

DRIVING FACTORS OF FINTECH FIRMS TO UNDERSTAND THE BEHAVIOURAL ECONOMICS OF CUSTOMERS – A COOKIE CUTTING APPROACH

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Abstract

The study considered the cookie cutting approach to understand the clear cut contribution of respective driving factor role in understanding the behavioural economics of the customers and also identifying the key problems it experiencing, while delivering the services to their customers. The study looked at the broking and banking services provided by fintech companies such as Angel One, Zerodha, Paytm, Gpay, and PhonePe. The study used a descriptive research approach for the objectives and applied the neural network to know the driving factors for the fintech firms to understand the behavioural economics of customers. The study found that "Improved risk management identified to be the major driving element for the fintech enterprises in understanding the consumers' behavioural economics. Fintech companies that use behavioural economics principles can gain valuable insights into customer behaviour and preferences, allowing them to create more targeted and effective marketing campaigns and product offerings, as well as influence financial decision-making. Fintech companies can design products and services that reduce risk and increase overall financial stability. The study observed that Regulations had the largest loading, indicating that fintech enterprises are expanding in industry 4.0 and that capital and financial markets According to the study, information and decision overload are behavioural issues that fintech organisations encounter.

Key words: Behavioural Economics, Fintech, EFA.,

Introduction

Behavioral economics is a subfield of economics that aims to explain how individuals come to financial conclusions, particularly when those conclusions are not totally logical. In order to get a deeper understanding of how people absorb information, evaluate risks, and make decisions, the field of behavioural economics draws on findings from the fields of psychology, sociology, and neuroscience. Behavioral economics was developed in the 1990s. Fintech, also known as financial technology, refers to an industry that is expanding fast and makes use of technology to deliver financial services to people as well as corporations. The manner, in which individuals gain access to various forms of financial services, such as banking, lending, and investing, has the potential to be revolutionised by fintech. As organisations in the fintech industry aim to understand and solve the behavioural biases and inclinations of customers in their decision-making processes, the field of behavioural

economics has become an increasingly essential part of the industry. Fintech firms may increase the efficacy of their goods and services by adding behavioural insights into the design of financial products and services. This enables the companies to assist customers in making more informed decisions regarding their finances. Fintech businesses may employ behavioural insights to build user interfaces that encourage better financial decision-making. One way that this can be accomplished is by supplying information that is both clear and succinct on the costs and advantages of various financial products. In addition to this, they have the option of employing "nudges," which are defined as "modifications to the environment of decision-making that are intended to be minor and unobtrusive and are intended to encourage individuals to make better financial choices." Overall, the incorporation of behavioural economics into fintech has the potential to improve the financial outcomes for consumers and promote greater financial inclusion by making financial services more accessible and user-friendly. Behavioral economics is a subfield of economics that studies human decision-making and behaviour. The study considered the cookie cutting approach to understand the clear cut contribution of respective driving factor role in understanding the behavioural economics of the customers and also identifying the key problems it experiencing, while delivering the services to their customers.

Review of Literature

Johnson, E. J., & Shu, S. B. (2016): "Behavioral Economics and the Future of Financial Technology", this research looks at how behavioural economics may help enhance financial decision-making and encourage good behaviour in financial technology design. According to the findings, behavioural economics can help shape financial technology design. These findings can assist financial technology designers and developers in improving interfaces, aligning incentives with user desires, and encouraging healthy financial habits. The paper concluded that, practitioners and researchers must collaborate to develop these approaches.

Calvet, L. E., Campbell, J. Y., & Sodini, P. (2017): "The Behavioral Economics of Consumer Financial Services" This paper provides an overview of behavioral economics principles and their relevance to consumer financial services, including fintech. The findings of the paper suggest that traditional economic theories often assume that individuals make rational decisions, but behavioral economics suggests that humans can be influenced by a range of cognitive and emotional biases. These biases can lead to suboptimal financial decisions, such as overspending, borrowing too much, and saving too little. The conclusion of

the paper highlights the importance of incorporating behavioral economics insights into the design of consumer financial services, including fintech.

Breuer, W. & van Deuverden, K. (2018): "The Role of Behavioral Economics in Fintech" This paper discusses how behavioral economics can be applied in fintech to improve financial decision-making and enhance customer engagement. The findings of the paper suggest that fintech firms can leverage insights from behavioral economics to design products and services that better align with the needs and preferences of customers. By using these insights, fintech firms can create more user-friendly interfaces, simplify complex financial information, and provide tailored recommendations to customers. The conclusion of the paper highlights the potential benefits of using behavioral economics in fintech, but also notes that there are some challenges and limitations to these approaches.

Lusardi and Mitchell (2019): The paper "Behavioral Economics and Fintech: An Overview" focuses on the potential of using behavioral economics to improve financial decision-making, and the role of fintech in implementing these strategies. The authors point out that traditional economic theories often assume that individuals make rational decisions, but behavioral economics suggests that humans can be influenced by a variety of factors that may lead to suboptimal decisions. The findings of the paper indicate that behavioral economics has the potential to help address a range of financial challenges, including savings behavior, debt management, and retirement planning. The conclusion of the paper suggests that the intersection of behavioral economics and fintech holds great promise for improving financial decision-making and outcomes.

Tanaka, T. (2019):"Behavioral Economics and FinTech: A Review of the Literature" This literature review examines the relationship between behavioral economics and fintech, with a focus on how fintech can leverage behavioral insights to improve financial outcomes. The focused point of the paper is to examine the existing literature on the intersection of behavioral economics and fintech. The findings of the paper suggest that fintech has the potential to address a range of financial challenges, including savings behavior, debt management, and retirement planning. The conclusion of the paper highlights the potential benefits and challenges of using fintech to implement behavioral economics strategies.

Hira (2020): "The Intersection of Behavioral Economics and Fintech: Current State and Future Directions" provides an overview of the relationship between behavioral economics and fintech, including current research and potential future directions for this field. The findings of the paper suggest that there is growing interest in applying behavioral economics

to fintech, with a range of innovative approaches and techniques being developed to improve financial decision-making and promote positive behaviours. The conclusion of the paper emphasizes the potential benefits of combining behavioral economics and fintech, but also notes the need for caution and careful evaluation of these approaches.

Schneider (2020): discusses "Behavioral Economics and the Design of Fintech Applications" how behavioral economics can inform the design of fintech applications, with a focus on improving financial decision-making and encouraging positive behaviours. The findings of the paper suggest that there is significant potential for applying insights from behavioral economics to the design of fintech applications, particularly in areas such as financial education, savings, and investing. The conclusion of the paper emphasizes the importance of a user-centered design approach that takes into account the needs, motivations, and behaviours of customers. Furthermore, the paper highlights the need for transparency, privacy, and ethical considerations in the design and deployment of these technologies.

King, K. (2021): "Behavioral Economics and Fintech: A Review of the Literature", This literature review examines the current state of research on the intersection of behavioral economics and fintech, with a focus on recent developments and emerging trends. The findings of the paper suggest that there is growing interest in the application of behavioral economics to fintech, with a range of innovative approaches and techniques being developed. The conclusion of the paper highlights the potential benefits of combining behavioral economics and fintech, but also notes that there are some challenges and limitations to these approaches.

Candy Candy, Robin Robin et al., (2022): Fintech in the time of COVID-19: Conceptual Overview, This study aims to analyze the relationship between financial technology (Fintech) and COVID-19. The importance of adopting 'digital' in all transaction could boost the Fintech growth during the pandemic. Fintech will help reduce the spread of COVID-19 by digital payment. The study says COVID-19 influences the use of Fintech, which the positive impact resulting from this transformation in addition to providing convenience for users also brings economic development. Practical policies in Fintech encourage organizations to compete in offering financial services.

Morshadul Hasan, Thuhid Noor (2022): studied on Rural Consumers' Financial Literacy and Access to FinTech Services, The study aims to show the impact of financial knowledge among rural consumers' access to financial technology services. This study carries out a survey-oriented method with a structured questionnaire. According to the data category, this

study uses three well-known econometric models: logistic regression, probit regression, and complementary log–log regression, have been experimented. This study finds that knowledge regarding various factors significantly impact on access to financial technology services. Mainly, this study has important practical significance for the use of rural finance and financial technology in rural areas, which affects the entire economy.

Research Gap

There has been significant scholarly attention on the role fintech firms in understanding the customer's behaviour. The study focused in the aspect of "behavioural economics in fintech firms" and found with the literature survey that few studies have examined of how behavioural economics affects the operations and strategies of fintech firms. There were studies analyzed the impact of cognitive biases on the decision-making process of consumers while using fintech services, and how fintech firms design their products to account for these biases. Few studies also explored how fintech firms use nudges and other behavioural interventions to encourage desirable customer behaviours, such as saving or investing. Thus, the present study making an effort to fill the research gap with the proposed titled of "Driving Factors of Fintech Firms to Understand the Behavioural Economics of Customers – A Cookie Cutting Approach"

Objectives of the Study

1. To study the Driving Factors of Fintech Firms to understand the Behavioural Economics of Customers
2. To study the Fintech firm problems experienced in providing the services to the customers.

Hypothesis of the Study

H0: There is no significant difference between the driving factors of Fintech firms to understand the Behavioural Economics of Customers

H1: There is a significant difference between the driving factors of Fintech firms to understand the Behavioural Economics of Customers

Scope of the Study

The present study focused on the Fintech firms' perspective in understanding behavioural economics of the consumer. The study mainly considered the driving factors of the fintech firms in the context behavioural economics of their users i.e., customers. The study also examined the key problems experienced in delivering the services by the fintech firms.

Research Methodology

The study adopted the descriptive research approach for the examination of framed objectives. The study mainly focused to know the clear cut role of driving factors in understand the behavioural economic of the consumers. The study tried to examine the with the cookie cutting approach in order to identify the higher to lower level of driving factors role.

Data Collection

The study collected the primary data from the employees of sample fintech firms. The study considered the opinion of the employees who are having more than one year work experience. The framed the questionnaire keeping in view of two segments i.e., driving factors and Problems experienced by them in offering the services.

Sample Method: The study considered the convenient sampling method for the collection of primary data from the respondents. The study collected the primary data in five point Likert scale trough the drafted questionnaire.

Sample Fintech Firms

The study collected the primary data from the Zarodha, Paytm, Gpay, and PhonePe, which are delivering the key financial services to the customers.

Statistical Tools

The study applied the following statistical tools for the examination of framed objectives.

Reliability of the Data

The study applied the reliability test with the Cronbach's Alpha on the collected two segment primary data in Likert scale structure. The study observed the reliability > 0.7 i.e. 0.813 for driving factors and problems experienced by them in serving the customers.

Neural Network: The study applied the neural network for the identification of key driving factors, which are playing the vital role in understanding the behavioural economics of the users or customers. The higher importance level depicts the higher role and lower importance indicates the lower role in knowing the users behaviour.

Exploratory Factor Analysis: The study applied the EFA to identify the key problems experienced by the Fintech firms, while offering the services to customers. The high loading factors need to be dealt with more focus in order to improve the services to the customers.

Tabulation of Data Analysis

Objective – 1: To study the Driving Factors of Fintech Firms to understand the Behavioural Economics of Customers

The study identified the key driving factors with the support of literature survey and collected the primary data from the employees of sample companies.. The study applied neural network statistical method for the study and framed the following hypothesis.

H0: There is no significant difference between the driving factors of Fintech firms to understand the Behavioural Economics of Customers

H1: There is a significant difference between the driving factors of Fintech firms to understand the Behavioural Economics of Customers

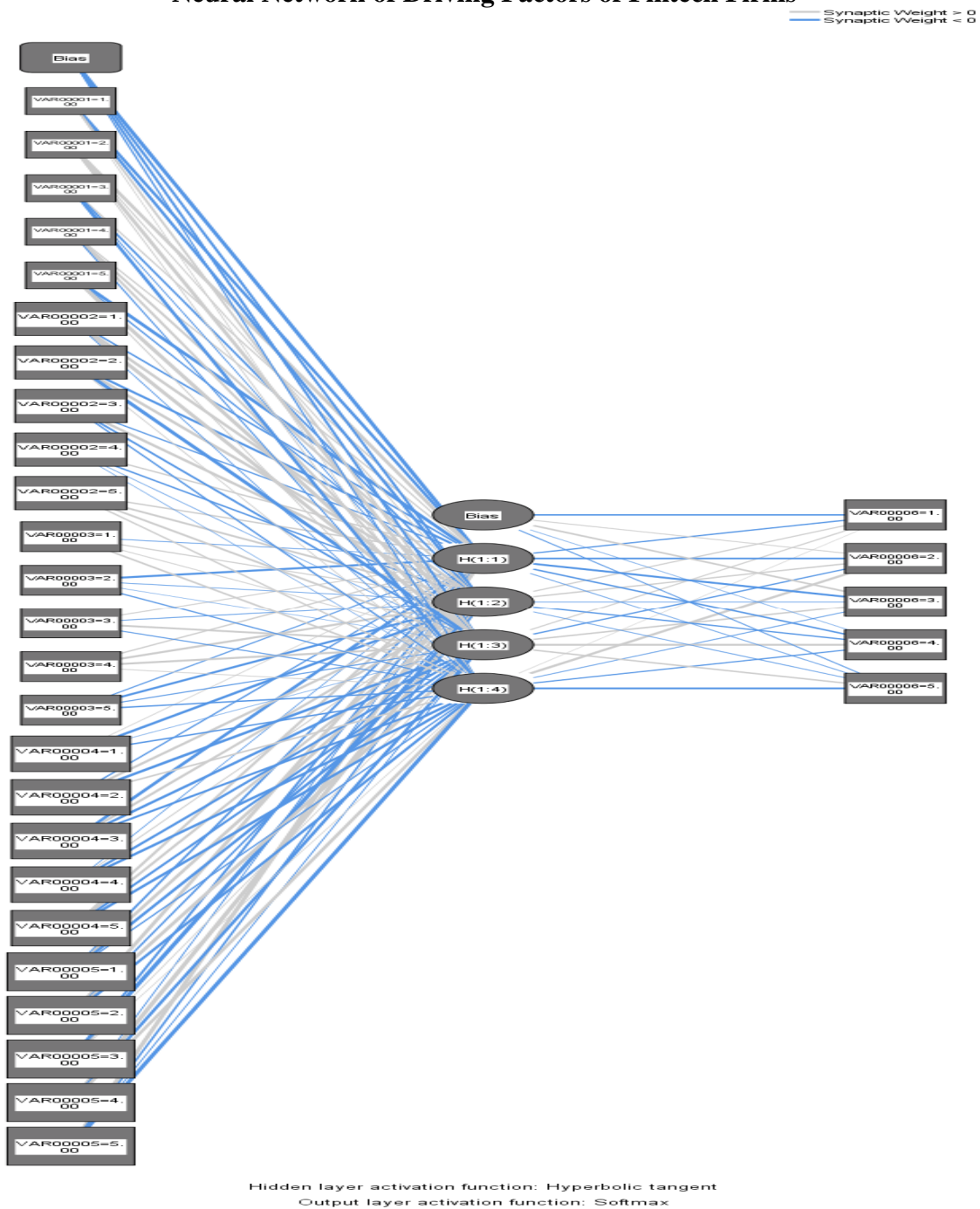
Table No –2
Case Processing Summary Driving Factors of Fintech Firms

		N	Percent
Sample	Training	96	65.8%
	Testing	50	34.2%
Valid		146	100.0%
Excluded		0	
Total		146	

Source – Primary Data

This table provides a summary of case processing for driving factors of fintech firms. The data includes 146 cases, with 96 cases (65.8%) used for training and 50 cases (34.2%) used for testing. All 146 cases were considered valid for analysis, and there were no excluded cases.

Figure No-1
Neural Network of Driving Factors of Fintech Firms



Source – Primary Data

The graph illustrates the network information in the form layers. In this graph each input is linked to a hidden layer and this hidden layer help to generate the output layer, that the Driving Factors of Fintech Firms To Understand The Behavioural Economics Of Customers. It indicates that there are layers which are used to generate the output layer.

Table No –3
Driving Factors of Fintech Firms to Understand the Behavioural Economics of Customers

	Importance	Normalized Importance
Improved financial decision-making	.090	29.8%
Enhanced customer engagement	.211	70.2%
Increased financial inclusion	.145	48.3%
Data-driven insights	.254	84.3%
Improved risk management	.301	100.0%

Source – Primary Data

The table depicts the independent variable importance of driving factors in fintech firms to understand the behavioural economic of customers. The study mainly focused on the driving factors of fintech services to know the behavioural economics of customers. The study observed that, “Improved risk management” has the highest importance value (0.301) with normalized importance 100.0% and “data-driven insights” has second highest importance value (0.254) with 84.3%. The study observed, “enhance customer engagement” variable importance value (0.211). The study observed that, risk management drive as effective factors in fintech firms for customers

Objective-2: To study the Fintech firm problems experienced in providing the services to the customers.

Table No –4
KMO and Bartlett's Test of Fintech firms

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.715
Bartlett's Test of Sphericity	Approx. Chi-Square	39.722
	Df	55
	Sig.	.940

Source – Primary Data

This table shows the results of KMO and Bartlett's tests of Fintech firms. The Kaiser-Meyer-Olkin measure of sampling adequacy is 0.715, indicating that the sample size is moderately sufficient for the analysis. Bartlett's test of sphericity has an approximate chi-square value of 39.722 with 55 degrees of freedom and a significance level of 0.940, which suggests that the variables in the analysis are not significantly correlated.

Table No –5
Component Matrix

	Component				
	1	2	3	4	5
Regulations	.672				
Competition	.548				
Cyber-security	.527				
Customer acquisition		.345			
Scaling		.360			
Trust			.640		
Funding			.764		
Overconfidence				.543	
Information overload				.570	
Choice overload					.515
Confirmation bias					.463

Source – Primary Data

This table displays the results of an exploratory factor analysis (EFA) done on a difficulty encountered by a fintech business when offering services to its consumers. The table shows a component matrix, which shows the correlation coefficients between the detected factors (i.e., components) and the original variables (i.e., problems). The EFA discovered eight factors, which were designated as follows: Regulations, Competition, Cyber security, Customer Acquisition, Scaling, Trust, Funding, Cognitive Biases are all factors to consider. The correlation coefficients reveal the strength of the association between each problem and each element. It has a large positive association with Component 1 (Regulations), but Funding has a strong positive link with Component 7. (Funding). Overall, the EFA argues that the fintech firm's obstacles may be divided into many major categories, including regulatory hurdles, competitiveness, cyber security threats, client acquisition and scaling issues, trust concerns, financial constraints, and cognitive biases that impact decision-making.

Findings of the Study

1. The study found that “Improved risk management (0.301) observed to be the key driving factor for the fintech firms in understanding the customers’ behavioural economics.
2. It has been synchronized “Data driven insight (0.254) found to be playing the vital role i.e., data mining by the fintech firms, so that behaviour of the customers can be identified.

3. The study observed that “Improved financial decision making” (0.090) found to be driving lower to the fintech firms. As the decision making is done by the customers and the fintech firms’ perspective financial decision observed to be lower.
4. The study found that Regulations (0.672) observed to be having the higher loading, which states that Fintech firms are emerging in industry 4.0 and the capital and financial markets regulators changing the guidelines frequently, which are acting hurdles for the fintech firms.
5. The study observed through the EFA that fintech firms are facing cutting –edge competition (0.548) from various other fintech organizations. The customers are having many alternatives in financial markets as many new fintech firms are emerging every day in the markets.
6. The study observed that Information overloaded (0.570) and choice overloaded (0.515) are behavioural aspect issues the fintech firms are experiencing.

Conclusion of the Study

The present study focused on the “Driving Factors of Fintech Firms to Understand the Behavioural Economics of Customers – A Cookie Cutting Approach”. The study considered the broking and banking services offered by the fintech firms such as Zarodha, Paytm, Gpay and PhonePe. The study adopted the descriptive research approach for the examination of framed objectives. The study applied the various statistical methods for the objectives. The study found that "Improved risk management identified to be the major driving element for the fintech enterprises in understanding the consumers' behavioural economics. It has been connected "Data-driven insight was discovered to be the fundamental function performed by fintech organisations, namely data mining, in order to recognise client behaviour. The study observed that "better financial decision making" is hurting fintech enterprises. Customers make financial decisions, and fintech companies make fewer of them. The study observed that Regulations had the largest loading, indicating that fintech enterprises are expanding in industry 4.0 and that capital and financial markets regulators modify norms on a regular basis, posing challenges for fintech organisations. The study discovered that fintech firms compete with one another. Clients have a variety of financial market possibilities as new fintech enterprises arise on a daily basis. According to the report, information and decision overload are behavioural issues that fintech organisations encounter.

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