Challenges and Issues of Fin-Tech Applications Impact on Customers' Trust in Tiruchirappalli District

S. Jerome

Assistant Professor and Research Advisor, Department of Commerce, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu

Abstract

As the Fin-Tech industry continues to transform the financial landscape, data privacy and security have become critical. Fin-Tech firms acquire and process massive volumes of sensitive data, making them appealing targets for cybercriminals. It is critical to balance the potential afforded by Fin-Tech breakthroughs with the challenges of data privacy and security. In this article, we will look at the difficulties and opportunities in the Fin-Tech sector for data privacy and security. The government also explore the importance of deploying appropriate cybersecurity controls and tactics to secure sensitive financial data while encouraging innovation. Because of the rising digitization of financial services, cybersecurity vulnerabilities have increased. Personal identity information, financial records, and transaction details are all stored and transmitted by Fin-Tech companies. Because of their substantial assets, they are potential targets for cyberattacks. Data breaches, identity theft, ransomware assaults, and sophisticated phishing attempts are all part of the growing threat landscape. To protect client data and preserve trust in the ecosystem, Fin-Tech companies must always stay ahead of these dangers. The present study try attempt the security issues in the perception of customers and how it affects the customers trust towards Fin-tech applications usages.

Keywords: Customers' Trust, ease of use, customer satisfaction and security threats

Introduction

Using cutting-edge technology like cloud computing, big data analytics, artificial intelligence, and block-chain has transformed financial services in the banking industry's digital transformation. But there are serious cybersecurity and data privacy issues with this quick digitization. This study examines the difficulties banks face in protecting cybersecurity and data privacy when introducing new technology, how they view these difficulties, and the precautions they take to lower the risks. Thematic analysis is used in this qualitative study to analyse interviews with banking IT personnel.

Technological developments have had a significant impact on the manufacturing and financial services industries. The primary competitive advantage in today's global marketplaces is increased industrial efficiency, which is what these digital technologies seek to achieve. Technologies have a lot of potential to be good change agents in the fields of sustainability and sustainable development because of their efficiency-focused nature and digital foundation. They remove the ways in which

natural resources have been depleted, ecological balances have been upset, and the environment has been destroyed. Governments everywhere have realized that in order to restore environmental sustainability through the dematerialization of industry and consumption, they must use breakthroughs like financial technology (Fin-Tech).

The globe is becoming a distinct biosphere with simpler transactions and increased security thanks to the new, ground-breaking FinTech technologies. Anytime and anywhere a transaction needs to be completed, such as when taking a taxi, shopping at a small retail establishment, or making an internet purchase, there is a cutting-edge FinTech option available. It is transforming the financial industry in a number of ways, including lowering expenses, enhancing the caliber of financial services, and assisting businesses in effectively managing their funds while maintaining a high level of protection against cyberattacks (Subbarao, 2017).

Review of Literature

Fin-Tech aids in assessing the financial sector's and its affiliated institutions' rapid expansion. Thanks to technology developments in core services and the creation of new applications for delivery, it is now easier than ever to manage risk, save, borrow, make payments, and get financial advice (He et al., 2017).

Consumer demand for technologically based financial services is increasing as more and more organizations go through digital revolutions (Saal et al., 2017). Fin-Tech companies have created quicker, less expensive, and easier ways to borrow, invest, and transfer money in order to meet these demands (Manyika et al., 2016).Fin-Tech is being used more and more by retail businesses and telecoms to broaden their service offerings beyond conventional banking and investment funds. Even though Fin-Tech service providers are proliferating and their offerings are steadily improving, only a portion of them have gained broad acceptance. Therefore, it is essential to look at the factors that affect the adoption of these services.

According to Knewtson and Rosenbaum's (2020) research, the Fin-Tech sector includes the following subsectors: alternative monetary systems, capital intermediation; investment technology; and infrastructure. Capital intermediation includes digital banking and lending tech, while "money alternatives" are businesses that offer services related to money, such as cryptocurrencies or traditional bank payment systems. Crowdfunding, algorithmic trading, financial intelligence, and investment apps

all fall under the umbrella term. Consequently, this research documents the spread of use in interconnected fields such as mobile POS payment, digital commerce, crowdfunding, crowd investing, digital remittances, advisors, crowd lending, and marketplace lending.

According to a study conducted by (Nangin 2020), individuals' perceived value, perceived risk, and social influence are all strongly related to their intent to adopt Fin-Tech. In addition, individuals' performance expectancy, effort expectancy, and perceived risk all affect individual's perceived value, which in turn influences their intent to adopt Fin-Tech.

(Das 2020) studied on Fin-Tech and suggested that Governments have taken necessary efforts towards digital transformation and promoted Fin-Tech firms, realizing the potential of Fin-Tech to assist towards financial inclusion and stability. Banks and other financial institutions have begun working together with Fin-Tech companies to better serve their consumers. The purpose of this article is to look into how clients of various banks view and use Fin-Tech services, how they perceive them, and what kinds of barriers they run into while trying to use them.

Keer yang (2021) discovered that counties with more severe trust loss had bigger gains in Fin-Tech market share than those with less severe erosion. Generic machine learning inference for estimating treatment effect heterogeneity reveals that borrowers with the greatest reduction in faith in banks and the largest increase in adoption of Fin-Tech share defining characteristics.

According to research (Rebecca Chan 2022), the performance expectation, effort expectation, social influence, and perceived risk of customers are all direct antecedents of their decision to use Open Banking. There is a robust mediating effect of social influence on usage intention through performance expectancy. Initial trust moderates the impacts of effort expectation and performance expectancy on customers' usage intentions of Open Banking, whereas perceived risk moderates the effects of both. Last but not least, consumers may be less likely to trust Open Banking due to inadequate financial knowledge.

Research Problem of the Study

As the Fin-Tech industry continues to transform the financial landscape, data privacy and security have become critical. Fin-Tech firms acquire and process massive volumes of sensitive data, making them appealing targets for cybercriminals. It is critical to balance the potential afforded by

Fin-Tech breakthroughs with the challenges of data privacy and security. In this article, we will look at the difficulties and opportunities in the Fin-Tech sector for data privacy and security. The government also explore the importance of deploying appropriate cybersecurity controls and tactics to secure sensitive financial data while encouraging innovation.

Because of the rising digitization of financial services, cybersecurity vulnerabilities have increased. Personal identity information, financial records, and transaction details are all stored and transmitted by Fin-Tech companies. Because of their substantial assets, they are potential targets for cyberattacks. Data breaches, identity theft, ransomware assaults, and sophisticated phishing attempts are all part of the growing threat landscape. To protect client data and preserve trust in the ecosystem, Fin-Tech companies must always stay ahead of these dangers. The present study try attempt the security issues in the perception of customers and how it affects the customers trust towards Fin-tech applications usages.

Objectives of the Study

1) To investigate the variables that encourage individuals to adopt Fin-Tech services and increase their satisfaction levels.
2) To study the data security issues affects customer trust in Fin-Tech applications.
3) To offer suggestions to overcome the issues in using Fin-Tech apps and increase usage Fin-Tech applications.

Methodology

This study aims to assess customer perceptions of Fin-Tech services and their effects on overall satisfaction. To fulfil the research objectives, a descriptive research design was employed, involving the collection of quantitative data from participants. The focus group for this research consists of individuals utilizing Fin-Tech solutions in their banking activities. A structured questionnaire was developed, comprising demographic information in the first section, while the second section included inquiries pertaining to the research variables, with respondents providing their opinions on a 5-point Likert scale (1 representing Strongly Disagree and 5 representing Strongly Agree).

Sampling Design

Universe of the study: users of the Fin Tech applications. Universe is infinite.

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Sampling methods: Non-probability purposive sampling including the chain referral (snowball) technique is proposed.

Sampling Size: The researcher proposes that 1% of the universe will proof the reality of the study but due to time constraint the researcher restricts the sample size to 120.

Data collection

i) Sources of data: Primary data will be collected through interview Schedule. Secondary data will be collected through reference books, Newspaper, websites, and discussions with the respondents.

ii) Tools for collection of proposed data: Interview schedule will be framed with the help of previous researches which gives depth knowledge to the researcher.

iii) Data Analysis: Statistical Packages for Social Sciences (SPSS 26) will be used for data analysis

Analysis and Interpretations

Chi-square 'X^2' test

			Gender		Total	Statistical inference
			Male	Female		
Perceived usefulness of fin-tech applications	Low	Count	35	10	45	$X^2 = 2.074^a$ .108 > 0.05 Not significant
		% of Total	29.2%	8.3%	37.5%	
	High	Count	49	26	75	
		% of Total	40.8%	21.7%	62.5%	
Perceived ease of use of fin-tech applications	Low	Count	28	13	41	$X^2 = 0.086^a$ .769 > 0.05 Not significant
		% of Total	23.3%	10.8%	34.2%	
	High	Count	56	23	79	
		% of Total	46.7%	19.2%	65.8%	
Customer satisfaction	Low	Count	25	11	36	$X^2 = 0.008^a$ .547 > 0.05 Not significant
		% of Total	20.8%	9.2%	30.0%	
	High	Count	59	25	84	
		% of Total	49.2%	20.8%	70.0%	
Over all perception of customer trust in fin-tech applications	Low	Count	42	15	57	$X^2 = 0.702^a$ 0.262 > 0.05 Not significant
		% of Total	35.0%	12.5%	47.5%	
	High	Count	42	21	63	
		% of Total	35.0%	17.5%	52.5%	

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Research Hypothesis

There is a significant association between gender of the respondents and their overall perception about customer trust in fin-tech applications free from security issues.

Null Hypothesis

There is no significant association between gender of the respondents and their overall perception about customer trust in fin-tech applications free from security issues.

Statistical Tools

Chi-square 'X^2' test was used for the above table

Findings

The above table shows that There is no significant association between gender of the respondents and their overall perception about customer trust in fin-tech applications free from security issues. The calculated value is greater than the table value. Hence the research hypothesis is rejected and null hypothesis is accepted.

Linear Regression

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.093[a]	.009	.000	3.72369

a. Predictors: (Constant), Age

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.149	1	14.149	1.020	.314[b]
	Residual	1636.176	118	13.866		
	Total	1650.325	119			

a. Dependent Variable: customer trust in fin-tech applications

b. Predictors: (Constant), Age

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Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	13.262	.988		13.422	.000
	Age	-.229	.226	-.093	-1.010	.314

a. Dependent Variable: customer trust

Research Hypothesis

There is a significant relationship between age of the respondents and their overall perception about customer trust in fin-tech applications free from security issues.

Null Hypothesis

There is no significant relationship between age of the respondents and their overall perception about customer trust in fin-tech applications free from security issues.

Statistical Tools

Linear Regression test was used for the above table

Findings

The above table shows that There is no significant relationship between age of the respondents and their overall perception about customer trust in fin-tech applications free from security issues. The calculated value is greater than the table value. Hence the research hypothesis is rejected and null hypothesis is accepted.

Discussions

The phrase "FinTech" describes the application of advanced technology and digital innovation to improve, scale, and automate financial services for the advantage of investors, consumers, and enterprises. Understanding client needs and designing products to meet those needs is crucial for a business. In order to provide clients with a seamless delivery experience, most banks are currently implementing or partnering with FinTech services. The current study aims to determine the elements impacting customers' perceptions of FinTech adoption and how these perception determinants are affecting their happiness in order to comprehend the evolving FinTech landscape in India. Perceived utility, usability, and service trust were used to measure perception factors for the current study.

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According to normalized regression weights, the results also showed that perceived usefulness had the biggest effect on customer happiness. This outcome shows that the most important characteristics are service flexibility and design in accordance with client needs. Overall, the survey found that when FinTech offers benefits like accessibility, ease of use, flexibility, safety, and security, users are more satisfied with the services.

It is recommended that banks try to improve the functioning of FinTech services in order to appeal to a larger spectrum of clients. Similarly, the process of using FinTech services to make a purchase must be easy for users.

The results demonstrated the importance of trust in fostering consumer pleasure. Therefore, it is advised that banks, financial services, and FinTech companies concentrate on gaining the trust of their clients by paying particular attention to customer security concerns and content transparency.

In order to benefit from FinTech's current technological advantages and enhance the quality of high-tech application services, banks must fortify their collaboration with the company. This will help to improve customer experiences. Through this collaboration, banks can use advanced technology to improve client access and expand their offerings at a reasonable cost.

Although the goal of this study has been achieved, it has limits because it hasn't taken into account several other elements that could have an impact on FinTech customer service. These include the financial resources of the clients, the dangers associated with using the service, and the kind of IT platform that is being used. However, the study is cross-sectional, meaning that data was only gathered once. The longitudinal study can be used in future studies to assess the effects of FinTech service usage before and after.

Conclusion

The fin-tech business is built on trust, and maintaining that trust requires data security and privacy. Fin-tech businesses are prime targets for hackers because they manage enormous volumes of financial and personal data, including transaction histories and bank account information. A single data breach has the potential to destroy a company's reputation and undermine customer trust. Fin-tech businesses may provide a safe atmosphere where clients feel comfortable disclosing their financial

information by placing a high priority on data privacy and security. This will encourage long-term loyalty and allow for sustained growth.

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