A Study on the Business Transformation, Security issues and Investors Trust in Fintech Innovation

Rasika Patil1, S. Vijayakumar Bharathi2*
1,2Symbiosis Centre for Information Technology, Symbiosis International (Deemed University), Pune, Maharashtra, India

*Corresponding author: svkbharathi@scit.edu

Abstract
Financial Technology (Fintech) has attracted much attention and is increasing swiftly. The emerging technologies adopted by Fintech have made innovation a general term among the Financial Institutions and the Businesses using them. The techniques from data security to the deliveries of financial services are a few of the critical enablers of Fintech. This research is a descriptive study to understand Fintech Innovation’s impact in transforming the Businesses, the comprehensive benefits of Fintech, on how it has the edge over the Traditional Financial Institutions. The research also focuses on the exploratory study of the upcoming technologies adopted by Fintech and its critical issues that need to be addressed. It analyses the potential of this emerging technology by winning the Investors’ confidence and disrupting the market to venture into the Financial Industry. The research findings indicate the positive impact of FinTech in Transforming the Business and the trust factor that the Investors have gained on the innovation.

Keywords
Fintech, crowdfunding, P2P lending, Business transformation, Market Venturing

1. Introduction
The “financial technology” or the “Fintech,” which seemingly has got the most attention in the past decade, has transformed as one of the disruptors in the Financial Sector, is on the pace to gain the entire market focus. Fintech simply means Finance in collaboration with the technology creating the products and the services which support the Business Transformation and the ease of usage to the customers. Fintech has been evolving rapidly. Improving the services’ quality, cutting down the costs, and bringing in the diversity of services with the Financial Industry’s stability are the major focus areas that Fintech promises to bring in the industry and reshape financially and escape. Artificial Intelligence, Big Data, Big data analytics, and mobile embedded technologies are the backbone of Fintech, which are the technologies that form the combined strength for the development of Fintech. Fintech enables customer service automation with the help of chatbots and Artificial intelligence. These technologies can facilitate the customers with certain operations and brings down the staff. The industry offers a wide variety of digital financial services. However, it faces a number of security and privacy challenges; the reason being the IT systems in use creates a vulnerable environment. The challenges that Fintech should address are to maintain confidentiality, integrity, availability, and authorization. Trustworthy integration of the IT applications is impossible without addressing these issues. They are considered the most prominent challenges to address when it comes to measuring the performance of Fintech. The threats to the applications, the mechanisms to detect those threats, and the number of approaches to protect these applications and maintain privacy will be discussed as a part of the research study. Along with them, much research that has been an eye-catcher is the Blockchain Technology; the financial regulators are attempting to grab the opportunities enabled by Fintech by developing the regulatory measures.

The emerging technologies enabled by FinTech have augmented the new entrants in the Fintech Industry and the traditional competitors. These technologies include Artificial Intelligence, cognitive computing, and Machine Learning, to name a few. These technologies have the potential to reshape the Financial Industry. The investment in the financial sector has been growing immensely and gaining the investor’s trust over the years.
The evidence presented shows and the hype stage of Fintech. We can state the technology has positioned itself as a competitive player in the financial world. Artificial Intelligence and Machine Learning have contributed immensely to Fintech. Analyzing and helping people make rapid decisions over investment or critical business needs has been a blessing. Furthermore, the research analyses the security measurement, various other data-oriented techniques, and data processing, whether Fintech will be a disruptor in the future or not? We will also be discussing the services that are influenced by the Blockchain and other FinTech innovations. These services include the financial markets, investments, risk management, trading in stock markets, and Robo-advisory. The sourced information from the International organization of Securities Commissions Commission in 2017 reported a possibility of intersection between certain aspects of the Fintech enabled services. The services include lending, crowdfunding, trading and investments, and security. Hence there is a need for the innovation to look into such critical factors for its development.

1.1. Research Question

The main objective for carrying out this research is to analyze Fintech Innovation and the embedded technologies, how they help to transform a business to cope with the competitiveness in the market, does it prove to be secure enough. How it wins the Investors Trust, and does it have the potential to disrupt the Financial Industry [1].

1.2. Research Question

Based on the objective of the Research Study, a key question has been identified:

"Is FinTech having a significant impact on the Financial Industry, and does it have the potential to disrupt the market?"

The above question's answer will provide the intended information to resolve the research dilemma.

2. Literature Review

2.1. Evolution of Fintech and the approaches used by the Nations to tackle the Global Financial Crisis of 2008

Fintech being an ever-trending technology slowly disrupting the Finance Industry has been evolving for over a decade; the three major eras have been studied to define how the industry has grown over a while. Fintech 1.0, which started from 1866 to 1987, Fintech 2.0 from 1987 to 2008. Fintech 3.0 post the 2008 financial crisis. The most challenging era for Fintech was posting the financial crisis where the Financial Sector had to grow and develop in terms of the regulations, creating opportunities, and balancing the upcoming threats and the risks to provide security of the data. The entire Fintech 3.0 was public-driven based on the demands and the expectations of the consumers. Slightly different for the developing nations, precisely for Asia it was Fintech 3.5 where it just not had the tackle the ongoing crisis but had to develop more innovatively, the opportunities and the innovations had to be made, developing and filling the gaps between the current financial system and thinking about the future. Since it was an emerging smartphone era, new technologies relating to mobile communications had to be derived. Regulators had to focus on building a regulatory framework that supports innovation but does not threaten the financial industry's stability. Several approaches were employed by many other nations like the UK hired a principle-based approach that mainly focuses on the consumer protection protocol. In contrast, China employed the product-based approach with a two-tiered system. The finance companies monitored the small and medium transactions, while the huge institutional players managed the large transactions. In other cases, the regulators welcomed the new approach to competitive markets with diversity and allowed the markets to be more efficient. Approaches had yielded the opportunities and combat the risks. The post-financial crisis has proved to use Risk Management as an effective tool to deal with the Financial Crisis and decrease operating costs. It is not the best time to set it right now since there has been much experimentation to be done, innovative technologies and regulations approaches are to be made to set the regulation standards [2].

2.2. Emerging Technologies disrupting the Financial Sector

One of the new concepts, "depth of innovation," has also been studied by the researchers, which are useful to find how impactful innovation is and how far it can strive in the financial sector. The depth of innovation is categorized into surface, genuine, and foundation. More than half of the innovations come under the surface ones, which are not very huge. Genuine innovations have a slightly deeper innovation where many
factors are taken care of while creating them. Strengthening the infrastructure and fostering the Financial system are enabled by the foundation is the deepest and most significant Financial Innovation level.

There have been major factors that act as opportunities and force the Enterprises to make innovative products and services. Since [3] Fintech has entered into the markets, it provides two major areas for innovation.

- One can be a large amount of data of the people containing customer’s demographic and the psychographic information. Their spending patterns help create an Automated Investment Advisor using Machine Learning. Fintech Services are categorized to generate opportunities through ventures like efficient payment processes through e-wallets, peer-to-peer transactions, crowdfunding, Robo-advisor. These are some of the solutions that have opened opportunities in the Fintech Industry.
- With these, it also includes the Fraud Detection Techniques helping find real-time anomalies with timely responses, examining log files, and using the investigative tools to rebuild the links. Hong Kong being the leader during the GFC of 2008, which strategically tackled the crisis, was analyzed, and their approaches were adopted to strengthen the E-banking controls and advocate cybersecurity.
- Data-oriented techniques such as Big Data Analysis and data mining, big data processing. Data-oriented techniques such as big data processing play a major role because huge data and its processing and analyzing whether the transactions are genuine can overpower the human brain capacity. Hence, huge innovative protocols are required and are of huge scope in Fintech. One of the areas, which open opportunities in Frauds Detection and have a huge Future Scope.
- Much advancement has been made in the Risk Detection Explorations, Authentication and Access Control Methods, Data Usage Cycle Protection, Data Storage and processing, Risk Reduction, and Prevention. Other than these handling of the data while its analysis is being worked upon too [4].
- Since the Financial markets have extended their way to the Equity markets, it opens opportunities for balancing the securities issues and protecting the Investors from the risks of frauds. It also gives an area to provide the ease of access with a trustworthy environment for the Investors as the end-users (International Organisation of Securities Commissions, 2017).
- Artificial Intelligence and machine learning skills today help the investing methods with efficient decision-making processes through the market's best analysis. Fintech platforms have hugely benefitted the unbanked and the underserved consumers of the Banking Financial Systems.
- Blockchain technology is a one-stop solution for protecting ideas, encouraging the industry for its wide adoption.
- Data transmission, storage, and sharing over the network have been made possible by emerging technologies like Cloud Computing, IoT, and Virtualization, to name a few. It has been identified that the maintenance of hundreds of datasets that are generated daily is next to impossible. Hence looking at this as an opportunity, Fintech has adopted a larger IoT field to transform all the customer information into the cloud [5].

A survey shows how huge investments in start-ups have immensely increased from 2010 to 2015, which simply adds trust over the industry and the industry’s innovation to disrupt the market. Several Fintech applications, those of which are trending, have been studied. Examples: Mobile Finance and E-commerce, Fintech in Management. Fintech not just has a single branch. It is vigorously diversified and provides services in the areas such as Information Flow Optimization, Cloud Computing, and the smart city, etc. Since most of the payments are now done with smartphones’ help, much focus has been drawn over the smartphones as they are now in the frame as a new vulnerability to be exploited. For the vulnerabilities to be addressed, the government needs a strong regulation to avoid data breaches and illegal stealing of Consumer data. The key factors for Information security in Fintech Applications include maintaining the users’ authentication for trusted usage and reliability over the devices for the transactions. The Data Analytics Techniques huge requirement to analyze today’s business needs. Fintech applications are playing the facilitator’s role in assisting businesses [6].

There have been many concerns regarding humans being replaced by advanced technologies. On the contrary, the employees’ skills regarding the advanced analytics will enhance the human capabilities benefiting the Businesses will be a significant requirement that the Industry experts believe. Fintech does come with
several benefits, but there are several risks associated with them with the benefits. The new risk that revolves around the Regulators of not creating an environment such as over-regulation or under regulation has been worked upon constantly. The right balance between providing consumer protection and financial stability is an ideal requirement expected out of Fintech. With this, sufficient incentives for the Fintech Innovators must be simultaneously looked upon. Since many technologies have to be studied, with and its implementation still in process, the increase of cyber attacks by 2025, posing as a security threat to Fintech, has been predicted [7].

2.3. Hype for Fintech

The other question that arose why the phenomenon of Fintech occurred now? The traditional financial services lacked the potential to satisfy the customers. Increasing risks of frauds in the transactions, low performance, and the long procedures for getting the services. These were the factors that force the market to make innovative products. The supply and the demand drivers studied thus helped in the analysis, which was carried out during the 2008 financial crisis. The banks curbed back the lending activities, and the competitive Fintech entrepreneurs supplied the services at a lower cost with innovative services. There have been many Surveys conducted among the consumers who use Fintech Technologies. It has been observed that most people find these services easy to use, the personal mobility available, and also because of the usefulness [8].

2.4. Research Gaps

With the opportunities come potential problems, like frauds. Some of the factors that lead to the frauds’ exposure are Regulatory uncertainties, excessive compliance cost, big data overpowering the human brain, the technological skills required for the internal controls are lacking, and the loss of visible audit trails. In the usage of IoT, it can be seen that the data is not the only thing that is shared, but the sensitive information also gets shared, leading to a compromised state. It can be stated that, with the increase in the use of IoT, there is an exponential rise in the risks of cyberattacks. Data Encryption is very common to secure the data in the systems, but there have been cases where the data, while it is processing in many different systems during the transfer, gets leaked. It is also seen that MSMEs still do not use Fintech Services and the main reason found in the survey was the awareness gap, security issues, and no socialization, which would let them know the benefits to use the services [9].

3. Methodology

The research focuses on studying Fintech Innovation by analyzing its key technological innovations on how it succeeded in transforming the Businesses and how the Financial Industry gains trust among the Investors. The hype that has been created over the years under the name Fintech can standby and stabilizes the Financial Industry. Along with that, it helps the end-users gain trust over the Fintech applications to use them with ease and does not need to have concerns over the security issues. The research also focuses on getting the predictions over Fintech Technology’s future, along with the emerging innovative concepts that might upgrade the Financial Industry. The risks associated with the existing technologies are worth the transformation, or will they be faded with time. The research is limited to the scope of the financial services enabled by Fintech. It has a significant focus on the technologies to identify whether they can strive into the financial markets for long. This section of the study provides details on the research design, data collection, and the analysis methods used to conclude the Research topic.

This section of the research deals with the proposed design a shown in Figure 1 on how to plan the entire study and come up with the analysis. Research Design is nothing but a draft plan or a strategy used to research systematically. It helps provide a framework of how the data will be collected, who will be the samples for the data collection, and how the data analysis will be carried out [10].

3.1. Research Design

The research strategy elements for investigating the research question will involve a survey conducted through an online mode, precisely through a Google Form Survey Method for the collection of responses from the participants. The sampling methodology chosen for the study is the Purposive Sampling method because the researcher sincerely believes that there is a need for expertise in both the domain as well as technology for finding out how these experts perceive the usefulness of Fintech or what value additions can Fintech brings to the Traditional Financial Industry.
and Insurance. People will be identified who the Service Providers of Fintech or the Developers of Fintech people working on the Fintech Technology as experts, as well as the people who are currently exploring and studying the Fintech Innovation are, these people will be connected through social media platforms as well as through LinkedIn Profiles for the collection of data. They are identified as the sample for the data collection through an online survey.

The reason for choosing this type of research strategy is to evaluate the potential impact and the emerging innovative technologies giving back to the Financial Industry. The research design has proposed two studies, namely study 1, followed by study 2. Study 1 provides the analysis of the relationship and the difference in the respondents’ opinions participating in the survey using MANOVA. Study 1 study2, where the research objectives are studied and analyzed to fulfill or not use an ANOVA. Both the studies will be carried out, after which the inferences will be drawn for the research to be completed [11].

The type of questions asked in a survey would be closed-ended ones. The emphasis here is to study the situation through the questionnaire survey and collect the data to explain how Fintech impacts the Financial Industry and its challenges. The questions thus asked in the survey address the research objectives directly. The research objectives are to understand the Fintech services which has transformed the traditional financial services to meet the new technology-based modern services; the other objective is to find the benefits that have been produced because of the services, the last objective is to find out the critical factors that need to be addressed for the development of Fintech[12]. Table 1 presents the categorizations of the questions:

3.2. Research Choice

For this research, we will be using the Quantitative Method. We will use this method Quantitative Method to measure, categorize, and identify the patterns and make generalizations.

3.3. Data Collection Method

This section of the research deals with the methods deployed for Data collection. We will be collecting the Primary data as a part of our data collection method. The primary data, which is also known as the raw data is collected from the sources. In our research study, we will be carrying out a Survey on the people working in the Traditional Financial Industry and the experts in Fintech as working professionals or even the ones exploring Fintech; they will be identified as our samples or data sources [13].

3.4. Ethics Statement

While carrying out this research, ethical issues will be given significant importance. Confidentiality from the researcher’s side is a crucial requirement considering the nature of the Financial Industry. It can be assured that the information of the respondents will not be disclosed in any circumstances. The survey’s motive will be communicated to all the people before any research is taken place, which will give them time to consider the purpose and then consciously take part in the survey. The consent and confidentiality state-
ments will be issued for the research purpose. The anonymity of the respondents will be an added feature of the survey.

3.5. Survey

A Questionnaire Survey has been carried out, and responses are being collected. The process is in progress. The minimum sample size or the respondents for the survey to be carried out is 160. The questions were framed in such a way that they address the research objective directly. The research objective is to determine how financial technologies can transform the traditional domain of Banking Financial Services and Insurance. The purpose of the survey is to find the critical factors expected from Fintech that are to be addressed in the traditional domain. To what extent can Fintech augment the security and privacy concerns of the BFSI Sector? The type of questions asked in the survey is categorized as to how Fintech has brought-transformation, the benefits or the advantages of Fintech Services, and the critical challenges[14].

4. Analysis, Findings, and Interpretation

An online survey was conducted where primary data collection was the source of data. The survey was conducted on the 9th of June and was open until the 30th of June. One hundred sixty data samples were collected from the survey. The samples were collected from the people who are into Fintech; these include the Fintech Service Providers who are mainly working in start-ups and provide Financial Services to businesses. The sample was also collected from the Fintech Developers working into developing the services of Fintech. The sample was also collected from the Fintech Consumers; these consumers can be best known as those who use the Fintech Technologies and its features. In these, the Fintech enthusiasts who are carrying out study or research have been considered as well[15].

The sample segregation as shown in Figure 2 is as follows: Approximately 52% of the samples who responded are the Fintech Service providers, 26% of the respondents are Fintech developers, and 22% of the respondents are Fintech Consumers.

The respondents who are the service providers or the developers of Fintech have experience working in the Fintech Industry in Table 2. The minimum experience is 0-3 years working in the industry, and it goes

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Categorization of Survey Questionnaire.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Transformation</strong></td>
<td><strong>Benefits of the Fintech</strong></td>
</tr>
<tr>
<td>With the evolution of Fintech services, the mobility of people to the banks has been reduced. How much does this affect the bank's traditional model of extending the branches at every different location?</td>
<td>What do you think are the most important reasons for the customers to opt for Fintech services?</td>
</tr>
<tr>
<td>With the increase in the number of online financial transactions, can we assume that the consumers are open to adopting more Fintech services?</td>
<td>Do you agree that Fintech services have increased the access to the financial markets like Mutual funds, equity markets, systematic investment plans SIP by making the transactions easy and secure?</td>
</tr>
<tr>
<td>With the help of financial services available on a smartphone, do you agree that the inquiry and the approval of banks’ loans will become easy?</td>
<td>Do you agree that Fintech can bring the right balance in ease-of-access and the investor's protection in crowdfunding or peer-to-peer lending? (funding a project or venture by raising small amounts of money from a large number of people, typically via the Internet)</td>
</tr>
<tr>
<td>Do you think that development in Artificial Intelligence (Voice-based transactions, e.g., Alexa) will change the way we see Fintech now (application-based)?</td>
<td>Compared to traditional banking services, do you agree that Fintech technology has more potential in the long run?</td>
</tr>
</tbody>
</table>
beyond 10 years of experience in this sector. Out of the total data samples, approximately 60% of the respondents have approximately more than three years of experience in Fintech Services; they do not exactly mean that they have working experience but also poses experience of using the Fintech Services when considered as end-users [16]. The questions thus asked in the survey directly address the objectives of the research. The five-point Likert Scale was used in the closed-ended questions, ranging from “strongly disagree” to “Strongly Agree.

4.1. Data Analysis Tools and Methods

The sample data of 160 respondents have been received, and the analysis of the Survey data has been done using the one-way Multivariate Analysis of variance using the tool SPSS to identify whether there are any differences between the independent groups (in our case, they are the respondents) on more than one continuous dependent variables. The main objective of doing a statistical analysis of MANOVA is to determine the relationship between the respondents, whether they pose any similarity in the opinions regarding each other, or they completely differ in their perspective and understanding of Fintech. The other method is descriptive statistics. The Fintech enabled Business Transformation, its benefits, and the critical factors that need to be addressed according to the respondents will be inferred. This method uses a Quantitative approach to determine the Impact that Fintech has created after its adoption [16].

4.2. Data Analysis Strategy

The research initiative focuses on the respondents’ perspective and their opinions to determine the differences in their thoughts and thinking and their understanding of the Fintech Services, which is determined statistically using Multivariate analysis of variance. Since the data was collected and analyzed so that they had an Independent Variable with several Dependent variables to be isolated and analyzed, the extended version of ANOVA, which seems to be MANOVA, is used. The model is designed to understand the Independent Variable, and the Dependent Variables are explained in Figure 3.

The model explains the statistical approach to determine the relationship between the respondents who seem to be the Fintech Service Developers, Fintech Service Providers, and the Fintech Service Consumers. The opinions on the understanding and the transformation occurred after Fintech Services were introduced and the Benefits observed. Under Transformation factors, T1, T2, T3, and T4 are the Surveyed
questions that directly address the objective of determining whether the transformation is taking place in the Business after Fintech Innovation is used. Similarly, in the Benefit Factors, B2, B3, and B4 are the surveyed questions directly addressing the Benefits of the Businesses or the end-users after the Fintech Innovation is introduced. Note: No B1 has been used since it is not based on the Likert scale data and is also categorical data that could not be isolated with other variables and analyzed. The second study followed by the MANOVA analysis to determine the relationship between [17] the Respondents is the Univariate Analysis, which individually focuses on each of the research objectives:

1. Transformation factors analysis descriptively, its impact on the Businesses with how much it has transformed the traditional way of dealing in the Financial Industry.
2. The Benefit factors analysis in the description of how the Fintech Innovation has opened opportunities and its advantages
3. The critical factors analysis to predict the Future of Fintech and the issues that need to be addressed.

4.3. Findings and Interpretation

4.1.3. Business Transformation

Independent Variable: Role of the respondents (Developer, Service Provider, End-user)

Dependent Variables: Transformation Factors (T1, T2, T3, T4)

H0: There is no significant difference between the respondents’ roles and their opinions on the Business Transformation enabled by Fintech.

H1: There is a significant difference between the respondents’ roles and their opinions on the Business Transformation enabled by Fintech.

If the p-value < 0.05 (95% confidence)- Reject null Hypothesis

The multivariate tests result in Table 3 define the joint relationship between the respondents’ profile as a combined effect. As shown above with its p-value in the Multivariate Tests, considering the Wilks’ Lambda significance as 0.328, which is not less than 0.05, we do not reject the null hypothesis (H0). Here we can infer that the respondents, whether they be the Developers, Service providers, or the end-users, do not have any differences in their opinions regarding the Business Transformation Factors enabled by Fintech. They prove to be insignificant. Equation 1 shows the p-value = 0.328.

\[
p-value = 0.328 < 0.05 \Rightarrow \text{do not reject } H_0 - [1]
\]

After moving forward with the Multivariate tests, we consider Levene’s Test of equality, which talks about the Univariate nature, for each of the Dependent individual variables T1, T2, T3, and T4 (Tests, n.d.)
Levene’s test of Homogeneity of Variance presented in Table 4 returned statistically significant for T3 and T4 whereas insignificant for T1 and T2.

Particularly while analyzing the ANOVA of the Profile and the Transformation factors with its p-values, it can be seen that all the values turn out to be insignificant as in Table 5. Considering this evidence, we can prove that the respondents do not vary in their opinions regarding the Business Transformation factors observed because of the Fintech Innovation. The reason behind this could be the Literacy or the understanding of Fintech Innovation amongst the respondents. We now focus on understanding the Transformation Factors as in Table 6 possessed by the Fintech Innovation, on how impactful it has proven to the Businesses while transforming from the traditional markets to the Fintech enabled advancements.

The above is the Descriptive Analysis of variances, also known as the Univariate Analysis of each transformation factor as shown in Table 6. On analyzing each of the factors, we can observe that the results are inclined positively towards the Business Transformation that has happened on accepting the Fintech Innovation over traditional Financial Services. The negative results or disagreement are hardly seen [18].

This entire study on the Transformation factors is the Study 1, proposed in the research design, which can be interpreted as, the development of Fintech Services, even in its evolving stage, has seen an impactful change by decreasing the banks’ cost for extending its branches at different locations. The changes that occurred in utilizing the Fintech Services at the comfort of the homes for the end-users have increased Fintech Technology’s adoption because of its transformation from the traditional way of Banking. The banks’ traditional loan procedures have been transformed to a significant extent as the Fintech enabled mobile banking services allows the inquiry and loan approval at the comfort of home without many documentation.

Table 3
Multivariate Analysis for the Respondents’ Relationship.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Pillai’s Trace</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>Wilks’ Lambda</td>
<td>.016</td>
<td>2295.574b</td>
<td>4.000</td>
<td>154.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Hotelling’s Trace</td>
<td>59.625</td>
<td>2295.574b</td>
<td>4.000</td>
<td>154.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Roy’s Largest Root</td>
<td>59.625</td>
<td>2295.574b</td>
<td>4.000</td>
<td>154.000</td>
<td>.000</td>
</tr>
<tr>
<td>Profile</td>
<td>Wilks’ Lambda</td>
<td>.943</td>
<td>1.153b</td>
<td>8.000</td>
<td>308.000</td>
<td>.328</td>
</tr>
<tr>
<td></td>
<td>Hotelling’s Trace</td>
<td>.060</td>
<td>1.147</td>
<td>8.000</td>
<td>306.000</td>
<td>.332</td>
</tr>
<tr>
<td></td>
<td>Roy’s Largest Root</td>
<td>.038</td>
<td>1.469c</td>
<td>4.000</td>
<td>155.000</td>
<td>.214</td>
</tr>
</tbody>
</table>

Table 4
Levene’s Test Analysis For Respondents’ Relationship.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T1: p-value = 0.133 &lt; / 0.05</td>
<td>Not significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2: p-value = 0.974 &lt; / 0.05</td>
<td>Not significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3: p-value = 0.01 &lt; 0.05</td>
<td>Significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T4: p-value = 0.001 &lt; 0.05</td>
<td>Significant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5
Individual ANOVA Analysis on the Dependent Variables of the Transformation Factors.

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile</td>
<td>T1</td>
<td>.363</td>
<td>.013</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>.293</td>
<td>.016</td>
</tr>
<tr>
<td></td>
<td>T3</td>
<td>.125</td>
<td>.026</td>
</tr>
<tr>
<td></td>
<td>T4</td>
<td>.197</td>
<td>.020</td>
</tr>
</tbody>
</table>
procedures. The respondents agree that Fintech has transformed the way the traditional banks used to carry out the procedures. With the increase in technological development, the respondents agree that Artificial Intelligence (voice-based transactions) will change the way we see Fintech today; it can transform the Fintech services we use today. With this, we can conclude that Fintech Innovation’s adoption has significantly transformed the way the traditional Business models used to Function,[19] which ends with the study 1 criterion and is followed by Study 2 hereafter be the Benefits factor.

4.3.2. Benefits of Fintech Innovation

Independent Variable: Role of the respondents (Developer, Service Provider, End-user)

Dependent Variables: Benefits Factor (B2, B3, B4)

H₀: There is no significant difference between the respondents’ roles and their opinions on the Benefits that occurred because of Fintech Innovation.

H₁: There is a significant difference between the respondents’ roles and their opinions on the Benefits that occurred because of Fintech Innovation.

If the p-value < 0.05 (95% confidence)- Reject null Hypothesis

As discussed earlier, the multivariate tests define the joint relationship between the respondents’ profiles as a combined effect. As shown in Table 7 with its p-value in the Multivariate Tests, considering the Wilks’ Lambda significance as 0.125, which is not less than 0.05, we do not reject the null hypothesis (H₀). Here we can infer that the respondents, whether they are the Developers, Service providers, or the end-users, do not have any differences in their opinions regarding the Benefits factors enabled by Fintech, and
they prove to be insignificant. Equation 2 shows the p-value = 0.125.

\[ p-value = 0.125 < 0.05 \rightarrow \text{do not reject } H_0 \] [2]

Levene's test of equality as in Table 8 talks about the Univariate nature for each of the Dependent individual variables B2, B3 and B4.

Levene's test of homogeneity of variance presented returned statistically significant for B2 whereas insignificant for B3 and B4. Table 8 talks about Levene's Test Analysis for respondents' relationship

<table>
<thead>
<tr>
<th>Test of Between-Subjects Effects</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profile</td>
<td>B2</td>
<td>.243</td>
<td>2</td>
<td>.121</td>
</tr>
<tr>
<td></td>
<td>B3</td>
<td>1.466</td>
<td>2</td>
<td>.733</td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>3.944</td>
<td>2</td>
<td>1.972</td>
</tr>
</tbody>
</table>

Considering the evidence above, we can majorly prove that there is no significant difference of opinions amongst the respondents when discussing the Benefits enabled by the Fintech Innovation, which could be because of the ease of usage or a user-friendly environment with a lower cost and faster transactions. We will now discuss the specific Benefit factors enabled by Fintech[20].

We now understand the individual Benefit Factors, which discusses the advantages as the doors opened because of the Fintech Innovation as shown in Table 10.

The top major reasons for the end-users to opt for Fintech are its nature of accessing it 24/7 with its User-Friendly interface and faster transactions enabled. These key features prove to be the Benefits of Fintech Innovation for the Businesses and the end-users to adopt Fintech Innovation. The respondents' major agreement that the Fintech's access to the Financial markets like the Mutual Funds, equity markets, SIP's has made it beneficial for the Users to adopt the Fintech Innovation because of its easy and secure nature. The Investors opting to invest in a project venture will have the ease of access and the protection from potential frauds as an added benefit. There has been a strong agreement in the Fintech Innovation response that it poses the potential to disrupt the Financial Industry in the long run [21].
4.3.3. Critical Factors

The issues faced by traditional banking systems like the speed of transactions being low, the security level of transactions, the risks of fraud, privacy, and the data protection concerns with each transaction's cost level. The Innovators have seen the critical factors and must be looked upon to address these issues. Some of the innovators also predicted or may be developing the Fintech such that the issues like the speed of transactions, cost level, and the risks of fraud are the three major factors that will be addressed [28].

According to the Developers of Fintech, when the automated financial advice tools will be introduced, the predicted critical risks that might be faced could be a misspelling of the financial advice being on the top, and the flaws that can be encountered in the financial tool's algorithms are the major risks which must be addressed. At the same time, its development and has currently been worked up [22].

The predictions for the Future of Fintech have been taken into consideration where the Innovators discuss the development in technologies like Artificial Intelligence, Blockchain, Voice technology/ Natural Language Processing, Biometrics and identity man-

---

Table 10
Analysis of the Benefits Factors of Fintech.

<table>
<thead>
<tr>
<th>B1</th>
<th>What do you think are the most important reasons for the customers to opt for Fintech services?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasons to opt for Fintech Services</td>
<td>Cost (cheaper rates) – 100%</td>
</tr>
<tr>
<td></td>
<td>Personal digital contact – 90%</td>
</tr>
<tr>
<td></td>
<td>Ease of Use – 90%</td>
</tr>
<tr>
<td></td>
<td>User Friendly Interface – 90%</td>
</tr>
</tbody>
</table>

| B2 | Do you agree that Fintech services have increased the access to the financial markets like Mutual funds, equity markets, systematic investment plans SIP by making the transactions easy and secure? |

<table>
<thead>
<tr>
<th>Fintech’s extension into the Financial markets</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120</td>
<td>80</td>
<td>40</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

| B3 | Do you agree that Fintech can bring the right balance in ease-of-access and the investor's protection in crowdfunding or peer-to-peer lending? (funding a project or venture by raising small amounts of money from a large number of people, typically via the Internet) |

<table>
<thead>
<tr>
<th>Balance in the ease of access and data protection in peer-to-peer lending</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120</td>
<td>80</td>
<td>40</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

| B4 | Compared to traditional banking services, do you agree that Fintech technology has more potential in the long run? |

<table>
<thead>
<tr>
<th>Potential of Fintech Innovation in the long run</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree nor disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120</td>
<td>80</td>
<td>40</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>
agement as some of the upcoming technologies which will be an added beneficial Fintech Innovation to be developed in the next two years[23].

Investors trust in Fintech

Figure 4 discusses investors’ trust in Fintech. The research study’s most prominent objective was to identify whether Fintech Innovation has won the investor’s trust and see the innovation as a glowing Technology in the future. With the above analysis, we can infer that about 68% of the respondents feel that the Investors have likely gained enough trust in the Fintech Technologies and are ready to invest in them. The data sourced by the Economic Times from the Business Intelligence platform Transaction reported that the Investments in 2019 were doubled that of the capital that flowed to the sector in 2018 when $1.25 billion in 206 rounds were raised [24]. Fintech Innovation in India has an exciting time right now to work with it. It plays a critical role in bridging the gap between the existing solutions and the growing need for quicker, smoother, and safer solutions. [25]

Some of the open-ended opinions from the Innovators of Fintech discuss:

i. The long-term Investments in Fintech Innovation could be very fruitful.

ii. With security as an issue, the development and deployment of Blockchain will transform the businesses in the real sense. Blockchain technology will not only provide security but also enhance the speed of transactions with accuracy.

iii. Round the corner, Covid-19 has increased the demand for Fintech because of its key features of accessibility at the comfort of home [28].

iv. For the adoption of Fintech on a large scale, there is still a door of security and speed of transactions that need to be enhanced.

5. Conclusion

Fintech Innovation is believed to be a game-changer for the Traditional Financial Industry. Fintech technology which is still in its evolution period has already created a new financial landscape. Financial Markets have benefitted from these technologies, and it has significantly transformed the way the Financial Industry was looked upon earlier. The Fintech addresses the critical issues observed by the Traditional Financial Institutions like the security measures, low-performance indicators, and the risks of fraud. The limitations or the differences faced in the research as being discussed in this part.

The research has to be conducted within the limited sample size: The respondents participating in the survey were limited to approximately 160. The scope of the responses was very limited. The research only limits the knowledge of those respondents regarding this limited scope. A nation-wide study of Fintech Innovation could not be done, which does pose a limitation. The research was only conducted over the respondents have a decent knowledge about Fintech and its features, which precisely means that the Respondents must be Literate enough and technology is accepting to take the survey; this fact acted as a limitation since the research was seen through the eyes of the people who have access to the Fintech Innovation. The urban population who could afford to use the Fintech services was the main focus of the study. In contrast, the people who cannot or have not used the services are excluded from the scope, which is also a limitation because the innovation’s niche study could not be done.
Additionally, the issues faced by the technologies adopted by Fintech are also in the developmental vogue predicted to be enhanced. The development in the upcoming technologies like Artificial Intelligence, Blockchain, Voice-based technology or the Natural Language Processing, Biometrics, and the Identity management technologies are predicted to enhance the Fintech Technology and its features. Innovation has prominently won the Investors’ trust as a major player with its potential to standby and stabilizes the Financial Industry. It does have the potential to disrupt the financial market to come up as the Next generation of Banking.

References


