constant), Social_Influence, Facilitating_Conditions, Effort_Expectancy, Price, Perceived_Credibility, Performance_Expectancy

Table 7Model Summary

Source: Self-Made

In the model summary Table 7, multiple regression parameters, such as the R^2 value, establish the criterion with (.755[a]), the data fit the model well, and the results are predictable. The data fits the model well for 0.0 R^2 less than 0.5. The R^2 for the current study is .570, which shows that the regression model can accurately predict the results.

4.3.2 Anova

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.735	6	4.289	26.285	.000[b]
	Residual	19.418	119	.163		
	Total	45.153	125			

a. Dependent Variable: Islamic_FS_Acceptance

b. Predictors: (Constant), Social_Influence, Facilitating_Conditions, Effort_Expectancy, Price, Perceived_Credibility, Performance_Expectancy

Table 8ANOVA

Source: Self-Made

The above table 8 of ANOVA shows the succeeding assist in identifying the impact of Fintech on Islamic Banking. The dependent variable is Islamic banking, with the independent variable: social influence, facilitating conditions, Effort expectancy, price, perceived credibility and performance expectancy. The validity of the hypothesis can now further be functioned upon with the help of achieved information. The significant value was found to be 0.000. Thus, it can be said that the hypothesis can now be established by additional examination. Following analysis of the coefficients of prior data founds a significant connection between independent and dependent variables.

4.4 Coefficients

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.498	0.32	0.123	1.554	0.123
	Effort_Expectancy	0.261	0.101	0.011	2.594	0.011
	Facilitating_Conditions	-0.054	0.081	0.502	-0.673	0.502
	Perceived_Credibility	0.242	0.101	0.018	2.404	0.018
	Performance_Expectancy	0.086	0.086	0.317	1.004	0.317
	Price	0.218	0.069	0.002	3.167	0.002
	Social_Influence	0.168	0.088	0.057	1.924	0.057

a. Dependent Variable: Islamic_FS_Acceptance

Table 9 Coefficient Analysis

Source: Self-Made

The Table 9 shows the coefficient analysis of the dependent and independent variables. Effort expectancy (0.011), Price (0.002) and Perceived Credibility (0.018) shows a significant relationship with Islamic FS acceptance. Furthermore, the Facilitating condition (0.502) and Performance expectancy (0.317) had an insignificant relationship with the Islamic FS Acceptance. Last, Social Influence (0.05) shows a significant relation with the dependent variable.

4.4.1   Quadratic Regression

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755[a]	.570	.548	.40395

Table 10 Model Summary

Source: Self-Made

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.735	6	4.289	26.285	.000[b]
	Residual	19.418	119	.163		
	Total	45.153	125			

Table 11 Anova

Source: Self-Made

Coefficients[a]

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.498	.320		1.554	.123
	Effort_Expectancy	.261	.101	.220	2.594	.011
	Facilitating_Conditions	-.054	.081	-.055	-.673	.502
	Perceived_Credibility	.242	.101	.209	2.404	.018
	Performance_Expectancy	.086	.086	.093	1.004	.317
	Price	.218	.069	.266	3.167	.002
	Social_Influence	.168	.088	.185	1.924	.057

Table 12 Coefficients

Source: Self-Made

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.9598	5.1057	4.0278	.45374	126
Residual	-1.02548	1.34451	.00000	.39414	126
Std. Predicted Value	-2.354	2.376	.000	1.000	126
Std. Residual	-2.539	3.328	.000	.976	126

Table 13Residual Statistics

Source: Self-Made

Charts
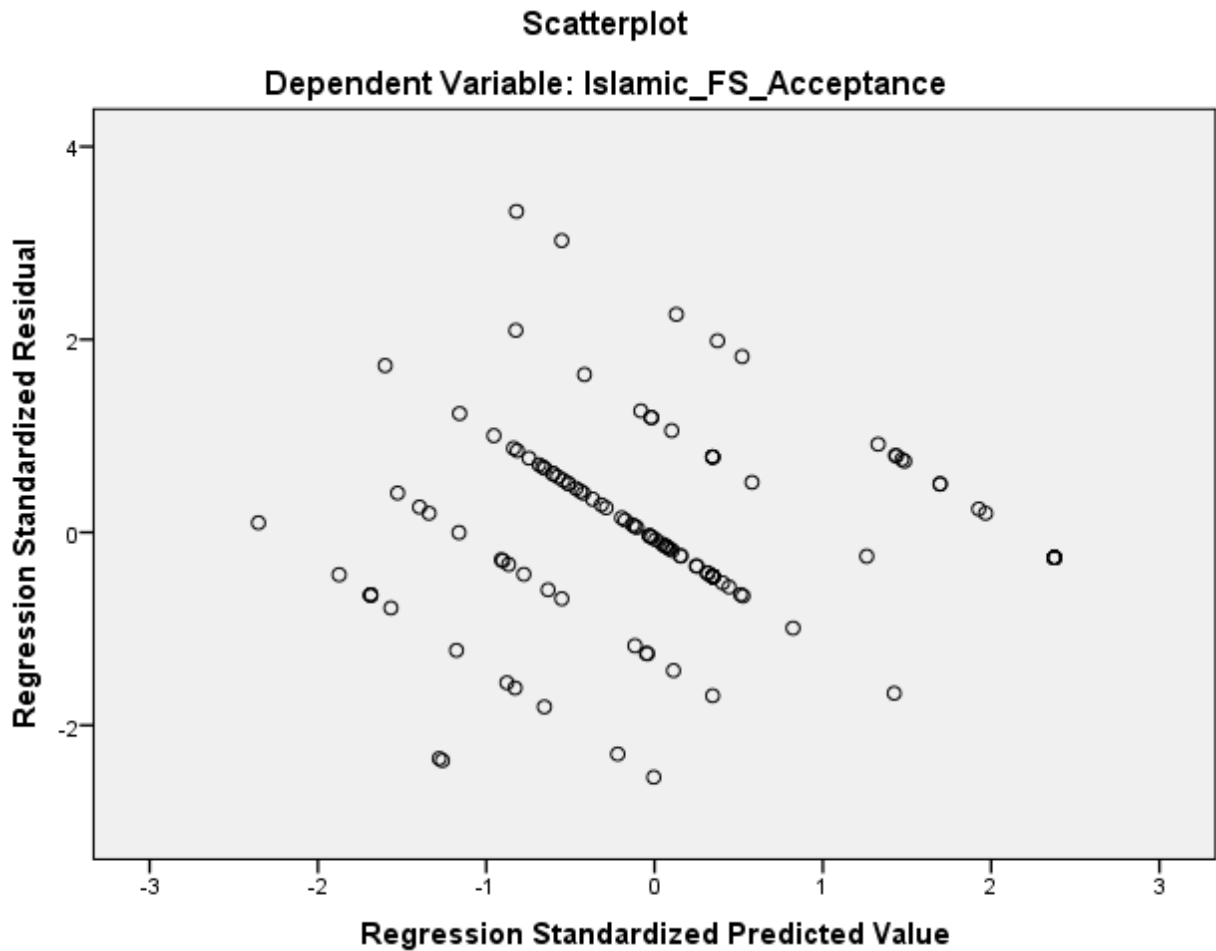
Figure 2 Scatterplot

Source: Self-Made

Figure 2 shows the mean residual that is near to zero. According to the Standard Deviation of Residuals of 0.39414, the average residual that represents the prediction error is

approximately 0.39414 units. On the other hand, the anticipated values appear to be adequately distributed around the mean predicted value of 4.0278, as indicated by the standard deviation of predicted values, which is 0.45374. The spread of the residuals after standardisation is 0.976 units, according to the standard deviation of the standardised residuals, which is 0.976.

4.5   Summary of Hypothesis

	Statement	Criteria	Status
H1	Effort Expectancy has a significant influence on Islamic FS Acceptance	0.01	Accepted
H2	Facilitating Condition has a significant influence on Islamic FS Acceptance	0.50	Rejected
H3	Perceived Credibility has a significant influence on Islamic FS Acceptance	0.01	Accepted
H4	Performance Expectancy has a significant influence on Islamic FS Acceptance	0.31	Rejected
H5	Price has a significant influence on Islamic FS Acceptance	0.00	Accepted
H6	Social Influence has a significant influence on Islamic FS Acceptance	0.05	Accepted

4.6   Chapter Summary

The above chapter shows the discussion on the significance of Fintech on the Islamic banking. Regression, coefficient analysis, and summary of hypothesis have all been used in the prior research which helps to analyse the data. These methods have thoroughly demonstrated whether the variables are accepted or rejected

5 CONCLUSION AND DISCUSSION

5.1 Discussion

It has been analysed that Fintech is an innovative technology that helps to make life easier for consumers or businesses. According to Chemmanur et al. (2020), Fintech aids companies to minimise the cost of financial products and services. In this regard, the above chapter found that the H1 effort expectancy significantly impacts Islamic FS Acceptance, showing consumers' intention towards FinTech is relatively strong. In simple words, effort expectancy is a step of convenience that helps consumers to use innovative technology or inventive system.

Furthermore, Fintech was a relatively new business in Pakistan, but it was also steadily gaining ground. According to Rizvi et al. (2018), ATMs, debit cards, and credit cards are the primary commercial banking products of fintech in Pakistan. By reorienting the global financial system to accommodate the introduction of fintech in the banking sector, the output of commercial banking in Pakistan increased. Pakistan has implemented ground-breaking changes to its technological skills in order to facilitate financial solution in the banking sector. The findings also indicated that adopting FS in the Islamic banking industry is strongly correlated with Price which was H5.

Additionally, Rabbani et al. (2020), asserts that, financial technology can increase the standardisation and transparency of the Islamic banking sector in Pakistan. According to Ali et al. (2021), there are two parts to the Pakistani fintech banking system: traditional fintech and emergent fintech. The Fintech component is emerging and collaborates with banks and other financial institutions, as opposed to the conventional collaboration of the Fintech component with the existing financial system. Contrarily, in the above analysis, the facilitating conditions H2 show an insignificant relation with the dependent variable i-e Islamic FS Acceptance. The consumers did not believe that the technical infrastructure of the banking system could support the use of technology. Various goods and services are offered by the Fintech emerging component, including web-based apps, payment solutions, management consultancy, mobile payments, and a network for social investment.

On the other hand, the above analysis showed that Islamic banking and the conventional banking sector were strongly influenced by the H3 Perceived Credibility of fintech technology to lower the cost of conventional financial goods and services in the banking system. Noreen et al. (2022) claim that Pakistan has challenges due to the requirement for additional resources and technological knowledge to operate the banking sectors. The obstacles that the fintech approach faces are related to information security and regulatory issues.

According to Karim et al. (2022) a yearly examination of Islamic banking results in Pakistan, financial technology had a discernible impact on Pakistan's Islamic institutions between 2008 and 2020. Despite of this, performance expectancy H4 shows an insignificant relation, which means that the individuals or employees of banking system needed to find it feasible to gain the appropriate IT expertise and performance.

H5 Social influence is an important factor which helps organisations to understand human behavior. It has been analysed that the social influences could be manifested with the help of

consumers' attitudes, values and social norms. Fintech supports the industry by offering solutions for customer service, service accounting, and process efficiency to operate normal tasks in the Islamic banking sector. According to Hasan (2023) assessment, Fintech companies provide digitalised financial services and mobile banking options to the consumer of the Islamic banking industry. Financial technology has a positive impact on the Islamic banking industry by eliminating the need for customers to visit the bank's physical location and replacing it with mobile devices or digitalised banking. According to Saba et al. (2019), it can increase the effectiveness of all operations, Fintech enhances the client experience in the world of Islamic banking.

5.2 Conclusion

The prior research Marzuki and Nurdin (2020) had concluded that, Fintech is the name for the technology that aids in managing financial processes and activities. Fintech often refers to a body of knowledge concerning cutting-edge technology that might be useful in managing a company's or an individual's financial affairs (Saba et al., 2019). Fintech makes sure that the technology is conveying its concept to the users in addition to focusing on devel oping new technology for the regulation of transactional records of any individual or corporation (Ali et al., 2021). The research findings conclude that Fintech is a type of third-party service provider that offers customers access to both insurance products and financial instruments.

The findings further indicate that For Islamic bank customers, it is the most highly recommended financial technology because it provides secure financial services. It also offers cutting-edge safety. Through the provision of Shariah-compliant advice, payments, and services, the implementation of compliant Shariah in the Islamic banking sector significantly impacted client retention. According to analysis, fintech is a cutting-edge technology that makes life easier for individuals and enterprises. Fintech helps businesses reduce the cost of financial services and products. In this regard, the chapter discovered that expert expectancy greatly influences the acceptance of Islamic financial products, demonstrating that consumer interest in fintech is relatively high.

In this regard, the chapter discovered that the effort expectancy greatly effects the acceptance of Islamic financial products, demonstrating consumers' rather strong inclination towards fintech. In layman's terms, effort expectancy is a step of convenience that enables users of creative systems or innovative technology. In order to facilitate financial solutions in the banking sector, Pakistan has made revolutionary modifications to its technology capabilities. The results also showed a high correlation between pricing and the Islamic banking industry's adoption of FS. Contrarily, in the study above, the facilitating conditions display a negligible relationship with the dependent variable, i.e., acceptance of Islamic faith. Customers lacked confidence in the financial system's ability to facilitate technological use due to its technical infrastructure.

The Fintech emerging component provides a range of products and services, including mobile payments, web-based apps, payment solutions, management consulting, and a network for social investment. The foregoing analysis, on the other hand, revealed that the perceived credibility and social influence of fintech technology had a significant impact on

Islamic banking, driving down the price of traditional financial goods and services in the banking system. Organisations can better understand human behavior by considering social influence. According to analysis, customers' attitudes, beliefs, and social norms might assist the social influences become apparent on Islamic FS Acceptance.

Moreover, the research adds recommendation for further research in Pakistan's Islamic banking industry, which include advancements in Fintech, provide solutions for payments, management consulting, mobile payments, and innovation in machine learning programs. The study also notes that innovations in machine learning programs, management consultancy, and payment solutions are all made possible by Fintech developments in Pakistan's Islamic banking sector.

6 REFERENCES

Ali, M., Raza, S.A., Khamis, B., Puah, C.H. and Amin, H., 2021. How perceived risk, benefit and trust determine user Fintech adoption: a new dimension for Islamic finance. foresight, 23(4), pp.403-420.

Alshater, M.M. and Othman, A.H.A. (2020). Financial Technology Developments and their Effect on Islamic Finance Education تطورات التقنية المالية المالية وتأثيرها على التعليم المالي الإسلامي. Journal of King Abdulaziz University: Islamic Economics, [online] 33(3), pp.161–187.

Alshater, M.M., Saba, I., Supriani, I. and Rabbani, M.R., 2022. Fintech in Islamic finance literature: A review. Heliyon.

Ararawi, M.Z.A., 2020. Islamic micro investment suggested framework, and its role in enhancing millennials' financial inclusion (Doctoral dissertation, Hamad Bin Khalifa University (Qatar)).

Baber, H., 2020. Impact of FinTech on customer retention in Islamic banks of Malaysia. International Journal of Business and Systems Research, 14(2), pp.217-227.

Banerjee, A. and Chaudhury, S. (2010). Statistics without tears: Populations and samples. Industrial Psychiatry Journal, [online] 19(1), pp.60–65.

Butt, S. and Khan, Z.A., 2019. Fintech in Pakistan: a qualitative study of bank's strategic planning for an investment in the fin-tech company and its challenges. Independent Journal of Management & Production, 10(6), pp.2092-2101.

Chali, M.T., Eshete, S.K. and Debela, K.L. (2022). Learning How Research Design Methods Work: A Review of Creswell's Research Design: Qualitative, Quantitative and Mixed Methods Approaches - ProQuest. [online] www.proquest.com.

Chemmanur, T.J., Imerman, M.B., Rajaiya, H. and Yu, Q., 2020. Recent developments in the fintech industry. Journal of Financial Management, Markets and Institutions, 8(01), p.2040002. collaboration, Al-Intaj: Jurnal Ekonomi dan Perbankan Syariah, 7(2), pp.172-182.

De Menezes, D.Q.F., Prata, D.M., Secchi, A.R. and Pinto, J.C., 2021. A review of robust M-estimators for regression analysis. Computers & Chemical Engineering, 147, p.107254.

Dorfleitner, G., Hornuf, L., Schmitt, M., Weber, M., Dorfleitner, G., Hornuf, L., Schmitt, M. and Weber, M., 2017. Definition of FinTech and description of the FinTech industry. FinTech in Germany, pp.5-10.

Freund, R.J., Wilson, W.J. and Sa, P., 2006. Regression analysis. Elsevier.

Hasan, M. (2023). The Impact of Financial Technology (Fintech) on the Financial and Banking Services Sector and Its Applications in the Islamic Financial Industry. SSRN Electronic Journal. doi https://doi.org/10.2139/ssrn.4369683.

IIPS (2022). The Rise of Islamic Fintechs in Pakistan. [online] Iqbal Institute of Policy Studies – IIPS. Available at: https://iips.com.pk/the-rise-of-islamic-fintechs-in-pakistan/ [Accessed 18 Jul. 2023].

Ikram, M. and Kenayathulla, H.B. 2022. Out of Touch: Comparing and Contrasting Positivism and Interpretivism in Social Science. Asian Journal of Research in Education and Social Sciences, [online] 4(2), pp.39–49.

Islam, M.A. and Aldaihani, F.M.F. (2022). Justification for Adopting Qualitative Research Method, Research Approaches, Sampling Strategy, Sample Size, Interview Method, Saturation, and Data Analysis. Journal of International Business and Management, 5(1), p.3.

Karim, S., Naeem, M.A. and Abaji, E.E. (2022), 'Is Islamic FinTech coherent with Islamic banking? A stakeholder's perspective during COVID-19 Heliyon, 8(9), pp. 1-6.

Khudhori, K.U. and Hendri, L. (2021), Islamic banking and Fintech: Sustainable

Kocianski, S. (2016). THE FINTECH ECOSYSTEM REPORT: The emerging technologies and firms driving change in financial services and how legacy players can navigate the disruption. Business Inside

Lee, D.K.C. and Teo, E.G., 2015. Emergence of FinTech and the LASIC Principles. Journal of Financial Perspectives, 3(3).

Marzuki, M. and Nurdin, N., 2020. The influence of halal product expectation, social environment, and fiqih knowledge on intention to use shariah financial technology products. International Journal of Innovation, Creativity and Change, 13(1), pp.171-193.

Mashuri, S., Sarib, M., Rasak, A. and Alhabsyi, F. (2022). Semi-structured Interview: A Methodological Reflection on the Development of a Qualitative Research Instrument in Educational Studies Ruslin. IOSR Journal of Research & Method in Education, [online] 12(1), pp.22–29.

Mohajan, H. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability Two Criteria for Good Measurements in Research: Validity and Reliability.

Mohamed, S. and Al Taitoon, J. (2019). SHIFTING DYNAMICS. [online] p.6.

Noreen, M., Mia, M.S., Ghazali, Z. and Ahmed, F. (2022), 'Role of Government Policies to Fintech Adoption and Financial Inclusion: A Study in Pakistan', Universal Journal of Accounting and Finance, 10, pp.37-46.

Rabbani, M.R., Bashar, A., Nawaz, N., Karim, S., Ali, M.A.M., Rahiman, H.U. and Alam, M.S., 2021. Exploring the role of islamic fintech in combating the aftershocks of covid-19: The open social innovation of the islamic financial system. Journal of Open Innovation: Technology, Market, and Complexity, 7(2), p.136.

Rabbani, M.R., Khan, S. and Thalassinos, E.I., 2020. FinTech, blockchain and Islamic finance: An extensive literature review.

Rizvi, S.K.A., Naqvi, B. and Tanveer, F., 2018. Is Pakistan ready to embrace Fintech innovation?. The Lahore Journal of Economics, 23(2), pp.151-182.

Saba, I., Kouser, R. and Chaudhry, I.S., 2019. FinTech and Islamic finance-challenges and opportunities. Review of Economics and Development Studies, 5(4), pp.581-890.

State bank of Pakistan (2016). State Bank of Pakistan. [online] www.sbp.org.pk. Available at: https://www.sbp.org.pk/IB/about.asp.

Tercan, H. and Meisen, T. (2022). Machine learning and deep learning based predictive quality in manufacturing: a systematic review. Journal of Intelligent Manufacturing.

Thakor, A.V., 2020. Fintech and banking: What do we know?. Journal of Financial Intermediation, 41, p.100833.

Varma, P., Nijjer, S., Sood, K., Grima, S. and Rupeika-Apoga, R. (2022). Thematic Analysis of Financial Technology (Fintech) Influence on the Banking Industry. Risks, [online] 10(10), p.186.