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Edited by
Dr. Sanjib kumar Basu
Dr. Sumanta Dutta

**POSTGRADUATE & RESEARCH
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Message from the Principal

Research is the creation of new knowledge and the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings. Higher education institutions (HEIs) in the light of the New Education Policy 2020 are the essential actors in the promotion of such culture of research.

*It gives me immense pleasure to share the information that our Postgraduate Department of Commerce of the college has taken this initiative to publish an Edited Book Series **Anveshan (अन्वेषण) Volume II** annually starting from 2021 to encourage the students of Postgraduate students of Commerce to pursue meaningful research.*

I would like to congratulate the students whose dissertations are published in this second edition as a research paper and simultaneously expect that all the students will consider research more seriously. In addition to that, I also like to congratulate the Editors and the entire Editorial Board members for their wonderful job and I strongly believe that this good work will be carried forward in the years to come.

Nihil Ultra
Rev. Dr. Dominic Savio, S. J.
Principal
St. Xavier's College (Autonomous), Kolkata

Message from Fr. Vice Principal (Commerce-Evening)

It is a matter of pride that Postgraduate and Research Department of Commerce (M. Com) of our college has maintained the continuity to have the second edition of edited book series Anveshan (अन्वेषण) Volume II this year. Through this effort, the Department is not only encouraging our students to pursue meaningful research work, but also creating a culture of research environment. It will enrich the college publications and academic literature of our Postgraduate Department.

I would like to congratulate the students whose dissertations are published in this second volume of the edited book. Besides I also like to congratulate the Editors and the entire editorial advisory team for their continuous efforts for bringing this novel academic creation. I strongly believe that the publication will bring a new culture of research centric environment in line with New Education Policy 2020.

Nihil Ultra
Rev. Fr. Peter Arockiam S.J.
Vice Principal, Commerce (Evening)
St. Xavier's College (Autonomous), Kolkata,
West Bengal, India.

Editorial

St. Xavier's College (Autonomous), Kolkata is well known for its academic excellence and committed services towards dissemination of knowledge in the academic world. The College appreciates the role of research in education and aims in developing an inclination towards research among the faculty members and the students. In this pursuit, the Post Graduate and Research Department of Commerce has taken an initiative to publish an Edited Book Series titled Anveshan (अन्वेषण) from 2021 to encourage the students of Post Graduate and Research Department of Commerce to pursue meaningful research under the able guidance of the faculty members of the department.

The research articles for this volume are selected on the basis of the final score obtained by the respective candidates in their Dissertation Work at the end semester examination. The articles cover the contemporary issues in the field of accounting, finance as well as marketing management.

We sincerely thank to Rev. Dr. Dominic Savio, S.J., Principal and Rev. Fr. A. Peter Arockiam, S.J., Vice-Principal, Department of Commerce (Evening) of our college for their constant words of inspiration and support.

We congratulate all the students whose research papers are published in this edited volume and express our sincere thanks to their supervisors and referees.

We would also like to thank Almighty God and pray for His blessings without which this achievement would not have been possible.

Sanjib Kumar Basu
Sumanta Dutta

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Section 1

Accounting & Finance

A Study on Customer Perception Towards Quality of Mobile Banking in Kolkata City

Arnab Kar[1]

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Abstract

The Indian banking sector has been strongly influenced by the process of globalization and liberalization. Cost consciousness, credit management, profitability and overall efficiency have got overriding importance for the survival and growth of banking business. With increasing competition and increase in demand for greater and superior quality of banking service, the challenges for banking sector have increased. While mobile banking offers phenomenal opportunities for growth, the challenges are equally daunting. Success of mobile banking service and it contribution to banking sector will depend upon the capacity of banks to meet the challenges and make use of the opportunities available. Indian retail banking sector which mainly depends upon transactions directly with consumers covers segments like current account, saving account, housing loan, auto loan, personal loan, education loan, consumer durable loan, credit card, debit card, etc. Banks have had tremendous success in shifting to day-to-day banking services from walk-in branches to lower cost channels. Retail banks are armed with a wealth of demographic details that they can leverage for cross-sell and up-sell opportunities, and they've long used their knowledge about customers to implement targeted marketing campaigns.

The main purpose for conducting this study is to provide some essential information that would definitely help the management to retain its existing customer and attract new ones in today's competitive environment. The results of the study would facilitate the process of categorizing, determining and measuring, controlling and thereby improving customer satisfaction in the context of mobile banking of the commercial banks. Hence, the purpose of this research is to examine the perception of customers towards mobile banking of the commercial banks in Kolkata. The factors determining the consumer perception is being studied in this paper. The data used for the paper is purely primary and it is collected through structured questionnaire.

Keywords: *Consumer Preference, Banking Industry, Consumer Satisfaction, Mobile Banking, Retail Bank.*

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1.   This Dissertation was done by the scholar under the guidance of Dr. Amitava Roy.

1. Introduction

Mobile banking makes the changes in the traditional processing of the bank words. Customers of the bank moved according to the technology because of their busy schedule of their work. During the non-availability of the banking services in the holidays they are moved forward the internet services or the other outlets to transfer the amount for their purpose, where the mobile banking helps them to transfer and do all the activities in the same place without moving anywhere. Based on the attitude of the customer there is a change in the behavior banking process with the help of the mobile banking is more comfortable. Banks that are started to develop their activities with the help of the mobile banking which is effectively used by the customers.

2. Literature Review

Irina Bena (2010) examined the level of satisfacion of the customers having accounts in a specific Romanian Bank. This survey was a qualitative research which depended on a questionairre. The primary data we gathered from a Bucharest Branch of 50 retail clients. The response of the clients were in a haphazard manner like either interviewd , face to face or on their way out of bank.There were some problems in effort of evaluating the satisfaction level of the customer's satisfaction. Firstly, the satisfactions dimension have to be established according to area of business and company's specifics. Secondly, customers also tends to state that they are satisfied or check an undecided response. As a result, the scale for future bank surveys should eliminate the middle-of-the-road responses, as customers tend to take either a positive or a negative stance. As a result, the benefits of the surveys include not only a clear picture of the consumers, but also an overview of the areas in which the branch has to improve."

Kazie Omar Siddiqi (2011) investigated the interrelationships between service quality, customer happiness, and loyalty in Bangladesh's retail banking sector the study tried to determine the most essential attributes in banking environments that will aid in the examination of bank features as seen by clients. The sample size was set at 100 retail banking clients taken from various banks in Bangladesh. The final result revealed that all service quality qualities are positively associated to customer loyalty and satisfaction in Bangladesh's retail banking sectors. As a result, the bank management can use this as a tool to analyse the quality of banking services in Bangladesh."

Apena Hedayatnia and Kamran Eshghi (2011) evaluated the bank selection factors used by bank clients in Iran. The study was mostly done in the city of Tehran. Data for the study were acquired from 798 bank customers via a standardised questionnaire addressing the many aspects that people consider significant when deciding which banks to support. Because of the nature of the investigation, convenience sampling was employed. A total of 830 questionnaires were distributed, with 798 of them deemed usable. The findings show that the following factors are important in determining customer selection: quality of

services and new banking methods, bank innovation and responsiveness, friendliness of staff and confidence in manager, price and cost, staff attitudes, and convenience of bank location and services. According to the survey, retail bank managers should create their marketing strategy with the aforementioned aspects in mind. To attract new consumers and keep existing ones, banks should offer up a variety of high-tech services such as internet banking, SMS banking, e-banking, and phone banking. Furthermore, banks must understand their clients' requirements and desires in order to boost customer satisfaction through tailor-made services."

Ahmed Sohel S. M., Rayhan Shah Johir, & Islam Ariful M. D. (2012) examined the problems and prospects of Mobile Banking in Bangladesh" they tried to point out the main problems and the prospects in the process of mobile banking in Bangladesh. They, in the mentioned paper described the customers and financial institutions interest towards the mobile banking.

Gamoorthy Avinay, Sha, Sankar C &Sangeeta, M. (2012) they described various mobile banking models, including conceptual models, mobile banking business models, bank-led models, and non-bank-led models, as well as challenges and barriers to m-banking and its services. Both providers and subscribers benefit from mobile banking. The paper recommends solutions that have been designed to support multiple channels throughout the customer life cycle."

Madhvi Jhulka (2013) conducted a study on the challenges and concerns confronting India's banking system as a result of the growing rate of educated and lenient attitude of clients regarding debt services Bank overdraft, customised contact, credit and debit card, tax payment, easy shopping, greater interest on deposits, saving incentives, general insurance, statement, on-line recharge, life insurance, and mutual funds are the variables chosen for research. Primary data were obtained through questionnaires from persons in the bank's management and clients, and secondary data sources included bulletins, journals, books, bank websites, financial results announced by banks, and newspaper articles. 50 respondents from Batali, Gurdaspur, Dina Nagar, and Pathankot provided primary data. According to the report, retail banking is one of the most important sectors for the banking industry to focus on today, as it contributes 7% of India's GDP and 14% of jobs. With a growing population and an expansion in the middle class earning bigger earnings while also being willing to take risks, its scope has multiplied many times over. To gratify clients, the requirement of the hour is to invest in innovation, convenience in services, distinguished services, and making banking more mobile.

Amola Bhatt, S. B. (2016) in his article "Factors Affecting Customer's Adoption of Mobile Banking Services. Journal of Internet Banking and Commerce" "he stated the various characteristics of mobile banking which are the demographic, behavioural and attitudinal. The infrastructure facility is user-friendly technology and its availability was found to be attitudes. This study identifies two additional criteria, infrastructure and customer service, that are crucial to mobile banking but were absent in prior studies."

3. Research Gap

Using the literature as a foundation, it was recognised that the adoption of mobile banking and its importance has been mostly studied in developing economies. However, research has been conducted in India to understand the adoption behaviour of mobile banking in only a few places such as Delhi, Pune, Punjab, Maharashtra, Indore, Tamandu, and Karnataka.

There is no single survey that focuses on electronic banking usage in urban West Bengal. The Kolkata region was chosen as the study area because it is representative of urban West Bengal.

4. Objectives of The Study

1. To study and analyse the customer perception towards quality of mobile banking services.
2. To explore the factors affecting the customer perception towards quality of mobile banking services

5. Research Methodology

Nature of Data: There are two ways of collecting data –

(a) Primary Data: These are those data which will be collected in a fresh way and for the first time, and it happens to be original in character. We will be using the structured questioners to frame our response from our students as well as teachers.

(b) Secondary Data: Such data which are already collected by any person and have been passed through the statistical methods. We can collect the data from different sources like internet and any published paper.

Data Collection: The data used for the paper is purely primary data and it is collected through structured questionnaire. The data will be collected during February,2022

Area of the Study: In order to achieve the objectives of the present study, Kolkata, Capital City of West Bengal, India is selected.

Sampling Technique: The respondents of the study area will be a given questionnaire through google forms or in physical forms to collect their responses and convenience sampling method are used to select the respondent.

Sample Size: In order to conduct the present study 100-150 respondents will be surveyed from the study area.

Research Tools

• For conducting the study both quantitative and qualitative tools are used.
• Data which are collected are processed and manually coded to use for further analysis.

- Charts and Tables are used to analyse and interpret the data.
- Factor Analysis is used to examine the objectives of the study.

Table 1.1

Reliability Statistics		
• Cronbach's Alpha	• Cronbach's Alpha Based on Standardized Items	• N of Items
•.864	•.865	• 21

- The questionnaire has been tested by a Reliability Analysis and the Cronbach's Alpha is reported as 86.4%.
- MS Excel and SPSS Software are used for the analysis.

6. Analysis and Interpretation

Demographic Details

- It has been observed that maximum number of respondents belongs from the age group between 21-30 years. The paper entails the perception about mobile banking from the view point of customers of age ranging from below 20 years to 70 years.
- Out of 110 respondents 57.27% are female and 42.73% male.
- Out of 110 respondents, majority i.e., 50.9% of the respondents are using and aware of mobile banking services for 1-3 years. Even 20.9% of the respondents are using this service for 3-5 years and 9.1% of the respondents are using the service for more than 5 years.
- Out of 110 respondents it is found that 50.9% of the respondents are graduate and 36.4% have the post graduate degree and just 2.7 % have school education. This can be understood that for using mobile banking services the level of intellectual maturity is a pre requisite.
- The chart shows that respondents of all income groups are aware of mobile banking services and use them. Majority of the respondents' i.e., 55.5% of them have a monthly income below Rs 15000.
- Interestingly 43.6% of the respondents "frequently" use mobile banking services. Only 4.5% use mobile banking services either rarely or very rarely. The ranking of the uses of mobile banking reveals that it is mostly used for Funds transfer, Railway Ticket Booking, Movie ticket booking, Shopping from mobile, Mobile top up and.

A factor analysis is done to analyse the factors which influence the Quality of Mobile Banking Services from the respondents' point of view.

Factor Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.812
Bartlett's Test of Sphericity	Approx. Chi-Square	873.118
	df	171
	Sig.	.000

The KMO statistics is 0.812 which is statically significant at 5% level of significance this makes the factor analysis appropriate all the variables are strongly correlated to each other.

Total Variance Explained									
Compo-nent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumu-lative %
1	6.614	34.811	34.811	6.614	34.811	34.811	3.113	16.382	16.382
2	1.766	9.296	44.107	1.766	9.296	44.107	2.944	15.493	31.875
3	1.508	7.936	52.043	1.508	7.936	52.043	2.099	11.048	42.924
4	1.137	5.986	58.029	1.137	5.986	58.029	2.068	10.886	53.809
5	1.053	5.543	63.572	1.053	5.543	63.572	1.855	9.763	63.572
6	.865	4.553	68.125						
7	.843	4.439	72.565						
8	.807	4.249	76.814						
9	.703	3.698	80.511						
10	.645	3.393	83.904						
11	.536	2.824	86.728						
12	.465	2.447	89.175						
13	.430	2.263	91.437						
14	.401	2.109	93.546						
15	.317	1.666	95.212						
16	.279	1.469	96.681						
17	.239	1.259	97.941						
18	.232	1.221	99.162						
19	.159	.838	100.000						
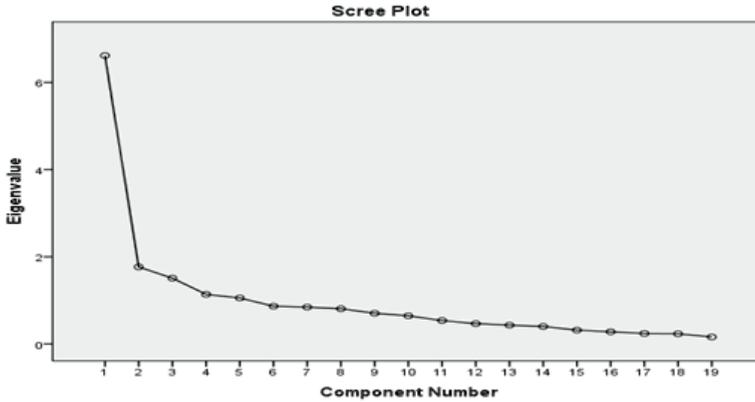
Scree Plot

The Scree plot shows the percentage of variance explained by the eigen values such that the distance among the nodes show the number of factors to be selected

There are five components because there are five Eigen Values greater than unity.

Component 1 comprises of these variables which explain 16.382% of the variability among the concerned variables in the data set. These variables are strongly inter-correlated.

Similarly, Component 2 captures those variables which explains 15.493% are relatively lesser correlated than Component 1. In this manner the percentage follows descending order and Component 3 follows Component 2, Component 4 follows Component 3 and Component 5 records 9.763% of the variability among the concerned variable.

Rotated Component Matrix

	Component				
	1	2	3	4	5
Timely Delivery of Transaction	.253	-.049	.103	-.030	.840
Accurate delivery at first attempt	.111	.184	.115	.230	.795
Finding solution to customer's problem	-.091	.575	-.051	.378	.372
Transaction and customer details are handled safely	-.075	.195	.173	.783	.118
Accurate mobile transaction with bank	.385	-.137	.084	.649	.311
Transaction are flexible according to customer need	.596	.012	.190	.065	.258
Minimization of inconveniences	.124	.712	.242	.096	-.049

Mobile customer service is excellent	.603	.397	.248	-.007	.192
Prompt response to request by mobile	.231	.640	.284	.098	.216
Solving problems during mobile online transaction	.245	.380	.130	.590	-.060
Repairs website breakdown quickly	.299	.531	.047	.457	-.017
Individual attention to customer	.272	.759	.141	.051	.014
Services offered in easy language	.127	.280	.792	.068	.123
User friendly technology for customer access	.309	.027	.659	.231	.075
Offers access to financial records through mobile	.272	.184	.747	.052	.066
Feeling of safety regarding the transaction	.741	.200	.170	.077	.066
Technology inspires trust and confidence through own password	.697	.271	.259	.008	.271
Adequate pollicise against data misuse and fraud	.623	.133	.200	.240	-.016
No people can access my personal account	.507	.445	-.055	.364	-.094

Summary of Rotated Component Matrix

Paramount Demands	Ancillary Requicites	Personal Needs	Pecuniary Desideratum	Delivery of Services
Transaction is flexible according to customer need	Finding solution to customer's problem	Services offered in easy language	Transaction and customer details are handled safely	Timely Delivery of Transaction
Mobile customer service is excellent	Minimization of inconveniences	User friendly technology for customer access	Accurate mobile transaction with bank	Accurate delivery at first attempt
Feeling of safety regarding the transaction	Prompt response to request by mobile	Offers access to financial records through mobile	Solving problems during mobile online transaction	

Technology inspires trust and confidence through own password	Individual attention to customer			
No people can access my personal account	Repairs website breakdown quickly			
Adequate pollicise against data misuse and fraud				

7. Conclusion

- In this age of 'Information and Communication Technology,' e-Banking is a critical tool for transforming the Indian banking sector and making it globally competitive. E-banking has evolved into an essential survival tool that is radically altering the financial system throughout the world. The click of a mouse now provides bank clients with significantly lower-cost services as well as unparalleled choice in selecting providers for their financial service needs.

- Based on the study, it can be stated that e-Banking service utilisation is inadequate since the benefit of e-banking services is not fully understood. It has been shown that the majority of e-banking users are educated, well-off men. Small company owners, farmers, and people in unorganised sectors, on the other hand, continue to avoid utilising financial services. This is due to either a lack of understanding of the e-banking system or a mistrust on the computerise system.

- Since the launch of the mobile banking system, clients have been able to manage their funds more conveniently and efficiently. However, despite the benefits of mobile banking, there are several difficulties that hinder it from being widely used. In India, the network problem is a major worry, as a solid network connection is required for mobile banking. Another source of concern is reliability; over half of consumers believe it is a risky means of transaction with privacy concerns. Another half considers mobile banking to be a difficult approach. To sum up, even though individuals are aware of the benefits of mobile banking, the factors of dependability, privacy concerns, and complicated mechanisms make it difficult to utilise.

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A Report on the Performance of Select Mutual Funds in India with Special Emphasis on the COVID-19 Pandemic

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Abstract

A well-spread financial market with dynamic participation is an essential prerequisite for a developing economy like India. This broad objective led to the establishment of the first mutual fund in India in the year 1963, namely, Unit Trust of India (UTI), an initiative undertaken by the Government of India and the Reserve Bank of India 'with a view to encouraging saving and investment and participation in the income, profits and gains accruing to the Corporation from the acquisition, holding, management and disposal of securities.'

The tremendous growth of the industry has been possible primarily because of two factors- (i) the measures taken by SEBI to re-energise the industry back in September 2012 and (ii) the support from mutual fund distributors to expand the retail base. The distributors also act as a bridge between the funds and the investors, especially in the remote areas. They not only help the investors to choose an appropriate scheme, but also make them aware about the volatility of the market, thus making investing in mutuals funds a secure option. They have also had a major role in popularising Systematic Investment Plans (SIP) over the years. In April 2016, the number of SIP accounts crossed 1 crore mark and as on 28th February 2022 the total number of SIP Accounts are 5.17 crore.

This study aims to deal with the performance of the Mutual Funds Industry in India before the covid-19 pandemic and after the covid-19 pandemic. Data has been collected from various sources, and a comparison has been made between the trends of the two chosen periods. Statistical analysis has been made to reach to a concrete conclusion. This study deals with equity mutual funds of four different sectors. The chosen mutual funds are the top performing mutual funds in their respective sectors.

Keywords: *AUM (Assets Under Management), Equity Mutual Funds, Covid-19 Pandemic, SENSEX*

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1. This Dissertation was done by the scholar under the guidance of Prof. Ankita Samanta.

1. Introduction

Mutual funds can be defined as an unregulated and unincorporated trust, where the capital subscribed by the members is invested in stocks, bonds and other securities such that any member shares pro rata in all profits and losses of these investments. Mutual Funds India Pvt Ltd was incorporated on December 30th, 2000 for providing world class financial advisory services to investors to help them align their interest rates with national interest rates. As on 31st March 2013, the capital investment and assets under management (AUM) of Mutual Funds India was Rs 5907 crore and Rs 25000 crore respectively.

Mutual funds in India are managed over decades, starting in the year 1951. This sector has grown gradually and steadily throughout the years, gaining stature, and contributing to India's GDP. The rise has been attributed to the continuous investments by domestic financial institutions on behalf of their retail clients, with growth seen during both bears and bull's markets. Discussions of reform measures continue with Competition Commission of India (CCI) who regulate market operations.

With the onset of the Covid-19 pandemic, it has been observed that the mutual fund space has grown. Interestingly, in the year 2021, it has been seen that several smaller companies have gained momentum over the larger companies. In spite of the Covid-19 pandemic and the series of lockdowns, money inflows to the equity markets continues to be high, which boosts the confidence of the investors.

2. Literature Review

Subrata Roy (2013) in his paper *'Performance Appraisal of Mutual Funds in India an Empirical Study'* examined the risk-return performance of selected open-ended mutual fund schemes and evaluated their performance based on risk-adjusted measures. He concluded that performances of all types of selected open-ended mutual fund schemes were positive and satisfactory.

Das (2017), in his paper *'Mutual Funds in India Performance and Disclosure Practices'*, analysed the trend of growth in Mutual Funds in India during the period 2004-05 to 2014-15. He concluded that India had a much better performance in terms of growth and sales than US and Europe and the world as a whole.

Trivedi *et al*. (2018), in '*A study of Investors Perception on Selected Mutual Funds'* conducted a study on the perception of investors on selected mutual funds. It was found that the respondents started investing before the age of 30, which increased by the time they were middle-aged.

Babbar *et al*. (2018), in their paper '*Mutual Fund Characteristics and Performance in India'* conducted a study to understand mutual fund investments in a normal situation. It examined the role of fund characteristics in determining mutual fund performance in India.

Liu et al. (2020), in '*Covid-19 Outbreak and Affected Countries Stock Markets Response'* studied the coronavirus outbreak on 21 leading stock markets using the event

study methodology. They found that the markets fell quickly after the outbreak.

Zhang *et al.* (2020), in their paper '*Financial Markets under the Global Pandemic of Covid-19*' examined the impact of the pandemic and concluded that it has led to an increased risk in the global stock market.

Baker *et al.* (2020), in their paper '*The Unprecedented Stock Market Reaction o Covid-19*' examined textual analyses of news mentions and government data to conclude that the Covid-19 pandemic has caused the highest stock market volatility in the recent times including the Spanish Flu of 1918.

Al-Awadi *et al.* (2020), in their journal '*Death and Contagious Infectious Diseases: Impact of the Covid-19 Virus on Stock Market Returns*' believed that a pandemic evolves over a period of time rather than a particular point of time and analysed it to understand the change in trends in post pandemic investing. They noticed a negative pattern of investment in stock markets for all companies.

3. Research Gap

(a) A thorough research on the Indian Mutual Funds market has not been conducted post the Covid-19 pandemic.

(b) There is not enough data on the scopes of select mutual funds and their prospective futures.

4. Research Objectives

1. To understand the impact of the Covid-19 pandemic on the Indian mutual fund industry.

2. To analyse the performance of the mutual fund sector as a whole to help investors decide the areas for profitable purpose.

3. To compare the trend of the mutual funds sector in India between the pre and post Covid-19 scenario.

5. Research Methodology

This study adopts for itself a descriptive framework and bases the findings solely on secondary data available. Advanced statistical tools have been used to comprehend the quantitative data into means of comparison. The statistical tools used are:

• One Sampled T-Test
• Corelation

The selected mutual funds have been studied for a period of 2018-2019 to get a scenario of the industry before the pandemic, and for a period of 2020-2021 to get a scenario of the post pandemic situation.

For the Telecommunication Sector, DSP Small Cap Fund- Regular Plan has been taken into consideration. For the Banking Sector, HDFC Mid Cap Opportunity Fund has been taken for an in-depth study. For the Infrastructure Sector, L &

T Tax Advantage Fund has been taken into consideration. Lastly, for the Retail Sector, Reliance Tax Saver Fund has been considered.

Standard Deviation:

SD acts as a superior indicator of the volatility which shows how dispersed are the values under the study are from their means. Standard deviation is used for the calculations of the risk of an individual mutual fund scheme's returns, for the market index. Standard deviation can be computed as under:

$$\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^{N} (X_i - \mu)^2}$$

Where,

σ: Standard Deviation

N: Number of observations

Xi: Returns

μ: Average Returns

Beta

Beta is the sensitivity or the volatility of the stocks in relation to the market portfolio. By definition, if the beta of a portfolio of securities is equal to one, it means that it moves with the market. If the beta is less than one, it is a low beta stock; this means that the stock or the portfolio moves less than proportionately to the market and vice- versa.

Application of Jensen Measure

The returns of the schemes will be higher if the mutual fund managers are able to predict the price movement of the individual securities correctly in the volatile market. This can be measured with the help of Jensen measure. This measure is applied to examine the stock – selection performance of the managers of various types of equity mutual fund schemes in India. The capital asset pricing model (CAPM) can be written a under: Ri = Rf + βi(Rm) + ei

Ri = Rf + βi(Rm) + ei

R(i) = the realized return of the portfolio or investment

R(m) = the realized return of the appropriate market index

R(f) = the risk-free rate of return for the time period

β = the beta of the portfolio of investment with respect to the chosen market index

Sharpe Ratio

Sharpe ratio is used to calculate the risk-adjusted performance of a mutual fund. Essentially, this ratio tells an investor how much extra return he/she will receive

by holding a risky asset. A higher Sharpe ratio indicates better return yielding capacity of a fund for every additional unit of risk taken by it. Sharpe ratio is used to measure the excess return on every additional unit of risk taken.

Sharpe Ratio = (Average fund returns – Risk-free Rate) / Standard Deviation of Fund- Returns

The relevant growth and decline rates have been collected from the official websites of the said companies to understand the trend of the Mutual Funds sector in India. These companies have been selected based on the availability of information, their positions in the investment market and their relevance to the investors.

6. Data Analysis

DSP SMALL CAP FUND- REGULAR PLAN

Year	Average Return	Sensex Return	Sd of Fund Return	Sd of Sensex	Beta	Sharpe	Jensen
2018	-0.0226	0.00419	0.0576	0.03278	0.522	-0.408	-0.0265
2019	0.00189	0.0121	0.053	0.02386	1.259	0.209	-0.0142
2020	0.03144	0.0167	0.118	0.1027	1.051	0.194	0.0133
2021	0.0400	0.0183	0.0395	0.0365	0.249	0.816	0.0299

HDFC MID CAP OPPORTUNITY FUND

Year	Average Return	Sensex Return	Sd Of Fund Return	Sd Of Sensex	Beta	Sharpe	Jensen
2018	-0.0085	0.0067	0.0540	0.3278	0.522	-0.1736	-0.0124
2019	0.0011	0.0109	0.04621	0.0239	1.052	0.223730.	-0.0108
2020	0.0228	0.0177	0.1102	0.1027	1.017	0.12888	0.005
2021	0.0289	0.017	0.0356	0.0365	0.659	0.59328	0.0151

RELIANCE TAX SAVER FUND

Year	Average Return	Sensex Return	Sd Of Fund Return	Sd Of Sensex	Beta	Sharpe	Jensen
2018	-0.01791	0.0067	0.0510	0.03278	0.767	-0.3686	-0.0233
2019	0.0028	0.0109	0.0587	0.02386	2.008	0.2048	-0.0283
2020	0.0108	0.0177	0.1088	0.1027	1.037	0.01989	-0.0073
2021	0.0283	0.017	0.0408	0.0365	0.972	0.50218	0.0115

L & T TAX ADVANTAGE FUND

Year	Average Return	Sensex Return	Sd Of Fund Return	Sd Of Sensex	Beta	Sharpe	Jensen
2018	-0.00623	0.0067	0.0409	0.03278	0.572	-0.1744	-0.0104
2019	0.00449	0.0109	0.0384	0.02386	1.11	0.3554	-0.0087
2020	0.20207	0.0177	0.1021	0.1027	0.958	0.1137	0.0029
2021	0.02330	0.017	0.0299	0.0365	0.594	0.5184	0.01

CORELATION WITH SENSEX

Mutual Fund	Corelation (r)	Significance Rate
Dsp Small Cap Fund	0.924	0.00
Hdfc Mid Cap Opportunity Fund	0.952	0.00
Reliance Tax Saver Fund	0.939	0.00
L & T Tax Advantage Fund	0.864	0.00

The above table shows the corelation of the Net Average Values of the selected Mutual Funds with that of the Average SENSEX values. There exists a high corelation between the two factors for all the four companies, and for all of them the factors are positively corelated. This indicates that, when the SENSEX values increase, the NAVs of the said companies also increase, and vice versa. There is a direct relationship between the two factors. For all the four companies, the significance level considered to be 0.01. According to the table, the significance rate (P) is less than 0.01 and is 0.000 in all the four cases. Thus, the null hypothesis of the corelations not being positive is rejected, and there is sufficient evidence to prove that the two factors- the NAVs of the said mutual funds and the Average Sensex Values- are indeed positively corelated.

ONE SAMPLED T-TEST

Particulars		T Values	Significance
Dsp Small Cap Fund Regular Plan	PRE COVID	47.49	0.000
	POST COVID	15.621	0.000
Hdfc Mid Cap Opportunity Fund	PRE COVID	89.688	0.000
	POST COVID	18.896	0.000
Reliance Tax Saver Fund	PRE COVID	83.236	0.000
	POST COVID	22.238	0.000
L & T Tax Advantage Fund	PRE COVID	61.824	0.000
	POST COVID	20.241	0.000

The T Test has been conducted on the Mean Difference Model. The differences in the NAVs of the four companies of the four sectors are statistically significant

in the pre pandemic and the post pandemic situation.

7. Interpretation

1.   For the Telecommunication sector, the performance of DSP was the best in the year 2020, wherein, the average rate of return is more than the market return. The degree of risk associated with the investment is also lower than the prevailing market risk. The market is highly volatile, and the risk associated with the investment is sub optimal.

2.   For the Banking sector, the performance of HDFC Mid Cap Opportunity Fund is the best in the year 2020. The degree of risk associated with the investment is also lower than the prevailing market risk. The market is highly volatile, and the risk associated with the investment is sub optimal.

3.   For the Retail sector, the Reliance Tax Saver Fund has performed the best in the year 2021. The degree of risk associated with the investment is also lower than the prevailing market risk. The volatility of the market is low, the risk associated with the investment is optimal, and the risk of investing is also low when compared to the risk-free returns of that period.

4.   For the Infrastructure sector, L & T Tax Advantage Fund has performed the best in the year 2021. The degree of risk associated with the investment is also lower than the prevailing market risk. The volatility of the market is low, the risk associated with the investment is optimal, and the risk of investing is also low when compared to the risk-free returns of that period.

5.   The relationship between the Net Average Values and the SENSEX values are positively related. When the return on SENSEX or the risk of SENSEX increases, the return and risk of the said mutual funds also increases, and vice versa.

6.   There is a significant difference between the pre pandemic and the post pandemic market risk and return of the studied mutual fund companies.

8. Conclusion

To conclude, the performance of the selected mutual funds has improved a lot after the COVID-19 pandemic has hit the country. The pandemic may be adversely affected all the other sectors, but it has positively affected the mutual fund sector. As the investors are becoming more aware of the market, and the benefits and risks associated with it, mutual funds are gaining more popularity in India. The investors want to diversify their portfolios, and investing in mutual fund schemes is the best way to do that.

From the period 2018-2019, which is the pre pandemic period, investors were apprehensive of investing in mutual funds. However, from the year 2020 to 2021, there has been an upward trend in the mutual fund market. The investors are getting a higher return at a lower risk compared to the pre pandemic situation. Among the four sectors chosen for the study, maximum growth has been noticed in the retail sector, compared to the other three sectors of the study.

The mutual funds sector is one the fastest growing sectors in the financial market of India. With proper knowledge, assessment, and judgement, investing in mutual funds post the covid 19 pandemic can be very rewarding

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A Study on the Impact of Fintech Companies with Respect to Financial Inclusion in India

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Abstract

New financial technologies (FinTech) have erupted around the world. Consequently, there has been a considerable increase in FinTech over the last five years. The paper focuses on the evolution of FinTech Companies in India along with the impact of fintech's on financial inclusion in India. The paper also finds out whether FinTech companies are disrupting the banking industry through the delivery of digital technology solutions. It was observed that many people have adopted to this new age financial technology called Fintech which has made daily transactions and security of funds much easier just with the help of a single click. After the COVID crisis it was seen that the use of FinTechs have risen at a much faster rate. The collaboration process of FinTechs and Traditional Banking Industries have already begun which will benefit both to survive in this changing environment.

Keywords: Digital technology solutions, financial inclusion, FinTech, Start-ups.

1. Introduction

Financial inclusion refers to the concept of providing financial services to people with low incomes. Financial services are not adequately and evenly available throughout all strata of society in many developing and underdeveloped nations, resulting in financial exclusion. It can result in sluggish economic and social growth, resulting in issues such as unemployment, inequality, and poverty. As a result, every country must integrate all segments of society in the financial sector and provide them with equitable access to banking and other financial services. Despite the fact that the majority of Indians live in rural areas, the level of financial inclusion has improved dramatically in recent years. The availability

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1. This Dissertation was done by the scholar under the guidance of Prof. Ankita Samanta.

of numerous banking technology facilitates improves the process of financial inclusion.

As a result, technology plays an important role in the delivery of financial services to customers. Technology is transforming the financial sector, allowing for unprecedented access to financial services. These changes have been in the works for several years, and they are affecting practically every country on the planet. Fintech (Financial Technology) is one that is fast growing currently. Fintech's rise in India promises to make it easier for people to perform financial transactions online, improve financial literacy, and achieve financial inclusion.

FinTech is a term that stands for "financial" "technology." It may be defined as technology-enabled financial innovation that results in new business models, applications, processes, or products, all of which have a significant influence on financial markets, institutions, and the delivery of financial services. As a result, FinTech has the ability to fundamentally alter India's financial services and financial inclusion environment. FinTech firms can help increase competition and accelerate Financial Inclusion in India by lowering costs and improving access to financial services for the underserved, low-income groups, rural, and other underserved sectors of the Indian economy through their innovations, new business models, and applications.

2. Literature Review

Joseph (2014) in her research work, *"A study on Financial Inclusion and Financial Literacy"* discusses public knowledge of banking services and products. It has been determined that significant changes in the promotion and success of FI have occurred in the last ten years. After extensive conversations among specialists, a policy framework has formed. To put financial inclusion policies into action, a variety of projects and experimental services have been created. People are not only accessing but also actively using fundamental financial services. However, there is still much more to be done. Access to and correct use of various financial services ensures the long-term viability of projects and aids in the prevention of new kinds of financial exclusion and marginalisation as they emerge.

Schweitzer and *et al*. (2017) conducted research *"Is 'Fintech' Good for Small Business Borrowers? Impacts on Firm Growth and Customer Satisfaction"* on the characteristics of businesses that obtain loans from internet lenders and came to the same conclusion. The data support the premise that entrepreneurs turned to Fintech lenders to arrange credit for their company that would not qualify for typical bank loans.

Jon Frost, Erik Feyen (2021) they show in their paper *"Fintech and the Digital Transformation of Financial Services: Implications for Market Structure and Public Policy"* that Digital innovation is producing substantial economic changes in financial service production, with ramifications for the financial industry's industrial structure. Computer and connectivity developments can help increase efficiency and competition. The financial frictions and circumstances that first created the demand for financial intermediaries have returned.

3. Research Gap

From the above aforementioned reviewed literature, it is observed that:

- None of the researches, addresses the impact of FinTech Companies with respect to Financial Inclusion in India
- Not much research was found on development of FinTech Companies in underdeveloped and developing countries.
- Not many research paper was found showing the impact of COVID-19 Pandemic under FinTech Companies in India

4. Objectives

- To study the evolution of FinTech Companies in India
- To study the impact of FinTech Companies with respect to Financial Inclusion in India
- To examine how FinTech companies are disrupting the banking industry through the delivery of digital technology solutions.

5. Research Methodology

Both primary and secondary data collection methods are used in the study in order to collect the required data to meet the objectives of the study. Accuracy in research necessitates a thorough understanding of the subject. The information collected for the research is between 2011-2021 as during this phase only the technical aspects of banking started to develop, and the 2016 demonetization drive pulled in a lot of significance for the Fintech.

As the objective of the project is to examine how FinTech companies are disrupting the banking industry through the delivery of digital technology solutions, the research methodology adopted is basically based on primary data which is acquired through the use of questionnaires. The age group of the respondents is from 18-75years. The sample size is proposed to be 100 respondents. For the purpose of analysis and interpretation of data statistical tools like Factor analysis and Chi-Square have been used depending on the type of data.

Secondary data is used to obtain information about evolution of FinTech Companies in India and to identify the impact of FinTech Companies with respect to Financial Inclusion in India wherever required through Journals, Internet and Articles. Compilation of information was done through continuously referring to the above-mentioned secondary sources. Mainly the focus was given to the RBI website as well as the websites of other regulatory bodies in India for the collection of secondary data for better understanding of Financial Inclusion in India through FinTech Companies. The vast gamut of internet provided access to wide knowledge base, which added to the content of this project substantially.

6. Analysis and Interpretations

Based on the survey of 107 responses the following results have been obtained.
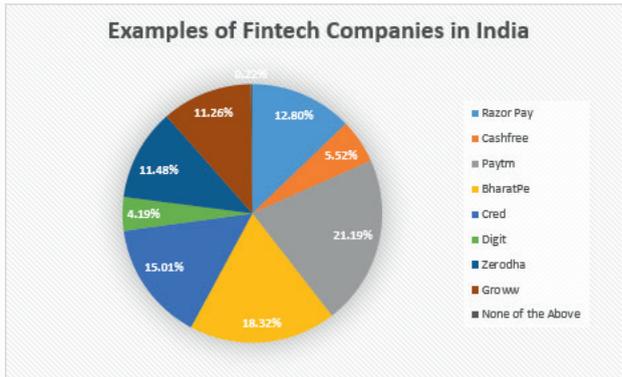
With the help of the Survey we were able to find out that a large number of people are aware of FinTech Companies especially people belonging to the age group of 18 – 24 and 25 – 40. There are numerous FinTech Companies Platforms available in India. The widely used ones being Paytm, BharatPe, Cred and Razor Pay.
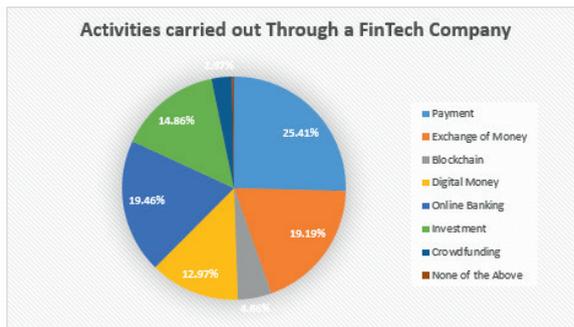
A number of activities are carried out through the different available applications of FinTech Companies. With the help of the Survey conducted it was concluded that a large section of the respondents use these applications for making Payments especially for their day to day transactions. This signifies that people are moving towards the cashless transactions. Along with this the other activities which have gained much importance include Online Banking and Exchange of Money. Nowadays every individual wants all their basic banking tools and details at one click hence the FinTech apps come into action making all their banking activities convenient and hassle free.

Banks collaboration with FinTech Companies
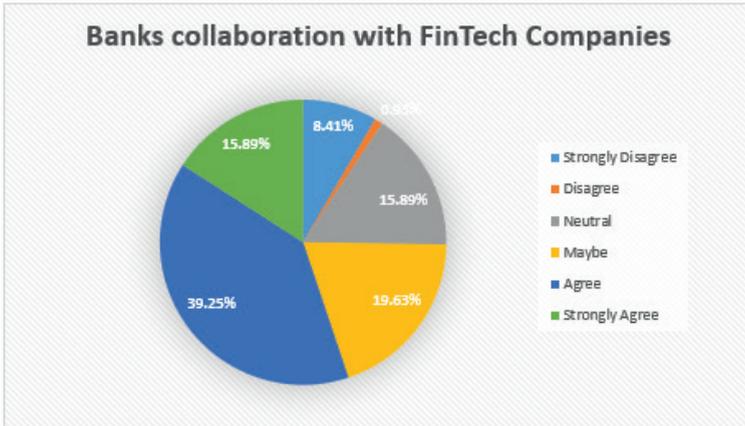
Most of the respondents believe that the Traditional banks should collaborate with the FinTech Companies in the near future in order to survive in the changing environment. Orelse the Traditional Banks might get completely disrupted by the Fintech Companies because of the advanced technological features and services provided by them which makes the entire process of transacting or Security hassle free. 39.25% of the respondents agree with the statement, followed by 16% of the respondents who strongly believe that banks should collaborate. In short around only 9% do not agree with the statements and it was observed that maybe these respondents are reluctant to the environmental changes.

Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.533	13

We examined the reliability of the data by running Reliability Test. For the various sets (total number of items = 13) of associated factors used in the Questionnaire, values of Coefficient Alpha (Cronbach's Alpha) have been obtained. Among the Reliability Tests that were run , the minimum value of Cronbach's Alpha for performance scores obtained was 0.533 which is higher than the thumb value that is .50 for the lower limit of acceptability for satisfactory internal consistency reliability. This demonstrates that the data is reliable, and the random error-related inconsistency has been kept to an acceptable level. As a result, we may now conduct further tests for the analysis of the article based on the survey results.

Factor Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.750
Bartlett's Test of Sphericity	Approx. Chi-Square	416.394
	df	78
	Sig.	.000

Factor analysis is suitable since the KMO value is 0.750, which is larger than 50% and statistically significant at the 5% level. KMO Statistics has a value greater than 0.5, suggesting that factor analysis might be performed to analyse the data. Furthermore, the p value corresponding to the chi-square statistic indicates that the correlation coefficient matrix is significant, as revealed by Bartlett's test of sphericity testing for the significance of the correlation matrix of the variables. The p value is 0.000, which is less than the anticipated threshold of significance of 0.05, implying that the hypothesis that the correlation matrix of the variables is negligible is rejected. It's also worth noting that the sample size of 107 is substantially larger than the number of variables, which is 13. All of these factors support the use of factor analysis in this study.

In the Total variance Explained there are 13 variables in the data set .They are classified into 4 components. Component 1 comprises of those variables which are explaining 30.252% of variance and hence these variables are strongly inter-correlated. Similarly component 2 (15.873%) captures those variables which are relatively lesser correlated than component 1.In this manner the % follows descending order. It indicates how much of each variable is accounted for by the underlying factors taken together. A relatively high communality shows that not much of the variable is left over after whatever the factors represent is taken into consideration.

Total Variance Explained									
Comp-onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumu-lative %	Total	% of Variance	Cumu-lative %	Total	% of Variance	Cumu-lative %
1	3.933	30.252	30.252	3.933	30.252	30.252	3.880	29.844	29.844
2	2.063	15.873	46.124	2.063	15.873	46.124	1.873	14.404	44.248
3	1.242	9.551	55.675	1.242	9.551	55.675	1.344	10.336	54.585
4	1.035	7.962	63.637	1.035	7.962	63.637	1.177	9.053	63.637
5	.784	6.027	69.665						
6	.759	5.838	75.502						
7	.627	4.824	80.327						

8	.566	4.353	84.679						
9	.547	4.207	88.886						
10	.503	3.869	92.755						
11	.436	3.353	96.108						
12	.308	2.369	98.477						
13	.198	1.523	100.000						
Extraction Method: Principal Component Analysis.									

According to Rotated component matrix, in this matrix the variables are accommodated among the components on the basis of factor loading. Higher the factor loading of the variable the greater the possibility of accommodation in the respective factors. Based on the component score coefficients we are able to obtain the factor scores for the extracted factors.

Component Matrix[a]				
	Component			
	1	2	3	4
Heard	.070	.587	-.484	.059
Simplified_User_Experience	.754	-.225	-.055	.271
Accessible_Analytics	.773	.097	.074	.139
Artificial_Intelligence	.725	-.095	-.106	-.017
Blockchain_Security	.772	.119	.050	.006
Personalized_User_Experience	.701	-.021	-.376	.216
Integrating_Other_FinTech_Solutions	.792	-.052	.310	-.119
Voice_Controlled_Banking	.680	-.069	.076	-.285
Next_5yrs	.121	.725	.080	.076
Traditional_Banking_disrupt	.194	.350	.411	-.662
Reliance	.025	-.761	-.090	-.164
Customer_Experience	-.047	.550	.358	.338
Collaboration	-.071	-.314	.656	.459
Extraction Method: Principal Component Analysis.				
a. 4 components extracted.				

Component 1	Component 2	Component 3	Component 4
Simplified_User_Experience	Heard	Reliance	Traditional_Banking_disrupt
Accessible_Analytics	Next_5yrs	Collaboration	

Artificial_Intelligence	Customer_ Experience		
Blockchain_Security			
Personalized_User_ Experience			
Integrating_Other_FinTech_ Solutions			
Voice_Controlled_Banking			

COMPONENT 1: Features of FinTech Application

COMPONENT 2: Way Forward

COMPONENT 3: Integration

COMPONENT 4: Awareness

CHI - SQUARE TESTS

Test Statistics		
	Next_5yrs	**Traditional_Banking_disrupt**
Chi-Square	86.907[a]	48.374[b]
df	3	4
Asymp. Sig.	.000	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 26.8.		
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 21.4.		

The Chi-Square Test of Independence is used if two categorical variables are associated. The p- value for both the variables is 0.00 which is less than 0.005 thus null hypothesis rejected and alternative hypothesis is accepted. This states that there is an association between both the variables. Since most of the respondents feel that in the upcoming 5 years Fintech Companies will substantially grow in India and the traditional Banking Industry will be disrupted by the FinTech Companies. Thus, it can be concluded that if Fintech rises in the coming 5 years Banking Industries will be disrupted.

7. Conclusion

India, as a country, is on the verge of a huge opportunity to accelerate financial inclusion through FinTech, which is quickly becoming a significant driver of the country's development. Only about 300 million people out of the 1.3 billion people in the country have taken out a loan at some point, therefore the next 300 million people are clearly the opportunity. India is becoming a data-rich country, with over a billion individuals having access to payment and telecommunications data in some way.

In terms of data that is machine readable and usable for credit evaluation, we

have merely scratched the surface thus far. As a result, the prospects are huge if we can combine data, technology, and consumer insights to target the next 300 million individuals. India has demonstrated to the rest of the world that linking the unbanked does not have to be a pipe dream in the future, and much can be learned from its financial inclusion initiatives, which are founded on the pillars of digitalization and infrastructural development.

We tend to think of banks and fintech firms as opposed forces battling for market share as technology becomes increasingly essential in the banking industry. The truth is that both sides require each other just as much as they require competition.

Fintech firms, on the one hand, have received bank investment and frequently rely on banking, insurance, and back-office partners to supply their primary goods. Banks, on the other hand, have bought or invested in fintech businesses to improve their existing operations and offers by using new technologies and methods of thinking. Fintech start-ups are working with banks to gain from their regulatory compliance experience and skills, as well as to make expanding easier. Fintech companies, in turn, provide banks with a cutting-edge platform for reaching out to new clients. The collaboration also aids in cross-selling products between retail and corporate, enhancing the relationship beyond a transactional one.

Hopefully, this looks back at the growth of fintech will help to summarise how far we've gone and put the busy times ahead of us into perspective.

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An Analysis of the Performance of Cryptocurrency and Expectations from its Future

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Abstract

Over in the recent times Cryptocurrency has been a massive subject of discussion among the public at large. In the world full of technological advancements, Cryptocurrency is becoming more and more comfortable for an investor who values privacy and creation of money.

Recently, some of the Cryptocurrencies like Bitcoin, Ethereum, Ripple, Litcoin, Dash, Dogecoin, etc. are trending in the financial market as people are getting more and more aware and hence are somewhat showing interest in buying Cryptocurrencies, because of the ever-dynamic nature of the environment.

Keywords: *Bitcoin, Blockchain, Cryptocurrency, International Acceptance, Technological Advancement.*

1. Introduction

Cryptocurrency, doesn't have any physical form, it is intangible, as it is completely a digital value in the web wallet. These digital currencies, like Cryptocurrencies are used as cash and cash equivalents for transactions and other businesses, like transferring funds globally/locally, as a store of value and so on.

It is the overall performance of Cryptocurrency that matters the most to the mass. Bitcoin was the first decentralized Cryptocurrency, to be created in the year 2009.

On the other hand, there exists a greater population who is at a confused state of mind with regards to it.

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1.   This Dissertation was done by the scholar under the guidance of Dr. Sreemoyee Guha Roy.

The Bitcoin has maximum dominance in the Cryptocurrency market. Bitcoin's price has shown a significant rise, as it has become a household name in month of May 2016. For instance, an individual could purchase a Bitcoin for about $500.

Within a very short span of time, some of the Cryptocurrency exchanges started appearing in the nation. Some initial bitcoin exchange in India was btcxindia, unocoin, and coinsecure.

Over the course time, some other exchanges also appeared, including Zebpay, koinex, and bitcoin-India. With the proliferation of Cryptocurrency trading and exchange platforms, the Cryptocurrency market in India has grown from its modest level in 2013 to what it is today, big difference.

As of the month of January 2022, there are about 16,598 cryptographic forms of money in presence. Not all cryptographic forms of money are dynamic or very important. Limiting some "dead" Cryptos leaves us to something around like 9,631 dynamic digital forms of money.

There are as much as 300 million Cryptocurrency users across the globe.

2. Literature Review

Various studies have been carried out on Cryptocurrencies till date.

Shailak Jaini (2018) in his *"The Growth of Cryptocurrency in India: its challenges & potential impacts on legislation"* mainly highlights the readers on the important aspects as to like what all impacts are associated with the very popular concept of Cryptocurrency and the opportunities that come along with it mainly focusing on India.

Saloni S. K. Doshi (2020) in her study *"A study of opinions on Future of Cryptocurrency in India* "highlights the various opinions of investors on the important aspect of the future of Cryptocurrency in India, considering the context of different level of investors and also in the context of area. This paper, in particular is the outcome of an opinionnaire that was performed after using the opinions of a total of 30 investors and thereafter, a t-test was performed to check the hypothesis of the same.

Dr. Mubarak and Hosmani Manujnath (2021) titled "*A study on Cryptocurrency in India"*. This study is a work of analytical research methodology conducted in the period between March 2018 and January 2021. It majorly focuses on the 'Bitcoin', starting from its creation to selling and buying of the same. In this paper trends have been shown comparing the value of Bitcoin to Indian rupee during the focus of study.

3. Research Gap

From the above aforementioned reviewed literature, it is observed that:
- There have not been enough literatures that investigate the future and expectations of Cryptocurrency in India.

- Not much research was found on Cryptocurrency by applying both data visualization tools like pie charts and bar graphs and statistical tools factor analysis.
- There seemed to have existed no other way to identify the source of creating or cashing out the very popular cryptocurrencies.

4. Objectives of The Study

(a) To understand the concept of Cryptocurrency and its functioning in regular trading.

(b) To study the spread of Cryptocurrency and identifying its growth and future prospects.

(c) To investigate user's expectation of the future of Cryptocurrency.

5. Research Methodology

A Research Methodology generally incorporates the way in which we intend to carry out our research paper and it encompasses the systematic way that aims to fulfil the objective of our research and the various data analysis methods under considerations.

The main focus of this research is to understand the concept of Cryptocurrency, its functioning and to study the spread of Cryptocurrency and the expectations of the various classes of users from Cryptocurrency.

The study is mainly based on exploratory data analysis, aiming to seek the answers to our objectives. Therefore, basic primary research on the performance of Cryptocurrency and its expectations from its future was conducted to collect the opinions of the various investors and necessary graphical tools like pie charts and bar graphs was used to formulate our results also, statistical tools like Reliability tests, KMO and Bartlett's Test along with Factor Analysis was applied to our primary data to conclude our study. The paper explores many aspects of Cryptocurrency platforms attempting to address the questions about its future and aims to answer other related safety and security concerns.

Furthermore, to satisfy the objectives of the research, secondary data from various publications by financial websites, government of India, journals, newspapers and related books was collected.

6. Analysis and Interpretation of Data

Based on the survey on "An analysis of the performance of Cryptocurrency and Expectations from its future "of 102 responses, the following results have been obtained:

FIGURE-3.1
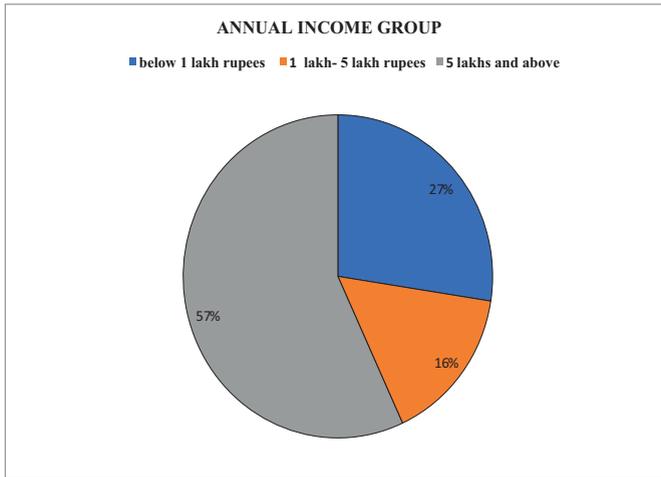
The pie chart above shows, the results of our survey in which investors are having different levels of annual income, have taken part in our survey. It is quite evident that 57% of our respondents have an annual income of Rupees 5 Lakhs and above.

Whereas16% belonged to the income group of Rupees 1 Lakh- Rs.5 lakhs. Lastly, 27% belonged to the category of below Rs. 1 lakh.
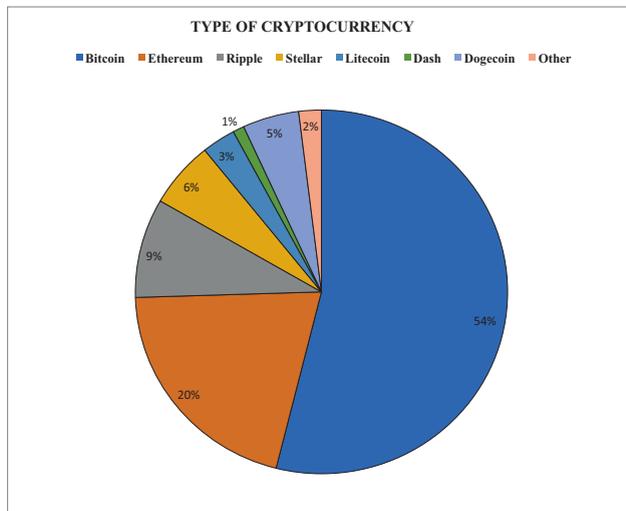
FIGURE-3.2

The survey conducted, also aimed to record those Cryptocurrencies which were most popular among the various investors. Majority of the respondents, that is 54% thought Bitcoin was the best known Cryptocurrency.

Subsequently, 20% of the respondents found Ethereum to the best known Cryptocurrency. Moreover, 9% were of the opinion of Ripple, 6% for Stellar, 3% for Litecoin, 1% for Dash and 5% for Dogecoin. The last 2% were of the opinion of other cryptocurrencies.

FUTURE OF CRYPTOCURRENIES IN THE NEXT 5 YEARS

■Close ■Decline substantially ■Decline ■Remain the same ■Grow in use ■Grow substantially

1%
2%
3%
19%
23%
52%
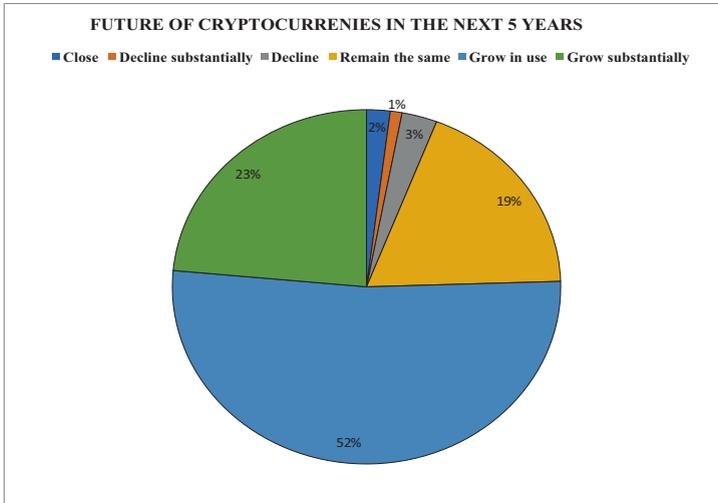
FIGURE -3.3

Our respondents on being asked about what the future holds for Cryptocurrencies in the coming 5 years, a very clear picture could be derived. 52% of the respondents were of a belief that the future of Cryptocurrency is bright and it will grow in use also 23% thought it will grow substantially. 19% of the respondents thought Cryptocurrency's use will remain the same as it is now.

On the other end, 3% of the investors were of the strong belief that its use will decline in the near future, 1% thought it will decline substantially, even 2% of the respondent think the use of Cryptocurrencies will close down in the near future.

WAYS OF USAGE OF CRYPTOCURRENCIES

- Investing and trading
- making purchases
- As storage of value
- Selling goods and services
- paying outstanding bills
- Online Gambling
- Transferring funds locally
- Transferring funds globally

8%
5%
4%
9%
13%
17%
11%
33%
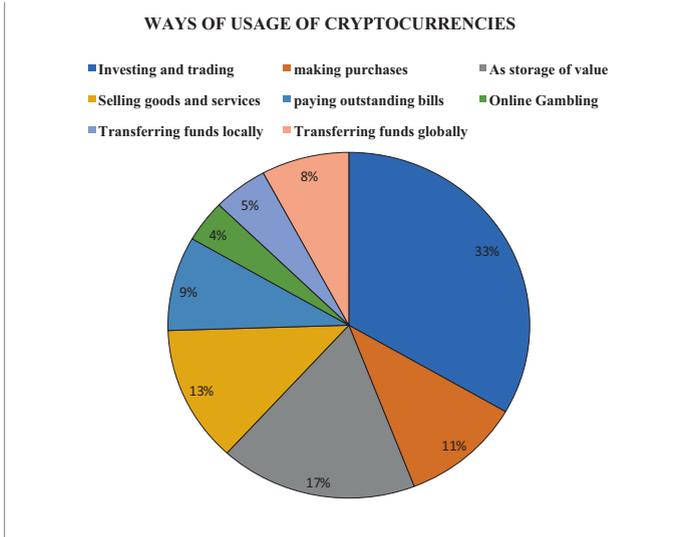
FIGURE -3.4

Our survey revealed the various avenues of the usage of Cryptocurrencies by our investors. It was seen that, majority of the investors, that is, 33% used it for trading and investing purpose. 11% used it for making purchases. 17% used it as storage of value, 13% for selling goods and services. It was also brought to notice that 9% if used was to pay outstanding bills, 4% for online gambling.5% to transfer funds locally and 8% for transferring funds globally.

HOPE TO INVOLVE IN CRYPTOCURRENCIES IN THE NEXT FEW YEARS

- very little rate of involvement
- moderate rate of involvement
- high rate of involvement

24%
42%
34%

FIGURE -3.5

Since Cryptocurrencies are becoming very popular day by day, the respondents were made to answer a very basic question that conveys a lot about Cryptocurrency's future. A very huge population of 42% wishes to have a high

rate involvement in the process of Cryptocurrency, since it may have a certain future according to the respondents.

Lastly, 34% want a moderate rate of involvement in the future, whereas 24% do not wish to involve much in the process of trading of Cryptocurrency in the near future.

Table 3.1 Case Processing Summary

		N	%
Cases	Valid	102	100.0
	Excluded[a]	0	.0
	Total	102	100.0

Table 3.2 Reliability Statistics

Cronbach's Alpha	N of Items	
.891		31

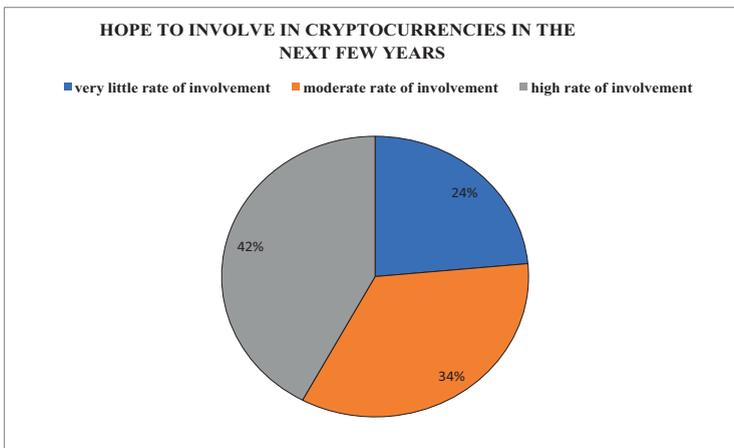To examine the reliability of our data by running a Reliability Test. For the various sets (total number of items = 31) of associated factors used in the Questionnaire, values of Coefficient Alpha (Cronbach's Alpha) have been derived.

The Reliability Tests that were run above, we see, the minimum value of Cronbach's Alpha for performance scores obtained was equal to 0.891 which is a higher value than the thumb value of 50% (that is 0.5), for the lower limit of acceptability for satisfactory internal consistency reliability. This shows that the data have "meritorious" reliability and the inconsistency as caused by random error was of somewhat manageable level.

Thus, we can say that, we are at a position to carry out the further tests of the Factor Analysis of the paper based on the data which is collected from our conducted survey.

Table 3.3 KMO And Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.856	
Bartlett's Test of Sphericity	Approx. Chi-Square	1867.850	
	df	465	
	Sig.	.000	

It is appropriate to do factor analysis on our data set because the KMO (Kaiser-Meyer-Olkin) value is 0.856, which is more than 50% and statistically significant at 5% level.

The value of KMO Statistics is more than 0.5, which indicates that the factor analysis can be performed for the given set of data. Further, we see Bartlett's test of Sphericity tests for the importance of the correlation matrix of the variables which is said to be indicating that the correlation coefficient matrix holds

significant, as indicated by the "p value" corresponding to the "chi-square" statistic as shown above. The p value is 0.000, which is less than 0.05, being the assumed level of significance.

This is said to indicate the rejection of the hypothesis that the correlation matrix of the variables stands insignificant. It is also quite evident that, the sample size is of 102 is much greater than the number of Variables which is, 31.All of these factors justify the use of factor analysis for our performed survey.

In the Total variance Explained, there are 31 variables in our data set .They are seen to be classified into 8 components. Here, Component 1 comprises of only such variables that are explaining 10.180% of variance and hence, these variables appear to be in strong inter- correlation. In the same manner, component 2 captures those variables which are relatively lesser correlated than component 1.

In the similar fashion, it is generally seen that the percentage shows a descending trend, pointing towards the way each variable is accounted for in the underlying factors when taken together. When there is relatively high communality, it shows that not much of the variable is left over subsequently, what the factors that represent it gets taken into consideration.

The Rotated Component Matrix generally focuses on the variables that are accommodated among the components on the basis of factor loading. If the factor loading is higher, the possibility of the accommodation of the variables will be also greater in the respective factors. Depending on the component score coefficients we successfully obtain our factor scores for the extracted factors, where the derived components were as follows:-

Component 1: Characteristics

Component 2: Influences

Component 3: Participation

Component 4: Drawback

Component 5: Pricing

Component 6: Operation

Component 7: Classification

Component 8: Assumption

7. Conclusion

From our study it was found out that:

- A majority of our respondents to who invest in Cryptocurrency are Graduates, meaning that they have a general idea of their investments.
- The annual income of majority of the respondents was above rupees 5 lakhs.
- "Bitcoin" was the most popular type of Cryptocurrency known to the mass.
- A highly advantageous factor for a Cryptocurrency in use is its international acceptance, according to the findings of our survey.

- About 42.2% of the respondents hope to involve in Cryptocurrencies for purchases in the next few years.

We know the volume of Cryptocurrency commerce has been steadily increasing across the world, including in our country, India. However, there remains a gap in the form of a formulation of a concrete law that usually governs the Cryptocurrency-related transactions.

It is now of utmost importance to guarantee that the proposed Bill in Budget 2022, which will recognize Cryptocurrencies as a store of value and will believe that individuals should be permitted to own them as an asset class, to get implemented in near future.

Accordingly, it is of my opinion to avoid a standstill in the data economy, the government should prioritize timely policy formulation, implementation, regulation and oversight of Blockchain.

It can be concluded that the investors under the research generally value the characteristic of Cryptocurrencies, its influence on other vital decisions, the degree of participation and pricing more than just the rumour or the traditional perception associated to it. Cryptocurrencies have a lot of promise, and as seen, Indians have embraced Blockchain without a doubt.

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Effect of COVID-19 Pandemic on Selected Cases of the Health Insurance Sector in India

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Abstract

Purpose- The country was in much turmoil mainly during the period of 2020-2021 when Covid-19 disrupted the entire economic system of India. Consequent upon the onslaught of COVID-19, Health Insurance sector had also been adversely affected by the pandemic. People came to realize the importance of financial backups for medical emergencies and therefore more and more people were investing in health insurance policies for themselves and their loved ones. This paper discussed about the impact of COVID-19 on select cases of Health Insurance sector who dealt in exclusively only Health Insurance, commonly called as Standalone Health Insurance Companies (SAHI Companies)

Methodology- Secondary data has been collected about the health insurance sector at all India level for various financial and non-financial parameters to understand and analyze the growth pattern of health insurance sector. The source of all data is Insurance Regulatory and Development Authority of India (IRDAI). Microsoft Excel was mainly used for the secondary data analysis.

Findings- From the study, it was found that the incurred claim amount had increased during the COVID period, therefore the quantum of decreasing profits during this period had been observed. The reason for the slow growth in the Health Insurance sector during the COVID period maybe attributed for substantial increase in premium rate by the insurance companies which cost a kneejerk reaction from the prospective insurance buyers being unable to afford such a steep increase .Further floating of socially welfare health insurance schemes like "Ayushman Bharat" by the Central Government and schemes of "Swastha Sathi" by the Government of West Bengal and similar other schemes by

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1.   This Dissertation was done by the scholar under the guidance of Prof. Ankita Samanta.

various states providing medical facilities free of cost always had serious adverse impact on the premium earning of the commercial Insurance Companies specially by the Stand alone Health Insurance Companies.

Keywords: *Covid, Health Insurance, SAHI Companies.*

1. Introduction

1.1 Background of the study

Health insurance is a method that provides financial assistance in the event of illness or damage. The policyholder, or the person who is insured against the risk of health problems, pays a set amount of premium in exchange for the Insurance Company agreeing to pay the policyholder the cost of all medical expenditures incurred during the policy period, subject to certain terms and restrictions. India's progress in the health insurance business has been tremendous in recent years, yet the industry still lags well behind that of many other developing countries. Health insurance is one of India's burgeoning service industries. Purchasing health insurance protects us from the unexpected and high costs of hospitalization, which could deplete household funds. It protects you from financial hardship if you get sick for a lengthy time. The government of India's new economic policy and liberalization process, which began in 1991, prepared the path for the country's insurance business to be privatized.

The country was in turmoil in the year 2020 when Covid-19 disrupted the entire economic system of India. People have come to realize the importance of financial backups for medical emergencies and therefore more and more people are investing in health insurance policies for themselves and their loved ones. This study investigates the effect of COVID-19 on health insurance policy demand and a comparative study of the financial position of standalone health insurance companies before the pandemic and during the pandemic.

1.2 Rationale behind the study

In the last 1.5 years, the only common parameter across the globe and all the industries has been "COVID-19: THE NOVEL CORONAVIRUS". With the advent of Covid-19, the entire world has witnessed a series of critical cases, high morbidities and unprecedented deaths across the globe. Undoubtedly, the Health Insurance sector has also seen a huge impact on its business. This study aims to throw light on the performance of health insurance sector during the Covid-19 period.

2. Literature Review

Ellis *et al.* (2000) comes up with many recommendations including improvements in delivery of health care and its financing, efficient functioning of the ESIS and the CGHS, amending the Mediclaim system to tap the huge market potential and the possible privatization of health insurance within a strict regulatory regime.

Dileep Mavalankar (2000) states that India has limited experience of health insurance and the existing health insurance programmes such as ESIS and Mediclaim also need extensive reforms to make them more efficient and collectively useful.

Reshmi *et al.* (2007) states that the middle and low socio-economic groups are a growing market to be tapped because they are willing to spend a reasonable amount as a yearly premium rather than huge medical expenses in the event of adversity.

Helen Levy et al (2008) says that the core question of how health insurance impacts health, who it affects, and how much it affects health remains largely unsolved at the level of detail required to inform policy decisions.

Sinha (2018) tried to find out whether RSBY had improved care-seeking and reduced incidences of Catastrophic Health Expenditure (CHE) and providing financial security to economically weaker sections of the society. It was found that selective demographics and enhanced tax deductions are likely to motivate health insurance enrolments and these tax deductions would increase tax publications.

Monica et al. (2018) concluded that that the health insurance industry has become multi-faceted and that only one aspect cannot be responsible for its development, rather multiple factors are interlinked together to contribute to the improvement of Health Insurance in the market.

Erlangga *et al.* (2019) states that in many nations, the impact of various health insurance programmes on utilisation is generally beneficial. The effect of health insurance on health status appears to be beneficial, although further research from different nations is needed.

Surahio *et al.* (2019) concluded that employees are fairly satisfied with the employer-based health insurance facility they receive these days from the organisations where they work, according to the findings of this study.

Madan Mohan Dutta (2020) wanted to find out the understanding on performance of health insurance sector in India. His study attempted to find out how much claims and commission and management expenses it has to incur to earn a certain amount of premium in the health insurance sector.

Nayak *et al.* (2021) focused on the changing health insurance industry due to advent of technology like wearables technology, big data analytics, cloud technologies, etc who might develop a service mechanism where customers using wearables technology would be provided favourable premium for COVID-19 related products.

Ram Prakash *et al.* (2021) states that the CMCHIS has proved the importance of incorporating commercial diagnostic centres into publicly financed health programmes in order to reach a larger audience.

3. Research Gap

After a thorough and extensive literature review, it has been observed that:

- The performance of health insurance companies during the period of Covid-19 which is covered under this study has not yet been done.
- The financial contribution of standalone health insurance companies has not been studied in any research paper till now.

4. Objectives of The Study

1. To study the consequence of the effect of Covid-19 pandemic on the health insurance sector.
2. To make a comparative study of the financial performance of selected health insurance companies before and during the pandemic.

5. Research Methodology

Secondary data collection

Secondary data has been collected about the health insurance sector at All India level for various financial and non-financial parameters to understand and analyze the growth pattern of health insurance sector. For this purpose, the following financial and non-financial parameters have been considered based on the availability of data.

Sr No	Financial Parameters	Non-financial parameters
1	Operating profit/loss	No of policies
2	Net PAT	No of persons covered
3	Gross Direct Premium	
4	Net Earned Premium	
5	Claims Incurred	

Period of Study

The data for the above parameters has been collected for a total period of six years from the financial year 2015-16 to the financial year 2020-21. The data has been compiled from the IRDA handbook and IIB published reports and individual reports of the companies.

Scope of study

Data has been collected for 7 standalone health insurance companies as follows-

(i) Aditya Birla Health Insurance Company Limited
(ii) HDFC ERGO Health Insurance

(iii) Manipal Cigna Health Insurance (formerly known as Cigna TTK)

(iv) Niva Bupa Health Insurance Company Limited (formerly known as Max Bupa)

(v)   Religare (also known as Care Health presently)

(vi) Reliance Health Insurance (now taken over by Reliance General Insurance)

(vii)Star Health and Allied Insurance Company Limited

Statistical methods used for the study

To achieve the objectives of the study collected secondary data was analyzed using various computer software. Microsoft Excel was mainly used for the secondary data analysis. The statistical methods used for the purpose of achieving the objectives are as follows: -

Application of statistical tools

1.   The Annual Growth Rate (AAGR) has been calculated for all financial and non-financial parameters. The annual growth rate has been calculated using the following formula:

Annual Growth Rate = (Current Year Figure-Previous Year Figure)/Previous Year Figure x 100

AGR of every parameter have been computed using Microsoft Excel.

2.   Two sample T test has been used to measure the degree and the direction of the relationship between two financial and non-financial parameters.

3.   The financial and non-financial parameters for the standalone health insurance companies have been shown with the help of graphs to analyze the pattern of growth up to 2020-21 which covers the COVID-19 period.

6. Analysis of The Efeect of Covid-19 on Health Insurance Sector Based on Financial and Non-Financial Paramters

This chapter covers the detailed analysis as to how the health Insurance sector has been impacted due to COVID-19. The impact on the health insurance sector has been measured by parameters that has already been discussed in the research methodology section of chapter one. All data has been collected from IRDAI website.

Net Earned Premium
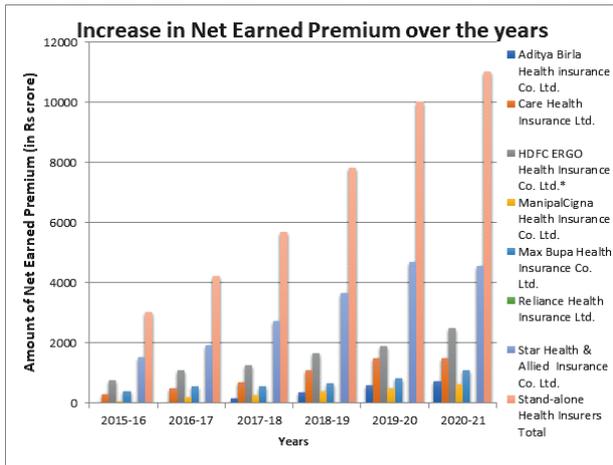
The graph shown above depicts the trend of the net earned premium for each company over the years. As seen from the graph, it can be said that the net earned premium increased for all companies except for Reliance health insurance limited. In totality also the standalone health insurers recorded an increase in the premium over the years. There was a considerable increase in the Net Earned Premium on the onset of the COVID-19. And in the year 2020-21 also it is observed that the net premium increased.
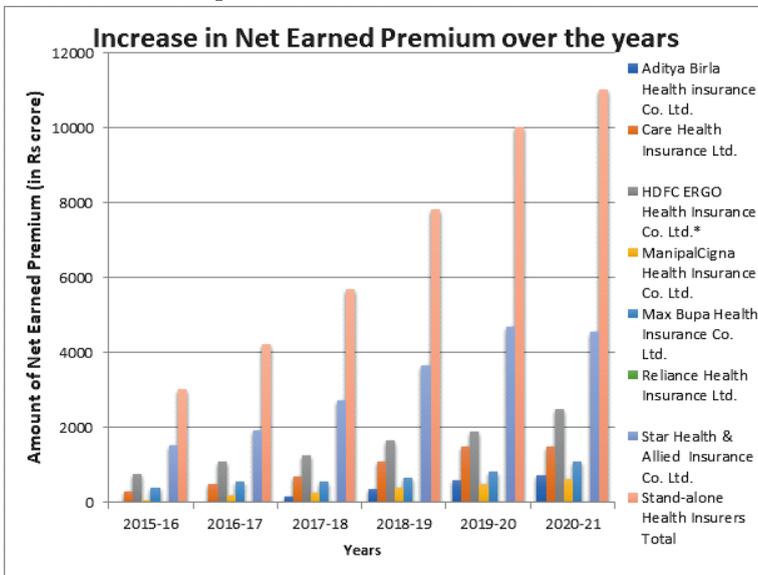
It can be observed that the growth rate initially decreased while in 2018-19 it recorded a sudden increase and then a decrease over the years and it recorded the lowest rate of 9.83% in the year 2020-21. As we can see from the graph that

on the onset of the Covid-19, the net earned premium considerably decreased. So, it can be said that the growth rate of the net premium earned fell down to a considerable extent during the Covid period.

INCURRED CLAIMS
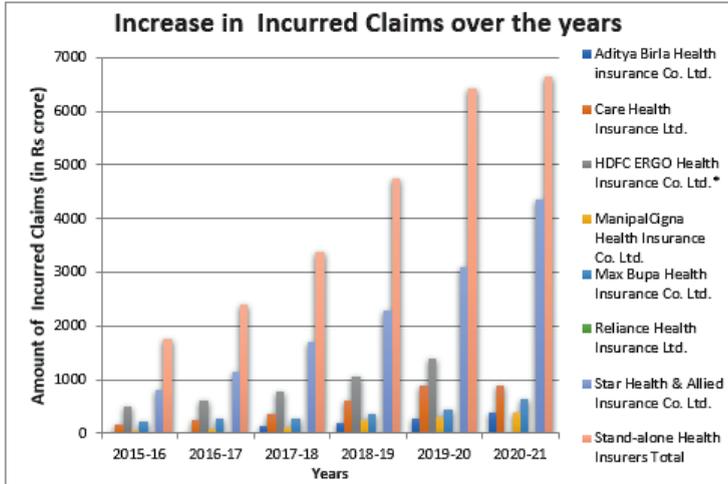
From the graph it can be seen that every company had recorded an increase in their claims incurred except for Care health and Reliance health insurance limited. HDFC ERGO health insurance has no incurred claims as on 2020-21 because it merged with HDFC ERGO general insurance company limited. In totality the standalone health insurers recorded an increase over the years and during the Covid-19. Also, the claims incurred increased for the standalone health insurance.
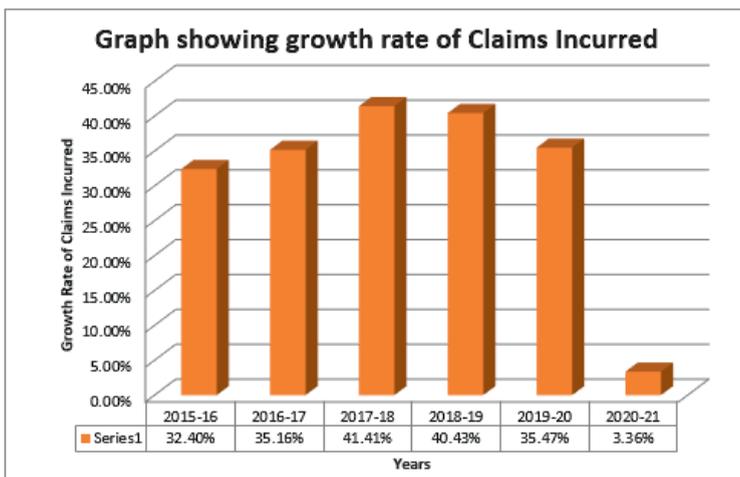
It can be observed that the growth rate increased up to 2017- 18 while the growth rate recorded a decrease from 2018-19 onwards. The lowest growth rate was recorded in the year 2020- 21 at 3.36%. So, it can be understood that though the incurred claims increased as a whole for the standalone health insurers over the years the growth rate shows us that the claims incurred recorded a decrease during the Covid- 19 period.

Analysis On The Basis Of Non-Financial Parameters

NUMBER OF POLICIES
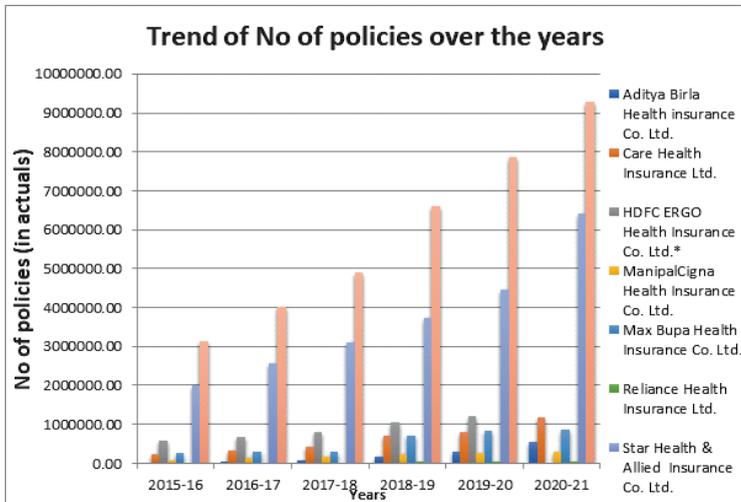
It can be said that during COVID-19. The number of policies underwritten by the stand-alone health insurers increased in totality if we observe the individual companies, it can be said that the number of policies increased for each and every company except for Reliance health insurance limited.

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Series1	25.05%	28.60%	22.02%	34.82%	19.08%	18.10%
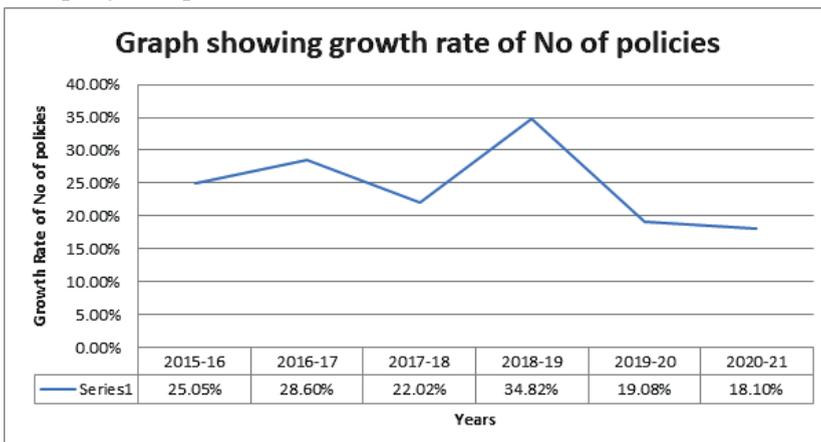
The graph given above depicts that the growth rate decreased during the COVID-19 period and the lowest growth rate was recorded in the year 2020-21 at 18.10%

NUMBER OF PERSONS COVERED
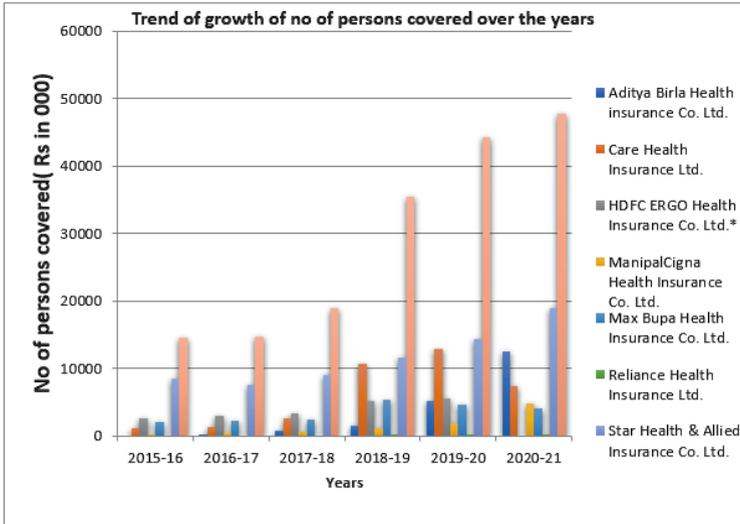
The graph given above shows the increase in the number of persons covered over the years for the individual companies and the standalone health insurance sector in totality. As can be seen from the graph, all companies recorded an increase in the number of persons covered except for Care health, Reliance health insurance and Max Bupa Health insurance company limited. The highest number of persons covered was recorded in the year 2020-21 and as can be seen from the graph the standalone health insurers had covered more persons during the Covid-19 period.
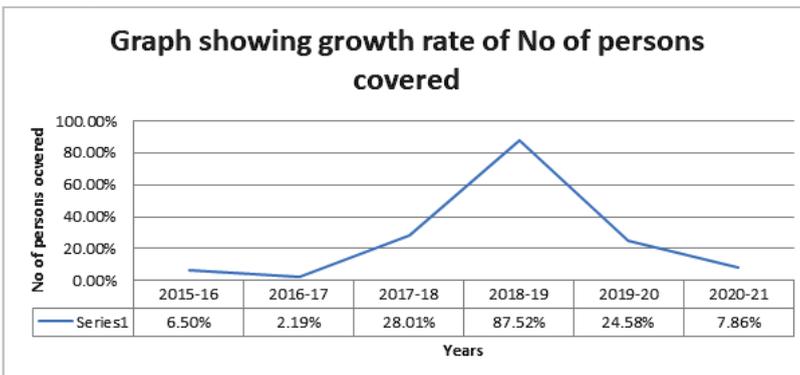
The graph given above depicts the growth rate of the number of persons covered. At the beginning of the graph, we can see that the growth rate is declining while it reached its maximum in the year 2018-19 at 87.52% and the growth rate declined during the Covid- 19 period.

Analysis of Inter-relationship Among the Financial and Non-Financial Parameters

Alternative Hypothesis(H1)	P-value	Acceptance or rejection of hypothesis
There is significant relationship between Net earned Premium and Total Claim Incurred	0.139859516	Rejected
There is significant relationship between Net earned Premium and PAT	0.093535734	Rejected
There is significant relationship between number of policies and number of persons covered.	0.001670918	Accepted

Inference from the Above Table

The null hypothesis is accepted when the p-value is less than the level of significance, that is 0.05. For the first two hypotheses, the alternative hypothesis was rejected as the p-value obtained from the two sample T-test was greater than the level of significance of 0.05 but for the last hypothesis in regard to No of policies and no of persons covered, the alternative hypothesis was accepted because the p-value is 0.0016 which is less than 0.05. So it can be concluded that a significant relationship exists between no of policies and no of persons covered.

7. Conclusion

Huge Claim

- There was huge claim due to the attack of Covid- 19 pandemic.
- The quantum in the claim amount had nearly doubled because of the average cost of covid claim which was twice the size of non-covid claim.

Survival Crisis

The standalone health insurance companies are the worst hit amongst all other private and public general insurance companies doing health insurance since the portfolio of standalone companies comprises of only the health insurance business unlike their counterparts in private and public sector where portfolios of insurance are well diversified.

Negative Financial Impact

- Negative PAT in 2020-21
- Problems of merger, infusion of capital for maintaining their solvency margin ratio to avoid disciplinary action by the IRDA may arise.

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A Study on the Effects of the Pandemic on E-Commerce in India

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Abstract

The concept of electronic commerce was at first introduced in the year 1991, it was a time when the Internet was not available in India until the late 90s when more and more people became aware of the Internet and they came to know that transactions can be facilitated through this medium. For most Indians, until 2002, that marked the IRCTC launching an online reservation system, this is from where the people started accepting the Internet as something of a purpose. Flipkart is also one of the major companies that contributes a lot towards the e-commerce juggernaut here. This growth accelerated when Mukesh Ambani launched JIO making internet accessible and affordable for all.

E-commerce has turned the way business and activities are done in India. The Indian E-commerce market is expected to grow to US$ 111.40 billion by 2025 from US$ 46.2 billion as of 2020. By 2030, it is forecasted to reach US$ 350 billion. With the pandemic we saw major industries and markets failing, but this triggered a shift towards the e-commerce and a growth in the e-commerce industry was observed.

Thus, we want to present our research on the aforementioned i.e.; has there been a shift towards e-commerce due to the pandemic, and deciphering various other reasons for the for the growth, by structuring my research into various tiers to get different facets and combining manifold reasons into a logical cohesive hole.

1. Introduction

The concept of electronic commerce was at first introduced in the year 1991, it was a time when the Internet was not available in India until the late 90s when more and more people became aware of the Internet and they came to know

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1. This Dissertation was done by the scholar under the guidance of Prof. Shubhayan Basu.

that transactions can be facilitated through this medium. For most Indians, until 2002, that marked the IRCTC launching an online reservation system, this is from where the people started accepting the Internet as something of a purpose. Flipkart is also one of the major companies that contributes a lot towards the e-commerce juggernaut here. This growth accelerated when Mukesh Ambani launched JIO making internet accessible and affordable for all.

E-commerce has turned the way business and activities are done in India. The Indian E-commerce market is expected to grow to US$ 111.40 billion by 2025 from US$ 46.2 billion as of 2020. By 2030, it is forecasted to reach US$ 350 billion. With the pandemic we saw major industries and markets failing, but this triggered a shift towards the e-commerce and a growth in the e-commerce industry was observed.

2. Literature Review

A series of Research work has been made in relation to the e-commerce industry and pandemic. A few notable research works are as follows:

- A study conducted by Viviana Alfonso, Codruta Boar, Jon Frost, Leonardo Gambacorta, Jing Liu. *et.al* (2021) on E-commerce in the Pandemic and Beyond and it was found that the growth of e-commerce has differed across sectors and over different stages of the pandemic.

- The contribution of Rithika Sirvi, Gundla Ranga Ramu, Varun Revelli, Gv Santosh Kumar, Dr Chandra Sekhar Pattnaik. *et al.* (2021) in finding the role of e-commerce on customer engagement in 2021 highlighted a compressive review of the role of e-commerce and how it is attracting customers.

- World Trade Organisation. *et.al* (2020) has conducted a study on e-commerce, trade and the COVID-19 pandemic to get an overview of the e-commerce landscape in the context of the pandemic.

- The findings of Sophia Chen, Deniz Igan, Nicola Pierri, and Andrea F. Presbitero. *et.al* (2020) are based on tracking the Economic Impact of COVID-19 and Mitigation Policies in Europe and the United States to analyse the economic impact of COVID-19.

- The contribution of Himmgiri Chaudhary. *et.al* (2020) on Analyzing the Paradigm Shift of Consumer Behavior Towards E-Commerce During Pandemic Lockdown helped in understanding change in consumer behaviour during the pandemic.

- A study conducted by UNCTAD. *et.al* (2020) on COVID-19 and E-commerce from a survey of Online Consumers was the first survey undertaken to examine the effect COVID-19 on the online purchasing behaviour on consumers, it helped understand the customer perspective directly.

3. Objectives of The Study

The proposed study will analyse and interpret the key features, problems and opportunities of the Online e-commerce Industry. The target will be explained

via a detailed manner with the assistance of graphs, charts and reports.

The key objectives of the proposed project are as follows:

• To study the effects of the pandemic on the e-commerce industry.
• To demonstrate reasons for growth in e-commerce industry during the pandemic.

4. Research Methodology

The proposed research is done through Descriptive Research, the descriptions are used for frequencies, averages and other statistical calculations and interpretations. The research has been conducted in three major steps:

Collection of Secondary Data

Collecting data containing various attributes from sites of government, economic and various other authorized institutions

Interpreting The Results

Making data charts, graphs, and figures in excel using the information derived out of the first stage.

Drawing Conclusion

Reaching to conclusions based on the data charts, figures, past data reports by performing trend and comparative analysis.

5. Data Analysis and Interpretations

5.1 Online retail sales an market size trend
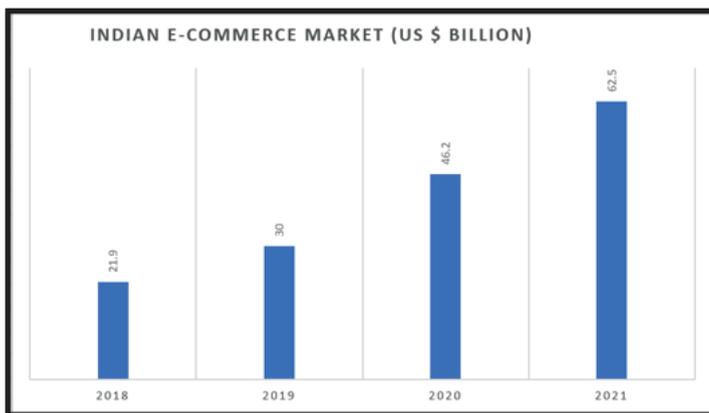
FIGURE 1:   Indian E-Commerce

Source of Data: Statista

Online Retail Sales

- Y-O-Y change from 2018 to 2019 is 36.98%
- Y-O-Y change from 2019 to 2020 is 54%
- Y-O-Y change from 2020 to 2021 is 35.28%

Interpretation

The trend for both online sales and market size of e-commerce industry was always an uptrend, but we see from 2019 to 2020 the increase/growth was at and increasing rate, which can be clearly identified by a steep rise of the curve.

There are various factors that are associated with such a rise in demand, these have been discussed above and some will be discussed in detail subsequently with the help of charts. The major reason however lies in the fact that it was the peak beginning year for the pandemic. And this caused people to shift to options that involved ease buying necessities, with minimal contact.

"After China and the US, India had the third-largest online shopper base of 140 million in 2020. India's e-commerce orders volume increased by 36% in the last quarter of 2020, with the personal care, beauty and wellness (PCB&W) segment being the largest beneficiary.

As of November 2, 2021, the Government e-Marketplace (GeM) portal served 7.96 million orders worth Rs. 152,315 crore (US$ 20.40 billion) to 55,433 buyers from 3.06 million registered sellers and service providers."

5.2 Festive sales
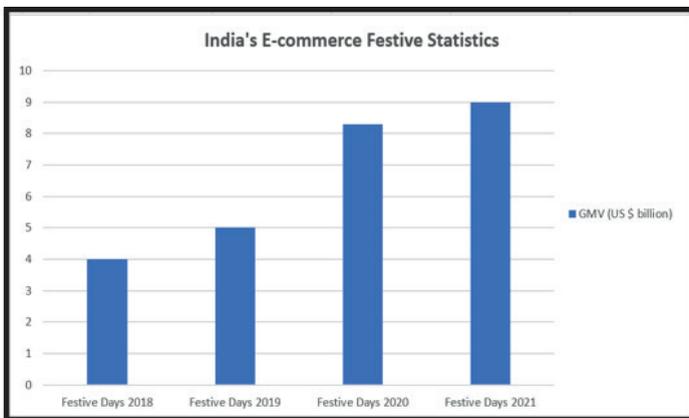
FIGURE 2: Festive Sales

Source of Data: Goldman Sachs

Interpretation

We see a huge jump in sales between festive period of 2019 to festive period 2020. India is rich in its culture and traditions, even with lockdown-imposed

people celebrated heartily within the confinements of their homes. The purchase of new apparels, and festive items were heavy on demand during the months of September – November.

With e-commerce portals offering heavy discounts and people unable to go and shop outside the sales to an uptrend to keep the celebrations going.

From October 15 to November 15 (2020), India's e-commerce festive sale season garnered gross sales of "Rs. 58,000 crore (US$ 8.3 billion) for brands and sellers, up 65 percent from Rs. 35,000 crore (US$ 5 billion) last year."

Major demand was seen in apparel and electronics during the festive days of 2020 and 2021.Indians purchased Rs. 68 crores of mobile phones during sale of these festive periods.

5.3 Demand in various segments
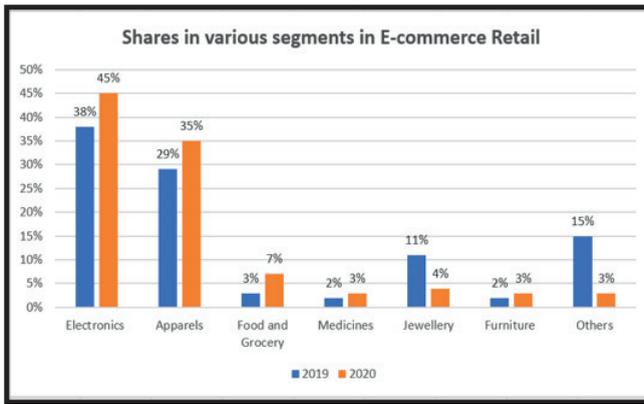
FIGURE 3:   Shares of Various Segments in E-Commerce Retail

Source of Data: IBEF

Interpretation

• Share of electronics have increased, with need of laptops/smartphones needed for work from home and education. Laptops and desktops saw 3 times the spike in demand in 2020, according to Flipkart, when it was tallied to pre-COVID levels. To address enormous demand, the outbreak demanded the emergence of new technology tools and non-contact modes.

• Apparels increased (mostly in the segment for athleisure wear)

• Food and Grocery shopping increased by 5 % owing to fear in going directly to sabzi mandis and panic buying. Thousands of neighbourhoods Kirana businesses and offline retailers joined Amazon fresh to take use of digital

technologies to connect with customers at their doorstep. This shift was also marked by other players in the market. Even Jio has launched kirana stores onto Jio mart. According to a Grofers spokeswoman, "64% of all new users on the site in the last year were first-time online grocery buyers, while 20% were completely new to e-commerce".

- Rise in Medicines delivery at home increased to avoid encounters with sick people in medicine shops.
- Jewellery shopping decreased by 7%, with decreased need for it.

An Amazon India spokesperson said: "as customer consumption patterns and habits evolved, over the last year, sellers have seen high demand in categories such as groceries, work from home and online schooling enablers like laptops, smart devices and headphones. We also saw significant demand for personal grooming products, wellness products, masks and sanitisers and fitness products."

E-commerce giant like Amazon had strengthened its partnership with the Indian Railways and has increased its operations to 55 lanes in order to facilitate faster delivery during the lockdown and to cater to rising demand.

In 2019 when Amazon had partnered with Indian railways, it was for 13 lanes. This number rose to 55, and helped cater to tier 3 areas as well.

5.4 Internet and smartphone penetration
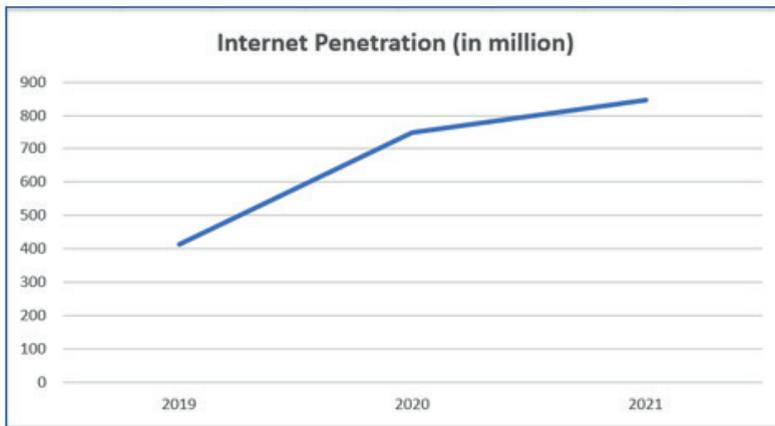
FIGURE 4:   Internet Penetration

Source of Data: IBEF
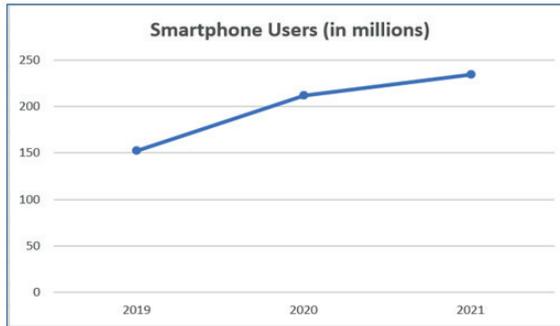
FIGURE 5:   Smartphone Penetration

Source of Data: Statistica

Interpretation

- In 2020, the number of internet connections in India significantly increased to 749.07 million.
- In 2020, smartphone users increased to 212 million.

With the need to work from home and education shifting to online modes this rise was inevitable. Since, 2016 post Jio entered the market internet penetration has been really high, infact same goes for smartphones. The rise in these two aspects were always present over the years, the pandemic gave a push to this rise. It fastracked the growth, with shifts and rise in usage being witnessed in rural area and Tier 3 cities as well.

The increase in smartphone and internet penetration is the country only facilitated the usage of e-commerce. These two are necessary requirements for e-commerce shopping, and to have a flawless experience. These are the basic predicaments for a shopper to have, the increase in these two variables has taken a positive push even more in the pandemic, thus contributing to e-commerce growth in turn.

5.5   Market for protective equipment
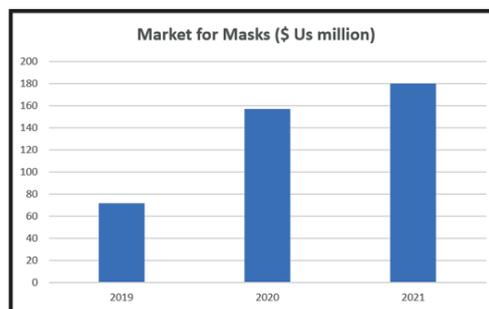
FIGURE 6:   Market for Mask

Source of Data: Media Sources

Y-O-Y increase from 2019 to 2020: 118.87 %

Y-O-Y increase from 2020 to 2021: 14.6%

Interpretation

From a situation of panic because of a severe scarcity in April 2020, India is currently facing more than needed supply for surgical and N95 masks. A large number of manufacturers (over 100) have closed or are intending to close their doors. Most of the players entered to achieve the governments vision of "Aatmanirbhar", but are now planning to shut down their production due to idle inventory with them.

Many players entered the market only to gain the profits for these two years, after ploughing the benefits for this period, they are smartly shutting their operations down.

The installation capacity of India for N95 masks is 20 crore pieces a month, with its utilization getting lower and lower, leaving unused inventory. Government confusion also played a role in the dwindling demand. While first closing demand for exports due to increase in demand in the country, we lost the opportunity, eventually opening up later to have lost the chance to China.

5.6 Sales proportion in and beyond tier 2 cities

Percentage value of E-commerce Q4 Sales in Tier 2 and beyond cities
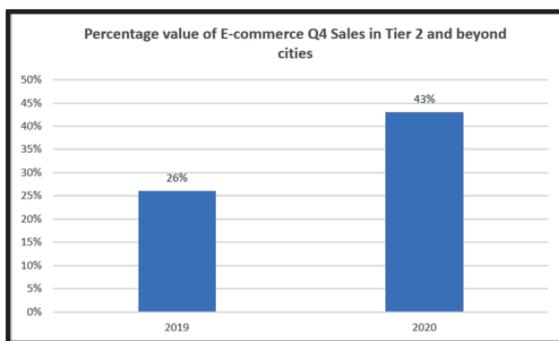
FIGURE 7:   Quarter 4 Sale Percentage in Tier 2 And 3 Cities

Source of Data: Business Standard

Interpretation

Last quarter percentage sales from Tier 2 cities and beyond are mentioned above in the graph, there has been a significant increase in online consumers from these areas.

This shift in consumer behavior and buying preferences can be understood with higher penetration of smartphones and internet, introduction of multiple payment apps which are easily accessible, multiple new delivery channels servicing to more and more pin codes.

The major reason for such a drastic increase is also because content in various e-commerce sites have started being available in various vernaculars.

- Flipkart saw a 52% rise in sale from Tier 3 cities.
- Paytm Mall saw a 2X increase in the number of users from Tier 1 and Tier 2 cities.
- Nykaa saw a 65% rise in sales from these regions compared to 45% earlier.

6. Conclusion

Shift from Brick-and-Mortar Retail

The COVID-19 pandemic has been such a crisis that has accelerated expansion and growth of e-commerce towards new institutions, consumer segments (e.g.: elderly) and as well as product kinds (grocery). There has been both rise in number of sellers and customers online.

Not all product categories have been benefitted

The consequence of the COVID-19 disaster on e-commerce seems to have not been the same between product lines, genres, and for different types of vendors. Commodities connected to personal protection (e.g., disposable gloves, sanitizers, masks), home pastimes, groceries, or ICT facilities saw a spike in interest, whilst items linked to tourism, recreation, or formal attire saw a sink in demand (e.g., briefcases, luggage, bridal attire, gym bags, etc.)

Certain COVID-19 alterations are anticipated to result in long-term e-commerce developments:

While certain demand adjustments may not be a recurring phenomenon, Others are likely to have a dent that leave a long-lasting impact. When the SARS 2003-04 outbreak took place, it was seen that it has acted as a catalyst to digital transformation.

Maximum growth in e-commerce has been witnessed by Tier 2 and Tier 3 cities:

This shift in consumer behavior and buying preferences can be understood with higher penetration of smartphones and internet, introduction of multiple payment apps which are easily accessible, multiple new delivery channels servicing to more and more pin codes.

The major reason for such a drastic increase is also because content in various e-commerce sites have started being available in various vernaculars.

Digital India initiative leveraged the growth of e-commerce:

Penetration of smartphone and internet was already rising due to government initiatives, this took a positive push during the pandemic and helped facilitate e-commerce. These two are not all but the basic necessary conditions to have for the use of e-commerce.

Demand for protective equipment caused shifts in buying behavior:

With people scared to buy masks from over the counter, demands shifted online. Being the only important product that was also mandatory, the demands rose exponentially catering to increased demand in other categories as well eventually.

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Chapter 7	**A Study on Freelancing in Accounting Sector in India: Pre and Amidst COVID-19 Outbreak**

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Abstract

Freelancing has been a noteworthy element of the accounting industry after the pandemic hit India. In this study, the influence on the accounting sector before and after COVID-19 was examined, Secondary data was collected using the Upwork website, while primary data was acquired via a questionnaire issued to Indian freelancers. With the help of SPSS software, the primary data was evaluated. The research focuses on the performance of freelancers in the accounting industry before and after COVID-19 outbreak. The aim of the study is to analyse the impact of freelancing, the changes in workspace and the future prospects. It stretches a vibrant picture on the influence Covid-19 has had on the income of the freelancers of the freelancers in the accounting sector in India.

Keywords: Freelancing, Accounting sector, Indian freelancers.

1. Introduction

A freelancer is an independent labourer who procures compensation on an hourly or per-task premise regularly for momentary work. The Covid-19 epidemic has forced organizations, associations and even states to offer remote working. Freelancing in accounting sector is relatively in recent trends in Indian Accounting Sector. It has gained a huge demand in existing times throughout Covid-19 pandemic by providing prospects to job seekers and allowing them to utilize their skill set in order to offer services. The software's mainly used in accounting sector for bookkeeping are Quickbooks Online, Xero, Zoho Books, Tally- etc.

At the start of the corona virus epidemic, a major portion of the labour force began freelancing for the first time in India. When the corona virus shut down the

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1. This Dissertation was done by the scholar under the guidance of Dr. Partha Pratim Ghosh.

economy in early March, 34% of the freelancers began working in that capacity. According to Upwork, roughly 10% of freelancers started freelancing within a six-month period. As per Upwork study, independent professionals benefit from income diversification, scheduling flexibility and higher productivity.

2. Literature Review

Stephany (2021) on *"Online Labour Index 2020: New ways to measure the world's remote freelancing market"* addresses the upsurge in scale of online freelance work over different language platforms. It has tried to understand the level of awareness of freelancing services inthe Indian subcontinent.

Noronha *et al.* (2016) studied on *"Positives outweighing negatives: the experiences of Indian crowdsourced workers"* presents an experimental investigation of Indian consultants in a subjective methodology, information was assembled from 24 specialists across India. It investigates diverse experiences of Indian freelancers on Elance-oDesk.

The contribution of Trajano (2021) on the area of *"A Rights-Based Approach to Governing Online Freelance Labour: Towards Decent Work in Digital Labour Platforms"* examines the emergence of different platforms over time. It audits the efforts made by national governments in realm bencourage social protection and different challenges outgrown.

Popiel (2017) on *"Boundaryless in the creative economy: assessing freelancing on Upwork, Critical Studies in Media Communication"* talks about the idea of inventive work through a contextual investigation of labourer outsourcing on Upwork. The conversation tends to underlying drivers of uncertainty in the commercial center and continuous achievement of freelancers.

3. Research Gap

This research aims to make a relative study about the pre and amidst covid-19 outbreak situation in freelancing in accounting sector. Furthermore, there has not been any research that shows the current scenario of freelancers in India. This research brings light on the impact Covid-19 outbreak has brought on freelancing accounting services in India. The study also analyses:

(i) How freelancers in India gained the market acknowledgement in this pandemic?

(ii) How were the changes in the market place incorporated and accepted in theaccounting sector in India?

(iii) What changes were seen in the income of the freelancers in India amidst Covid-19outbreak?

4. Objectives of The Study

(i) To explore the changes in workspace during pandemic.

(ii) To study the impact of Covid-19 on the income of the freelancers in India.

(iii) To predict the future prospects for the freelancers in the accounting field in India.

5. Research Methodology

Information has been gathered in two ways- Primary and Secondary Data. A well-defined structured questionnaire along with structured interviews having open ended questions was asked from salaried individuals working as freelancers in the bookkeeping area. A sample of 100 freelancers in India has been chosen for the study on the basis of simple random sampling. Primary data has been gathered during January to February 2022. Secondary data has been gathered from journals and reports from Upwork.

For presentation, analysis and interpretation, data has been classified and tabulated using Microsoft excel. The classified and tabulated data are studied, analysed and interpreted using statistical tool SPSS. The various tests conducted are reliability analysis, factor analysis and k-independent test.

6. Analysis and Interpretation

Primary data

This chapter portrays the results obtained through the survey wherein the demographic profile of the respondents includes 8 variables which are name, age, gender, occupation, annual income, residence, marital status and number of earning members. It also consists of various behavioural and opinionated questions.

Reliability analysis

Table 1:   Showing Cronbach Alpha's value

Case Processing Summary

N			%
Cases	Valid	100	100.0
	Excludeda	0	.0
	Total	100	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.784	16

Cronbach's alpha is a measure of reliability test or how closely a group of things are related to one another. It is regarded as a scale dependability indicator. The value of Cronbach Alpha is 78.4%, it is more than 50%. This suggest that the test is reliable and acceptable for the following study.

Factor Analysis

Table 2:   Showing KMO

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.765
Bartlett's Test of Sphericity	Approx. Chi-Square	665.309
	Df	120
	Sig.	.000

The KMO(Kaiser-Meyer-Olkin) and Bartlett's Test is 76.5% which states that factor analysis is acceptable for the following study. It is carried out in relation to the first objective of the study which is to explore the changes in workplace during pandemic. Here it is more than 50%hence it can be said that the data is suitable for structure detection.

Table 3:   Showing Total Variance

Total Variance Explained

Compo-nent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumu-lative %	Total	% of Variance	Cumu-lative %	Total	% of Variance	Cumu-lative %
1	4.469	27.928	27.928	4.469	27.928	27.928	4.344	27.152	27.152
2	2.685	16.781	44.709	2.685	16.781	44.709	2.359	14.746	41.898
3	1.891	11.821	56.530	1.891	11.821	56.530	1.927	12.044	53.942
4	1.055	6.595	63.125	1.055	6.595	63.125	1.469	9.183	63.125
5	.970	6.062	69.187						
6	.855	5.344	74.531						
7	.739	4.620	79.152						
8	.670	4.189	83.341						
9	.560	3.498	86.839						
10	.470	2.938	89.777						
11	.425	2.653	92.430						
12	.331	2.069	94.500						
13	.293	1.832	96.331						

14	.224	1.399	97.730						
15	.207	1.293	99.023						
16	.156	.977	100.000						

Extraction Method: Principal Component Analysis.

The eigenvalue, or amount of variance in the original variables accounted for by each component is given in the Total column and the overall variance in all variables, represented as a percentage. Here number of factors is equal to number of components which are having the value greater than 1. Hence these components are strongly correlated and extracted for further analysis. So, component 1,2,3 and 4 are being extracted here.

Table 4: Showing Rotated Component Matrix Rotated Component Matrix[a] Component

1		2	3	4
Freelancing_period	-.079	-.066	-.088	-.819
Freelancing_fulltime	.011	.584	.249	-.211
Regular_work	.037	.497	-.255	.603
Filtering	-.033	.781	-.018	.042
Demotivated	-.072	.799	.006	.194
Finance_planning	.154	.608	.036	.228
Income_expectations	.141	.258	.668	.203
Manage_family	.131	.169	.616	.382
Competition	.785	.035	-.059	.175
Freelancing_benefits	.871	-.078	.041	-.066
Concentration_flexibility	.869	.092	-.052	.064
Productivity_level	.738	-.069	.293	-.017
Learning_scope	.873	.062	-.086	.018
Technological_advancements	.901	.052	.036	.075
Preference	.143	.158	-.653	.069
Prospering_future	.016	.032	.661	-.247

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization

Table 5: **Showing the concerned variables classification into factors and the name of the factors:**

Component 1	Component 2	Component 3	Component 4
	Freelancing_period		
	Freelancing_fulltime		
			Regular_work
	Filtering		
	Demotivated		
	Finance_planning		
		Income_ expectation	
		Manage_family	
Competition			
Freelancing_benefits			
Concentration_flexibility			
Productivity_level			
Learning_scope			
Technological_ advancements			
	Preference		
		Prospering_future	

Here the component with the highest value for each variable are considered and are classified into factors thereafter. The designated name for each factor is as follows:

Component 1 – Attribute

Component 2 – Stretch

Component 3 – Goals

Component 4 - Continuity

K- INDEPENDENT TEST

The Kruskal-Wallis H test is a tier based nonparametric test that can be applied to see if two or more groups of an independent variable on a continuous or ordinal dependent variable have statistically significant differences. This test has been applied for the following study keeping in mind the second objective of the paper which is to study the impact of Covid-19 on the income of the freelancers in India.

Table 6:   Showing K-Independent Test

Test Statistics[a,b]

REGR factor score 1 for analysis 1

Kruskal-Wallis H	8.254
df	4
Asymp. Sig.	.083

(a) Kruskal Wallis Test

(b) Grouping Variable: Age

The test variables used here are Factor 1 and a demographic variable Age (as grouping variable). The range for the grouping variable i.e., Age has been put between 1 to 5. Here the significance value has come up to 8.3% which is more than 5% but less than 10%. Hence it canbe said that its significant and the variables are positively correlated.

Test Statistics[a,b]

REGR factor score1 for analysis 1

Kruskal-Wallis H	.104
df	1
Asymp. Sig.	.747

(a) Kruskal Wallis Test

(b) Grouping Variable: Gender

The test variables used here are Factor 1 and a demographic variable Gender (as grouping variable). The range for the grouping variable i.e., Gender has been put between 1 to 3. Here the significance value has come up to 74.7% which is more than 10%. Hence it can be said thatits insignificant and the variables are not correlated.

Secondary Data Analysis

On the basis of freelancer's opinion on power flexibility holds on freelancing

Graph 1: Showing to what degree is having flexibility is areason one freelances
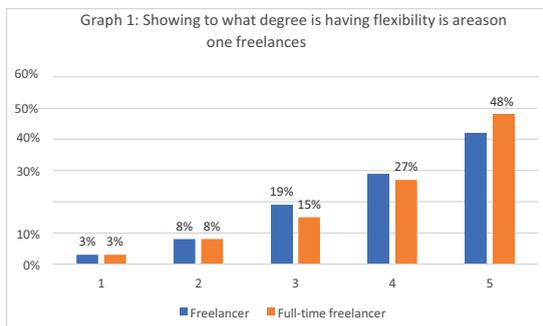
The above table shows to 'To what notch is having flexibility in schedule for an accounting field (i.e., what days or time freelancers labour) is a purpose why one freelances?' It can be seen clearly that freelancing gives more freedom and autonomy, but it is also crucial to understand the reason behind it. Here 1 means it is 'not a reason' and 5 means it is 'main reason'for freelancing. At one glance one can predict how freelancing itself whether full time or part time gives freedom in all respects.

Table 7:   Showing the percentage of people agreeing to the following reasons for freelancing.

Reasons for freelancing	
	Percent agreeing
Because of personal circumstances (health issues, childcare needs. Etc.).	50%
Freelancing gives me flexibility to be more available as a caregiver for my family.	76%
Freelancing gives me flexibility to address my personal mental or physical health needs.	66%

It shows that there is a greater requirement for flexibility in two important categories of personal circumstances: disability and caregiving. 76% say freelancing gives them the freedom they need as a family caregiver and 66% say it gives them the flexibility they need for their own mental or physical health.

On the basis of work preference in accounting sector

Graph 2: Showing work preference in accounting sector
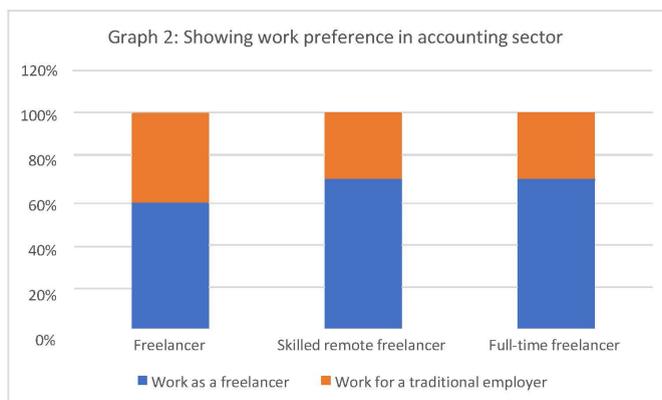
Here is another graph for the preference people give while choosing their career. It is observed that freelancers on an average are happier with their occupations, their day-to-day work-life balance. While it is always possible to discover people, who are dissatisfied with their jobs, on the whole, freelancers believe they are earning more, have the flexibility they require and are more satisfied

with their work. If given a choice 63% of freelancers indicate that they would opt for freelancing even without blinking.

On the basis of changes in management practices amidst COVID-19

Graph 3: Showing the changes in practices amidst COVID-19

Category	Percentage
Team Meeting (structure or	62%
Employee/Internal Communications	58%
Strategic Planning	50%
Onboarding/Training	39%
Recruiting	33%
Performance Reviews	23%
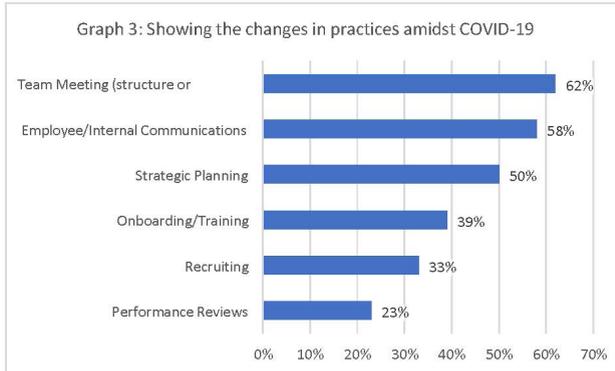
The above graph shows 'Has responding to the epidemic forced you to make changes to the subsequent management practice parts that will stay with you in long-run?' Here it is observed that when one looks at the details, it is quite evident that the changes are extensive, influencing practically every area of how much a company function. The most impactful factors here are- team meetings, internal communications and strategic planning which are more than 50%. Along with changes in management style, the epidemic prompted changes in software usage. Corporate management tools and project productivity software were also used by managers.

7. Conclusion

As people seek alternative forms of income, the pandemic which is tragically causing many job losses will be one of the factors that will cause the freelancing industry to flourish. Freelancing has become so popular in India that it has attracted a huge number of job-seeking, self-employed professionals eager to learn new skills and broaden their horizons. The area of freelancing is already speeding towards its wonderful pinnacle with an ever-increasing number of enterprises. As discussed in the paper Upwork's continued success is due in part of large number of start-ups that lack the financial resources to hire domestically and depend on the site for convenience and access to a large, competitive and flexible labour.

As per the questionnaire it is quite evident that Covid-19 has impacted the lives of a lot of earning members of the family. People's preference has changed ever since India was hit by the pandemic. It can be concluded that the site and online freelancing are appealing to people because of the ease of sign-up and profile setting, the convenience of working from home, thepossibility for large incomes and the flexibility of work. However, because of the scarcity of high-paying contracts the value of expertise and competitiveness, freelancers must work in a qualified manner.

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A Study on Impacts of COVID-19 on the Life Insurance Industry in India

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Abstract

The Covid-19 pandemic has resulted in a significant loss of human life around the world. India is one of the top worst-hit countries by coronavirus. The covid-19 pandemic has activated an enormous spike in the economy, wealth, and livelihood. This pandemic has made its impact on every business sector including the insurance sector. The purpose of the research is to make a comparative analysis between private and public life insurance companies and also study the effect of COVID-19 pandemic and its overall effect on the business of Indian life insurance industry.

In order to conduct the study, three private life insurance companies are taken such as SBI, ICICI PRUDENTIAL and TATA AIA and secondary data has been collected from various websites and annual reports of life insurance companies. Various types of ratios are used to analyze their financial position and also T-test is used to understand the impact of Covid-19 on life insurance industry is significant or not. The period of study covered total four years i.e. 2017-2018 to 2019-2020 as before Covid and 2020-21 as after Covid. The findings of the study reveal that Covid didn't affect the industry's solvency ratio, net retention ratio and claim settlement ratio. The net profit margin ratio and total life insurance premium of the companies can be seen slightly reduced but the difference is insignificant before and after COVID for both the sector.

Keywords: COVID-19, Insurance Sector, Public and Private Life Insurance.

1. Introduction

Life insurance is referred as a contract that guarantees the company will pay a sum amount of money to the insured or to the nominee in absence of the insured person (whichever happens earlier). The insurance industry in India plays a

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1. This Dissertation was done by the scholar under the guidance of Dr. Sreemoyee Guha Roy.

very important role in the national economy. COVID-19 has assumed global pandemic proportions. The WORLD HEALTH ORGANIZATION designated it a pandemic. There have been several research, just a few research have looked into this insurance company performance before and after COVID.

2. Literature Review

Kumar & Priyan (2012) titled "A Comparative Study of Public & Private Life Insurance Companies in India". The purpose of the study was to examine how LIC's prospects were affected due to privatization of the sector. It was observed that the Life Insurance Corporation of India had been capturing the majority of the market over the years. It was also seen that the private companies were also making an attempt to increase their share in the market.

Kiranmayi Patel, Pavan Patel (2021) in his title "Performance of Selected Life Insurance Companies – Comparative Analysis" made an attempt to understand the financial performance of LIC and private companies such as ICICI prudential, HDFC, SBI life insurance using CARAMEL model from the period 2012-13 to 2018-19. It can be concluded that willing investors can purchase a policy from any life insurance company based on their financial performance.

Dr. Gururaja B.L& Shraddha Srinivas Bangalore in the title "Impact of COVID-19 on insurance sector in India"(2021) to understand about the issues that India's insurance business has faced and how they have influenced the country's GDP. It was discovered after a review of multiple studies that the covid has both positive and bad effects. According to the study's conclusions, following the IRDAI standards is critical for insured's and insurers to deal with current uncertainty in a seamless manner.

Dr. Babita Yadav, Dr. Pushpa Suryavanshi (2021) their title "Study on the After Effect of Covid- 19 Pandemic in Life Insurance Sector in India" was an endeavor to concentrate on the impact of Coronavirus pandemic and its general impact on the business of Indian life insurance sector. The findings demonstrated that Covid-19 had an adverse effect on the life insurance industry in terms of new policy sales, premium income, and claim settlement. The Covid-19 epidemic is in full swing, there was also a good development due to life vulnerabilities.

Vaidyanathan Ramani (2020) in his title "COVID-19 impact: Here's why insurance may never be the same again" revealed about the new insurance launched specifically for COVID-19. This study was made collecting primary data to analyze how much people are concerned about the pandemic.

3. Research Gap

From the various above mentioned literature reviews, It has found out about that the researchers considered many parameters and ratios for analyzing the subject area of financial performance of insurance industry. But studies in public and private life insurance companies are needed to be explored more. No attempt has been created to analyze the financial performance of LIC and

other private insurance companies before and after COVID. In my study I will conduct a comparative analysis between public life insurance company LIC and private life insurance companies such as ICICI Prudential Life Insurance, Tata AIA Life Insurance and SBI Life Insurance before and after pandemic.

4. Objectives

1. To study the emergence and current position of selected public and private life insurance companies.
2. To understand the challenges faced by the insurance industry during COVID.
3. To analyze their financial performance from financial statements.

5. Research Methodology

In this study our main focus is to analyze the financial performance of public life insurance company (LIC) and private life insurance company (ICICI prudential, TATA AIA and SBI) before and after COVID. The data for this study came from secondary sources such as IRDA publications, journals, newspapers, websites, and other accounting and finance books. The data is analyzed using both financial (Ratio analysis) and statistical (Paired t-Test) methods. Profitability, solvency, and liquidity ratios were evaluated between public and private life insurance businesses.

6. Analysis and Interpretation:

Table 1 Total Life Insurance Premium

INSURER	2017–18	2018–19	2019–20	2020–21
SBI LIFE	25354.19	32989.42	40634.73	50254.17
TATA AIA	4162.95	6069.76	8308.51	11105.09
ICICI PRUDENTIAL	27068.77	30929.77	33430.70	35732.82
LIC	318223.21	337505.07	379389.60	403286.55

(Rupees in crore)

(Source: IRDA Annual Reports)

Table: 1 shows the total life insurance premium of selected public and private life insurance company before and after COVID i.e. during 2017-18 to 2019-20 and 2020-21. It's observed that the amount received as premium has increased over the years in both the sector. The table reveals an upward trend.

Table 2 Assets under Management

INSURER	2017–18	2018–19	2019–20	2020–21
SBI LIFE	115171.53	139970.37	49890.41	60237.89
TATA AIA	23477.95	27670.46	20572.09	26936.58

| ICICI PRUDENTIAL | 136239.05 | 157236.67 | 49093.39 | 61729.38 |
| LIC | 2526923.06 | 2760658.12 | 2253495.13 | 2460827.22 |

(Rupees in crore)

(Source: IRDA Annual Reports)

From the above Table: 2, it can be seen that assets under management of LIC and other private life insurance companies have increased in the year 2017-18 and 2018-19 but in the year 2019-20 both the sector faced downfall. During 2020-21again a rise in it can be observed from the table. Since asset under management of LIC is way higher than the private life insurance companies. So, it can be said that market value of LIC is bigger than any private players exist in the market.

Table 3 Claim Settlement Ratio

INSURER	2017–18	2018–19	2019–20	2020–21
SBI LIFE	96.76%	95.03%	94.52%	93.09%
TATA AIA	98.00%	99.07%	99.06%	98.02%
ICICI PRUDENTIAL	97.88%	98.58%	97.80%	97.84%
LIC	98.04%	97.79%	96.69%	98.62%

(Source: IRDA Annual Reports)

Above Table: 3 reveals the claim settlement ratio. In case of this ratio, higher the ratio, better it's for the company's reputation as it indicates the chances of settlement a claim. It can be seen from the above data that claim settlement ratio of the public sector has been better than the private sector during 2017-18 and 2020-21. However, in 2018-19 and 2019- 20 TATA AIA has been better with the ratio.

Table 4   Current Ratio

INSURER	2017–18	2018–19	2019–20	2020–21
SBI LIFE	1.83	1.78	1.93	1.69
TATA AIA	1.02	1.04	0.91	1.23
ICICI PRUDENTIAL	0.79	0.91	1.15	1.04
LIC	0.08	0.09	0.09	0.08

(Source: IRDA Annual Reports)

Current ratio refers company's ability to settle its current liability without prematurely selling long term investments or taking loans. Table Illustrates LIC's current ratio is lower than 1 over the years which indicates that the company's liquidity has become sensitive to the cash flow from premium collections. However, private sector has comparatively higher current ratio than the public sector as standard current ratio is considered between 1.5 to 3.

Table 5 Net Retention Ratio

INSURER	2017–18	2018–19	2019–20	2020–21
SBI LIFE	99.23%	99.70%	99.24%	99.03%
TATA AIA	98.34%	98.13%	97.56%	97.07%
ICICI PRUDENTIAL	99.00%	98.90%	98.30%	97.90%
LIC	99.88%	99.91%	99.91%	99.89%

(Source: IRDA Annual Reports)

Table: 5 reveals a continuous upward trend of LIC in net retention ratio over the years whereas private life insurance sector experience fluctuations. An increasing retention ratio expresses a company with profit expansion and growth. So, it can be said that LIC is a profitable business having the ability to manage risk.

Table 6 Commission Ratio

INSURER	**2017–18**	**2018–19**	**2019–20**	**2020–21**
SBI LIFE	4.48%	4.08%	4.00%	3.54%
TATA AIA	8.42%	9.29%	9.49%	8.98%
ICICI PRUDENTIAL	5.20%	5.00%	4.70%	4.20%
LIC	5.74%	5.73%	5.64%	5.50%

(Source: IRDA Annual Reports)

Table: 6 reflects commission ratio. In public sector the commission ratio of LIC has been decreasing over the years which depicts the company is paying lesser amount to the middleman. The lower the commission ratio, the better it's. Whereas in the private sector TATA AIA can be seen having higher commission ratio.

Table 7 Solvency Ratio

INSURER	2017–18	2018–19	2019–20	2020–21
SBI LIFE	2.08	2.18	2.16	2.33
TATA AIA	2.98	2.71	2.11	2.05
ICICI PRUDENTIAL	2.67	2.27	2.07	2.14
LIC	1.53	1.53	1.56	1.66

(Source: IRDA Annual Reports)

Table: 7 shows the solvency ratio of selected public and private life insurance companies during the year 2017-18 to 21. It can be clearly seen from the above data that in spite of bigger market domain, public sector has lower solvency ratio than private sector. This signifies that with lower solvency ratio the public sector cash flow is less sufficient than the private sector to meet its short- and long-term liabilities.

Table 8 Net Profit Margin Ratio

INSURER	2017–18	2018–19	2019–20	2020–21
SBI LIFE	3.40%	2.98%	3.24%	1.77%
TATA AIA	2.70%	0.40%	0.52%	0.24%
ICICI PRUDENTIAL	4.17%	2.74%	5.07%	1.14%
LIC	0.05%	0.05%	0.04%	0.04%

(Source: IRDA Annual Reports)

Table:8 shows the net profit margin of selected public and private life insurance companies. It's observed that the selected companies are facing fluctuations as the result of the changes in operating expenses relating to insurance, investment Income, commission paid and benefits paid. Also, percentage of net profit margin of LIC is lower than the private sector. Net profit margin ratio during 2020-21 depicts the impact of COVID.

PAIRED T-TEST

Net Profit (Rs. In crore)		
Insurer	2019-20	2020-21
SBI LIFE	142218.31	145584.94
TATA AIA	4406.99	4710.57
ICICI PRUDENTIAL	106875	96015
LIC	271270.8	290056.68

t-Test: Paired Two Sample for Means

	Variable 1	Variable 2
Mean	131192.775	134091.7975
Variance	12136468323	14215493812
Observations	4	4
Pearson Correlation	0.997433833	
Hypothesized Mean Difference	0	
df	3	
t Stat	-0.474115921	
P(T<=t) one-tail	0.333894328	
t Critical one-tail	2.353363435	
P(T<=t) two-tail	0.667788656	
t Critical two-tail	3.182446305	

The impact of Covid-19 pandemic on the net profit of the companies before 2019-20 and after 2020-21 has a normal distribution.

To check the p-values,

Hypothesis formulation:

H_0: There's no statistically significant difference between the two sample (i.e. before and after covid) $\mu_0 = \mu_1$

H_1: There's no statistically significant difference between the two sample (i.e. before and after covid) $\mu_0 \neq \mu_1$

Test Statistic: $t = (\bar{X}1 - \bar{X}2) / \sqrt{[(S21 / n\ 1) + (S22 / n\ 2)]}$

$\bar{X}1$ = observed mean of 1st the sample

$\bar{X}2$ = observed mean of 2nd the sample

$S1$ = standard deviation of the 1st sample

$S2$ = standard deviation of the 2nd sample

$n1$ = size of 1st sample

$n2$ = size of 2nd sample

H0: There is no statistical difference in the net profit of the companies between the two samples before and after the pandemic.

H1: There is a statistical difference in the net profit of the companies between the two samples before and after the pandemic.

Since P-Value is 0.667788656 which is greater than 0.05, therefore H0 i.e., the null hypothesis is accepted. Hence the test is statistically insignificant i.e., the difference between the net profit of the companies before the Covid is insignificant. Thus, it can be concluded that the Covid has no effect on the net profit of the companies.

Total Premium (Rs. In crore)		
Insurer	2019-20	2020-21
SBI LIFE	40634.73	50254.17
TATA AIA	8308.51	11105.09
ICICI PRUDENTIAL	33430.7	35732.82
LIC	379389.6	403286.55

t-Test: Paired

Two Sample for Means

	Variable 1	Variable 2
Mean	115440.885	125094.6575
Variance	31155967064	34656995707
Observations	4	4

Pearson Correlation Hypothesized Mean Difference	0.99987637 0	
df	3	
t Stat	-1.91820835	
P(T<=t) one-tail	0.075451525	
t Critical one-tail	2.353363435	
P(T<=t) two-tail	0.15090305	
t Critical two-tail	3.182446305	

The impact of Covid-19 pandemic on the total premium of the companies before 2019-20 and after 2020-21 has a normal distribution.

To check the p-values,

Hypothesis formulation:

H_0: There's no statistically significant difference between the two sample (i.e. before and after covid) $\mu_0 = \mu_1$

H_1: There's no statistically significant difference between the two sample (i.e. before and after covid) $\mu_0 \neq \mu_1$

Test Statistic: $t = (\bar{X}1 - \bar{X}2) / \sqrt{[(S21 / n\ 1) + (S22 / n\ 2)]}$

$\bar{X}1$ = observed mean of 1st the sample

$\bar{X}2$ = observed mean of 2nd the sample

S1 = standard deviation of the 1st sample

S2 = standard deviation of the 2nd sample

n1 = size of 1st sample

n2 = size of 2nd sample

H0: There is no statistical difference in the total premium of the companies between the two samples   before and after the pandemic.

H1: There is a statistical difference in the total premium of the companies between the two samples before and after the pandemic.

Since p-value is 0.075451525 which is greater than 0.05, therefore H0 i.e., the null hypothesis is accepted and H1 i.e., the alternative hypothesis is rejected. Hence the test is statistically insignificant i.e., the difference between the total premium of the companies before the Covid is insignificant. Thus, it can be concluded that the Covid has no effect on the total premium of the companies.

7. Conclusion

After conducting my study using secondary data, through annual reports, journals, etc. has shown the total premium amount increased over the years in both the sectors. It can be concluded that the public sector should work on their current ratio as having lower current ratio leads to sensitive cash flows and the

private sector should increase their asset under management as it reflects the total market value of the investment. Investors make comparison between higher investment inflows and higher asset under management as a positive indicator of quality and management experience. From the study it can be drawn that COVID didn't affect the industry's solvency ratio, net retention ratio and claim settlement ratio. The net profit margin ratio and total life insurance premium of the companies can be seen slightly reduced but the difference is insignificant before and after COVID. So, it can be concluded from the study that the COVID has not impacted the insurance industry in India.

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Chapter	**A Study on the Impact of COVID-19 Pandemic in the Microfinance Sector of India**
9	

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Abstract

COVID-19 has severely impacted all the sectors throughout the globe. The lockdowns necessitated by the spread of pandemic brought almost all the business to a halt, except the essential services. The worst off were the people from the low-income group who basically belonged to the microfinance sector. It created a lot of questions in the mind of people that whether this sector would survive the pandemic or not- if yes, then on what conditions? As said by Jonathan Morduch, "Microfinance stands as one of the most promising and cost-effective tools in the fight against global poverty." Therefore, the researcher focused on the impact of this pandemic in the microfinance sector of India.

In the first part of this paper, the researcher gave a gist about the whole research work done which includes the introduction, literature review, research gap, objectives and research methodology of the study. In the words of the UN Secretary-General António Guterres, "We are in this together-and we will get through this together." Hence, to analyse the impact of pandemic on the microfinance sector of India, the data taken from the annual reports has been analysed extensively followed by the findings and conclusion which gave this study its due importance. This paper is basically focused on the pre-covid and post-covid analysis of the microfinance sector of India.

Keywords: COVID-19, Microfinance Sector, Pandemic, Small Finance Banks.

1. Introduction

Microfinance, like many other aspects of the modern society has a very deep historical origin. Mechanisms of granting loans to the impoverished people of the society have existed in various forms, for thousands of years. In the 15th

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1. This Dissertation was done by the scholar under the guidance of Prof. Ankita Samanta.

century, the Franciscan monks established the Mounts of Piety to bring together the upper and lower sections of the society. Around 1870s, in the Rhineland region of Germany, the first mutualist financial organisation was founded which was the first savings and lending cooperative and its main purpose was to assist the working people by granting them loans. This idea continued to flourish the Europe throughout 20th century. However, these financial inclusion strategies couldn't continue for a much longer time since it was not sufficient enough to cover the poverty. As a result, in one of the poorest countries of the world "Bangladesh", the concept of modern microfinance was first emerged by Muhammad Yunus, who started his own program named: Grameen.

Traditional banking was flipped on its head by the Grameen system. The concept of "Bank for the poor" sparked in the mind of Yunus after witnessing the women of Bangladesh crafting bamboo stools for two cents a day and thus, was granted banking institution status in the year 1983 and was called as Grameen Bank. In the year 2006, Yunus for his efforts was awarded with the Nobel Peace Prize. In developing countries like India, there is a huge gap between rural and urban people, and to bridge this gap the concept developed by Yunus plays a very crucial role.

Many researchers in their empirical studies have proofed that microfinance provides financial stability to the people of rural areas who could not afford to gain financial assistance through other formal channels and the main reason behind the failure of conventional banking system in India when it comes to weaker section of the society was the demand of proof of recognised employment or the collateral, which poor may not supply. Besides, the risk and the cost involved in the small loan savings accounts was very high which created difficulty for banks as well. All these problems leave the poor no other option but to go to the local money lenders or the informal way of lending who charged a very high interest rates resulting in a very bad conditions of the needy people. Apart from the lending facilities, microfinance institutions provide many other facilities as well such as Poverty alleviation by providing entrepreneurial skills, women empowerment, economic growth, mobilisation of savings, social welfare, etc. Hence, emergence of the concept of microfinance has been a great change maker in the society.

The Indian microfinance sector has been tested time and again specially in the recent years, even after being proven by as an effective model for financial inclusion. The sector has survived the crisis of Andhra Pradesh in the year 2010, the demonetization drive of 2016 made by government and in the year 2018 the NBFC breakdown as well. Whenever the banking industry or the economy as a whole is struck by a crisis, the microfinance sector is typically among the most hit, as it serves the country's most financially deprived people. Despite this, the sector has weathered the storms and grown stronger as a result of the lessons learnt following each crisis. These and other experiences were useful during the COVID-19 that destroyed the nation, as well as most of the rest of the world. During the year 2020, when Covid-19 exploded throughout the world, it raised urgent questions about whether the sector of microfinance would survive–and,

if so, in what condition. Hence, this paper aims to get an idea rather to compare the performance of the microfinance institutions after the emergence of Covid-19 and before the occurrence of the same.

2. Literature Review

Roodman *et al.* (2006), in their paper "*Microfinance as Business*", presented a conceptual overview of the topic taking global diversity of microfinance in consideration. The study used mixed approach to check what microfinance leaders have done in order to solve various business problems. The results showed that they have created various product design and management techniques and the MFIs which implemented them showed a huge success story.

Mittal (2016), in her paper, "*Financial Inclusion through Microfinance in India*", used secondary data approach to analyse the stages that the Indian microfinance industry has gone through over the previous decades as well as to check the current outreach of the sector. She concluded that microfinance provides numerous chances to the historically disadvantaged sectors of women and also the savings-driven strategy has proven to be an effective tool.

Navin *et al.* (2019), in their paper, "*Market Structure and Competition in the Indian Microfinance Sector*", studied about the amount of competition in the Indian microfinance market in light of the sector's consolidation trend from 2005 to 2017 using secondary data. According to the findings, the Indian microfinance sector has seen a rise in concentration and a decline in competitiveness in recent years.

Dąbrowska *et al* (2020), in their paper, "*Impact of COVID-19 Pandemic on the Microfinance Sector in Europe: Field Analysis and Policy Recommendations*", examines the initial effects of the COVID-19 crisis on microfinance institutions and their clients, as well as MFIs', microfinance stakeholders', and governments' responses to the problem. They used primary data approach and collected data with the help of interviews with European MFIs which revealed that, microfinance institutions fared well during the crisis, demonstrating a high level of resilience in the face of adversity such as a global pandemic. Clients of MFIs, on the other hand, remain vulnerable and have gotten little assistance during the crisis.

Ray (2021), in his paper, "*Study of over Indebtedness in Microfinance Sector Indian Experience and Challenges*", used mixed data approach to describe the experiences and issues of over-indebtedness in the Indian microfinance industry. He founded that the microcredit over-indebtedness index (measured by IMO) suggests that there is some over-lending in a number of states' urban marketplaces. He added that in certain places where microfinance providers have just begun operations, there are also indications that they are targeting wealthier households in an attempt to increase financial sustainability.

3. Research Gap

From the aforementioned reviewed literature, it has been observed that:

- There are not many studies done before in area of microfinance with regard to the underdeveloped sector of the developed countries.
- There has been no study related to the microfinance banks concerning any pandemic or epidemic apart from COVID-19 in India.
- An extensive analysis hasn't been done on the proposed data set which will be extracted from the annual reports of the banks.
- The exact period of analysis which is proposed to be taken for the study, starting from pre-covid and stretching up to the post-covid time hasn't been taken before.

4. Objectives

The researcher here aims:

- To evaluate the impact of COVID-19 pandemic in the microfinance sector.
- To do a comparative analysis of the pre and post covid time of the microfinance sector in India with the help of the data extracted from the annual reports of the microfinance banks.

5. Research Methodology

The structure of the entire study is defined by the research design. In order to give this study its due importance, the nature of data selected here is quantitative. The secondary data is collected from the Annual reports of five banks which includes: Bandhan Small Finance Bank, Capital Small Finance Bank, ESAF Small Finance Banks, Ujjivan Small Finance Bank and Utkarsh Small Finance bank. These five samples have been taken by researcher with the help of Judgemental Sampling.

The study focused on the data of the year starting from 2016-17 and stretching up to 2020-21, a period of five years. The data set is divided into two sections: the first part is pre-COVID, which includes data of the years 2016-17, 2017-18, and 2018-19, and the second portion is post-COVID, which includes data of the years 2019-20 and 2020-21.

To conduct a comparative analysis, seven variables are taken by the researcher which are: Total Deposits, Total Advances, Net Profit, Indebtedness, Net NPAs, No. of Accounts/Customers and No. of Branches of the Bank. The analysis of these variables has been carried out using Microsoft Excel. With the help of this software, trend analysis is conducted to show the comparative analysis of pre-covid and post-covid period.

6. Data Analysis And Interpretations:

Trend analysis

Deposits

Fig: Representing the mean of deposits of the five banks for the five years

Deposits

It has been observed that the deposits follow a linear trend for both the periods i.e., pre-covid and post-covid years. In the year 2019-20 the number of deposits fell down a little below from the trend line. However, for the year 2020-21, the deposits number are back on the trend line.

Advances

Fig: Representing the mean of advances of the five banks for the five years

It has been observed that the advances follow a linear trend line both for the pre-covid and post covid years. Hence, we can say that there was no effect of the pandemic on the number of advances.

Net Profits

Fig: Representing the mean of net profits of the five banks for the five years
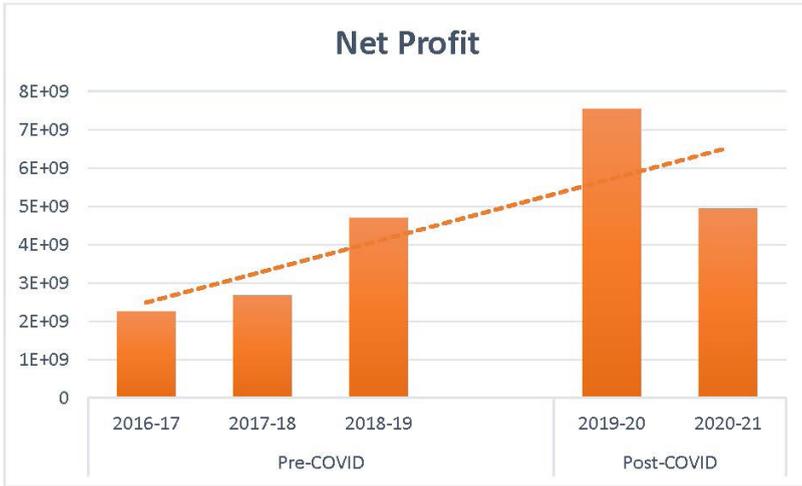
Net Profit

It has been observed that the net profits do not follow the linear trend line, neither in the pre-covid period nor for the post-covid years. However, we can see that there as the profits was growing every year but there is a severe decline of net profits in the year 2020-21. It is the time when covid-19 was at peak and affected the entire globe including the net profits of the microfinance sector.

Indebtedness

Fig: Representing the mean of indebtedness of five banks for the five years
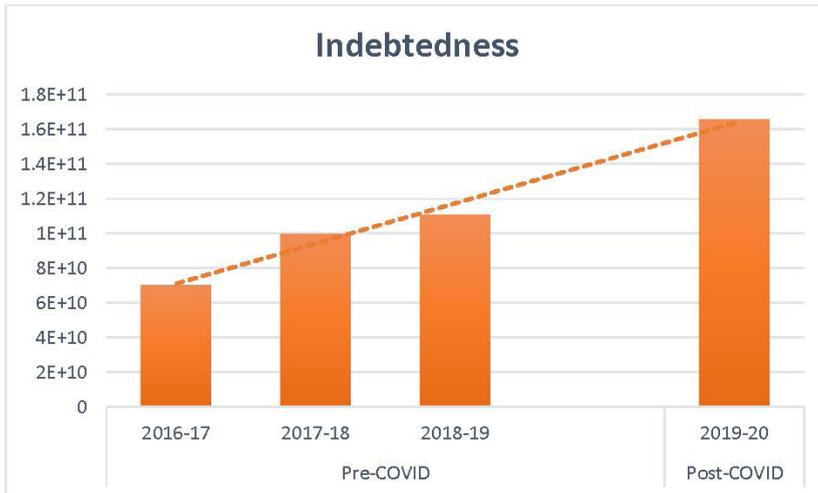
It has been observed that there is a huge increase in the indebtedness level from the year 2018-19 to the year 2019-20. Hence, we can say that the covid-19 has increased the indebtedness level in the microfinance sector.

NPAs

Fig: Representing the mean of NPAs of five banks for the five years

NPAs

8E+09				
7E+09				
6E+09				
5E+09				
4E+09				
3E+09				
2E+09				
1E+09				
0				
2016-17	2017-18	2018-19	2019-20	2020-21
-1E+09				
-2E+09				

Pre-COVID   Post-COVID
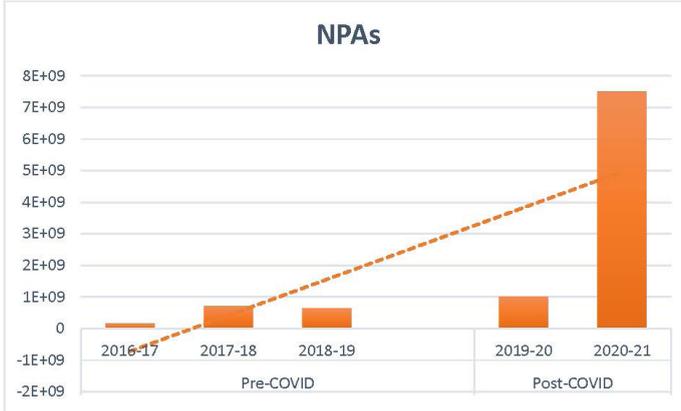
It has been observed that the NPAs does not follows the linear trend line rather we can see in the post-covid year 2020-21 the NPAs has jumped so high which is basically a negative impact of Covid-19.

Number of Branches

Fig: Representing the mean of number of branches of five banks for the five years

Branches

700				
600				
500				
400				
300				
200				
100				
0				
2016-17	2017-18	2018-19	2019-20	2020-21

Pre-COVID   Post-COVID
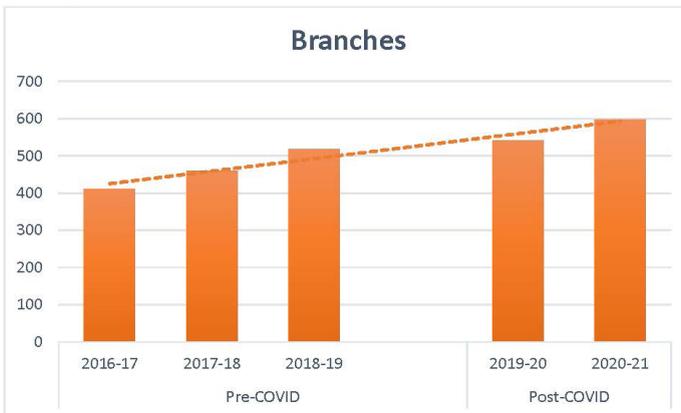
It has been observed that for the pre-covid years the number of branches has been increased linearly every year. Hence, there is no such major implication of covid-19 on the opening of number of branches.

Number of Accounts/ Customers

Fig: Representing the mean of number of accounts/customers of five banks for the five years

It has been observed that the data for both the periods doesn't follows the trend line. However, for the pre-covid years there is a constant increase in the numbers of accounts open or the customers for the taken samples but for the post-covid time there is a decline in the number of accounts open which shows a negative impact of covid-19 in the per year customer base of the banks.

7. Conclusion

The COVID-19 pandemic has created havoc on the world, particularly on vulnerable economies, and has prompted the whole microfinance market to behave responsibly. There are some impoverished people who are dependent on the microfinance sector for their day-to-day activities. However, with the advent of this global crisis every sector has faced some or the other issues majorly the funding problems, specifically affecting the microfinance sector which resulted in making the impoverished people dwell more into this vicious cycle of poverty. The researcher in this study focused on this major issue i.e., the impact of the pandemic on the microfinance sector of India and hence came up with the conclusion that this global crisis has impacted negatively on the small finance banks which is taken as a sample by the researcher. There is a decline in Net profits of the banks which shows that if the profits are less than those small finance banks, which are specifically made for the poor people cannot serve them properly. It has also been founded that the indebtedness and the NPAs of the banks has also hiked up which is again, a negative impact of this pandemic because this will affect the entire economy in a poor way. However, despites all this, the microfinance sector has come up with various new schemes and initiatives in order to neutralise the effect of this crisis. The ways in which our microfinance sector has provided with all the efforts to lessen the impact of COVID-19 is not gone unseen and hence, we can say that this sector has acted commendably in order to cope up with the crisis we faced and are still facing throughout the world.

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Section 2

Marketing

A Study on Feminism in Advertisement as Portrayed in Indian TV Commercials

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Abstract

Advertisement portrays what society stands for and what the people in the society think about certain issues and ideas. Therefore, studying advertisements from certain periods and certain demographic regions gives us a somewhat clear picture of what the society during that time and in that place represents and vice versa. Feminism is one such very important factor that needs to be studied to understand the status of women in society. At a very basic level, feminism in advertisements can be said to be how the advertisement shows women performing in their respective fields. However, there are various nuances in advertisements that can provide a deeper level of understanding of society, provided they are studied properly. Indian advertisements have evolved a lot through the years-particularly television commercials. We cannot, therefore, have a stereotypical view of Indian TV commercials. They have evolved a lot over the years and therefore we must update our perceptions as well.

This study aims to do the above with the help of an extensive qualitative content analysis of Indian TV advertisements.

Keywords: *Advertisement, Feminism, India, Society, Television.*

1. Introduction

Feminism as a movement might be a relatively new phenomenon but the characteristics of feministic ideas have been present in our lives from the beginning of time. Wherever there is a woman and her rights are being questioned, the string of the essence of feminism is being pulled. Even in India, specks of feminism can be found since the ages of Hindu mythology.

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1. This Dissertation was done by the scholar under the guidance of Dr. Sumanta Dutta.

Advertisement influences people of all age groups and especially the impressionable youth of a country. The matter becomes even more complicated when the advertisements are released in a country like India, where there is a mix of religions, language, values, education level and income, among other things. On one hand the country holds certain traditional cultures very dearly and on the other hand it is a land of impressionable people who are heavily influenced by the West. The sensitivities and emotions of Indians also have to be kept in mind before making any kind of bold advertising choices.

A large portion of the Indian population is still conservative regarding a lot of things like their religion, customs and family values. Although challenging these values can cause a stir in the market and catches people's attention, advertisers have to be extremely careful to not do it only for that purpose. Ads that hurt the sentiments without delivering a proper message are bound to fail in a country like India.

The confluence of India's existing notions around feminism and the portrayal of the same through advertisements is an interesting area of study. It reveals a lot of layers that go into creating an advertisement and makes us aware of the thought process.

2. Literature Review

Bhola M. (2021) Studied Indian advertisements and the underlying implications that are not expressed explicitly in these advertisements. The study concluded that the advertisements are promoting gender inequality among the viewers in some way or the other.

Vohra J., Ghuman M. & Soni P. (2020) studied the impact that advertisements shown on Indian television have on the minds of the consumer. They conducted an extensive content analysis and presented their views in the form of codes for various pre-decided variables.

Bardhan T. (2019) examined the effects that advertisement has on the brand preference of university going students. In conclusion, he said that advertising does play an important role in purchasing of products.

Fatma S. (2016) Studied whether the representation of women in television advertisement changed over the decades or whether it has remained the same. She found that the human tendency is to connect to something that is positive.

Padmalochana. R & Fayyaz Ahmed. H.I. (2016) studied the portrayal of feminism in Indian mythology. They compared it to the feminism expressed in contemporary literature and how it affects perception of people in the modern society. The primary focus was on Sita and Draupadi and the authors extended the conclusion to feminism in general, through these two women.

Das M. (2016) conducted this study to examine the perception of consumers regarding the portrayal of women in Indian TV advertisements. Primary data was collected through the survey method with the help of structured questionnaire. The study saw that most of the respondents said that women in

Indian TV advertisements are mostly shown as conventionally pretty, but they are not portrayed equally with men.

Moorthy YLR., Roy S. & Pansari A. (2014) Studied television advertisements for the decades 1980-1990, 1990-2000 and 2000-2010. The results show stark differences in the portrayal of woman from 1980s to 2010.

Chaudhuri M. (2012) studied the journey of feminism in India from the period of colonialism to the post-modern world. It discusses how outside forces like politics, war and western influence affected the lives of India women and impacted the perception of the citizens of the country regarding feminism.

Dwivedy A.K & Patnaik P. (2009) examined the portrayal of men and women in Indian magazines in the form of printed advertisements. Women were mostly portrayed in decorative or ornamental roles where they did not have much to contribute in terms of the message of the brand. Men were portrayed as strong characters who led productive and useful lives.

Wortzel H. & Frisbie M. (1974) examined how women were shown in various advertisements and concluded that the kind of product or service and the brand vision impacts the effectiveness of the role portrayal.

Courtney A.E. & Lockeretz S.W (1971) studied the different roles women were portraying in television advertisements. They conducted a primary research through survey method and concluded that the representation through these roles were not at all sufficient. Many roles such as working role or free wheeler were not even introduced at that time.

3. Research Gap

For the purpose of understanding the study on feminism in advertisement as portrayed in Indian TV commercials, we have gone through 11 research papers. Some researchers have focused on the history of feminism and how it has been portrayed in print advertisement around the world. (Dwivedy A.K & Patnaik P., Chaudhuri M., Courtney A.E. & Lockeretz S.W). But very few studies have been done so far on the portrayal of feminism in television commercials; even fewer that were about Indian advertisements. So, we explore this area in 'A study on feminism in advertisement as portrayed in Indian TV commercials'.

4. Research Question

How is feminism represented by certain chosen variables in Indian TV advertisements?

5. Objectives

1. To identify the elements of feminism in current Indian television advertisements and study how they are being portrayed.
2. To analyse the evolution of Indian television advertisements and how it has impacted the current scenario.

3. To suggest measures on how to properly portray women and their issues in Indian television advertisements.

6. Research Methodology

Secondary data have been used in this study. Secondary data has been collected from video recording of Indian advertisements that are being broadcast during the highest viewership timings on weekdays and weekends on the most popular Hindi entertainment channel that is, STAR Plus, according to data given in Statista.

Television advertisements that were produced in India and were broadcasted in Indian Entertainment channels were chosen for this study.

The time period for choosing the advertisements ranged from 12th February to 5th March, 2022.

Sample Size: 90 advertisements (non-repetitive)

Qualitative Content Analysis has been used to analyse the data collected from the 90 advertisements.

7. Analysis and Interpretation

A total of 90 non-repetitive advertisements have been studied from the total duration of four weeks. n=90 is thus taken as the total number upon which percentage of occurrence of each variable is calculated. The percentage that we get for each code of each variable is then analysed to study its effect on the portrayal of feminism.

Variables studied in selected advertisements - Role, Status, Location, Voice-over, Eye-contact, Product Category, Age, Product User and Attire.

Portrayal	Percentage of Advertisements (%)
Family role	46
Working role	28
Decorative role	12
Free wheeler	14

Portrayal of 'Role' of women in Indian TV advertisements

Role – Most advertisements showed women in a Family role (46%). It is followed by working role at 28% which shows women in their workplace. Representation of women as free wheelers is 14%. It shows a woman in a dominant position, who does not care about other people's opinion and is free to do what she wants. Decorative role is 12% which shows women as mere ornaments in the ad with their posture, body language etc.

Portrayal	Percentage of Advertisements (%)
Dependent	15
Independent	55

Neutral	30

Portrayal of 'Status' of women in Indian TV advertisements

Status - 55% ads showed women having independent status over the usage and buying decision of the product. Whether that is positive or negative, largely depends on the kind of product or service being advertised. 30% ads remained neutral regarding status and 15% showed women being dependent on men for the status.

Portrayal	Percentage of Advertisements (%)
Domestic	48
Occupational	32
Outdoor	20

Portrayal of 'Location' of women in Indian TV advertisements

Location - 48% of the advertisements studied showed women in a domestic setting. This was mostly true for food products, skin and hair care items, and household goods. 32% of the advertisements were shot in workplaces like doctors' chambers, corporate offices etc. 20% advertisements were shot outdoors in natural environments like in automobile or cosmetics brands.

Portrayal	Percentage of Advertisements (%)
Male	34
Female	24
Both	36
No voice-over	6

Portrayal of 'Voice-over' in Indian TV advertisements

Voice-over - Only 24% of the studied advertisements had completely female voice-over, whereas 34% had completely male voice-over. 36% advertisements used both male and female voice-over to give a holistic approach. 6% had no voice-over and relied only on audio, video and images.

Portrayal	Percentage of Advertisements (%)
Yes	77
No	23

Portrayal of 'Eye contact' of women in Indian TV advertisements

Eye contact - 77% of the advertisements showed direct eye contact by the female in the advertisements. Whereas 23% of the advertisements had indirect or no eye contact with the audience.

Portrayal	Percentage of Advertisements (%)
Food and beverages	25
Apparel	8
Cosmetics	20

Jewellery	8
Household items	9
Portable electrical devices	9
Automobiles	10
Services	11

Portrayal of 'Product Category' in Indian TV advertisements

Product Category - Food and beverages constituted 25% of the studied advertisements. This was the majority, followed by cosmetics at 20%. Apparels and jewellery were the lowest at 8% each.

Portrayal	Percentage of Advertisements (%)
Young adult	49
Mid adult	29
Senior citizen	22

Portrayal of 'Age' of women in Indian TV advertisements

Age - There was a disparity in showing adults of the age group 18-35 years. Senior citizens were shown very less and only when it directly related to them.

Portrayal	Percentage of Advertisements (%)
Men	15
Women	17
Men and Women	37
Children	9
All	22

Portrayal of 'Product User' in Indian TV advertisements

Product User - 37% of the advertisements were product and services that were used by both men and women. Women, men and children were targeted by 22% of the advertisements. Only women were targeted by 17% of the advertisements whereas only men were targeted by 15% of the advertisements. Children were targeted by 9% of the advertisements but women mostly played a prominent role in such advertisements.

Portrayal	Percentage of Advertisements (%)
Indian traditional	57
Western	43

Portrayal of 'Attire' of women in Indian TV advertisements

Attire - Ideally the attire should not be a factor for judgement, but Indian societal norms make it an important one for us. It has been seen that 57% of the advertisements studied portrayed women in Indian traditional attire like saree, salwar, lahenga and 43% of them portrayed them in western attire like shirts, dresses, skirts.

8. Conclusion

Advertisements in India have covered a long journey to reach where it is today. We have seen that through the decades, there have been several changes in the style and structure of the advertisements. Portrayal has not always been the same in a particular decade, and there have always been some advertisements that were better or worse than others. This is why a constant observation is required to make sure a standard is maintained and the work that has been done to promote feminism is not undone by few brands.

The study revealed that even in 2022, there are certain parameters where Indian advertisements lack in terms of feminism. Age is one such stark parameter that is lacking. Only a handful of conscious brands like Dove and Tanishq are considerate towards the fair representation of women of all age. However, advertisements have become much more balanced overall, compared to older times and the percentages when it comes to things like domestic setting, professional role, etc. are more or less similar.

We can hope that with the rise of feminism as a movement and the future generations being exposed to it from childhood, more and more advertisements will follow the ideals of feminism, equality, ethics and humanity in general.

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Out-of-Pocket Expenditure on Healthcare by Senior Citizen in Dhanbad District: A Study

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Abstract

India wants to make access to high-quality healthcare affordable and widespread by offering universal health coverage, at least for primary care. Even though India has a sophisticated public health system, out-of-pocket medical expenses account for a significant portion of family health care spending, frequently with disastrous results. Most of India's medical expenses are paid by individual households as out-of-pocket expenses (OOPE). To plan the implementation of universal health insurance, we need an up-to-date quote at the district level. The study found that patients had very high out-of-pocket costs, most of which were directed towards drug purchases. The sample group's health insurance coverage was very low, families were vulnerable to the financial crisis and were forced to take out loans that had to be repaid after discharge, putting a mental and financial burden on them. Household income, type of illness, age, gender, type of health care facility, and quality of care are all factors that influence OOPE's health care costs. Increased government spending on health care and improved access to health insurance can significantly reduce out-of-pocket health care spending.

Keywords: Catastrophic health expenditure; health insurance; health care provider; Out-of-pocket expenditure.

1. Introduction

Medical expenses (OOPE) are payments made by an individual when they receive a medical service or goods. For example, if you get sick and visit a clinic, you will have to pay the clinic's doctor's fees and other services (syringes, wound dressings, etc.). He / she also pays for medicine in the pharmacy and diagnostic tests in the laboratory (X-rays, blood tests, etc.) separately. All such

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1. This Dissertation was done by the scholar under the guidance of Dr. Sumanta Dutta.

payments made when receiving medical services are considered OOPE. OOPE is typically when visits to individual healthcare providers (clinics / hospitals/ pharmacies / laboratories, etc.) are not provided "free" by government medical institutions or organizations operated by non-profits. Or in that case, individuals are not covered by government / private health insurance or social protection schemes. Out-of-pocket costs are the most common method of paying for medical expenses, which is one of the foundations of the healthcare system. The health care system should be designed and funded to provide health care to people without financial difficulties. Out-of-pocket costs are the biggest barrier to access to health care in India.

A household is considered to be in financial difficulty if one of four methods of financing health expenditures are not mutually compatible: 1. selling assets or borrowing money, 2. asking relatives or friends to pay, 3. have severe OOPE (defined as household health spending in excess of 10% of household consumption expenditure), and 4. do not seek treatment to avoid costly OOPE.

High out-of-pocket costs often include weak public health systems and consequent reliance on the private sector, lack of awareness and penetration of health insurance, and lack of basic services such as medical staff and diagnostics. Tools and other medical devices that may be due to factors. Out-of-pocket spending accounts for about 62.6% of India's total health care and is one of the highest in the world. OOPE puts a strain on all households as they occur during health events where households are already in need. The impact of OOPE is much greater if the household income is low or if the OOPE that occurs is very high, especially in the case of inpatient care or severe illness. OOPE reduces spending on other basic and basic needs such as food, housing, clothing and education, especially for low-income households. Households are also forced to borrow or borrow money from friends / relatives / lenders. Further in debt drive. Household OOPE is typically over 10% of total household spending and is devastating, pushing households below the poverty line and potentially leading to poverty.

2. Literature Review

According to the research conducted by Dr. Dewesh Kumar (2009), Indian patients pay around 60% of their overall spending on medical treatment out of pocket, however this figure varies by location and state. In India, families account for a large amount of health expenditure as out-of-pocket expenditure (OOPE). OOPE estimates fluctuate over time as a consequence of viral patterns, changes in health seeking behaviour, changes in health service accessibility, and inflation.

J. Arsenijevic (2012) conducted a study that established a link between out-of-pocket health spending and poverty. Generally, out-of-pocket health care expenses were cited as a key cause of household poverty. Poor health conditions were one of the elements that effectively led to increasing poverty rates, particularly in emerging nations such as India. It established that out-of-pocket

health care costs were disastrous for impoverished households and a primary source of poverty in India.

Upendra, B., & B.S. Thrivendi (2012) aims to produce a new poverty measure taking into account a new measure of poverty taking into account medical spending. Their method is involved by comparing poverty and poverty gaps before and after catastrophic costs. They discovered that wasting spending leads to 7.4% more and more poor households. In addition, wasteful medical expenses are strongly linked to inefficient and access to inequality to health care; For example, people who benefit people who do not have access to social health insurance are more likely to have a catastrophic health costs than those who have more successful access to commune health insurance festival.

3. Research Gap

The goal of this thesis, titled "Out-of-pocket expenditure on healthcare by older adults in Dhanbad district: a study," is to undertake minimal research. Several scholars shed light on health concerns, health care usage, health care cost, per capita health expenditure, and outpatient care. As a result, we hope to research the topic of out-of-pocket healthcare expenditures through this study.

4. Objectives of The Study

1. To capture the inter-price variability in diagnostic tests in Dhanbad.
2. To estimate the average amount spent by senior citizens of Dhanbad for healthcare.
3. To know the proportion of senior citizens incurring OOPE.
4. To know how OOPE often leads to catastrophic consequences.

5. Research Methodology

The study aimed to examine recent trends in out-of-pocket health spending among the elderly using primary data collected from 384 households in Dhanbad district in Jharkhand state, India. The total duration of this study was four months from December 2021 to March 2022.

For the purposes of study, the households are separated into two categories: elderly households and non-elderly households (all members are 60 years or more). The cost of health care for the elderly is investigated at different socioeconomic levels. Descriptive analytics and multivariate techniques are used to explore the age component of health spending in Dhanbad. Monthly per capita health differences were assessed using household characteristics, place of residence (rural/urban), household size, caste, religion, monthly consumption expenditure per capita (MPCE), age and gender of the household head (MPSH), and health expenditure as a percentage of household consumption expenditure. The states are divided into categories based on their fertility transition stage, which is employed in the analysis, among other factors.

The senior citizens were interviewed using a structured questionnaire and the sampling technique used is Judgement (or Purposive) sampling.

This sampling technique is based on the researcher's judgment when selecting people to request participation.

DATA COLLECTION: Information is gathered on how these families pay for these expenses and whether or not direct funding has resulted in any disastrous investments. The effectiveness of various government health insurance schemes was also investigated in order to reduce these catastrophic expenses.

STUDY PERIOD: 4 MONTHS (December 2021 to March 2022)

METHOD OF SAMPLING: Judgmental (or deliberate) sampling: This technique, also known as selective or subjective sampling, is based on the researcher's judgement when selecting whether or not to ask for participation. To reach their objectives, researchers can choose an implicit "representative" sample or target individuals with specific characteristics. When polling the public and conducting qualitative research, the media typically employs this method. Judgmental sampling offers the benefit of being quick and low-cost while yielding a large number of replies (especially useful in qualitative research). However, in addition to deliberate bias, researchers are prone to evaluation errors, and the results, while theoretically representative, are unlikely to be.

SAMPLE SIZE: 384

PROCESS OF CALCULATION:

5 percent margin of error

95 percent confidence level

The response rate is expected to be around 85%.

P = Population Percentage

N =the number of people in the population.

e = stands for error margin (percentage in decimal form)

z = z-score. The number of standard deviations a proportion is distant from the mean is represented by the z-score.

To find the right z-score to use, refer to the table below:

Desired confidence level and corresponding z-score:

80%   1.28

85%   1.44

90%   1.65

95%   1.96

99%   2.58

Thus, finally the sample size decided was 384.

TOOLS USED: The standard deviation (SD) is a measurement of data variability or dispersion. When calculating the sample size, an investigator must account for variation in the metrics being studied. If the population is

more homogeneous and hence has a lower variance or standard deviation, it's easy to see why a smaller sample is required. Assume we're looking into the effects of a weight-loss programme on a population of people weighing 45 to 100 kg. Naturally, the standard deviation in this group will be high, needing a larger sample size to detect a difference between interventions; otherwise, the variation will obscure the intrinsic difference between the two groups. If we were to sample from a population weighing between 80 and 100 kg, we would naturally obtain a smaller and more homogeneous group, which would reduce the standard deviation and hence the size of the sample.

6. Analysis and Interpretation

To reduce health care costs, governments need to standardize and regulate the prices of medical diagnostic tests in cities. Diagnosis is an important aspect of the healthcare system because it provides healthcare providers with the knowledge they need to make informed decisions about treatment and management. Accurate and efficient diagnostic techniques are important and urgently for physicians and other service providers to design successful treatments or recovery programs that help patients recover as quickly and with the least difficulty. One of the major issues that causes delays or inadequacy in disease management and patient care is lack of cost and availability of quality medical care. From 2013 to 2014, households spent about 10% of their OOPE on health examinations, according to the results of the Indian Household Health Expenditure Survey.

Also, according to the survey we conducted, the percentage of elderly people with OOPE was 200. Of the 384 respondents, only 200 older people suffered from OOPE for health care.

Many participants in India's multiplayer healthcare system are paid by a combination of public hospitals and private health insurance, some of which are almost entirely tax-funded. India's healthcare system can be divided into two categories: public and private. In large cities, government or public health systems have a small number of secondary and university health care institutions, with an emphasis on providing basic health care in rural areas.

Some of the current projects in the Indian healthcare industry are:

1. India has 80,136 Ayushman Bharat-Health and Wellness Centres as of November 18, 2021. (AB-HWCs).

2. India's national government had built 638 e-Hospitals as part of its 'Digital India' programme as of November 18, 2021.

3. In November 2021, the Flipkart Group announced the launch of Flipkart Health Plus, its first foray into the healthcare industry. Sastasundar Marketplace Limited, the firm that owns and operates the online pharmacy and digital health platform SastaSundar.com, has signed a formal agreement with Flipkart to acquire control.

4. In November 2021, Aster DM Healthcare announced intentions to extend its footprint in India by investing Rs 90 billion (US $ 120.97 million) over the next three years.

5. The Health Ministry's e-Sanjeevani telemedicine initiative will have reached 12 million teleconsultations since its establishment on September 21, 2021, allowing patients and doctors to consult from the comfort of their own homes.

6. Biological E. Ltd. said in September 2021 that its coronavirus vaccine would be available in October 2021.

7. Sputnik Light, a Russian-made COVID19 vaccine, was licenced for Phase 3 trials in India in September 2021.

When out-of-pocket health spending by households reaches a specific percentage of a household's consumer expenditure or capacity to pay, it is referred to as "catastrophic." It is founded on the logic that when a household's OOPE on health exceeds a particular threshold, it will suffer financial difficulties, which may lead to destitution. Although there is no consensus on when health expenditures become catastrophic, many research have utilised a baseline of 10 to 25% of household consumption spend. Others have suggested that health-care payment criteria should be decided based on a household's ability to pay rather than its consumer spending. Capacity to pay is the amount of money spent by a household once it has met its fundamental necessities. Health payments that exceed a pre-determined percentage of non-food expenditures (usually 40%) are categorised as catastrophic. The ability of impoverished households to pay for health care is limited because they spend a large portion of their income on food.

7. Conclusion

The study found that patients had very high out-of-pocket costs, most of which were directed towards drug purchases. The sample group's health insurance coverage was very low, families were vulnerable to the financial crisis and were forced to take out loans that had to be repaid after discharge, putting a mental and financial burden on them. Household income, type of illness, age, gender, type of health care facility, and quality of care are all factors that influence OOPE's health care costs. Increased government spending on health care and improved access to health insurance can significantly reduce out-of-pocket health care spending. In this regard, India's National Rural Health Mission (NRHM) is beneficial as it significantly reduces obstetrics OOP spending. As the population ages and public health spending increases, there is an increasing need to reallocate resources to reduce the average OOP health care burden for older people and also in terms of price range. Governments need to standardize and regulate the prices of medical diagnostic tests in all cities to reduce out-of-pocket health care costs.

In India, increasing public funding for universal health insurance is important to protect people from excessive OOPE. Health insurance is a source of public health care funding, and its coverage needs to be extended to the most disadvantaged,

but existing public health care that provides quality care to those who need it most. Strengthening the system is also important. Investing in addressing unequal distribution of resources, providing accessible and affordable health care, reducing the vulnerability of disadvantaged people, and providing a safety net against catastrophic consequences it should be at the top of the list of government priorities.

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An Analytical Study of the Consumer Behaviour Towards Online Purchase of Grocery during the COVID-19 Period

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Abstract

The motive of the research is to comprehensively explore and determine the consumer behaviour towards online grocery purchasing during pandemic circumstances. The Convenience sampling method is used as a data collection and the sample size was 278 participants who were voluntarily willing to share their perception and use ANOVA test to determine the hypothesis. The finding shows that the most prominent component was the satisfaction and ample options aspect offered by the online shopping mode, time saving, convenience and in pandemic it provides a safe mode of shopping. Eventually, this clearly manifested that the consumers are shifted to the online method for grocery shopping because of covid outburst, which may induce more systematic and enduring change in grocery retail because the risk of contamination influenced consumer behaviour.

Keywords: *Buying behaviour of consumers for online grocery, consumer behaviour toward online purchasing of grocery during covid, e-grocery and customer attitude.*

1. Introduction

In the digital world where financial activities and commerce obtain new dimensions because of multichannel opportunity availability, the business now focusing on e-commerce and online shopping has intensified and established its robust foundation over the global economy (Alarcón, C. N *et al*., 2018). On the basis of the e-commerce report, the global online market is expected to reach 4.89 trillion dollars in the year 2021, which holds a 19.5 percent online market share

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1. This Dissertation was done by the scholar under the guidance of Prof. Rishen Kumar Mukherjee.

of the world[2]. This enhances global market e-commerce and online marketing strategies based on the characteristics like fast delivery services, discount and attractive means for the grocery market, diverse channel shopping methods that comprise online and large stores, among others.

The Indian online grocery market holds 66.5% of the total retail spend in India. The graph demonstrates the Indian online grocery market growth, the fluctuation exhibited and the prediction of the market till the year 2025. The growth shown in the graph from 2016 to 2019 increased by 11%, and after that, there was a decrease in growth by 5% because of lockdown and disrupted supply chain and transportation issues. Moreover, the transition was identified at 8% in the Indian online grocery buying trend after that. The online retail sector paved an elevated pace growing by more than 70% in the last year and is assumed to accelerate and flourish with a growth rate of 8 times in size in the upcoming five years.
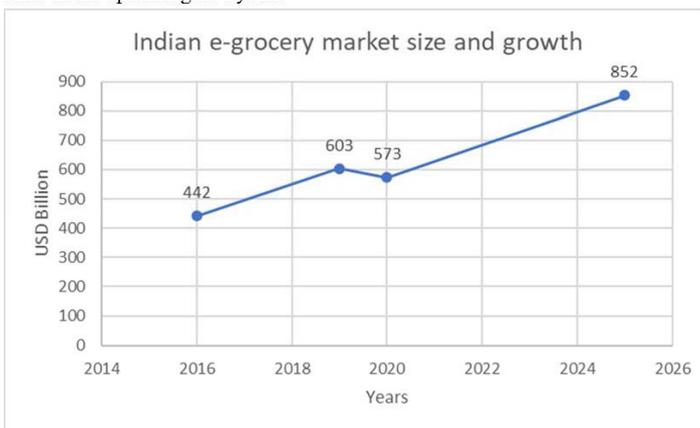
FIG 1:   Indian e-grocery market size and growth [3]

The company operated various business tactics to attract the buyers based on various components like optimum cost products, utilisation of organic, herbal and healthy products for the citizen's well-being, which ought to embrace less toxic pharma and cosmetic chemicals. Satisfaction is the most crucial parameter for any company, whether standing in onside or offside suits (Shyam, H. S., & Gupta, M., 2018). The pleasure of goods and services determines the buyer's choice and likability, perception of the goods and the company's reliability, and motive behind binding something. Satisfaction can be broadly categorised into reasonable satisfaction and highly satisfied.

2. Literature Review

Tyagi, P., & Pabalkar, D. (2021) investigated that with the outburst of covid-19 and pandemic adversely impacted the lives of millions of people and their

2   https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/
3   https://smefutures.com/indias-e-grocery-market-is-growing-rapidly-while-delivering-daily-groceries-to-indian-households/

surroundings. Their buying behaviour during pandemic conditions introduced a shift in the customer purchasing attitude. The study tries to review the change comprehensively and explore its effect on the strategies of the business industry, specifically focusing on online buying practice because of protocols like social distancing, wearing masks, sanitization, lockdown conditions, and other people preferred online shopping rather than going to market physically.

Vázquez-Martínez, U. J et al., (2021) tried to explore the pandemic crisis that dramatically altered the buying perspective and intention of purchasing of the consumer all over the world. The paper explores fifty-five countries and collectively engages one thousand and fifteen participants to analyse the impact of covid-19 on consumer buying behaviour during the first peek of the outburst in the year 2020. For evaluating the outcome, the paper uses qualitative and quantitative methods. The result demonstrates that the crisis has an immense influence on the customer buying attitude related to the product medium and motivation. The situation has an enormous psychological impact, and the consumer perception is more influenced than its practical effect.

Marlene, R., (2021) intended to explore the sudden shift of the grocery market toward online shopping, why consumers are attracted to online grocery shopping, and the buying patterns of these consumers. The study determined that product scarcity, hygiene, and risk of contamination are the prominent motivating components for buying e-grocery. Other elements which assist in deciding consumer buying behaviour are time-saving, easy availability, and a variety of products. All these components play a vital role, although the research evaluates that availability, hygiene, and risk of contamination are the most significant components which have immense impact and force consumers to change their perceptions and encourage them to shift toward buying or shopping through e-grocery mediums.

Kashyap, N., (2020) tried to find during the covid crisis, people were afraid of visiting physical markets and stores to buy products as a virus spread because of various resources, which created obstacles to day-to-day life and changed their perception of shopping. The study tries to find out through online portals and websites the shift of consumer-aspect and their behaviour for shopping as people use websites to order groceries like fruits, vegetables, and other essential items. The paper chose an empirical study for exploring and evaluating the questions and obtaining the result. The analysis reveals that visiting websites and using them for online buying has increased almost twofold since the pandemic.

3. Research Gap

The paper comprehensively analyses 20 articles that discuss the impact of covid-19 over the buying practice and how trends intensify online buying behaviour over the mass. Several papers demonstrate that the research did not focus on the theme of changing behavioural patterns mainly because it is a complex concept as it developed and refined frequently. Thus, several papers ignored and excluded the behaviour pattern of the consumers and the components inside

the behaviour pattern like risk aversion, health awareness, discounts, and offers, among others. Several studies also do not focus on the component comprising satisfaction of customer value for their reliability towards their brands as to how much they are loyal towards their brand, and the most significant factor was the panic buying which played a crucial role to determine the buying perspective for the attitude of consumers during the pandemic crisis.

Purchasing behaviour is very crucial as it can be effectively utilised to develop customer-oriented policies for e-commerce strategies for providing better services which have an immense probability to satisfy the consumer needs and wants, and they become loyal towards their company and the products.

4. Research Question

- Determine the factors responsible for transforming consumers' mindset and behaviour during covid 19 shifting them from in-store to online grocery shopping?
- Explore the components which play a positive impact on online grocery shopping?
- Identify the consumer buying behaviour for in-store v/s e-grocery shopping?

5. Objectives

The study mainly focuses;
- To determine and comprehensively explore the consumer behaviour towards online grocery purchasing during pandemic circumstances.
- To determine the factors responsible for transforming consumers' mindset and behaviour and shifting them from in-store to online grocery shopping.
- To determine the components which play a positive impact on online grocery shopping.

6. Research Methodology:

Research design

The paper uses the qualitative approach to execute the evaluation and accomplish the research, which relies on a primary and secondary methodology that exclusively explores through both the sample survey approach and the existing studies.

Research approach

Primary data is obtained from real-time resources like surveys, questionnaires. This study chooses empirical research based on questionnaires and sampling methods to collect primary data. In this research, the researcher implements primary data to obtain accurate results. Through research, investigators examine in-depth the perception of consumers during covid 19 situations.

The Secondary approach is based on existing resources, like collecting information from governmental resources, already existing journal literature, books, newspaper articles, websites, among others. The secondary methodology is exclusively applied to observe consumer buying behaviour for e-grocery.

For collecting data from existing resources, the keywords and titles used for searching include the related terms encompassing buying behaviour of consumers for online grocery, grocery and pandemic, e-grocery and customer attitude, consumer behaviour toward online purchasing of grocery during covid, among others.

Location and time period of the study

The location of the study is specifically focusing on the Indian perspective and the study was conducted between November 2021 to March 2022.

Sample size

The location of the study is specifically focusing on the Indian perspective, and the time frame covers the Covid pandemic during and after the second wave situation, as it covers the years 2020 and 2021.

Confidence Level= 95%

Margin of error = 5%

Standard Deviation= .05

Necessary Sample Size = (Z-score)2 * StdDev*(1-StdDev) / (margin of error)2

Sample size= 278

Sampling method

In this research, Convenience Sampling approach is best suitable. Convenience sampling method is used as a data collection and search technique for obtaining the consumer buying behaviour perspective. This technique mostly is used here as we're in the throes of the new wave of the Covid 19 epidemic and therefore can move about enough for data collection. We can gather data rapidly and in immediate contact using this approach.

Statistical tools used for the research

For our analysis, we used parametric tests such as ANOVA Method and Microsoft Excel.

Analysis & Interpretation

The analysis section is divided into two parts: first covers the demographic description and second covers the research question section.

Demographic Description

In the demographic description, the questions are comprised such as- age group, gender identity, educational and occupational background of the participants and their qualification.

Demographic Details

Parameters	Categories	No. of Responses
Gender	Male	143 (51.4%)
	Female	135 (48.6%)
Age Group	18 to 25	242 (87.1%)
	26 to 30	19 (6.8%)
	30 to 40	07 (2.5%)
	Above 40	10 (3.6%)
Educational Background	High School	21 (7.6%)
	Graduate	120 (43.2%)
	Post-Graduate	135 (48.6%)
	Any Other	02 (0.7%)
Annual Income	Below 4 lakhs	211 (75.9%)
	Above 4 lakhs	37 (13.3%)
	Above 8 lakhs	19 (16.8%)
	Above 20 lakhs	11 (4%)

Statistical Analysis For Hypothesis

The second classification was based on the statistical analysis of the hypothesis and the objective of the research in order to determine the research questions. To assess the research question and the hypothesis the SPSS statistical tool is used and several testing approaches like T-test, ANOVA linear regression is also explored to effectively find the hypothesis based on their requirement.

Extraction of ANOVA

	Df	Sum of Square	Mean square	SD	F- statistic	P-value
Total	21	153.81	732.56	27.06	85.93	0

As the data reveals that the value of p (0) $<\alpha$, where significance level= 0.05.

The smaller the value of p the stronger it supports H1 (alternate Hypothesis).

Therefore H0 (Null hypothesis) is rejected and H1 (alternate Hypothesis) is accepted.

The alternative hypothesis H1 asserts that there are positive changes that transform consumers' mindset and behaviour during covid 19 shifting them from in-store to online grocery shopping is accepted.

Solutions of Research Questions:

RQ.1- Identify the consumer buying behaviour for in-store v/s e-grocery shopping?

The consumer behaviour for in-store v/s e-grocery shopping

■ Agreed ■ Disagreed

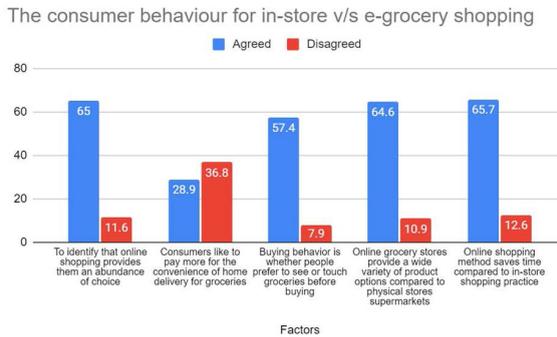| Factors	Agreed	Disagreed
To identify that online shopping provides them an abundance of choice	65	11.6
Consumers like to pay more for the convenience of home delivery for groceries	28.9	36.8
Buying behavior is whether people prefer to see or touch groceries before buying	57.4	7.9
Online grocery stores provide a wide variety of product options compared to physical stores supermarkets	64.6	10.9
Online shopping method saves time compared to in-store shopping practice	65.7	12.6

FIG 2: Demonstrates the consumer buying behaviour for in-store v/s e-grocery shopping.

65% of the respondents agreed and strongly agreed that online shopping provides them an abundance of choice and product that shifts to online grocery rather than in-store shopping. The Finding demonstrates that about 64.6 % of the participants agreed and strongly agreed that online shopping for a grocery product provides them a wide variety of options that effectively enhance their satisfaction. 65.7 percent of the participants agreed and strongly agreed with the time-saving perception. This proves that online grocery is more preferable in comparison to the traditional buying habits.

Q. Determine the factors responsible for transforming consumers' mindset and behaviour during covid 19 shifting them from in-store to online grocery shopping?

The factors transforming consumers' mindset and behaviour

■ Agree ■ Disagree

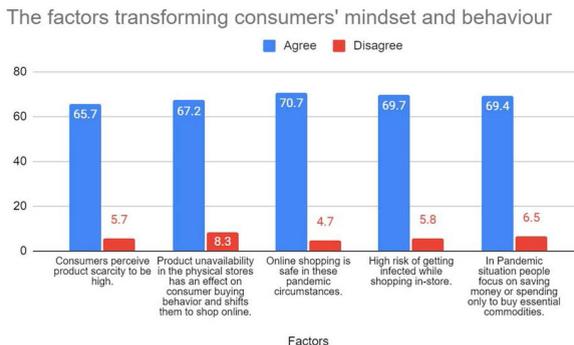| Factors	Agree	Disagree
Consumers perceive product scarcity to be high.	65.7	5.7
Product unavailability in the physical stores has an effect on consumer buying behavior and shifts them to shop online.	67.2	8.3
Online shopping is safe in these pandemic circumstances.	70.7	4.7
High risk of getting infected while shopping in-store.	69.7	5.8
In Pandemic situation people focus on saving money or spending only to buy essential commodities.	69.4	6.5

FIG 3: Factors responsible for transforming consumers' mindset and behaviour during Covid 19.

The study demonstrates that the risk of contamination influenced consumer behaviour; they perceive product scarcity to be high product unavailability in the physical stores, although their behaviour towards non-essential commodities was affected by depression and focusing on essential commodities only. Other prominent factors influencing consumer behaviour and buying practice were their economic condition, personality perception, and justification for purchasing items. These are the components that were encountered during the pandemic crisis and dramatically altered the buying perspective and intention of purchasing of the consumer all over the world.

Q. Explore the components which play a positive impact on online grocery shopping?

Major component that performs a significant impact on online grocery shopping:

Likeability to buy groceries through online or e-commerce resources- 51.7% agreed

- Online grocery shopping is convenient and easy -69.9% participants believe.
- People like to use new and various technologies and services available in digital platforms for shopping- 74.4% responses agree.
- People perceive that online grocery shopping is frustrating and time-consuming- 22% responses agree.
- E-grocery buying practice is environmentally friendly-53.1% participants believe.
- Online buying practices are comparatively cheap in comparison to in-store buying groceries- 38.2% participants believe.

7. Conclusion

Eventually, this clearly manifested that the consumers are shifted to the online method for grocery shopping because of covid outburst, which may induce more systematic and enduring change in grocery retail because the risk of contamination influenced consumer behaviour. It is determined that online shopping is safe in these pandemic circumstances; physical shopping can increase the threat of getting infected, consumers perceive product scarcity to be high, and product unavailability in the physical stores encourages them to shift toward online shopping methods.

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Impact of Sales Promotion on Consumer Buying Behaviour in Kolkata: An Empirical Study

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Abstract

The environment in which businesses operate is always changing, posing major challenges to organisational decision-makers. Since switching from one brand to another is so simple, it has created a complicated commercial environment, with customer preferences changing at a rapid speed. As a result, firms must devote more resources to acquiring and maintaining consumers, which necessitates the ongoing creation and execution of new strategies in response to industry trends. Sales promotions have risen in prominence over the last decade, becoming the most popular tactic in the marketer's toolbox. This study contains data from both primary and secondary sources. The primary goal of our research is to investigate the critical role of sales promotion in influencing consumer purchasing behaviour in the Kolkata region, as well as to assess the influence of sales promotion strategies on income level, gender, and age group. According to the findings, sales promotion has a significant impact on consumer purchasing behaviour in the Kolkata region.

Keywords: Consumer purchasing behaviour, Sales Promotion.

1. Introduction

The environment in which firms operate is frequently changing, offering significant difficulties to organisational decision-makers. This has resulted in a complex commercial climate, with customer preferences shifting at a fast speed, owing to the ease of shifting from one brand to other. Consumers have higher expectations, therefore businesses must invest more in attracting and retaining customers. Marketers are therefore confronted with the issue of keeping pace with

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1. This Dissertation was done by the scholar under the guidance of Dr. Sumanta Dutta.

market trends, which necessitates the ongoing formulation and implementation of new strategies in response to market developments. Over the last decade, sales promotions have gained in importance, becoming the most popular tactic in the marketer's toolkit. The marketer should meticulously segment the market, select one or more categories, and identify unfulfilled or partially fulfilled wants and requirements. After that, create a product or service, decide on a positioning strategy, price, make adequate distribution measures to ensure that the service or product is available to customers, and develop a powerful promotion strategy. Promotion involves persuasive communication of the elements of the sales program to target audiences with the purpose of facilitating trade between the marketer and the consumer, which can meet the objectives of the consumers as well as the organisations. It is an important component of every marketing activity since it is involved with efficient and effective communication of the marketing strategy decisions to the target group. Marketers are expanding their business by obtaining more profit on the merchandise by employing sales promotion techniques. Since all marketers use these strategies on a regular basis, the market's rivalry has intensified.

2. Literature Review

Ali & Muhammad (2021) investigated the impact of various promotional strategies on customer purchase behaviour in their research study. According to the study's findings, sales promotions have an influence on consumer purchasing decisions, even if their whole decision is contingent on making a purchase at any moment. The study goes on to say that sales promotion is an important aspect of marketers' and retailers' marketing strategies.

Awoniyi *et al.* (2021) examined the impact of sales promotions on biopharmaceutical patronage in Nigeria. The findings revealed a significant impact of promotional strategy in terms of incentives, discounts, and cashbacks used in pharmaceutical sales and marketing to encourage buyer adherence as a customer sales reaction.

Garg (2021) investigated on how marketing and sales promotion activities impact customer purchasing habits and preferences. According to the study's findings, sales promotions have an influence on consumer purchasing decisions, even if their whole decision is contingent on making a purchase at any moment.

According to Al-Nsour (2020), sales promotion activities have a significant impact on consumer buying behaviour, and the discount scheme is the main component of buying behaviour. The study sought to examine the impact of sales promotion activities using four key tools - discount offers, free products, purchasing coupons, and public figures - on the purchasing behaviour of Saudi Arabian buyers.

Shekhawat *et al.* (2020) scrutinized the impact of sales promotions on customer purchasing behaviour. The study's findings help managers understand the importance of sales promotion as well as changing customer behaviour and purchasing patterns.

According to Shahzad *et al.* (2020), sales promotion has a considerable influence on customer purchasing behaviour. Variables included in the study, such as discounts, coupons, and buy one get one free, were found to have a positive relationship with one another.

Prinka, Bansal & Surya (2019) Investigated the impacts of marketing tactics on business performance. According to the research findings, marketing methods (product, promotion, price, and place strategies) do not play an important role or have an impact on organisational performance at Nigeria Bottling Company, Kaduna.

Kumar *et al.* (2018) contribution in the dimension of sales promotion seeks to comprehend consumers' expectations about sales promotions by creating implications on customer sales promotion in the FMCG business. According to the study's findings, the great majority of clients are satisfied with the organization's services. Buyers expect the product's cost and availability to improve.

Saxena *et al.* (2018) sought to evaluate the impact of sales promotion strategies and tactics on consumer purchasing behaviour. According to the study's findings, effective sales promotion is a powerful instrument for changing customer behaviour. As a result of the study, it is advised that promotional techniques be used in order to boost sales in a profitable way and to outperform rivals.

Shamsi & Khan (2018) investigated the influence of Sales Promotion on Consumer buying behaviour using Structural Equation Modeling. According to the findings of the study, sales marketing strategies are successful at impacting customer purchasing decisions.

Ulle *et al.* (2018) pointed out that sales promotion is critical to a company's successes or failures. According to the study's findings, sales promotional strategies such as demonstration vehicle displaying, cash back incentives, and personal workshops are important, but free insurance, discounts, additions, and loan cum swapping do not exist in the automobile industry.

Chang (2017) evaluated the impact of sales promotion techniques on customer purchasing intentions and engagement in the tourism sector. The findings reveal that Sales Promotion has a remarkably positive impact on Consumer Engagement and Purchasing Behaviour.

Misra & Chaudhury (2017) analyzed the major factors influencing consumer purchase behaviour for colour television. According to the findings, the availability of sales promotion incentives is an important factor in survey participants' purchases of colour television.

Shamout (2016) pointed out sales promotion techniques play a vital part in encouraging consumers to purchase any advertised goods, which will undoubtedly improve the market share and profit of the dealer and marchant.

Alimpić (2014) investigated in his study the impact of different sales promotion methods in eliciting customer perceptions. As per the research, discounting, free

gift, and bonuses are the most successful techniques for eliciting the majority of attitudes in customer behaviour.

Bhandari (2014) in her research evaluated the impact of variety of sales promotion techniques on consumer purchasing decision, with a focus on Rathi Build Mart in Raipur and the most evocative sales promotion tool. According to this research, different sales promotional techniques have an influence on customers purchasing behaviour.

Ochieng (2014) analysed the impact of sales promotion methods on customer behaviour in Kenya's alcoholic liquor business. The investigation shows that a number of aspects improve the efficiency of sales promotion techniques in the industry.

Mishra *et al.* (2012) investigated the main aspects of buyers' perceptions of the benefits they gain from various types of sales sales promotion arrangements in consumer durables, as well as to build a blueprint demonstrating the legitimate associations between all types of numerous buyer advantages of sales promotion in durable goods. According to the findings, buyers consider discounts, higher product quality, and convenience of purchase as pragmatic benefits and worth manifestation, enjoyment, and discovery as hedonic benefits as primary motives for taking advantage of various sales promotion techniques.

Rizvi & Malik (2011) in their study analysed the Influence of various Sales Promotional Strategies on the profitability of the organisation and Purchase Behaviour. According to the findings of the survey conducted, buyers' perceptions of sales promotions have a strong positive association with brand loyalty, indicating that the research hypothesis is validated for each organisation.

Das & Kumar (2009) examined the influence of retail sales promotions on customer purchasing behaviour. The research concluded, retail sales promotion has a minimal impact on customer purchasing behaviour. Just a tiny number of buyers are drawn to such sales promotion schemes.

3. Research Gap

In the view of the above papers, authors mainly studied if sales promotion techniques influence consumer buying behaviour or not. (Ali & Muhammad, 2021) examined in their research study the influence of various promotional methods on customer purchasing behaviour. (Garg, 2021) investigated how marketing and sales promotional efforts influence customer purchasing habit and preferences. (Al-Nsour, 2020) studied the influence of sales promotion activities on consumer buying behaviour. Authors also focused on whether variables like discount, coupons etc. have any association with one another or not, if promotional tools, such as discounts, specimens, and purchase one get one free, can influence customer purchasing behaviours or not and which is the most successful sales promotion technique (Chang, 2017; Shamout, 2016; Alimpić, 2014; Ochieng, 2014).

So, previously no researchers have concentrated on the influence of sales promotion strategies on different income levels, gender and age of the consumers in the Kolkata region. As a result, our study appears to be unique.

4. Objectives of The Study

The study namely focuses;

1. To investigate the impact of sales promotion techniques on different level of income and gender.
2. To determine if various forms of sales promotional techniques affect customer purchasing behaviour in different age groups and which sales promotion technique is most effective in different age group.
3. To discover if various forms of sales promotion techniques has a significant influence on customer purchasing behaviour.

5. Research Methodology

Source of the Data

The study includes data from primary sources acquired through a survey approach using a structured questionnaire, as well as secondary data obtained from a range of periodicals, journals, essays, earlier research papers, and so on.

Location and time period of the study

For our study we have considered Kolkata region. This location has a cross-section of the urban population, making it ideal for the study. The study was conducted between November 2021 to March 2022.

Sample size

In our research we have focused on Kolkata region, since the population of Kolkata is equal to 15,133,888[2] (World Population Review, 2022), thus we used the Cochran Formula of known sample to calculate the sample size and obtained 385 as our sample size.

Sampling method

Non-probability sampling methods, such as the convenience sampling approach, were adopted in our study. Since the sample frame was unknown to us, we have used a non-probability sampling method. Due to time constraint and the present Covid-19 predicament, we chose the convenience sampling.

Statistical software and tools used for the research:

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2   Note: According to the World Population Review current population of Kolkata is 15,133,888.

World Population Review. Kolkata Population 2022. Retrieved March 16, 2022, from https://worldpopulationreview.com/world-cities/kolkata-population

For our analysis, we used SPSS 28.0.1 version software and Microsoft Excel. In our study, we employed statistical methods such as Correlation analysis, 2/2 Correlation matrix, Chi-squared test, Regression, Quantile regression and Artificial Neural Network.

6. Analysis and Interpretation

Objective 1:

Impact of sales promotion on gender:

H$_1$: There is a significant impact of sales promotion on Gender

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.251ᵃ	2	.002

As the p-value is 0.002 which is less than 0.05. So, we will reject the Null Hypothesis and accept the Alternative Hypothesis (H$_1$). So we can conclude that there is significant impact of Sales Promotion on gender.

Sub Hypothesis

Sales Promotion tools	Sub Hypothesis	Asymptotic Significance(2 sided)	Accept / Reject
Price Discount and Gender	H¹$_1$: There is a significant impact of price discount on gender	.458	Reject
Coupons and Gender	H²$_1$: There is a significant impact of coupons on gender	.005	Accept
Free Samples and Gender	H³$_1$: There is a significant impact of free samples on gender	.004	Accept
Buy one get one free offer and Gender	H⁴$_1$: There is a significant impact of buy one get one free offer on gender	.002	Accept

The p-value for price discount and gender is 0.458 which is greater than 0.05. So, we will accept the Null Hypothesis and reject the Alternative Hypothesis (H^1_1). So we can conclude that there is no significant impact of price discount on gender. Coupons, free samples, buy one get one free, and gender have p-values of 0.005, 0.004, and 0.002, respectively, which are less than 0.05. As a result, we will reject the Null Hypothesis and accept the Alternative Hypothesis (H^2_1), (H^3_1) and (H^4_1). So, we may conclude that coupons, free samples, and buy one get one free have a significant impact on gender.

Impact of sales promotion on different level of income:

H_2: There is a significant impact of sales promotion on level of income of the consumers

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	164.170	18	9.121	5.996	<.001[b]

The model's value of significance is less than 0.001, that is lesser than the threshold of significance of 0.05. It indicates that the complete regression model is statistically significant and we will accept the alternative hypothesis (H_2) and reject the null hypothesis. So, we can say that sales promotion has a impact on level of income of the consumers.

Objective 2:

Sales Promotion and Age group:

H_3: There is a significant impact of sales promotion on different age group

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	258.217	18	14.345	7.857	<.001[b]

The study shows that the model's value of significance is less than 0.001, that is lesser than the threshold of significance of 0.05. It indicates that the complete regression model is statistically significant and we will accept the alternative hypothesis (H_3) and reject the null hypothesis. So, we can say that sales promotion has a impact on different age group of the consumers.

Sub Hypothesis

Alternative Hypothesis	Parameter	Sig.	Accept/Reject
H^1_3 : Price discount has an impact on different age groups of the consumers	Price Discount	.667	Reject
H^2_3 : Coupons has an impact on different age groups of the consumers	Coupons	<.001	Accept
H^3_3 : Free Samples has an impact on different age groups of the consumers	Free Samples	.002	Accept
H^4_3 : Buy one get one free offer has an impact on different age groups of the consumers	Buy one get one free offer	.320	Reject

According to the above table, the significance (p-value) of Price Discount and Buy One Get One Free are 0.667 and 0.320, respectively, which are greater than 0.05. As a result, we will reject the alternative hypotheses (H^1_3) and (H^4_3) and accept the null hypothesis, allowing us to infer that price discounts and buy one get one freedoes not have an impact on different age groups of the consumers.

The significance (p-values) for coupons and free samples are less than 0.001 and 0.002, respectively, which are less than 0.05. As a result, we will accept the alternative hypotheses (H^2_3) and (H^3_3), which imply that coupons and free samples has an impact on different age groups of the consumers.

Crosstab showing which sales promotion technique is most favourable, favourable, less favourable and least favourable in different age group:

Sales Promotion Tools	Most Favourable/Favourable /Less Favourable/Least Favourable	Below 16	16-25	26-35	36-45	46-55	Above 55	Total
Price Discount	Most Favourable	30	57	60	47	65	34	293
	Favourable	0	37	12	7	16	12	84
	Less Favourable	0	1	1	0	2	1	5
	Least Favourable	0	0	0	0	1	2	3
Coupons	Most Favourable	25	31	20	13	6	4	99
	Favourable	2	37	34	13	22	17	125
	Less Favourable	2	20	8	15	30	13	88
	Least Favourable	1	7	11	13	26	15	73
Free Samples	Most Favourable	26	27	15	13	7	7	95
	Favourable	4	36	27	8	19	10	104
	Less Favourable	0	20	8	9	24	9	70
	Least Favourable	0	12	23	24	34	23	116
Buy one get one free offer	Most Favourable	29	47	35	19	29	14	173
	Favourable	1	36	34	19	32	13	135
	Less Favourable	0	11	0	8	14	10	43
	Least Favourable	0	1	4	8	9	12	34

Objective 3:

Influence of various forms of sales promotion techniques on customer purchasing behaviour:

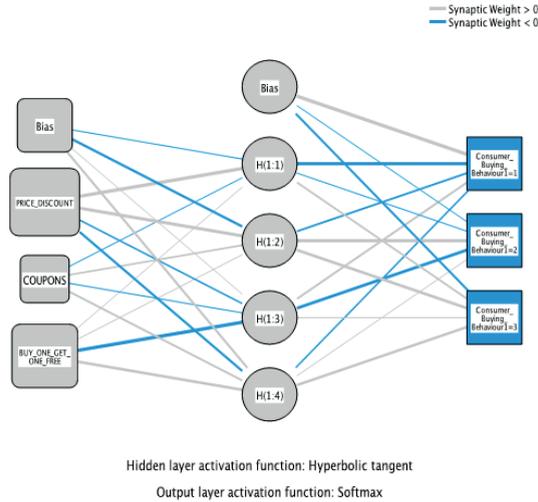**H$_4$: There is a significant impact of sales promotion on consumer buying behaviour**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.033	4	9.508	23.777	<.001[b]

The study shows that the model's value of significance is less than 0.001, that is lesser than the threshold of significance of 0.05. It indicates that the complete regression model is statistically significant and we will accept the alternative hypothesis (H$_4$) and reject the null hypothesis. So, we can say that sales promotion has an impact on consumer buying behaviour.

Tools of Sales Promotion	Mean
Price Discounts	1.27
Coupons	2.35
Free Samples	2.54
Buy One Get One Free Offers	1.84

According to the 385 survey respondents, Respondents prefer price discounts the most over other sales promotional methods since it has the lowest mean value (1.27), followed by buy one get one free offers, coupons, and free samples.

Artificial Neural Network

Hidden layer activation function: Hyperbolic tangent

Output layer activation function: Softmax

According to the multilayer perceptron, estimating our outcome variable (Consumer buying behaviour) using three predictor variables (price discount, coupons, and buy one get one free) and four notes in the hidden layer would be more effective.

Independent Variable Importance

	Importance	Normalized Importance
PRICE_DISCOUNT	.464	100.0%
COUPONS	.134	28.9%
BUY_ONE_GET_ONE_FREE	.402	86.7%

Both price discount and buy one get one free are very important in predicting consumer buying behaviour which is our outcome variable. Price discount has an importance of 46.4% and buy one get one free has an importance of 40.2% in predicting our outcome variable. Coupons have only 13.4% of importance in predicting our outcome variable. As a consequence, we may conclude price discount has the most relevance (46.4 percent), followed by buy one get one free and coupons in influencing consumer purchasing behaviour in the Kolkata region.

7. Conclusion

In today's competitive marketplace, sales promotions are critical for many firms and industries, and consumers are well aware of the many sales promotional strategies used. Today, companies spend a large amount of money on sales promotion. The major purpose of such promotional activities is to make the products more appealing and desired to consumers while increasing profits. The company attempts to change customers' purchasing habits and persuade them to acquire the product or service that they are selling. Based on our findings, we may infer that sales promotion has a considerable influence on customer purchasing behaviour in the Kolkata region. According to our findings, consumers in the Kolkata region prefer price discounts the most, followed by buy one get one free promotions, discounts, and free samples the least. Our research also reveals that sales promotional strategies have a significant influence on the different age groups, genders, and income levels of customers in the Kolkata region. According to our research, people prefer price discounts regardless of income level, gender, or age group and regardless of their age or income level, consumers favour buy one get one free deals. Free samples have no substantial influence on consumer purchase behaviour and are disliked by customers in the Kolkata region. An intriguing finding from our research is that children under the age of 16 prefer all the sales promotional techniques and are extremely keen in the numerous promotional offers. Consumers in the Kolkata region are extremely price sensitive, regardless of age, income level, or gender, and they prefer deep discounts. Price discount may be an excellent way to persuade consumers in the Kolkata region to make purchases, followed by buy one get one free offers and coupons. Companies, businesses, and retailers in the Kolkata region must put a greater emphasis on providing price discounts and buy one get one free deals during promotional seasons. The greater the investment in price discounts and buy one get one free, the higher the revenue.

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Chapter

14

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Influence of Humour Appeal on Consumers' Attitude: A Study of Indian FMCG Advertisements

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Abstract

Every day we are surrounded by numerous forms of advertisements, each conveying a unique message to influence the consumer's attitude. An advertisement is effective if a particular appeal creates a positive image of the product in the target consumer's mind. This study aims to identify the effects of humorous advertising on brand awareness, brand recall, and word-of-mouth communication by consumers. For this purpose, four brands namely, Vicks, Amul, Cadbury 5 - Star, and Slice were selected. The advertisements used different humorous appeals, namely, puns, satire, full comedy, and exaggeration respectively. For each brand, a humorous advertisement was chosen that was showcased on electronic or print media. An online survey was conducted and 266 responses were collected in a structured questionnaire. The results suggested that humor has a profound effect on brand recall and word-of-mouth communication. It was seen that humorous advertisements follow the AIDA model of advertising in their pursuit of persuading viewers to make a purchase decision.

Keywords: Humor Appeal, Brand Awareness, Brand Recall, Word of Mouth Communication,

1. Introduction

The hawkers shouting out their wares in the markets and cities were the earliest indication of Indian advertising. Indian advertising has grown significantly during the past 91 years as marketers have learned how to employ marketing appeals to make advertisements more than just straightforward educational tools. Advertising appeals are marketing techniques used by firms to sway

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1. This Dissertation was done by the scholar under the guidance of Dr. Sumanta Dutta.

consumer sentiment and strengthen their relationship with them.

One of the most common appeals used in India to cater to the emotional needs of the consumers is humour appeal. It gives the consumers a reason to laugh and hence creates an emotional link between the product and the consumers. Humour was first spotted in Indian advertisements in the 1960s with Amul and Parle using puns and quirkier messages as their means of communication. These messages not only made the consumers laugh but also conveyed the product and brand well (Sharma, 2020). Over the years, we have seen different brands using humour as their primary tool to make their advertisements stand apart. This helps the advertisements create a positive brand image and go viral via word-of-mouth communication (Primanto & Dharmmesta, 2019).

According to a forecast by Zenith, the ad spending of food and drinks brands is expected to rise by 14% a year over the next three years (Tewari, 2021). In order to understand the applicability of humour in the Indian FMCG product advertisement through our study, we will be analyzing 4 categories of humour. Satire is a comic element used as ridicule to sarcastically attack or expose the realities of any problem prevalent in society with humorous wordplay and characters. A pun is a figure of speech that creates new humorous meanings from the words and makes the consumers laugh. Commonly known as farce, it refers to overstating something out of proportion and adding spice to the existing stories to make them better or worse than they already are. Full Comedy refers to the use of funny elements, characters, languages, and storylines to make the audience laugh.

2. Literature Review

Siddhu (2021) highlighted that humour appeals can capture consumers' attention and make the advertisements worth watching. Ganjoo (2020) concluded that advertising appeals can change a consumer's attitude towards the product and brand and influence their purchase intention. Shah, Menon & Bagree (2020) observed that humour validates the consumers' feelings and creates a positive sentiment in the consumer towards the brand, and enhances brand recall. Primanto & Dharmmesta (2019) pointed out that humorous advertisements positively affect a consumer's attitude towards the brand and word of mouth. El-Tazy & Dianna (2018) presented a study showing a direct positive relation between well-applied humorous appeals and attitude as well as probability to purchase. Djambaska, Petrovska, & Bundalevska (2015) studied that humour appeal is cost-effective 60% of the time and creates a greater impact on the liking and preferences of the consumer as compared to any serious appeal of the message. Chang & Chang (2014) observed that humorous advertisements have higher brand recall as compared to emotional advertisements. Khan & Khan (2013) showed that humour elements increase brand recognition and associations for consumers, and create brand awareness through word-of-mouth communications. Sharma (2012) studied that creative advertisements help in selling the products and also create a good brand recall in the minds of the consumers. Mishra (2009) concluded that consumers view advertisements as

a person. Hence, advertisers must develop appeals based on demographic and psychographic factors.

3. Research Gap

While undertaking the thesis titled 'Influence of Humour Appeal on Consumers' Attitude: A Study of Indian FMCG Advertisements', we have noticed that the majority of the research has been conducted to find the impact of humour appeal on

1. Attitude toward the advertisement
2. Purchase intention
3. Brand attitude

We can see that very few researchers have researched on understanding the effects of humour appeal on

1. Brand awareness
2. Brand recall
3. Word of mouth intention
4. Consumer perception towards advertising appeals

We will try to explore these areas by the virtue of our study.

4. Research Objectives

The following are the research objectives of this thesis titled 'Influence of Humour Appeal on Consumers' Attitude: A Study of Indian FMCG Advertisements':

1. To analyze whether consumers are aware of humour applicability in Indian FMCG product advertisements;
2. To explore the impact of humorous advertisements on brand awareness, brand recall, and word-of-mouth communication;
3. To understand how consumers perceive humorous advertisements;
4. To understand whether the perception of humour is the same across all demographics.

5. Research Methodology

Data collection

The study includes primary and secondary data. The primary data was collected by a survey using an online questionnaire. The secondary data were collected by reviewing 20 research papers.

Sampling method

Convenience sampling is used for this research as the population is unknown to us. We are looking for sampling units in Kolkata and since it is not possible to define the population, we can try to collect as many responses as we can using online and offline mediums in different areas of Kolkata. Since, we cannot apply

a probability sampling method in a case where identifying the population and involving every element from the said population is impossible, convenience sampling is a way that we can collect responses to conduct our study. Convenience sampling can also be used for this research as it is exploratory in nature and aims to understand the consumer mindset as a whole for advertising appeals.

Sample size

The sample size for this study was calculated using Cochran's formula. A sample size of 385 was selected using Cochran's formula. 266 people responded to the said questionnaire.

Tools used

SPSS is used to analyze the data collected. Correlation analysis and the chi-square test of independence are used to analyze our study.

6. Data Analysis and Interpretation

The total number of respondents in our study is 266. The demographic details of the respondents are as follows:

Table: Demographic Distribution

Age Category	Percentage	Gender Category	Percentage
Below 18	8.28%		
18 – 25	75.94%	Male	44.37%
26 – 35	13.15%		
36 – 45	1.50%	Female	55.26%
Above 45	1.13%	Prefer Not to Say	0.37%

Objective 1: To analyze whether consumers are aware of humour applicability in Indian FMCG product advertisements

Respondents were prompted with 4 advertisements and asked to guess the appeal used in every advertisement from a given set of choices. The following are the results of the given test:

Table: Consumers' Awareness of humour applicability in FMCG product advertisements

Brands	Pun	Satire	Exaggeration	Full Comedy	Correct Answer
Vicks	25%	3%	12.4%	59.6%	Pun
Amul	28.3%	24.4%	8.6%	38.7%	Satire
Cadbury 5 - Star	17%	17.6%	28%	37%	Full Comedy
Slice	15.7%	4.1%	76%	3.7%	Exaggeration

The analysis tells us that consumers consider every funny advertisement as a full comedy appeal and are not aware of the different humour appeals existing in the advertising world. However, the respondents could differentiate between a funny and a non-funny advertisement and hence guessed the correct humour appeal used in the Slice advertisement, i.e., exaggeration. From this analysis, we can conclude that respondents are not aware of the humour applicability in Indian FMCG product advertisements.

Objective 2: To explore the impact of humorous advertisements on brand awareness, brand recall, and word-of-mouth communication

After analyzing the responses, it is seen that more than 50% of our respondents could guess the correct brand name for all four brands when they were prompted with the advertisement. This shows that brand recall for all four humorous advertisements is high.

Table: Correlation Analysis of Humorous Advertisements with Brand Recall and Word of Mouth Communications

Brands	Correlation between	Coefficient	Correct Respondents
	HA and BR	HA and WOM	
Vicks	0.330	0.442	87%
Amul	0.599	0.506	99%
Cadbury 5 - Star	0.664	0.605	91%
Slice	0.170	0.427	70%

HA - Humorous Advertisements, BR - Brand Recall, WOM - Word of Mouth Communication

The correlation analysis gives us the highest results for an association between humorous advertisements and word-of-mouth communication for all our brands. Here, we can conclude that advertisements using humour appeals have a chance of being viral and communicated through word of mouth.

However, we can see the highest association between humorous advertisements and brand recall for Amul and Cadbury 5 - Star, where there is the highest percentage of respondents guessing the correct brand name. One of the major reasons behind this can be the renowned names of these brands. Hence, we can conclude that humour appeal can create a strong brand recall in the minds of the consumers when the brands are popular with a strong market foothold.

Objective 3: To understand how consumers perceive humorous advertisements

Table: Correlation Analysis of how consumers perceive Humorous Advertisements

Humorous Advertisements ✤	Capability to Capture Attention ✤	Positive Brand Attitude ✤	Purchase Persuasion
Vicks	0.675	0.626	0.628
Amul	0.707	0.632	0.662
Cadbury 5 – Star	0.839	0.679	0.788
Slice	0.546	0.676	0.679

The given analysis shows the applicability of a model similar to the AIDA model of advertising. The AIDA model stands for Attention, Interest, Desire, and Action. The model explains the different stages a consumer goes through while deciding to buy a product. The four brands in our study are seen to create similar stages for their consumers through their humorous advertisements, starting by capturing their attention, creating interest in the brand, creating a positive brand attitude, and finally persuading them to buy the product.

The correlation analysis also gave us insights on a direct association of humorous advertisements with positive brand attitude and purchase persuasion, the results of which were:

Table: Correlation Analysis of Humorous Advertisements with Positive Brand Attitude and Purchase Persuasion

Brands	Correlation analysis between Humorous Advertisements and	
	Positive Brand Attitude	Purchase Persuasion
Vicks	0.556	0.450
Amul	0.554	0.457
Cadbury 5 – Star	0.625	0.631
Slice	0.485	0.441

It is seen that the effects of humorous advertisements on creating a positive brand attitude are moderate, while the impacts of humorous advertisements on persuading consumers to purchase the product are below average. Hence, we can conclude that humour appeal cannot create a positive brand attitude directly. Similarly, we cannot derive that humour appeal persuades consumers to buy a product. Humor appeal can be one of the factors that can create a positive brand attitude and persuade people to make a purchase decision but is not directly responsible here.

Objective 4: To understand whether the perception of humour is the same across all demographics

The results of the age-wise chi-square tests show that age does not have an impact on how consumers perceive humorous advertisements. The p-value was rejected for all four brands. Hence, we can conclude that people from all age groups perceive humorous advertisements equally and in the same manner.

The results of the gender-wise Chi-square test of Independence show that the p-value for most parameters of consumers' perception of humorous advertisements is rejected. However, there is an association between gender and how consumers have a positive brand attitude toward humorous advertisements. While gender has no impact on the overall perception of humorous advertisements, it was seen that the p-value was accepted for all four brands for creating a positive brand attitude. Hence, we can conclude that gender has an effect on consumers' attitudes towards the brand.

7. Conclusion and Managerial Applications

From the given data analysis and interpretations, we can conclude that humour appeal has an influence on creating brand recall ability and awareness in the minds of the consumers. Advertisements using humour appeal have a high chance of being communicated through word of mouth. The perception of humorous advertisements does not change as per different age groups of consumers. However, we have seen gender having an impact on how consumers form a positive brand attitude through humorous advertisements.

Our study gives us an insight into how brands use the AIDA model of advertising in order to convert the viewers of advertisements into potential customers. It is seen that brands cannot persuade the viewers to buy the products by mere use of humour appeal. It is advisable that brands understand the applicability and success of the AIDA model of advertising in depth and follow the same to capture their consumer base.

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