UNLEASHING THE IMPACT OF FINTECH ADOPTION BY COMMERCIAL BANKS: A DYADIC APPROACH THROUGH TECHNOLOGY DRIVEN INNOVATION THEORY

Rifa Tamanna Chowdhury

Institutional affiliation(s)-Student of School of Business, East Delta University, Chattogram Bangladesh

ABSTRACT

The banking sector has been enduring a rapid evolution with the growth of fintech products. Fintech products (FTPs) are innovative methods that use technology to enhance financial services and provide customers with innovative products and services. There is hardly found any research in aspects of customers and employee perspective. Therefore, this research paper explores impacts of fintech products in financial and non-financial performance in banking industry in Bangladesh on aspects of customers and employee perspective. To conduct the research, Technology Driven Innovation (TDI) theory is employed. Technology Driven Innovation is essential for banking industry as it qualifies banks to develop customer experience, to be competitive and overcome emerging encounters and unveil new opportunity for expansion & growth. To investigate the research, primary data is employed as quantitative method. Smart PLS 4.0 is utilized to run the analysis. In findings, perceived usefulness and perceived difficulty of use of FTPs have significant relation with firm performance. Perceived usefulness of use of FTPs is highly related to customer satisfaction as well as Firm performance. Similarly, perceived difficulty of use of FTPs is related with service quality and work efficiency.

KEYWORDS- *Customer Satisfaction, Fintech, Fintech Product, Service quality and Work Efficiency.*

01. INTRODUCTION

Fintech is indeed a mix of innovative services and ideas in globe which is provided by companies utilizing technologies for communication and information. Fintech (Financial technology) also defines new technologies that are focused on enhancing and optimizing the delivery and use of financial services by organizations. (Islam et al., 2021) Cloud computing, Big Data and Artificial Intelligence (AI) are also incorporated with FinTech. (Zhao et al., 2019) . Fintech is currently being utilized extensively in all aspects of e-commerce.

Especially in past years, financial organizations all over the globe, notably banks and investment organizations, have become more dependent on such high-tech functions. This trend can be seen in both developed and developing countries. It has been observed that the financial institutions are interacting with this idea of FinTech more often because it is convenient. Because of globalization, there has been a growth in the number of international transactions and consumers are progressively preferring to conduct virtual transaction (Islam et al., 2021). Fintech is an industry that concentrates on the use of newly developed technology in conventional financial services, and it is quickly becoming an essential component of the expansion of the financial sector.

In this circumstance, the financial firms in Bangladesh are literally falling more and further behind (Islam et al., 2021). However, government is taking different initiatives to endorse fintech rapidly.

1.2 Problem Statement

Many scholars have focused their interest on FinTech products as well and the effect those products have on the overall performance of banks (X. Chen et al., 2021; Wang et al., 2021a; Yao & Song, 2021; Yin et al., 2022). For instance, we can say – Mobile banking and internet banking, machine learning and also cybersecurity. Furthermore, lots of researcher evaluated bank performance in different way but ROA, ROE and survey are most frequent methods (X. Chen et al., 2021). This research study will evaluate commercial banks non-financial and financial performance in Bangladesh. According to the best of the authors' knowledge, no research has yet tended to focus on the preconceptions of both the customers and the employees, particularly in the context of commercial banks in Bangladesh considering the fact of perceived usefulness and the perceived difficulty use of fintech products and their impacts in bank performance in both financial and non-financial sector.

1.3 Research question and objective
RO: To investigate the factors influencing the role of fintech product in the financial and non-financial performance in banks in Bangladesh (From customer and employee point of view)

2.LITERATURE REVIEW
2.1 Fintech revolution and its application in different industry:
Fintech industries use technology to provide brand new and creative financial products and services, frequently more affordably and conveniently than classical financial institutions. According to (Acar & Çitak, 2019; Gai et al., 2018) Fintech is also used in peer-to-peer leading (P2P), third party payments, distributed ledger technology as well (Acar & Çitak, 2019). (Ramlall, 2018) defined Fintech refers to applying new challenges such as AI, blockchain, and big data to the financial sector so that these technologies can endorse rising business models, progressive product services, and creative technology implementation. In this interpretation, this segment will inaugurate the fintech revolution and its application in financial industry.

2.2 The use of fintech in financial industry
Blockchain Technology
Another significant technological advancement is blockchain. Based on the most popular interpretation, it is an accessible decentralized database where transactions are carried out in an anonymous manner. Simply described, a blockchain is a shared data automation system (Martinčević & Klopotan, 2020). A lot of authors discussed about blockchain technology in different way. (M. A. Chen et al., 2019) explained blockchain is a shared ledger technology for example bitcoin and also additional blockchain technology with fundamental financial facility. He also added that blockchain is the fast-growing fintech innovation and had significant future promise in financial service. Blockchain is the game changer for fourth industrial revolution (D. Lee & Chuen, 2019.).

Bitcoin and Cryptocurrency
Early in 2009, when the first Bitcoin block was formed, the world witnessed a transition that few could have anticipated (D. Lee & Chuen, 2019.). Surprising to many, the creation of the resulting Bitcoin network—with a capital B to designate it from the tiny b for the digital currencies it generates, bitcoin—started a global change remarkably similar to what the Internet did (Lee 2015a and 2015b). In 2017, its current market value was USD40 billion (D. Lee & Chuen, 2001.).

2.3FTPs in Commercial Bank in Bangladesh
Automated Teller Machine (ATM)
Customers can access their bank accounts via automatic teller machines which is known as ATMs. It is a self-service bank device, without the assistance of a bank teller or bank employee.

RQ1. What is the impact of fintech product from customer point of view in financial and non-financial performance in commercial banks of Bangladesh.
RQ2. What is the impact of fintech product from employee perspective in financial and non-financial performance in commercial banks of Bangladesh.

They serve to facilitate financial transactions and are available around-the-clock to assist users with cash withdrawals, cash deposits, money transferring, checking account balances, and printing statement of accounts. They are established in quick and easy areas like retail establishments, financial facilities, grocers, shopping centers, and petrol stations (Qadrei & Habib, 2009). However, over the last ten years, customers have grown increasingly dependent on and comfortable with the competence of automatic teller machines (ATMs) to satisfy their banking requirements in a time and space-efficient manner (Rumman et al., 2020).

Mobile Banking
The term "mobile banking" refers to a system that enables customers of a financial institution to carry out a variety of financial transactions through the use of a mobile gadget such as a mobile phone or personal digital assistant. Mobile payments, on the other hand, entail the use of a mobile device to pay for products or services whether at the point of sale or online. Mobile banking is not the same thing as mobile payments. SMS banking was one of the first types of mobile banking services available, and it was provided to customers through text message. In 1999, when the first smart phones that supported WAP and allowed users to access the web from their mobile devices were released, the very first European banks began providing mobile banking services to its clients using these devices (Bangladesh Bank, Information on Mobile Banking 2021)

Perceived Usefulness of Fintech product (FTP)
Flexibility is a potential factor for considering characteristics to make anything straightforward and accessible for customers. This serves as an initial variable that helps determine customer satisfaction and allows for a better understanding of the user's usage intention (Zhang & Kim, 2020). A psychological state of client satisfaction is produced because of a positive response from the consumer. Explain to them that when their feelings go above their expectations, they feel an overwhelming sense of contentment and joy. Firms who are able to meet the demands of their consumers are rewarded with a number of competitive advantages (M. A. Chen et al., 2019).

Theoretical Framework
Technology Driven Innovation Theory (TDI)
Technology Driven innovation (TDI) theory is a theoretical framework that illustrates how technological developments generate creativity in different sectors. According to the theory, the advancement and implementation of new technologies may

result in substantial changes to different business operations, goods, and services (Lyn and Heinz,1992) (Maarse & Bogers, 2011).The key component of TDI is the advancement and adoption of modern technologies, the innovation of new business strategies and models and the development of new ecosystems & markets. (Lyn and Heinz,1992) suggested that in summary, Technology Driven Innovation (TDI) theory provides a framework for analyzing how technology can stimulate creativity in various sectors, including the banking industry, whereas the acceptance of fintech products and services has contributed to significant changes in customer experiences, business procedures, and dynamic of the market. . Technology has also played a crucial role in enhancing the security of banking transactions. Advanced security technologies such as biometrics and two-factor authentication have helped to reduce fraud and increase customer confidence in online banking. technology-driven innovation theory has been critical in enabling banks to remain competitive in an increasingly digital world. Banks that have embraced technology and innovation have been able to enhance customer experience, reduce costs, and over all a good financial performance. Nevertheless, In the banking industry, technology-driven innovation has played a crucial role in transforming the way banks operate and deliver services to their customers. Technology has led to the automation of many banking processes, reducing the need for manual intervention and improving operational efficiency. Banks are now able to process transactions more quickly, accurately and at a lower cost, it is nothing but blessings of advanced analytics and machine learning algorithms. banks to offer a range of innovative services and products to customers. For instance, mobile banking apps have made it easier for customers to manage their accounts and conduct transactions on the go. In addition, online platforms have enabled banks to offer new products, such as digital wallets, peer-to-peer payments.

Construct of the study
The proposed model shows that Perceived Usefulness and Perceived difficulty of use have direct influence on Firm Performance. whereas perceive usefulness directly impacts customer satisfaction and service quality and intended to influence firm Performance. Again, perceived difficulty of use directly impacts customer satisfaction, service quality and work efficiency and intended to influence firm Performance. Whereas customer expectations of assistance is influenced by perceived usefulness and perceived difficulty of the and has no impact of firm Performance.

3. METHODOLOGY
3.1 Research Methodology
This research was conducted by quantitative research methodology and followed primary data collection. All the questions were collected by previous research and carefully developed. There are two types of questionnaires – Employee perspective and Customer perspective. All questionnaires were collected from (X. Chen et al., 2021) (Sharma & Sharma, 2019) (Kaddumi, 2020)

3.2 Data Collection & Period
Here, we used Google Form to collect data from respondents which is a tool for managing surveys that allows you to make questionnaires. Because of certain constraints, the questionnaire was sent through traditional mail, social media sites, and digital peer-to-peer networks. In some banks in Chittagong, surveys were done offline at a time that was convenient. the survey started on 27th March ,2023 and ended on 4th April ,2023. The survey was built in English so that everybody can understand. All questions were evaluated on five-point Likert scale where ranging 1 (strongly disagree) to 5 (strongly agree).

3.3 Questionnaire Design
For customer perspective questionnaire, there were total thirty-eight questions. In first section, we developed four questions for demographic information about customer. In second section, there were twelve questions for perceived usefulness. In third section, we set seven questions for perceived difficulty of use of fintech products. In fourth, fifth and sixth sections, we constructed total fourteen questions for customer satisfaction, customer expectation of assistance and customer trust issue towards using of fintech products.

For employee perspective there were in total thirty-three questions were constructed in seven sections. Demographic part is in the first section to collect respondents' gender, age, designation in bank and work experience. In second section , there were seven questions for perceived usefulness. In third section, we developed four questions for perceived difficulties of use of fintech products for customers. Additionally, in fourth, fifth, sixth and seventh section there were total eighteen questions to measure service quality, service efficiency and financial performance in bank.

3.4 Sample Size
The ethical procedure for research was carefully observed when the survey was conducted. The anonymity and confidentiality of the respondent's information were ensured for the survey. It highly recommends against writing the responders' names, emails, and other identifying identifiers to maintain authenticity.

We got total 320 respondents including 142 customers and 178 employees. All the respondents completed their survey.

Employee Perspective

Table Demographic Profile

Gender	Male 71.3% Female 28.7%
Age	18-30 years 12.4% 31-40 years 28.1% 41-50 years 37.6% 51 years and above 21.9 %
Experience	1-5 years 9% 5-10 years 34.3% 10-15 years 36 % 15-20 years 18% More than 20 years 2.8 %
Designations	Head of Branch 6.7% Operational manager 7.3% Customer service officer 9.6% Credit in charge 6.2% Others 70.2%

Customer's Perspective

Gender	Male 57.7% Female 42.3%
Age	18-30 years 62% 31-40 years 10.6% 41-50 years 16.2% 51 years and above 11.3 %
Experience of holding bank account	1 year or less 31% 1-5 years 31.7% 5-10 years 21.1% More than 10 years 11.2 %
Occupation	students 45.1% businessman 9.2% job holders 25.4% housewife 8.5% Others 11.8%

Customer questionnaire illustrates that in demographic section respondent age of 18-30 responded 62% (88) then age 41-50 is 16.2% (23) and age 51 and above is 11.3% (16) then 31-40 is 10.6% (15). That means, age 18 to 30 people are mostly interested about FTP and use of FTP among all age people. In this survey, females participated 42.3% (60) and males participated 57.7% (82) among all respondents. If we talk about occupation then mostly are students of 45.1% (64), job holders are 25.4% (36), businessman 9.2% (13), housewife 8.5% (12) and others (pilot, doctors, army officer, engineer (ETC) are 11.8**%.** Moving forward, participants hold bank account most from 1-5 years 31.7% (45), 1 year or less is 31%(44), 5-10 years is 21.1% (30) and least is 10 years & above is 16.2% (23).

Employer questionnaire shows that most of the participant are from age 41-50 years of 37.6% (67); 31-40 years is 28.1% (50); 51- above is 21.9% (39); lastly 18-30years is 12.4% (22). That

means, most respondents are experienced in this sector. In this survey, males participated in 71.3% (127) and females are 28.7% (51). Different designation people participated in survey. Among them, 12 head of brunch responded with 6.7%, about 7.3% were operational manager in 13, Customer service officer were 17 with 6.2% and major portion of our data is collected from others in 70.2% where Vice President, Additional Operational Manager, Assistant Vice President, Probationary Officer, Customer Relationship Manager, Senior Executive Officer, Management Trainee, Deputy Governor, MTO responded. With 64 participants, group of 10-15 years' experience shows 36%; 61 responded group of 5-10 years in 34.3% and 1 to 5 years' experience respondents are 9% in 16. On the other contrary, 15-20 years group shows 18% with 32 respondents; 1-5 years group of people shows 9 % with 6 respondents and 20 years & above, the most experienced among the group shows less in 2.8% with only 5 participants.

04 FINDINGS AND RESULTS
4.1 Data Analysis
To evaluate the hypothesized links in this research work, the study employs the method of partial least-squares structural equation modelling (PLS-SEM) and utilizes the advantage of the smart pls 4.0 software (Hair et al., 2013). The use of PLS-SEM is justified since it is more suited for this research's prediction-oriented model to investigate the casual association between numerous variables (Hair et al., 2014). The model developed in this research has undergone testing employing a method of analysis known as the "two-stage approach," as recommended by X. The first step involves the evaluation of the outer model, also known as the measurement model, which includes an assessment of the reliability and validity of the items. In the second stage, the path coefficient is estimated to establish the structural connection.

4.2 The Assessment of Measurement Model
The model fit was assessed through the proposed model's standardized root mean square residual (SRMR). This indicator represents the root mean square variation between the correlations that were observed and the implied correlations of the model. The result of 0.121 (estimated model) and 0.128 (Saturate model) indicate an appropriate fit of the model as the given threshold level suggested by (Henseler et al, 2016) is 0.008. The measurement model's inspection of the adequateness of measures and item reliability was conducted through examining the impact of the measures on their corresponding constructs. All Cronbach's alpha values were greater than 0.7 except one variable and all of the composite reliability values were greater than 0.8. Consequently, all constructs are reliable without one. To assess the reliability of each construct , the Composite reliability Index (CRI). The CRI is higher than 0.7 for all components (Hair et al, 2016). They were confirming its reliability.

Table Psychometric properties of the variable

| Constructs	Items	Item loading	Cronbach Alpha	CR	AVE
CUSTOMER SATISFACTION	CS33	0.784	0.824	0.877	0.588
	CS44	0.810			
	CS55	0.747			
	Cs11	0.693			
	Cs22	0.797			
Customer Expectation of Asst.	CEoA1	0.770	0.771	0.868	0.687
	CEoA3	0.840			
	CEoA4	0.874			
Firm Performance	FP1	0.649	0.868	0.899	0.562
	FP5	0.729			
	FP6	0.761			
	FP7	0.746			
	Fp2	0.812			
	Fp3	0.861			
	fp4	0.670			
Perceived Difficulty of Use	PDU1	0.739	0.838	0.885	0.606
	PDU2	0.811			
	PDU3	0.799			
	PDU4	0.759			
	PDU5	0.782			
Perceived Usefulness	PU22	0.734	0.775	0.848	0.529
	PU33	0.624			
	PU66	0.745			
	PU77	0.816			
Service Quality	SQ11	0.809	0.852	0.894	0.628
	SQ22	0.852			
	SQ33	0.726			
	SQ44	0.770			
	SQ55	0.801			
Work Efficiency	WE2	0.886	0.514	0.741	0.538
	We1	-0.205			
	we3	0.888			
	we4	0.731			
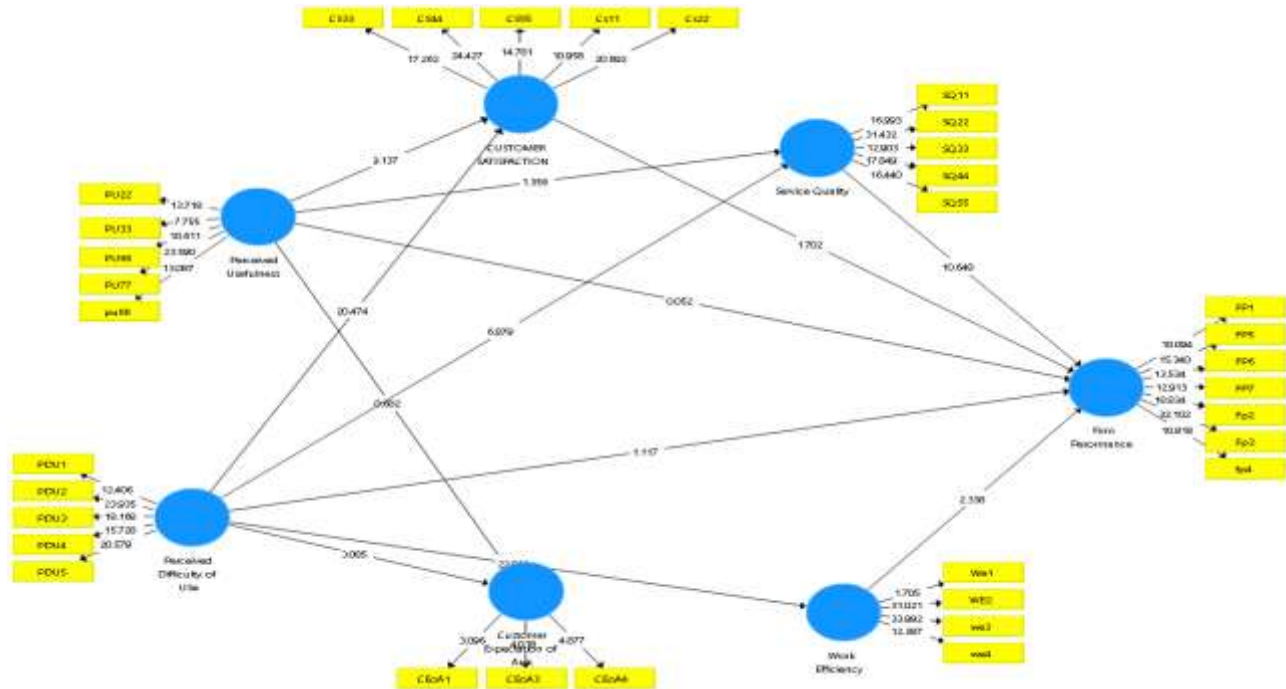
Figure Measurement Model

The Assessment of Structural Model

The proposed model's casual relationships are tested by employing the bootstrap method. All of the hypothesized relationships without customer satisfaction <- firm performance (H1), Perceived Difficulty of Use -> Customer Expectation of Asst (H3), Perceived Difficulty of Use -> Firm Performance (H4), Perceived Usefulness -> Customer Expectation of Asst. (H8), Perceived Usefulness -> Firm Performance (H9), Perceived Usefulness -> Service Quality (H10) have been found significant. Because, in H1, customer satisfaction and firm performance has been assessed statistically and found insignificant as P value is 0.089 which is higher than 0.05, B value is 0.157 and t value is 1.702. Again, H3, Perceived Difficulty of Use and Customer Expectation of Asst were examined statistical test and found P value 0.932, b value 0.017 and T value 0.085. as p value is higher than 0.05 oh H3, it is not supported here. H4, Connection between

Perceived Difficulty of Use and Firm Performance have been measured statistically and P value is 0.264, b value is 0.085 and T value is 1.117 that means this hypothesis is not supported for the higher range of P value. Additionally, H8 and H9 relation between Perceived Usefulness & Customer Expectation of Asst and relation between Perceived Usefulness & Firm Performance have been tested statistically and established the value respectively p value 0.495 & 0.948, b value is -0.128 & -0.002 and T value 0.682 & 0.052 which means P value is higher in range and consequently these two hypothesis H8 and H9 are not significant. Lastly, relationship between Perceived Usefulness & Service Quality examined statistically and developed (P value 0.175, b value 0.142 and t value 1.356) which determines that this hypothesized relationship is insignificant as P value is more than 0.05.

Table R Square

	R Square	R Square Adjusted
CUSTOMER SATISFACTION	0.941	0.940
Customer Expectation of Asst.	0.013	-0.001
Firm Performance	0.969	0.967
Service Quality	0.653	0.648
Work Efficiency	0.605	0.602

Table Path Coefficient and testing of hypothesis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Value	P Values	Hypothesis
H1. CUSTOMER SATISFACTION -> Firm Performance	0.157	0.153	0.092	1.702	0.089	Not supported
H2. Perceived Difficulty of Use -> CUSTOMER SATISFACTION	0.689	0.688	0.034	20.474	0.000	Supported
H3. Perceived Difficulty of Use -> Customer Expectation of Asst.	0.017	0.016	0.197	0.085	0.932	Not supported
H4. Perceived Difficulty of Use -> Firm Performance	0.085	0.088	0.076	1.117	0.264	Not supported
H5. Perceived Difficulty of Use -> Service Quality	0.691	0.693	0.100	6.879	0.000	Supported
H6. Perceived Difficulty of Use -> Work Efficiency	0.778	0.780	0.034	22.822	0.000	Supported
H7. Perceived Usefulness -> CUSTOMER SATISFACTION	0.329	0.330	0.036	9.137	0.000	Supported
H8. Perceived Usefulness -> Customer Expectation of Asst.	-0.128	-0.142	0.188	0.682	0.495	Not supported
H9. Perceived Usefulness -> Firm Performance	-0.002	-0.001	0.040	0.052	0.958	Not supported
H10. Perceived Usefulness -> Service Quality	0.142	0.143	0.105	1.356	0.175	Supported
H11. Service Quality -> Firm Performance	0.635	0.646	0.060	10.648	0.000	Supported
H12. Work Efficiency -> Firm Performance	0.164	0.152	0.070	2.338	0.019	Supported

On the other contrary, in H2 influence on Perceived Difficulty of Use has direct and positive impact on & CUSTOMER SATISFACTION. In H5, Perceived Difficulty of Use has positive and direct impact on Service Quality (p value 0.000, b value 0.691 and t value 0.6879) . When customer face difficulties using fintech products they will need more support from bank employee. As a result, bank employees have to give attention to so many clients which leads their lower service quality. Thus, perceived difficulty of use and service quality has direct and positive relationship. Simultaneously, in H6 influence on Perceived Difficulty of Use has positive and direct relationship with Work Efficiency (p value 0.000, b value 0.778 and t value

22.822) In H7, influence on Perceived Usefulness has direct and positive impact on customer satisfaction (p value 0.000. b value 0.329 and t value 9.137). when the customer has a more positive opinion of how useful using fintech services is, they are also more likely to have a more positive attitude overall. Hence, the relationship is positive and supported. Repeatedly, In H10, Perceived usefulness and Service quality has direct and positive relationship where p value 0.175 b value 0.142 and t value 1.356. The ease of use of fintech services can influence client engagement. Due to its importance, the service will improve service quality and user efficiency. So, the hypothesis is significant. Again, Service Quality and Firm Performance (H11)

has positive and direct relationship as p value is 0.000, b value is 0.635 and t value is 0.648. when a bank gives good service to its customer, customer gets satisfied for the service quality and more customers as a result attracted to this bank. Thus, banks profitability increases. so, Service Quality is positively related to Firm Performance. In H12, Work Efficiency has positive and direct relationship with Firm Performance as p value is 0.019, b value is 0.164 and t value is 2.338. Banks with high satisfied

Discussion
This article's proposed conceptual model was applied to measure and consider the findings suitable. The recent study allows the acceptance of constructs – Service Quality (SQ), Customer Expectation of Assistance (CEoA), Customer Satisfaction (CS), Work Efficiency (WE) and firm Performance (FP) are connected to measure financial and non-financial performance in banking industry. The coefficient of determination (R^2) for CS, CEoA, FP, SQ, WE are 9.41%, 0.13%, 9.69%, 6.53% and 6.05% respectively which indicates significant degree of explanatory power.

The key purpose of the research is to determine the relationship of customer satisfaction, perceived usefulness, perceived difficulty of use, customer expectation of assistance, work efficiency, service quality influence with firm performance. all hypothesis got acceptance without customer satisfaction <- firm performance (H1), Perceived Difficulty of Use -> Customer Expectation of Asst (H3), Perceived Difficulty of Use -> Firm Performance (H4), Perceived Usefulness -> Customer Expectation of Asst. (H8), Perceived Usefulness -> Firm Performance (H9), Perceived Usefulness -> Service Quality (H10).

From the analysis H1, relationship between customer satisfaction and firm performance is insignificant as P value is greater than 0.05. In H2, connection between Perceived Difficulty of Use and CUSTOMER SATISFACTION is direct and positive. In H3, relationship between Perceived Difficulty of Use and Customer Expectation of Asst is not supported as p value is greater than 0.05 and the value is 0.085. Repeatedly, in H4, influence on Perceived Difficulty of Use and Firm Performance is not supported as p value is 1.117 which is greater than 0.05. thus, this is not significant. Perceived Difficulty of Use has positive and direct impact on Service Quality (H5) when consumers find fintech product is difficult at using while doing transaction their money they need assistance from bank employee. Thus, The employees

employee will more productive than any other institutions. Satisfied employees in bank work harder, understand bank's situation, knows how to handle the customers, and assists them in their needs. As a result, banks will be assessed by their customers and employee for their higher work quality. Thus, consumers will be more satisfied and attracted to bank which leads their higher profitability. So, this hypothesis supported, and Work Efficiency has positive and direct relationship with Firm Performance.

are required to allocate their focus towards a multitude of clients who are encountering difficulties with fintech products. Consequently, the quality of their service decreases. Moving forward to H6, influence on Perceived Difficulty of Use has positive and direct relationship with Work Efficiency where p value 0.000, b value 0.778 and t value 22.822. Specially, situations in which consumers encounter difficulties in using fintech products during their transactions, they may require increased support from bank workers. As a result, the increased workload placed on bank employees may lead to a rise in work-related stress, potentially restricting their ability to perform the rest of their tasks with optimal efficiency. This hypothesis is accepted in a good way. So, the H7 proved that perceived usefulness and customer satisfaction has positive connection. It was found that relationship between Perceived Usefulness and Customer Expectation of Asst. in H8, is not supported as P value is 0.495 which higher than 0.05. Thus, result founds this hypothesis insignificant. Same as H9, Perceived Usefulness and Firm Performance relationship is not supported and insignificant as P value is 0.958. Findings found relationship between Perceived Usefulness and Service Quality in H10 has positive and direct relationship. In H11, influence on Service Quality with Firm Performance has positive and direct relationship. When a bank provides excellent service to its clients, those consumers feel satisfied with the level of service they have received, which in return attracts an increased number of potential consumers to the bank. It ends up resulting in an increase in the profitability of the bank. Work efficiency and firm performance has positive and direct relationship as findings. Employees at a bank who are delighted with their jobs put in greater effort to understand the current situation at the bank, can deal with clients, and assist customers with their various requirements. Because of this, clients are going to evaluate the banks' level of work based on its high standard of excellence. As a result, customers will have a better level of satisfaction and will be more attracted to the bank, which will lead to the bank having a higher level of profitability. So more the service quality, more the firm performance can achieve positively

05. CONCLUSION, POLICY IMPLICATIONS AND LIMITATIONS

5.1 Conclusion

The objective of this research is to assess the effects of perceived usefulness (PU) and perceived difficulty (PD) of fintech products (FTPs) on both financial and non-financial performance indicators (namely, customer satisfaction, service quality, customer expectation of assistance, and work efficiency) of commercial banks in Bangladesh. To achieve this goal, total of twelve hypotheses have been proposed and seven hypotheses accepted. This paper examines the distinct variables that influence firm performance individually. One of the most notable contributions is the evaluation of banks' non-financial and financial performance from the viewpoints of both customers and bank employees. In order to ensure the success of a firm, it is imperative to assess both financial and non-financial factors. The present research paper reports on the measurement of customer and employee acceptance of fintech products, specifically examining the extent to which they have adopted these products and their willingness to do so. The study explores the benefits and challenges of fintech products, focusing on enhancing bank employees' work efficiency through high-quality customer service and ensuring consumer satisfaction and security. It emphasizes the importance of preventing cyber-attacks and unauthorized disclosure of personal information to maintain customer loyalty. The research recommends the government promote younger generations' involvement in financial technology education to encourage future innovations. The study concludes that fintech products can advance due to consumer and staff adoption and survival of the fittest, as they play a significant role in the financial industry.

5.2 Theoretical Implications

Technology-driven innovation (TDI) is a trend in the banking industry, with fintech products like ATMs, mobile banking, and digital payments becoming increasingly popular. TDI emphasizes the importance of technological advancements for bank employees to maintain efficiency and customer satisfaction. If customers understand and use fintech products effectively, it will make it easier for bank employees to perform their tasks efficiently. This, in turn, will lead to quality service, satisfaction, and positive financial and non-financial performance. However, if customers and bank employees are resistant to technological advancements, it can negatively impact the organization's financial and non-financial performance. Therefore, understanding FTPs is crucial to maintain a balance between financial and non-financial performance in banks.

5.3 Practical Implication

Financial technology is crucial for various industries, including banking. It can enhance banker and customer relationships by enhancing efficiency and quality of service. Banks should employ more fintech products, hiring expert teams to handle related issues. This will help bankers provide better assistance to customers, ensuring transactions and account-related problems are handled efficiently. Additionally, banks should use secure databases to protect consumer personal data. Bankers should encourage customers to use fintech products, as adopting them will lead to increased engagement and experience. R&D departments should focus on updating banks to stay modern and prevent theft.

5.4 Limitation and future Research Direction

This study has some limitations. Such as, in this study, data was collected through online and offline. Online data was collected through Google Form. Face to face survey or focused group discussion could be an option for better collecting and understanding data. Geographic limitations also included. We collected data only from Chittagong based banks, some of Dhaka based. If data can be collected all over from Bangladesh, the better data and situation can be researched. There are also can be added more factors without our factors. We used Smart PLS 4.0 to analysis the data. There are plenty of techniques to analysis data, can be used here as well. We collected total 320 data where more than these can be collected. From our model the mediating effect can be focus for future research. We focused on financial and non-financial performance in banking industry where other industry like - hospitals, hotels, apparel and manufacturing industries can be also added for new research.

REFERENCES

1. *Acar, O., & Çitak, Y. E. (2019). Fintech Integration Process Suggestion for Banks. Procedia Computer Science, 158, 971–978. https://doi.org/10.1016/j.procs.2019.09.138*
2. *Akpan, I. J., Soopramanien, D., & Kwak, D. H. (2021). Cutting-edge technologies for small business and innovation in the era of COVID-19 global health pandemic. Journal of Small Business and Entrepreneurship, 33(6), 607–617. https://doi.org/10.1080/08276331.2020.1799294*
3. *Alt, R., Beck, R., & Smits, M. T. (2018). FinTech and the transformation of the financial industry. In Electronic Markets (Vol. 28, Issue 3, pp. 235–243).*
4. *Springer Verlag. https://doi.org/10.1007/s12525-018-0310-9*
5. *5. Amity University, Amity University. Amity Institute of Information Technology, Institute of Electrical and Electronics Engineers. Uttar Pradesh Section, & Institute of Electrical and Electronics Engineers. (2018.). ICRITO'2020 : IEEE 8th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) : conference date: 4-5 June 2020 : conference venue: Amity University, Noida, India.*
6. *ATMs of Banks: Fair Pricing and Enhanced Access. (2021.).*
7. *Bernhardt, K. L., Donthu, N., & Kennett, P. A. (2000). A Longitudinal Analysis of Satisfaction and Profitability (Vol. 47).*
8. *Bömer, M. (2018.). Competitiveness of Fintech: An Investigation into Dif-ferent Levels of Competitiveness Using Young Enter-prises from the Financial Technology Industry Inaugural-Dissertation.*
9. *Chen, M. A., Wu, Q., & Yang, B. (2019). How Valuable Is FinTech Innovation?*

10. *Yin, F., Jiao, X., Zhou, J., Yin, X., Ibeke, E., Iwendi, M. G. P., & Biamba, C. (2022). Fintech application on banking stability using Big Data of an emerging economy. Journal of Cloud Computing, 11(1). https://doi.org/10.1186/s13677-022-00320-7*

11. *YuSheng, K., & Ibrahim, M. (2019). Service innovation, service delivery and customer satisfaction and loyalty in the banking sector of Ghana. International Journal of Bank Marketing, 37(5), 1215–1233. https://doi.org/10.1108/IJBM-06-2018-0142*

12. *Zhang, L. L., & Kim, H. K. (2020). The influence of financial service characteristics on use intention through customer satisfaction with mobile fintech. Journal of System and Management Sciences, 10(2), 82–94. https://doi.org/10.33168/jsms.2020.0206*

13. *Zhao, Q., Tsai, P. H., & Wang, J. L. (2019). Improving financial service innovation strategies for enhancing China's banking*