

Volume 13 - Issue 10 - October – 2023

International Journal of Exclusive Management Research

ISSN: 2249 – 8672

Published by

Archers & Elevators Publishing House,

131, AGB Layout, 6th cross,

Hesharagatta Main road,

Bangalore – 560 090, Karnataka, India.

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A STUDY ON FINANCIAL ANALYSIS AT BASAVESHWAR SAHAKAR BANK NIYAMIT, JAMKAHNDI

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ABSTRACT

Finance is essential for every business enterprise to carry out its activities because finance is one of the basic needs of all kinds of modern economic activities. That is why finance is called the lifeblood of every business enterprise. The different financial institutions are Banks, Co-operatives, and Businesses etc. Nowadays the banking sector is tremendously developed by using modern technology. Co- operatives are the part of banking sectors and these works on the basis of banks only. Nowadays the co-operative banks are facing high competition from the nationalized banks in loans and advances. But the co-operatives bank that is “Basaveshwar Sahakar Bank Niyamit” has a clear mission and vision to make a good profit and they are issuing loans and advances too. For running a banking business initial capital is important. But after establishing to run and expanding the organizations the Working capital is very important, the banks getting working capital by accepting the deposits from public in different ways. Then the bank will issue the same deposit amount to the public in the form of loans and advances at a different interest rate. By this way the banks are making profit. Generally, the interest rate for deposit is less than the loans and advances.

Key words: Financial analysis, Ratio analysis, Trend analysis Regression model.

I. INTRODUCTION

Founded on December 15th, 1997. "Basaveshwar Sahakar Bank Niyamit, Jamkhandi, originally had 1242 shareholders and a share capital of Rs. 7.25 lakhs under the chairmanship of Dr. Sri Tatasahab Bangi. Basaveshwar Sahakar Bank Niyamit, Jamkhandi, has obtained a banking licence from the Reserve Bank of India after a continuous history of growth and development of its aims. The Bank is now led by Chairman Sri. Channappa S. Bangi, and he has been effective in keeping the organisation up to date with socioeconomic and banking trends.

As of March 31, 2021, our bank had a working capital of 18.66 crore, share capital of 65.94 lakhs, deposits of 15.75 crores, loans, and advances of 9.23 crores, and a net profit of 13.49 lakhs. Our bank received an "A" Rating on its audit. The bank offers members gold loans as well as loans for vehicle purchases, pay-deduction loans, advance on deposits, and home construction loans. Without any borrowing bank, the fund stands alone. That demonstrates the whole economic strength of our bank. Nowadays, our bank has effectively served for 25 years.

OBJECTIVES OF THE STUDY:

1. To determine the variation in income statement and balance sheet items using common Size statement.
2. To assess the bank's performance through a comparative analysis
3. To utilize ratios to assess the financial health, liquidity, and solvency of the bank.
4. To study bank data over time using trend analysis.

II. REVIEW OF LITERATURE

(Dr.P.R.Ramakrishnan & K.Prashanth Rao, 2018)A Comparative Study of Financial Performance of Urban Cooperative Banks in Belgaum District, Karnataka: Cooperative banks have had a significant impact on the strength of the Indian Financial System. In Karnataka, Belgaum is a significant district. Belgaum is home to a couple of the top cooperative banks.

Due to the district's closeness to Maharashtra, the cooperative movement has been particularly strong there. Several important metrics are used to assess the performance of Urban Cooperative Banks located in the Belgaum District. Data Envelopment Analysis is the most widely used statistical tool.

(KULKARNI & DR. SUJIT G. METRE, 2020) Comparative Study of Selected Urban Co-Operative Banks in Pune and Nagpur Based on Camel Model: They assist small, medium-sized, and increasingly some large enterprises in turning the meagre savings of the populace into successful companies. There were 1579, 1574, and 1562 urban cooperative banks in 2014–15, 2015–16, and 2016–17, respectively. This shows that several urban cooperative banks are closing annually, which is a bad omen. Due to financial irregularities, the RBI has also recently cancelled the licences of certain urban cooperative banks, and some banks are currently under strict inspection. As a result, it is vital to compare the financial results of urban cooperative banks.

(Talla, Anand Bethapudi, & Reddeppa Reddy G, 2013) An Analytical Study on Financial Performance of Dharmavaram Urban Cooperative Bank, A, P India: The researcher wants to look into the Dharmavaram Urban Cooperative Bank's financial standing. The study makes use of an exploratory research methodology that depends on secondary data. According to the data analysis, there was a considerable increase in the following areas related to DUCB: mobilisation of deposits, membership, loans, and advances, working capital, reserves, owned funds, total income, total expenditure, and overdue.

(Singh, Dr.Sharma Narender Nath, & Bhulal Vipran Kumar, 2017) A comparative study of financial performance with special reference to co-operative banks: The financial performance and significance of cooperative banks in Himachal Pradesh are examined in this essay. The current investigation is supported by secondary information. The primary goals of the research are to assess the current financial standing and evaluate the performance of HPSCB and KCCB, the two cooperative banks in Himachal Pradesh. The two biggest cooperative sector banks in the state are HPSCB and KCCB. Cooperative banks' effectiveness and efficiency are the fundamental drivers of the nation's financial system.

(Uwaramutse, Towo, E. N, & Machimu, G. M, 2022) Influence of Co-Operative Characteristics on Financial Performance of Irish Potato Farmer Co-Operatives in Northern and Western Province Rwanda: The goal of this paper is to investigate how Irish Potato Farmer Co-operatives (IPFCs) in Rwanda's Northern and Western Provinces' financial performance is influenced by cooperative features. For the benefit of stakeholders including policymakers and non-governmental organisations, this publication generates facts.

(Sharma & Dr. Mayank Jindal, 2022) Financial Ratio Analysis Of Co-Operative Banks In Uttarakhand: In this study, the researcher examined 20 financial ratios from five cooperative banks located in the Indian state of Uttarakhand: Kurmanchal Urban Co-operative Bank, Dehradun District Co-operative Bank, Uttarakhand State Co-operative Bank, and Almora Urban Co-operative Bank. The financial condition, financial structure, average number of workers per branch, and business per employee of the cooperative banks in Uttarakhand may all be understood with the help of this study.

(HARALAYYA, 2021) Analysis of Non-Performing Asset on Urban Cooperative Bank in India: Resources are referred to as non-acting sources (NPA) if debtors fail to pay interest and principal for 90 days in a row. Whatever the case, starting in March 2018, the bank must return all credit or credit rating positions given to the borrower as non-performing and must identify all credit or credit rating positions given to the borrower without regard to the manner in which they were provided. The standard may be given to the specific people who spend on 90 days if any increase or credit Facilities are provided by the bank to the borrower to become non-performing. In true terms, a benefit that anticipates acting as a mystery assistance is a valuable resource.

(Keerthi & S. Eswari, 2020) A Study on Financial Performance Using Ratio Analysis of Kumbakonam Central Co-Operative Bank: This paper's primary goal is to examine the overall financial situation. By applying ratio analysis, the bank's position. It demonstrates if the company has been getting better or worse over time. Utilising secondary data all the research, or the KCCB's yearly reports from the previous five years. Both intra- and inter-firm comparisons can be made using ratio analysis as a base. This report not only informs the reader on the firm's financial position, but it also assists in identifying problems and making recommendations to enhance the firm's performance.

(Dr.P.R.Ramakrishnan & K.Prashanth Rao, A Comparative Study of Financial Performance of Urban Cooperative Banks in Belgaum District, Karnataka, 2018): In Karnataka, Belgaum is a significant district. Belgaum is home to a couple of the top cooperative banks. Due to the district's closeness to Maharashtra, the cooperative movement has been particularly strong there.

Several important metrics are used to assess the performance of Urban Cooperative Banks located in the Belgaum District. Data Envelopment Analysis is the most used statistical technique.

(Alice & Dr. Patrick Mulyungi, 2018) Effect of Cash Management on The Financial Performance of Cooperative Banks in Rwanda: A Case of Zigma CSS: In this paper, the impact of cash management on Rwanda's cooperative banks' financial performance is examined. The research design was descriptive. Utilising surveys and document analysis, data was gathered from both primary and secondary sources. Frequency tables were used to show the data, and analysis was performed on them. The study concludes that as cash is the bank's largest asset, cash management is a crucial instrument in financial management. Cooperative banks need to adopt rules for efficient cash management.

III. RESEARCH METHODOLOGY

The study paper is based on descriptive research. Using secondary data from publications like books and journals websites of Basaveshwar Cooperative Bank such as balance sheets with schedules and profit and loss accounts. Data was collected from 2018-19 through 2021-2022.

Tools for data collection

1. Common size statement analysis
2. Comparative statement analysis
3. Ratio analysis
4. Trend analysis

Testable hypothesis

Ha1: There is a significant impact of profit on growth of reserves durin study with regard to Basaveshwar Sahakar Bank Niyamit

Ha2: There is a significant impact of deposit mobilization on profits during study with regard to Basaveshwar Sahakar Bank Niyamit

Ha3: There is a significant impact on total income on assets of Basaveshwar SahakarBank Niyamit during study.

Ha4: There is a significant impact of total expenditure to profits with reference to Basaveshwar Sahakar Bank Niyamit

IV. DATA ANALYSIS AND FINDINGS

FINANCIAL ANALYSIS

RATIO ANALYSIS

No. of years	Current assets	Current liabilities	Total	Current assets	Current liabilities	Total
2018	17875793	1461864	12.23	17875793	1461863.5	12.23
2019	17149849	2747759	6.24	17149849	2747758.5	6.24
2020	14453009	2175923	6.64	14453009	2175923	6.64
2021	20199813	2268562	8.9	20199813	2268562	8.9
2022	28909083	2175307	13.29	28909083	2175307	13.29

Source: Companies balance sheet

Interpretation

The current ratios that are considered acceptable change annually. It is deemed acceptable to have a current ratio of 1:12.23 in 2018, 1:6.24 in 2019, 1:6.64 in 2020, 1:8.90 in 2021, and 13:29 in 2022. The bank has more ability to meet its obligations the higher the current ratio is. However, the current ratio for 2022 has grown in comparison to 2018, 2019, 2020, and 2021, which is bad news for the bank. In order to avoid future risks that might hurt the bank, the bank should attempt to raise its current ratio in the years to come. Quick ratio should generally be 1:1. If the quick ratio is high, the bank may hold too much cash on hand or encounter difficulties collecting its outstanding debts. If the bank's quick ratio is less than 1:1, it may mean that it relies too much on its inventory or other assets to cover its short-term liabilities. This is a negative sign for the banks.

Due to the fact that the ratio is 12.23 in 2018 but reduced to 6.24 in 2019, grew by 6.64 in 2020, 8.90 in 2021, and dramatically increased to 13.29 in 2022. The figure which showing in the table is in lakhs.

TREND ANALYSIS

Year	Reserves	Trend percentage	Year	Deposits	Trend percentage
2018	10384705	100.00%	2018	151379773	100
2019	11148170	107.35%	2019	141358813	93.38
2020	12517692	112.28%	2020	155755280	110.18
2021	13461209	107.54%	2021	157506510	101.12
2022	15440071	114.70%	2022	171242680	108.72

Source: Companies balance sheet

Interpretation:

Here, we choose 2018 as our base year for computation, which will make it easier to analyze the bank's financial situation. It will discuss the bank's efforts to enhance its performance. The preceding table allows us to examine the reserve trend and what it means. The reserve trend percentage is 114.70% in 2022, and the reserves are growing yearly. The bank is prospering in this manner. The bank's reserve fell in 2021; however it was made up the next year by accelerating the trend, or by 114.70%. Here, we may observe the yearly improvement in bank deposits. As a base year for assessing the deposit trend, I also use 2018 as a reference. The trend analysis table above demonstrates that deposits rose from 2018 to 2022, which is encouraging for the banking sector. It decreased in 2019 and 2021; however it was made up for by raising the deposit the next year. The figure which showing in the table is in lakhs.

Five Year Data Analysis

Table 4.10 shows Five Years Annual Report

Particulars	2018	2019	2020	2021	2022
Members	2936	2941	2946	2952	2946
Share capital	6765350.00	6556700.00	6558900.00	6593750.00	6789350.00
Reserve fund	10384705.29	11148170.09	12517691.97	13461208.55	15440071.45
Deposits	151379772.77	141358812.55	155755279.88	157506510.12	171242680.03
Loans	112194087.00	95025919.30	95176517.05	92389286.75	100554160.00
Fixed Asset	211968.76	2914911.76	4586988.44	4568657.00	4180187.67
Net profit	676090.80	1142805.38	673314.58	1349355.90	1636309.42

Source: Companies balance sheet

Interpretation

In the common size balance sheet, the research above shows that the overall liabilities in 2022 will be higher than they were in the preceding four years, which were 2018, 2019, 2020, and 2021. Similar to that, the assets have grown. In terms of assets and liabilities, it can be said that the bank's performance for the current year is quite high compared to the prior four. Each year, the banks make more money. The bank should make efficient use of the resources at hand. The growth of the bank's fixed assets, current assets, investments, loans, share capital, cash on hand, and profit is evident. Thus, it is encouraging for the bank and its stockholders. And in the comparative balance sheet the share capital also increased by 34.90%. The drastic change in current asset was 56.91%. However, the investment and bank fees have increased, respectively, by 6.8% and 31.54%. We can see that the bank's profit has increased by 22.06%. The overall bank's activities and its position are good compared to the previous year.

Absolute and value share capital have increased. i.e., 0.53%. The bank's absolute profit has climbed by 100.40% when compared to the base year of 2020, and its financial condition is improving year after year. These monetary changes are visible on the bank's comparative balance sheet. The figure which is shown in the table is in lakhs.

REGRESSION ANALYSIS

SUMMARY OUTPUT				
Regression Statistics				
Multiple R	0.788564	0.545424	0.556354	0.854706
R Square	0.621834	0.297487	0.30953	0.730522
Adjusted R Square	0.495779	0.063316	0.079374	0.640696
Standard Error	1412577	408698.2	12551547	253126.3
Observations	5	5	5	5

Interpretation:

Based on the above data, the R value is 0.6218, or 62.18%. This value is between profit and reserve, and it shows the variation between both variables, and the multiple R is 0.788, t static value of intercept value 4.3960, significant F value is >0.05 , so H_0 is accepted and H_1 is rejected, indicating that there is no significant impact of reserve on bank profit. The R value is 0.2974, or 29.74%, as seen in the table above. The multiple R is 0.545, the t static value of the intercept is -0.7522, the significant F value is >0.05 , and the value between deposit and profit shows the variation between the two variables. As a result, H_0 is accepted and H_1 is rejected, indicating that there is no discernible effect of deposits on bank profit. The R value, as seen in the table above, is 0.3095, or 30.95%. The multiple R is 0.556, the intercept's t static value is 0.5973, the significant F value is greater than 0.05, and the value between total income and assets demonstrates the variance between the two variables. As a result, H_0 is approved whereas H_1 is refused, showing that overall income has no discernible impact on bank assets. As can be seen in the table above, the R value is 0.7305, or 73.05%. The value between total spending and profits illustrates the variance between the two variables. The multiple R is 0.854, the intercept's t static value is -2.3312, the significant F value is larger than 0.05. The fact that H_0 is accepted but H_1 is rejected demonstrates that overall spending has no appreciable effect on bank profitability.

V. FINDINGS

➤ The evaluation of a balance sheet of average size described above reveals an increase in total liabilities for 2017. The assets have increased in a comparable way. It was discovered that during the current fiscal year, the bank performed quite well in terms of assets and liabilities.

- In comparison to the base year of 2018, the bank's fixed assets trend indicates a steady increase. The trend seemed to have fallen down in 2018, but it was soon picked back up the year after. This pattern reflects the bank's stable position as being on the safer side of the market with greater assets.
- The current ratio in the last 5 years is not meeting the standards 2:1; hence the company is not able to pay short-term and long-term obligations.
- The firm's quick ratio is more than 1:1, suggesting that the company is able to satisfy current commitments using liquid assets.

VI. CONCLUSION

The bank's overall performance is improving, as evidenced by a considerable rise in profits over the previous year. The several financial analysis approaches employed indicate a very good financial position. As seen by the growing trend in earnings, the bank has made considerable operational improvements.

The balance sheet of the bank reveals that it is financially sound. Comparative balance statements, trend analyses, and ratio studies all show that the bank is operating profitably and expanding year after year. Additionally, management is correctly handling the issue. The bank's directors are accomplished professionals with a wide range of educations and experience.

They assist banks in formulating and carrying out various policies. Even the bank employees are extremely skilled and experienced. Additionally, they function well and effectively. This city has a huge cooperative bank. The bank's future seems optimistic. The bank has a high financial status and overall performance.

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CONSTRUCTION OF DIVERSIFIED PORTFOLIO USING SHARPE SINGLE INDEX MODEL WITH REFERENCE TO SELECTED STOCKS OF NIFTY50

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ABSTRACT

The purpose of this research is to build a diversified portfolio using the Sharpe Single Index Model (SSIM) and chosen equities from the NIFTY50 index. The SSIM is a well-known portfolio management tool that takes into accounts both individual stock returns and their connection with the market index. This study will use the SSIM to determine appropriate weights for each selected stock, taking into account risk and return characteristics. This approach's diversified portfolio seeks to improve risk-adjusted returns by limiting exposure to unsystematic risk while capturing market-related swings. The study's findings are intended to be useful for investors looking to develop diversified portfolios utilizing the SSIM approach in the context of the NIFTY50 index.

Keywords: systematic risk, unsystematic risk, beta, cut-off rate, excess return to beta

INTRODUCTION

The creation of a diversified portfolio is an important part of investment management that seeks to balance risk and return by distributing investments over several assets. The Sharpe Single Index Model (SSIM) has emerged as a helpful instrument for portfolio diversification in the field of equity investing. The SSIM examines the link between individual stock returns and overall market performance, allowing investors to compare the risk and return characteristics of individual stocks to a market index.

In this research, we concentrate on building a diversified portfolio using the SSIM approach, which is especially applied to equities from the NIFTY50 index. The NIFTY50 is India's leading stock market index, consisting of the top 50 businesses listed on the National Stock Exchange (NSE). We want to capture a representative sample of the Indian equities market by picking stocks from this index.

The SSIM technique provides a systematic framework for determining the best asset allocation within a portfolio. The SSIM permits the identification of stocks that contribute favourably to portfolio performance while limiting risk by taking into accounts both individual stock returns and their connection with the NIFTY50 index. This study intends to give practical consequences for investors wishing to optimise their investment portfolios in the Indian equities market by utilising the SSIM approach with reference to the selected stocks of the NIFTY50.

STATEMENT OF PROBLEM

An investor contemplating investing in securities has the challenge of selecting from among a large number of securities and allocating funds across a group of assets. The obstacle is that the investor must decide which securities to hold and how much to invest in each of them. While the Markowitz Model allows an investor to create an ideal portfolio, the Single Index Model aids in eliminating the difficulties of data entry and time cost consideration. Therefore, the current study as entitled as, "Construction of Diversified Portfolio using Sharpe Single Index Model with reference to selected Stocks of Nifty50".

OBJECTIVES

1. To analyze Risk and Return of selected companies of various sectors.
2. To analyze the selected equity stock and to construct an optimum portfolio using sharp's single index model approach.

REVIEW OF LITERATURE

1) Mr. B P Chandan Shri Guru and Dr. Chaya Bagrecha (2022) “Building an optimal portfolio using Sharpe's single index model: A study of BSE Sensex constituent companies” The study's goal is to calculate the proportion of investment in each security from the generated portfolio. This study reveals the exact technique to portfolio generation and implementation, which is ultimately advantageous to investors in selecting firms for their portfolio and maximising their return while incurring suitable risk.

2) Dr. N Krishnamoorthy and Mahabub Basha S (2022) “An empirical study on construction portfolio with reference to BSE” The purpose of this research is to investigate the potential for investors in terms of returns and risk while investing in selected stocks of companies listed on the BSE Sensex 30. According to the report, the pharmaceutical and financial services businesses made reasonable profits while posing the most risk throughout the study period during the pre- and post-Covid-19 eras.

3) M Sathyapriya (2021) “Optimum Portfolio Construction Using Sharpe Index Model With Reference to Infrastructure sector and Pharmaceutical Sector” The goal is to investigate the asset value of twenty distinct NSE-listed firms from the Infrastructure and Pharmaceutical industries. They discovered that the performance of the infrastructure sector is worse than that of the pharmaceutical sector since only one business, GMR, was chosen for the portfolio, accounting for only 7% of the investment share.

4) Biswajit Rout and J.K.Panda (2020) “Construction of Optimal Portfolio on Selected Stocks of BSE Using Sharpe's Single Index Model” This research intends to analyze the opportunities accessible to investors in terms of returns and investment risk while investing in equities of enterprises listed on the Bombay stock market. The findings of the study shows that portfolio beta is significantly lower than the market beta and portfolio return is much higher than the portfolio variance.

5) Dr. Aloysius Edward J. and Prof. Jagadish K K (2020) “Optimum Portfolio Construction Using Sharpe Index Model with Reference to Banking Sector” The primary goal of this research is to construct an optimal stock portfolio from selected stocks belonging to banking firms in India's public and private sectors, using the Sharpe Single Index methodology. The study's findings indicate that building an ideal portfolio using Sharpe's Single Index approach is more relevant and beneficial for individual and institutional investors.

6) Nazneenaara Rafik Shaikh, Dr. Vijay Gondaliya (2019) “To Construct an Optimum Portfolio using Sharpe's Single Index Model- A Study of Selected Stocks from NSE” The study's main purpose is to create an optimum portfolio for a certain NSE stock using Sharpe's Single Index Model. It may also be used to determine the weighting of each firm in an ideal portfolio and to understand portfolio risk and return behaviour. The study's findings show that the presence of estimation risk reduced the relative contribution of estimated systematic risk on portfolio selection. The results are impressive, with an average return that is significantly higher than the market return.

7) Madan K. M, Dr. Manoj Kumara N. V (2018) “Empirical Study of Optimum Portfolio Construction – Selected NSE Stocks” Analysing the risk and return of various investment channels is the goal of this research. The results of this study on investment choices take into consideration a variety of factors, such as general or macroeconomic factors, that affect share price movement. It aids in managing profitability and minimising risk while assisting both individual and institutional investors in making decisions about their investments.

8) Dr. Ajay Kumar Patel, Subhodeep Chakraborty (2018) “Construction of Optimal Portfolio Using Sharpe's Single Index Model and Markowitz Model: An Empirical Study on Nifty50 Stocks” Knowing which Securities are performing well and which are performing poorly in the market is the goal. Out of 50 equities, just six have done well, providing investors with better returns and lower risk, according to the study's findings.

9) Dr. Simranjeet Kaur Sandhar, Dr. Neetika Jain, Ruchi Kushwah (2018) “Optimal Portfolio Construction: A Case Study of NSE” The goal of this study is to distribute investment in various equities based on risk-return parameters. The analysis discovered that, with the exception of three firms (Maruti, Tata Steel, and HDFC), all of the sample businesses' stocks are cheap, and hence investors might choose these equities to modify their portfolio.

10) Sangita Choudhary (2017) “Equity Investment Decisions: Determinants for Retail Investors” The purpose of this article is to identify features and their interrelationships that impact retail investors' decision to invest in stock or not. It is an attempt to investigate several factors that impact the decision to invest or not invest in shares. According to the study's results, demographic considerations and economic conditions are strategic in nature, setting the tone for other factors that influence the choice to invest in equities.

RESEARCH METHODOLOGY

The relevant data has been collected from the secondary sources of information (NSE website). In this, NIFTY50 is taken as a Market index. The research design used in this research is the empirical design as the material gathered is compared to hypothesis. The top 15 companies based on their market capitalization is selected for the study. The historical stock prices pertaining to the selected stocks for six years (2017 to 2023) were collected from NSE website. The tools and techniques used in the study are Sharpe Single Index Model, Correlation and Regression. Initially mean returns, beta, excess return to beta, variance, systematic and unsystematic risks are calculated in this study.

Ci values for all the stocks according to the ranked order is computed using the following formula:

$$C_i = \frac{\sigma_m^2 \sum_{i=1}^N \frac{(R_i - R_f)}{\sigma_{ei}^2} \times \beta_i}{1 + \sigma_m^2 \sum_{i=1}^N \frac{\beta_i^2}{\sigma_{ei}^2}}$$

Where,

σ^2_m = variance of the market index

σ^2_{ei} = variance of stock movement that is not associated with the movement of market index i.e., stocks' unsystematic risk

The point will be selected as cut off point after which cumulative value of Ci start declining. Those securities which have value of Ci more or equal to cut off point will be selected in optimum portfolio.

The proportion for each selected securities will be found by using the following formula

$$X_i = \frac{Z_i}{\sum_{i=1}^N Z_i}$$

$$Z_i = \frac{\beta_i}{\sigma_{ei}^2} \left[\left(\frac{R_i - R_f}{\beta_i} \right) - C^* \right]$$

Where the first expression (X_i) indicates the weights on each security and the second expression shows the relative investment in each security.

HYPOTHESIS

H0: There is no significant impact of Individual Stocks on Nifty50.

H1: There is a significant impact of Individual Stocks on Nifty50.

LIMITATIONS OF THE STUDY

The limitations of the present study are:

- 1) Only fifteen companies have been selected for the study
- 2) The results of the study may not be universally applicable
- 3) Only six years data has been collected for this study

DATA ANALYSIS AND INTERPRETATION

The top fifteen companies which are selected for this study based on market capitalization value are as follows: HDFC Bank Ltd, Hindustan Unilever Ltd, Infosys Ltd, Housing Development Finance Corporation Ltd, ITC Ltd, Bharti Airtel Ltd, Bajaj Finance Ltd, Larsen & Toubro Ltd, HCL Technologies Ltd, Asian Paints Ltd, Maruti Suzuki India Ltd, Sun Pharmaceutical Industries Ltd, Titan Company Ltd, Ultratech Cement Ltd, Oil & Natural Gas Corporation Ltd.

Table 5.1 Table showing Sharpe's performance index rating of the chosen firms is displayed, along with a stock ranking.

Sl. No	Company Name	Ri	Rf	β	$(R_i - R_f)/\beta$	Rank
1	Titan Company Ltd	0.1363	0.0497	0.9421	0.0919	1
2	Bajaj Finance Ltd	0.1367	0.0497	1.4564	0.0598	2
3	Hindustan Unilever Ltd	0.0803	0.0497	0.6332	0.0483	3
4	Asian Paints Ltd	0.0768	0.0497	0.7448	0.0364	4
5	Bharti Airtel Ltd	0.0746	0.0497	0.8419	0.0296	5
6	Ultratech Cement Ltd	0.0595	0.0497	1.0032	0.0098	6
7	Housing Development Finance Corporation Ltd	0.0543	0.0497	1.2294	0.0038	7
8	Infosys Ltd	0.0515	0.0497	0.8257	0.0022	8
9	HCL Technologies Ltd	0.0438	0.0497	0.7301	-0.0081	9
10	Maruti Suzuki India Ltd	0.0397	0.0497	1.0661	-0.0094	10
11	Sun Pharmaceutical Industries Ltd	0.0430	0.0497	0.6578	-0.0102	11
12	Larsen & Toubro Ltd	0.0377	0.0497	1.0386	-0.0116	12
13	HDFC Bank Ltd	0.0334	0.0497	1.0755	-0.0152	13
14	ITC Ltd	0.0348	0.0497	0.7149	-0.0209	14
15	Oil & Natural Gas Corporation Ltd	0.0130	0.0497	0.9313	-0.0394	15

The above graph represents the ranking of stocks from highest to lowest based on excess return to beta. Titan Company ranked highest among other stocks; 2nd is Bajaj Finance; 3rd is Hindustan Unilever Ltd; followed by Asian Paints, Bharti Airtel, Ultratech Cement, etc. and ONGC ranked least.

Table 5.2 Table showing Ci of selected stocks

Sl.NO	Companies	Ci
1	Titan Company Ltd	0.0257
2	Bajaj Finance Ltd	0.0738
3	Hindustan Unilever Ltd	0.0748
4	Asian Paints Ltd	0.0782
5	Bharti Airtel Ltd	0.0884
6	Ultratech Cement Ltd	0.1058
7	Housing Development Finance Corporation Ltd	0.1379
8	Infosys Ltd	0.1735

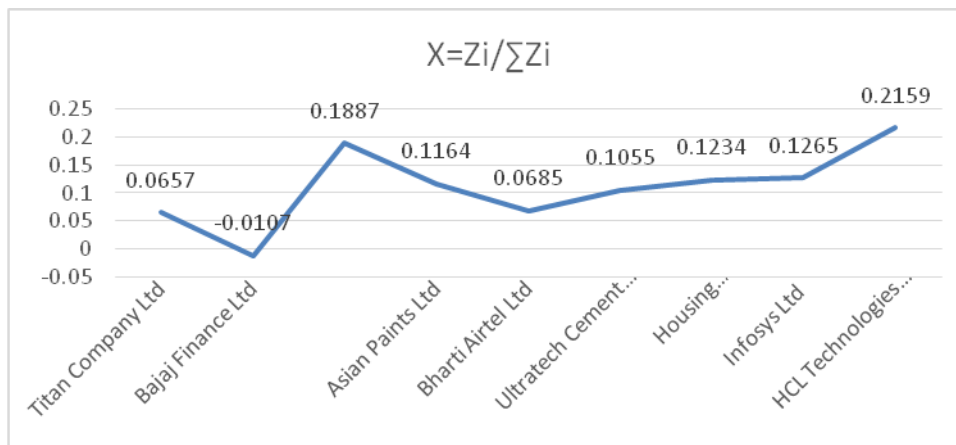
9	HCL Technologies Ltd	0.2038 (C*)
10	Maruti Suzuki India Ltd	-1.3542
11	Sun Pharmaceutical Industries Ltd	-0.6478
12	Larsen & Toubro Ltd	-0.2472
13	HDFC Bank Ltd	-0.1602
14	ITC Ltd	-0.1395
15	Oil & Natural Gas Corporation Ltd	-0.1261

In the above table the HCL Technologies Limited has considered to be C* as its Ci value i.e., 0.2038 is the highest among all the stocks and the companies which are above this company is included in the portfolio construction.

Table 5.3 Table showing the proportion of investment in optimal portfolio.

Sl. No	Company Name	$\frac{\beta_i}{\sigma_{ei}^2}$	$\frac{(R_i - R_f)}{\beta}$	C*	$\frac{(R_i - R_f)}{\beta} - C^*$	$X = \frac{Z_i}{\sum Z_i}$
1	Titan Company Ltd	0.3109	0.0919	0.2038	-0.1119	0.0657
2	Bajaj Finance Ltd	-2.4640	0.0598	0.2038	-0.1440	-0.0107
3	Hindustan Unilever Ltd	0.1505	0.0483	0.2038	-0.1554	0.1887
4	Asian Paints Ltd	0.2627	0.0364	0.2038	-0.1674	0.1164
5	Bharti Airtel Ltd	0.4645	0.0296	0.2038	-0.1742	0.0685
6	Ultratech Cement Ltd	0.3358	0.0098	0.2038	-0.1940	0.1055
7	Housing Development Finance Corporation Ltd	0.2962	0.0038	0.2038	-0.2000	0.1234
8	Infosys Ltd	0.2912	0.0022	0.2038	-0.2016	0.1265
9	HCL Technologies Ltd	0.1793	-0.0081	0.2038	-0.2119	0.2159

The above computation implies that investing in every stock is not practical for investors, hence Sharpe's single index model produces the best portfolio. This allows the investor to build the best portfolio possible. Asian paints have the highest proportion i.e., 0.1164.

Graph: 5.3 Graph showing the proportion of investment in the selected stocks

According to Sharpe's Single Index Model, we have created an optimum portfolio with top 9 yielding stocks. i.e Titan, HUL, Asian Paints, Bharthi Airtel, Ultratech Cement, HDFC Ltd., Infosys and HCL Technologies. AS per the calculations, it is suggested to invest 21.59% in HCL, 18.87% in HUL, 12.65% in Infosys, 12.34% in HDFC, 11.64% in Asian Paints, 10.55 % in Ultratech, 6.85% in Bharathi Airtel and 6.57 % in Titan Ltd.

Regression:

The regression analysis is done for the companies which are included in the portfolio. There are nine companies which are selected for the portfolio construction. Since the R square value is 0.8363 i.e., 83.63% we can interpret that the individual stocks are impacting market by 83.63% and remaining 16.37% by other factors. The intercept value is greater than the significant value 0.05 i.e., 0.2625, we accept the null hypothesis (H0) where, there is no significant impact of Individual Stocks on Nifty50.

FINDINGS

- Bajaj Finance Ltd has excess return to Beta 1.456 and Hindustan Unilever Ltd beta 0.633 being the least among all the 15 stocks. It indicates that Hdfc bank, Housing development finance corporation, Bajaj Finance, L&T, Maruti Suzuki and Ultratech Cement is highly volatile, and the remaining HUL, Infosys, ITC, Airtel, HCL, Asian Paints, Sun Pharmaceutical, Titan Company and ONGC are lower volatile comparing to the market.
- The nine securities ranking from 1 to 9 based on the Ci values were identified along with the proportion of investment to be made. The proportion of the investment to be made is 21.59% in HCL Technologies stock which is the highest proportion and 6.57% in Titan Company stocks which is the lowest proportion.

CONCLUSION

Finally, building a diversified portfolio utilising the Sharpe Single Index Model with reference to chosen Nifty50 equities might be a wise method for investors. The Sharpe Single Index Model is a powerful tool that takes into accounts both the systematic risk and possible returns of individual companies in a portfolio. Investors can reduce the unsystematic risk associated with individual equities by including a diverse group of stocks from the Nifty50 index into their portfolio. This technique helps investors to diversify their assets across industries and firms, lowering the influence of a single stock's performance on the total portfolio. The Sharpe Single Index Model assists in discovering stocks that contribute favourably to portfolio performance while taking their respective risk levels into account. As a result, investors may obtain optimal risk-adjusted returns and maximise their investing potential in the Nifty50 market.

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**A COMPARATIVE STUDY ON IMPACT OF CAPITAL STRUCTURE ON FIRM PERFORMANCE
WITH REFERENCE TO STOVE KRAFT LIMITED: PRE AND POST COVID**

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ABSTRACT

The current study on impact of capital structure on firm performance with reference to Stove Kraft Limited: pre and post covid basically examines, how companies' capital structure will affect the entire firm performance during pre and post covid situation. The study determining how much debt and equity financing a company will employ to finance its operations and investments is part of choosing its capital structure. The study concludes that there is no significant impact on capital structure on firm performance with reference of financial key metrics of Return on Equity (ROE), Return on Asset (ROA), Share Price, and P/E Ratio against to the Debt to Equity and Firm size. In other side there is a significant impact on capital structure on firm performance with reference to P/E Ratio against to the Debt to Equity and Firm Size. The study mainly depends on financial data of Stove Kraft Ltd during from 2018 to 2022.

Key words: Capital Structure, firm Performance, ROA, ROE, FS, DE, P/E Ratio, SHP.

I. INTRODUCTION

This study is to know about the capital structure of the company how effects its firm performance during its financial year. The study talks about company's capital structure in pre covid duration and post covid duration. The need of the study is how one capital structure variable will change the entire financial and operational efficiency of the organization like Return on Equity, Return on Asset, Share Price, P/E Ratio. One of the financial key metrics will change to the greater extent to the company. The capital structure and the firm performance will effect on organization profitability, market share, share holders' interest and variation in the share price. The capital Structure It describes a certain mix or combination of both debt and equity that is used to fund a company's assets and activities. From a business standpoint, equity financing is more expensive than debt financing. Equity finance is a more flexible, long-term form of funding for an organization. Based on stakeholder expectations, a company's performance is evaluated as profitability, growth, market value, total return on shareholders, economic value produced, and customer satisfaction.

II. REVIEW OF LITERATURE

The variables of the financial are impacting the overall performance of the company / business Muhammad Riaz & Shu Jinghong and Muhammad Nadeem Akhtar ; Kerongo Maatwa Meshack, Nyamute Winnie, Kennedy Okir, & Duncan Elly Ochieng (2022), on the other hand the consistency of the impact of the various financial variable were not found before the pandemic but it shows the effect post pandemic. Asen Ayange, Nwude Chuke Emmanuel, Idamoyibo Hwerien Rosemary, Ufodiana Clifford Ndudi, & Udo Emmanuel Samuel (2021) Effect of Capital Structure on Firms Performance there are several contradictory findings about the impact of capital structure mix on corporate performance. Empirical research on the variables that significantly affect company performance has been rare, according to developing nation studies. This study investigates the effects of capital structure factors on firm performance. Ngatno, Endang P. Apriatni, & Arief Youlianto (2021) Moderating effects between capital structure and firm performance. Examining how affects the link between capital structure and business performance is the goal of this study. Results show that decisions on capital structure financing affect financial performance favorably. This only applies to recent debt, though. Otherwise, both return on assets and return on equity are negatively and negligibly impacted by long-term debt. Nguyen Minh Ngoc, Nguyen Hoang Tien, & To Huynh Thu (2021) The Impact of Capital Structure on Financial Performance This article's study goal as measured ROA and ROE indicators. The study findings have demonstrated that capital structure has a detrimental effect on a firm's profitability as measured by ROA after applying the quantitative approach (with models of Pool OLS, FEM, REM, and FGLS).

The study did not find any statistical support for the influence of the capital structure of logistics firms over this time period in the case of profitability as indicated by ROE.

Hieu Thanh Nguyen & Anh Huu Nguyen (2020) The Impact of Capital Structure on Firm Performance. The study examines how capital structure affects company performance differently to solve econometric problems and increase the precision of the regression coefficients, the Generalized Least Square (GLS) method is used. In this study, return on equity (ROE), return on assets (ROA), and earnings per share (EPS) are used to gauge a company's success. Hundal, Shab, Eskola, Anne, & Lyulyu, Sofiya (2020) The impact of capital structure on firm performance. One of the most significant, ongoing, and simultaneously difficult company decisions is the choice regarding the capital structure. The best possible capital structure is a crucial component of funding businesses. It can be difficult for businesses to strike the ideal balance between their debt and equity. The goal of the current study is to determine if the capital structure influences the financial and non-financial performance as well as the financial risks. The research's conclusions show that leverage has a negative impact on most of the accounting, market, and hybrid performance metrics. Gabby Markus Angkasajaya & Putu Anom Mahadwartha (2020) The Impact of Capital Structure towards Firm Performance The purpose of this study is to examine how capital structure, affects business financial performance. Past studies have produced a variety of outcomes, and some recent advancement have made use of moderating variables in their studies. Multiple linear regressions is a quantitative method used in this study. According to this study, short-term debt as a percentage of total assets has a negative impact on financial performance (ROA, ROE, and Tobin's Q). The ratio of long-term debt to total assets has no effect on ROA, but it has a favorable impact on ROE. There no effect on how ROA and ROE are impacted by the ratio of short-term debt to total assets. Shab Hundal & Anne Eskola (2020) Capital Structure, Investment Decisions and Firm-Performance. The financing of firms, the investments, and business performance (financial and non-financial) all play a significant role in the literature on corporate finance. The current study investigates if there is a pattern in the causal relationships between the four separates, yet connected. Multivariate linear regression and principal component analysis have been used to analyses the data influence on capital structure than on investments or financial performance. The article's main contribution is the establishment of a series of causal relationships between funding, investments, and business performance. Manal Sulieman Abughniem, Mohammad Adnan Hilal Al Aishat, Allam Hamdan, & Sulieman Raji Weshah (2020) Capital Structure, Firm Growth and Firm Performance. The purpose of this study is to examine how capital structure and business expansion affect firm performance. Four variables were used to determine the capital structure (debt ratio, debt to equity, equity to assets, and asset turnover rate), while sales growth was used to determine the firm's growth. Four indicators were used to gauge a company's success: one was operational, or return on assets; the other three were financial or return on investment and return on sales; and the fourth was market performance, or price to book value. The conclusions from these empirical findings demonstrate how the impact of company expansion and capital structure on various aspects of firm performance.

III. DATA AND METHODOLOGY

The capital structure and firm performance is based on empirical research; Quantitative information is used to acquire this empirical evidence. Secondary data which is collected from the company financial Reports like Profit and Loss accounts And Balance Sheet of Stove kraft ltd. 5 years of period of study between pre-covid April 2018 to post-covid March 2022. April 2018 to March 2022 five years of data which is collected through the company's website. The important variables are the ROE, ROA, PE, DE, FST, and SHIP variables from companies Financials. The tools and techniques are used in this research is Linear Regression (Multiple regression analysis). The model for this relationship is presented as shown below:

$$ROE_{i,t} = \beta_0 + \beta_1 DE_{i,t} + \beta_2 FST_{i,t} + \mu_{i,t}$$

$$ROA_{i,t} = \beta_0 + \beta_1 DE_{i,t} + \beta_2 FST_{i,t} + \mu_{i,t}$$

$$PE_{i,t} = \beta_0 + \beta_1 DE_{i,t} + \beta_2 FST_{i,t} + \mu_{i,t}$$

$$SHIP_{i,t} = \beta_0 + \beta_1 DE_{i,t} + \beta_2 FST_{i,t} + \mu_{i,t}$$

Where:

$ROE_{i,t}$ = Profit after taxes / Shareholders' equity for firm I from time t equals Return on Equity;

$ROA_{i,t}$ = Return on Assets for Company I from Time T = Profit after Tax / Total Assets;

$PE_{i,t}$ = Price per Share to Earnings per Share for Firm I to Time t (Market value Price per Share / Earning per Share);

$SHPi,t$ = towards the conclusion of the year, the company's share price

β_0 = Where is the intercept (constant),

β_1 & β_2 = the Ith company's independent variable's coefficient at time t,

$DE_{i,t}$ = According to the company's total debt to equity ratios as of time t,

$FS_{i,t}$ = the market value for firm i at time t and the firm size

$\mu_{i,t}$ = Untrue term.

Hypothesis:

In order to investigation the effect of capital structure on firm performance, designed the following hypothesis,

H0: There is no significant impact of Capital structure on firm performance of Stove Kraft Ltd.

H1: There is a significant impact of Capital structure on firm performance of Stove Kraft Ltd.

IV. DATA ANALYSIS AND FINDINGS

Stove Kraft ltd Data, Data Analysis, Result, and Interpretation:

Table 4.1 Financial Data Set:

YEAR	ROE	ROA	P/E Ratio	SHARE PRICE	DEBT to EQUITY	FIRM SIZE
2018	6.99	0.89	0		2.5	2.516165
2019	-3.12	0.44	0		-5.1	2.631413
2020	-4.84	0.6	0	458.25	-5.58	2.67396
2021	26.82	14.21	17.22	613.95	0.17	2.756613
2022	15.44	7.71	35.67	375	0.22	2.862406

Source: Company Financials

Data Analysis:

In data set table 4.1 Stove Kraft Ltd financial information regarding ROE, DE, FS. The Income from Equity has decreases from 2018 (6.99) to 2020 (-4.84), again it has increased up to 26.82 in the year of 2021, then it has reached 15.44 in the year 2022. The Income from Assets has decreases from 2018 (0.89) to 2019 (0.44), again it has increased up to 0.6 in 2020, then it has increase 14.21 in the year 2021, it reached 7.71 in the year 2022. The P/E Ratio has from 2018 to 2020 is Zero, again it has increased up to 17.22 in the year of 2021, then it has reached 35.67 in the year 2022. There is none Share Price from the year 2018 to 2019 because of Stove Kraft ltd has been registered its share in Stock Exchange in the year 2020-2021. Then the Share Price of Stove Kraft Ltd in the year 2020 is 458.25. The share price has increased in the year 2021 is 613.95 and again it has decreased to 375.

The variable DE is 2.5 in the year 2018 as well as gone down in 2019 (-5.1), 2020 (-5.58), in the year 2021 it has gone up 0.17 and 2022 is 0.22. The Company Size is constantly increasing from 2.516165 to 2.862406.

Interpretation:

$$\text{ROE } i, t = -129.99 + 2.60\text{DE } i, t + 52.94\text{FS } i, t + \mu i, t$$

When information is acquired over 5 years period (2018-2022), the findings of the regression analysis. Debt to Equity and Firm Size, two independent variables, have a high level of correlation. Dependent variable ROE. The R^2 0.764% (76.4%). The P value of DE is 0.177 is more than 0.05 significance level hence accept H0 and Reject H1 hypothesis. Additionally, the firm size P value is 0.268 is more than 0.05 significance level hence accept H0 and reject H1 hypothesis. The F-Static value of DE is 4.189 and the F-Static FS is valued at 2.31. Even though the DE and FS Coefficients are positive, none of the variables significantly affect ROE. Stove Kraft Ltd.'s capital structure has no effect on the company's performance.

$$\text{ROA } i, t = -78.581 + 0.746\text{DE } i, t + 31.439\text{FS } i, t + \mu i, t$$

Data collected throughout time 5 years period (2018-2022), the regression analysis's conclusion shows in independent variable DE and Firm Size are closely connected. Dependent variable ROA. The R^2 0.639% (63.9%). The P value of Loan to equity is 0.411 is more than 0.05 significance level hence accept H0 and Reject H1 hypothesis. Likewise, the firm size P value is 0.254 is more than 0.05 significance level hence accept H0 and reject H1 hypothesis. The F-Static value of DE is 1.06 and the F-Static firm size is worth 2.51. None of the variables significantly affect the ROA, even though the DE and FS covariances are positive. Consequently, the CS of Stove Kraft Ltd. has no effect on the company's performance.

$$\text{P/E Ratio } i, t = -279.59 + 1.84\text{DE } i, t + 109.01\text{FS } i, t + \mu i, t$$

The collection of data 5 years period (2018-2022), the regression analysis result shows in independent variable Debt to Equity and Firm Size is significantly related to dependent variable P/E Ratio. The R^2 0.969% (96.9%). The P value of Debt to equity is 0.080 is more than 0.05 significance level hence accept H0 and Reject H1 hypothesis. The P value of Firm size is 0.019 is lower than 0.05 significance level hence accept H1 and reject H0 hypothesis. The F-Static value of Debt to Equity is 11.0 and the F-Static value of Firm Size is 51.1. Though the Coefficient of DE and FS is positive, none of the element is significantly related to the P/E Ratio. Hence Not at all significant impact of Capital structure on firm performance of Stove Kraft Ltd on dependent variable P/E Ratio and Independent variable Debt to Equity ($p = 0.080$). And Hence There is a significant impact of Capital structure on firm performance of Stove Kraft Ltd on dependent variable P/E Ratio and Independent variable Firm Size ($P = 0.019$).

$$\text{SHP } i, t = -3699.58 - 1.91\text{DE } i, t + 1482.84\text{FS } i, t + \mu i, t$$

Data collection throughout time 5 years period (2018-2022), the regression analysis result shows in independent variable Debt to Equity and Firm Size is significantly related to dependent variable Share Price. The R^2 0.486% (48.6%). The P value of Debt to equity is 0.966 is more than 0.05 significance level hence accept H0 and Reject H1 hypothesis. And the P value of Firm size is 0.303 is more than 0.05 significance level hence accept H0 and reject H1 hypothesis. The F-Static value of Debt to Equity is 0.00236 and the F-Static value of Firm Size is 1.88461. Though the Coefficient of DE is negative and FS is positive, none of the element is significantly related to the Share Price. Hence there is no significant impact of Capital structure on firm performance of Stove Kraft Ltd.

V. CONCLUSION

In the study done, accounting for considering the fact of Return on Equity (ROE), Return on Asset (ROA), Debt to equity (DE), Share Price (SHP), Firm Size (FS) in pre and post covid of Stove Kraft ltd from 2018 to till 2022. In contrasting Return on Equity with Debt to equity and Firm Size, The ROE is not very related to DE and FS (-129.99) and other factors have a huge influence. ROE during 2018 to 2022 in stove kraft ltd.

When comparing Return on Asset with Debt to equity and Firm Size, the ROA is not significantly related to DE and FS (-78.581) and other Several factors have a big influence on ROA during 2018 to 2022 in stove kraft ltd. When comparing P/E Ratio with Debt to equity and Firm Size, the P/E Ratio is not significantly impact to DE and the P/E Ratio is significantly impact to FS (-279.59) and other factors have a strong relationship with ROE.

Share price is not substantially associated to DE and FS (-3699.58) when comparing Share price with Debt to Equity and Firm Size.

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A STUDY ON FORCASTING EXCHANGE RATE WITH SPECIAL REFERENCE TO US DOLLARS

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ABSTRACT

Accurate exchange rate forecasting is a key tool for businesses, investors, and governments because exchange rates are crucial to global trade and financial markets. The predicting of exchange rates is the main topic of this abstract, with a special emphasis on the US dollar, which dominates the world's currency markets. The paper identifies the important variables that affect the US dollar exchange rate, such as monetary policy choices, political developments, and trends in the world markets. Researchers and practitioners can learn more about the dynamics of the US dollar and forecast its future movements by analysing historical data and using the appropriate modelling approaches. The abstract also highlights the difficulties in predicting exchange rates, including the lack of data, the choice of model, and the volatility of the market itself. In order to increase the dependability of exchange rate projections, the research highlights the significance of precise data gathering, strong model validation, and risk management measures. With a special emphasis on the US dollar, this abstract concludes by giving a general summary of the significance of exchange rate forecasting. It emphasizes the methods used for predicting exchange rates, the deciding variables, and the difficulties present. The results of this study add to our understanding of exchange rate fluctuations and provide useful information for economic decision-making in a variety of industries.

Keywords: US dollar, Currency forecasting, Exchange rate prediction, Econometric models and purchasing power parity (ppp).

I. INTRODUCTION

Exchange rates act as a key metric of the health and stability of the economy, and the global foreign exchange market is essential to international trade and finance. Among the various currencies, the US dollar stands as the most influential, widely adopted, and extensively traded currency worldwide. Its exchange rate fluctuations have far-reaching implications, impacting economies, businesses, and individuals across the globe. Consequently, accurate and trustworthy forecasting of currency rates, particularly concerning the US dollar, assumes essential importance for decision-makers in finance, commerce, and investment. The US dollar dominates other currencies and is the one that is used the most frequently and is traded the most. Its exchange rate swings have far-reaching repercussions, impacting economies, organizations and individuals across the globe. For those making decisions in finance, trade, and investment, accurate and trustworthy forecasting of exchange rates, particularly in relation to the US dollar, assumes paramount importance.

The forecasting of currency rates is a complex task, influenced by a myriad of factors, including macroeconomic indicators, geopolitical events, monetary policy actions, and market emotion. Over the years, researchers, economists, and financial institutions have devoted significant efforts to develop sophisticated models and methodologies to predict currency movements. These activities aim to better risk management tactics, improve investment decisions, and optimize the allocation of resources in an increasingly linked and volatile global marketplace. Over the years, researchers, economists, and financial institutions have devoted significant efforts to develop sophisticated models and methodologies to predict currency movements. These activities aim to better risk management tactics, improve investment decisions, and optimize the allocation of resources in an increasingly linked and volatile global marketplace.

This study's goal is to advance the body of knowledge by looking into the prediction of exchange rates, with a particular emphasis on the US dollar. We aim to develop a comprehensive framework for forecasting the future movement of the US dollar against major currencies by utilising advanced quantitative techniques, investigating various macroeconomic variables, and taking into account market dynamics.

The foreign exchange market is crucial to the global economy because it makes it easier for people to trade and invest abroad by determining how much different currencies are worth. The United States dollar (USD) stands out among the other major currencies because it serves as the primary reserve currency for the entire globe and is frequently used in trade, investments, and as a benchmark in the financial markets. As a result, precisely estimating the exchange rate of the US dollar becomes vital for businesses, investors, politicians, and individuals alike.

Because there are so many variables that can affect how currencies move, such as economic indicators, geopolitical developments, market attitudes, and monetary policies, predicting exchange rates is a difficult undertaking. Predicting the future movements of the US dollar is quite difficult due to the foreign exchange market's extreme volatility and numerous uncertainty.

The purpose of this study is to investigate and evaluate various forecasting processes and procedures, with a specific emphasis on the US dollar. By studying historical data, evaluating existing models, and identifying significant factors that affect the US dollar's exchange rate, this research attempts to add to the field of currency forecasting and give valuable insights for decision-makers.

Identify significant elements impacting the US dollar exchange rate. The study will pinpoint the most important variables influencing the value of the US dollar by looking at economic indicators, geopolitical developments, and market dynamics. The construction of an accurate forecasting model will be supported by this analysis.

Build a solid forecasting model that is specifically designed for anticipating the movements of the US dollar by building on the components that have been discovered and applying appropriate approaches. In order to produce trustworthy short- and long-term forecasts, the model will be built.

Analyze the forecasting accuracy. Using historical data, a detailed evaluation of the created forecasting model's performance will be carried out. The accuracy and dependability of the model will be assessed by comparing the forecasts with the actual changes in the US dollar exchange rate.

1.1 STATEMENT OF PROBLEM

The difficulty of correctly predicting the US dollar's exchange rate is the issue this study attempts to solve. Since the US dollar is a major medium of exchange for worldwide trade and investment, changes in its exchange rate can have a big effect on the world economy. Predicting the scope and size of these oscillations, however, is a difficult and complex undertaking.

Existing forecasting models might not be accurate because they might not account for all the variables affecting the value of the US dollar. Forecasting is further complicated by rapid and unexpected variations in currency rates that might result from changes in political and economic conditions around the world.

Due to the dynamic nature of the foreign exchange market and the vast array of factors impacting currency movements, projecting exchange rates is a difficult process. The following problem statement can be used to frame the main issue with exchange rate forecasting.

In light of the many and interwoven factors that affect currency values, such as economic data, geopolitical events, market attitudes, and monetary policies, it is difficult to anticipate future exchange rate movements of a particular currency, such as the US dollar.

1.2 OBJECTIVES OF THE STUDY

- To Forecast US Dollar exchange rate using PPP model.
- To determine the major determinants of the US dollar's exchange rate.
- To analyze the historical trends and patterns of the US dollar exchange rate.

II. LITERATURE REVIEW

1. Joscha Beckmann, Robert L. Czudaj and Vipin Arora (2020) The link between oil prices and currency rates has been the subject of theoretical and empirical studies, which are reviewed in this essay. Theoretical transmission channels, which suggest bidirectional causality, are where we begin. According to categorical empirical research, the evidence varies greatly depending on the sample, the country of choice, and the empirical methodology. Yet, some do exist. There are two recurrent patterns: (i) over the long run, it is widely noted that exchange rates and oil prices have strong linkages; and (ii) in the short run, either exchange rates or oil prices have the potential to be good predictors of the other variable, but their effects are strongly time-varying. We also point out some crucial directions for future study.

2. Abid (2019) the aim of this paper is to complement this literature by investigating the extent to which the exchange rates can be determined by EPU. Even though the literature argues significant effects of monetary and real variables on exchange rates. findings take a step further from some studies showing modest empirical performance of fundamentals in explaining currency movements in emerging economies.

3. Mahmoudvand, Rodrigues (2019) daily exchange rates in four of the BRICS emerging economies: Brazil, India, China and South Africa, over the period 2001 to 2015 are considered. In order to predict the future of exchange rate in these countries, it is possible to use both univariate and multivariate time series techniques. Among different time series analysis methods, choose singular spectrum analysis (SSA), as it is a relatively powerful non-parametric technique and requires the fewest assumptions to be hold in practice. Both multivariate and univariate versions of SSA are considered to predict the daily currency exchange rates. The results show the superiority of MSSA, when compared with univariate SSA, in terms of mean squared error.

4. ADRIEN VERDELHAN (2018) Sorting nations according to their use of the dollar A fresh cross-section of average currency excess returns is produced by betas. This cross-section of currency risk premia is explained by a slope component, which is long in high beta currencies and short in low beta currencies. The high-minus-low carry trade factor constructed from sorted portfolios of countries is in opposition to this slope component. The interest rates they charge. 18% to 80% of the monthly exchange rate fluctuations can be attributed to the two high-minus-low risk variables. According to the two risk factors, full market models should include at least two global shocks to explain exchange rates in stochastic discount factors.

5. Tarek A. Hassan Rui C. Mano (2018) UIP violations are studied separately in the literature using portfolio- and regression-based techniques. We suggest breaking down these violations into cross-currency, between-time-and-currency, and cross-time components so that we may analytically link them to each other. To quantify the joint constraints that portfolio- and regression-based data put on models of currency returns. We discover that the forward premium puzzle (FPP) and the "dollar trade" anomaly are closely related and are both driven primarily by the cross-time component, subject to common assumptions about investors' information sets. The "carry trade" anomaly, in contrast, is mostly caused by cross-sectional UIP violations.

6. Emine Boz ,Gita Gopinath, Mikkel Plagborg-Møller (2017) We provide evidence that the value of the U.S. dollar affects trade prices and volumes internationally. We establish the following facts using a freshly created data set of bilateral pricing and volume indexes for more than 2,500 nation pairs: 1) Quantitatively, the dollar exchange rate predominates the exchange rate on a bilateral basis in price elasticity and trade regressions. Dollar fluctuations brought on by U.S. monetary policy heavily influence bilateral import prices. 2) Bilateral terms of trade for non-commodities are essentially unrelated to bilateral exchange rates. 3) The strength of the US dollar is a major indicator of global aggregate trade volume and inflation in producer and consumer prices.

7. Roksolana Holub and Oleksandr Hlushchenko (2017) The country's monetary regulator's communication strategy must be optimised if excessive exchange rate volatility is to be reduced under the circumstances of a flexible exchange rate arrangement. The last 20 years have seen a growth in communication (information assistance) has grown in importance as a component of monetary policy. In order to affect financial market volatility, increase monetary policy predictability, and accomplish macroeconomic goals, communication is necessary. However, neither in Ukraine nor in industrialised nations has a consensus been established as of yet on what the best central bank communication approach should be.

Based on the use of the central bank's verbal interventions in the framework of the aforementioned, methodical techniques to improve the central bank's communication tactics, or For the past 20 years, information support (communication) has grown in importance as a component of monetary policy.

8. Ferraro, Rogoff, & Rossi, (2015) This study examines if there is an out-of-sample relationship between oil prices and the nominal exchange rate between the US and Canadian dollars. We discover minimal systematic relationship between oil prices and the exchange rate at the monthly and quarterly frequencies, even using cutting-edge approaches. The key contribution of this study, however, is to demonstrate the existence of a very short-term association at the daily frequency. This relationship is rather stable and persists whether we use contemporaneous (realised) or lagged oil prices in our regression. The latter, however, has ephemeral forecasting capacity that typically only manifests after instabilities have been properly taken into consideration.

9. Engel, Mark & West, K. D. (2015) then creates factors using a sample of exchange rates, and then forecast using the factors' unique deviations. We demonstrate how such forecasts can be successful using a stylized data generation method, even when there is essentially no serial correlation in the univariate exchange rate processes.

We submit the method to a panel of 17 OECD nations' bilateral dollar exchange rates. We use factors to forecast, as well as factors combined with any fundamentals recommended by the Taylor rule, monetary models, and purchasing power parity (PPP) models. In the late (1999-2007) but not the early (1987-1998) parts of our sample, we tend to outperform the forecast of a "no change" benchmark for long horizon (8 and 12 quarter) forecasts.

10. Furao Shen n , Jing Chao, Jinxi Zhao (2015) Exchange rate forecasting is a significant financial issue. An enhanced deep belief network (DBN) for forecasting exchange rates is put forth in this paper. We extend the traditional DBN to handle continuous data by building a DBN utilising continuous restricted Boltzmann machines (CRBMs). The Experiments are used to identify the appropriate structure of the DBN for use in forecasting exchange rates. Additionally, the conjugate gradient approach is used to quicken DBN learning. Three exchange rate series are investigated in the trials, and six assessment criteria are used to gauge how well the suggested strategy works. Comparison with common forecasting techniques, such as feed forward neural network (FFNN), demonstrates that the suggested method is more effective than conventional techniques and is relevant to the prediction of foreign exchange rates.

III. RESEARCH METHODOLOGY

3.1 RESEARCH TYPE

Quantitative Research- (QA) is a technique that uses mathematical and statistical modeling, measurement, and research to understand behavior. The goal of quantitative research is to comprehend and explain occurrences, correlations, or patterns by the systematic and organised collection and analysis of numerical data. It emphasises on gathering factual and quantifiable data, frequently using statistical techniques, to draw inferences and make generalisations about a wider population.

3.2 SAMPLE SIZE: 5 years of time period of study (2018-2023).

3.3 TOOLS: Purchasing Power Parity-One popular macroeconomic analysis metric to compare economic productivity and standards of living between countries is purchasing power parity (PPP)

$$S = p_1 / p_2$$

Where: S= Exchange rate of currency 1 to currency2

P1= Cost of good X in currency 1

P2= Cost of good X in currency 2

3.4 LIMITATIONS:

1. Data accessibility: A significant amount of historical data is necessary for exchange rate forecasting. However, data might not be reliable or only be available in small amounts, especially in underdeveloped nations.

2. Volatility: Exchange rates can be unpredictable and turbulent. Therefore, especially during times of extreme volatility, forecasting models may not be reliable at predicting exchange rates.

3. Political events: Elections and other political events can affect currency exchange rates. However, political developments can be erratic, making precise currency rate forecasting difficult.

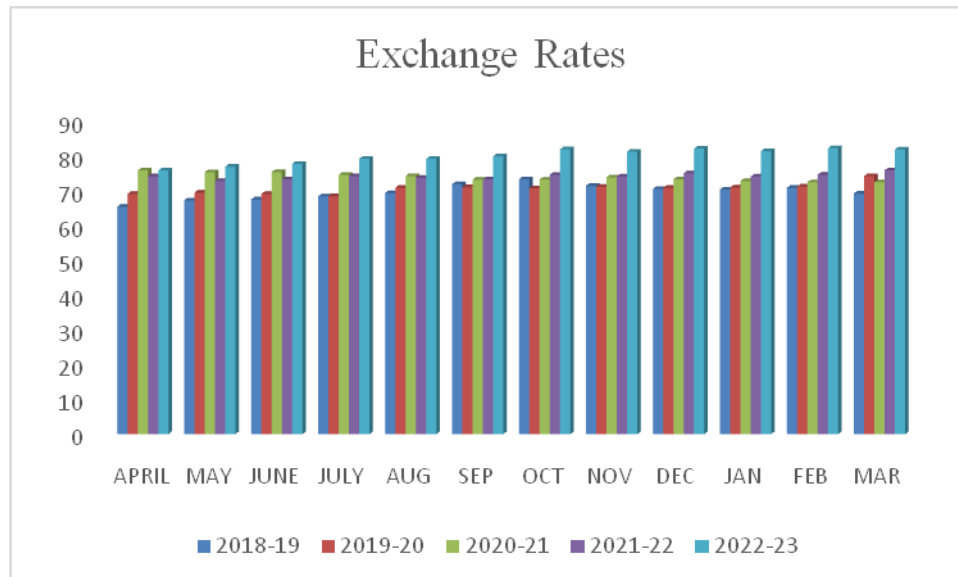
4. Economic shocks: Changes in interest rates or economic policies, for example, can have a big impact on exchange rates.

IV. DATA ANALYSIS AND FINDINGS

Table No.4.1 Average of monthly exchange rates from 2018-2023

MONTHS	2018-19	2019-20	2020-21	2021-22	2022-23
APRIL	65.68429	69.41045	76.20091	74.50455	76.19238
MAY	67.53087	69.77	75.66048	73.1881	77.295
JUNE	67.81857	69.3955	75.72409	73.62773	78.08636
JULY	68.69409	68.75435	74.92652	74.53636	79.56762
AUG	69.62348	71.18045	74.5781	74.11409	79.53652
SEP	72.204	71.36143	73.515	73.64591	80.25545
OCT	73.61043	71.0187	73.55909	74.95524	82.31762
NOV	71.73227	71.50429	74.21	74.48091	81.62409
DEC	70.81429	71.15955	73.63696	75.36174	82.50636
JAN	70.68435	71.2587	73.11286	74.44524	81.75727
FEB	71.177	71.544	72.809	74.964	82.6295
MAR	69.50143	74.57136	72.80087	76.21261	82.27435

Graph No.4.1 Movement of monthly exchange rates from 2018-2023



FINDINGS

The offered information displays the US dollar's exchange rates versus an unspecified currency for the months of April 2018 to March 2023. Several conclusions can be drawn from the analysis of the data. First off, there is a general increasing tendency in the US dollar exchange rate over the specified time frame. The exchange rate grew steadily from its starting point of 65.68429 in April 2018 to its peak of 82.27435 in March 2023.

This suggests that the US dollar is getting stronger in relation to the unknown currency. Additionally, there are monthly changes in the currency rate. Numerous variables, such as economic statistics, geopolitical developments, and market emotion, may have an impact on these changes. For instance, the exchange rate saw a modest decrease in the months that followed before gradually rising to reach its peak in March 2019 at 74.57136. Thirdly, the rate of change varies noticeably from year to year. The exchange rate increased moderately in the years 2018–2019. The rate of increase slowed down in the years that followed (2019–2020 and 2020–2021). It is important to remember that the exchange rate increased significantly between 2021 and 2022, then increased just slightly between 2022 and 2023. Overall, the results point to a typically upward trend for the US dollar exchange rate relative to the unidentifiable currency over the studied period. It's crucial to keep in mind, though, that exchange rates are influenced by a variety of outside factors and can be unpredictable. These results can be used as a starting point for more in-depth research and predictions of the US dollar exchange rate, which will take into consideration additional economic and geopolitical variables.

V. CONCLUSION

Analysing and predicting exchange rates with a focus on the US dollar is a difficult undertaking. Currency fluctuations are influenced by a wide range of variables, including macroeconomic statistics, market mood, geopolitical events, and investment behaviour. To predict exchange rates, researchers use a variety of research methods, including fundamental analysis, technical analysis, sentiment analysis, econometric models, market microstructure analysis, and machine learning techniques. Researchers should regularly assess and improve their models, taking into account fresh data and making adjustments for shifting market conditions. Forecasting the exchange rate should be considered a tool for decision-making rather than a surefire indicator of future fluctuations. In the end, the study of predicting exchange rates with a focus on the US dollar helps market players make wise financial decisions by deepening their awareness of the dynamics of global currency markets. Researchers work to produce accurate forecasts by applying a variety of research methodologies, including as fundamental analysis, technical analysis, sentiment analysis, econometric models, market microstructure analysis, and machine learning techniques. While forecasting techniques and models can offer insightful information, they should be employed as decision-support tools rather than as perfect forecasters. Continued study in this area helps market players reduce risks and make wise judgements by deepening our understanding of the dynamics of the foreign currency market.

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**A STUDY ON THE EFFECTIVENESS OF WEBSITE / SEO RANKING ON WEBSITE WITH SPECIAL
RELATION TO CUSTOMER PURCHASING BEHAVIOUR AND TRUST**

[CHANGE INSTITUTES INTERNATIONAL'S WEBSITE, BENGALURU]

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ABSTRACT

This study focuses on consumer behaviour and preferences related to search engine usage and website ranking. The study reveals that a majority of respondents have made purchases from search engine-found websites, emphasizing the influence of search engine results on consumer decision-making. Participants also consider website ranking and factors such as reviews and sponsored advertisements when making choices. Additionally, the study highlights the importance of search engine optimization in building trust and attracting website traffic. The study provides insights into the significance of website ranking and its impact on consumer trust, click behaviour, and purchasing decisions. Overall, the findings emphasize the importance of search engine visibility and optimization strategies for businesses aiming to engage and convert online consumers.

Keywords: website ranking, SEO ranking, effectiveness, customer purchasing behaviour, customer trust

INTRODUCTION

This research focuses on the effectiveness of website/SEO ranking on customer purchasing behaviour and trust. The study emphasizes the significance of websites as online showrooms for businesses, influencing consumer decision-making processes. A higher website ranking on search engine results pages (SERPs) increases visibility and attracts potential customers. SEO techniques help businesses optimize their websites for higher rankings, leading to increased organic traffic. Websites play a crucial role in shaping customer trust and confidence, with factors such as design, usability, and transparent information influencing credibility. Understanding the relationship between website/SEO ranking, consumer behaviour, and trust is essential for businesses to maximize their online potential. By recognizing the impact of website optimization on consumer behaviour, businesses can create engaging experiences that foster trust and boost conversion rates. Overall, this research highlights the importance of website ranking in influencing consumer behaviour and provides insights for businesses to develop effective strategies for increased visibility and customer trust.

Statement of the problem

This study investigates the influence of website (SEO) ranking on consumer trust and purchasing behaviour. It explores how website ranking affects consumer trust and the extent to which high search engine rankings impact purchasing behaviour. The findings aim to highlight the significance of SEO ranking in shaping consumer attitudes and behaviour towards websites.

Objective of the study

- To study how a website's ranking affects consumer trust.
- To analyse the extent of the impact on consumers' purchasing behaviour when they find websites ranked at the top of search engine results.

I. REVIEW OF LITERATURE

AUTHOR	LITERATURE REVIEW
Johnson, R., & Smith, K. (2020).	This paper aims to investigate the influence of safety measures in the construction industry on employee job performance. The study found that effective safety measures, such as training programs and safety protocols, significantly enhanced employee job performance, leading to improved project outcomes.
Hameed et al. (2020).	The author conducted a comprehensive meta-analysis on the relationship between website quality and online purchase intention. The findings highlighted the significant positive impact of website quality dimensions, including design aesthetics, usability, security, and content, on online purchase intention. Optimizing website quality is crucial for enhancing customer perception, increasing purchase intent, and driving favourable customer behaviour.
Hassan et al. (2020).	This paper examined the impact of website quality and trust on customer loyalty in the e-commerce context. The study demonstrated that website quality factors such as design, ease of use, and responsiveness significantly influenced customer loyalty. Trust played a crucial mediating role between website quality and customer loyalty, emphasizing the importance of creating positive online experiences and building trustworthy websites.
Martinez, G., & Davis, R. (2021).	The author conducted a comparative study on the relationship between welfare measures and employee retention in public and private sector organizations. The findings indicated that comprehensive welfare measures, including work-life balance initiatives and employee benefits, played a vital role in retaining employees in both sectors, contributing to organizational stability and productivity.
Tran et al. (2021).	In this paper the author conducted a study examining the relationship between website quality, perceived value, trust, and online purchase intention in the context of e-commerce. The findings revealed that website quality, including design, usability, content relevance, and interactivity, significantly influenced perceived value, trust, and online purchase intention. The study highlighted the importance of delivering a high-quality website experience to enhance perceived value, foster trust, and drive online purchase behaviour.

II. DATA AND METHODOLOGY

This research uses descriptive methods to examine the efficiency of search engine optimization (SEO) in relation to customer purchasing behavior and trust. The study relied on primary data sources, specifically questionnaires administered through the website of Change Institutes International. This approach allowed for direct interaction with the target market, enabling the collection of specific and relevant information regarding their perceptions, preferences, and experiences. By employing questionnaires, the research facilitated the systematic gathering of data, ensuring consistency and enabling quantitative analysis to derive meaningful insights. The combination of descriptive research methods and the use of questionnaires provide empirical evidence that can inform policy-making and decision-making in areas such as social sciences, market research, and healthcare.

III. DATA ANALYSIS AND FINDINGS

a. Descriptive Analysis

Statistics

	Mean	Std. Deviation	N
Clicked_2nd3rdPage	1.26	.437	200
Trust_1stPage	1.97	1.463	200
MadePurchase_Search	1.34	.475	200
Reviews_Impact	1.63	1.149	200
Frequency_SearchTerm	1.64	1.224	200
Recommendations_Impact	1.67	1.269	200

The provided statistics offer insights into various aspects of user behavior and perceptions in an online context. The mean values depict average responses or occurrences, while the standard deviations indicate the degree of variability around those means. On average, users tend to click on the second or third page of search results (mean = 1.26, std. deviation = 0.437), and they have a moderate level of trust in the content of the first page (mean = 1.97, std. deviation = 1.463). Users tend to make purchases after conducting a search (mean = 1.34, std. deviation = 0.475) and are moderately influenced by reviews (mean = 1.63, std. deviation = 1.149). The frequency of searching for a specific term is moderate (mean = 1.64, std. deviation = 1.224), and recommendations have a moderate impact on user behavior (mean = 1.67, std. deviation = 1.269). These statistics provide valuable insights into user behavior, trust, purchase patterns, the influence of reviews and recommendations, and the frequency of searching for specific terms in an online setting. Further analysis and contextual information would enhance the interpretation of these findings.

b. Correlation Analysis

H1: There is Positive customer trust in (Change Institutes International's) website is significantly influenced by website ranking (SEO).

		Clicked_2nd 3rdPage	Trust_1stPa ge	MadePurchase_S earch	Reviews_ Impact
Clicked_2nd3rd Page	Pearson Correlation	1	.138*	.210**	.051
	Sig. (1-tailed)		.026	.001	.235
	N	200	200	200	200
Trust_1stPage	Pearson Correlation	.138*	1	.130*	.298**
	Sig. (1-tailed)	.026		.033	.000
	N	200	200	200	200
MadePurchase_ Search	Pearson Correlation	.210**	.130*	1	.189**
	Sig. (1-tailed)	.001	.033		.004
	N	200	200	200	200
Reviews_Impact	Pearson Correlation	.051	.298**	.189**	1
	Sig. (1-tailed)	.235	.000	.004	
	N	200	200	200	200
Frequency_Sear chTerm	Pearson Correlation	.100	.311**	.137*	.338**
	Sig. (1-tailed)	.080	.000	.027	.000
	N	200	200	200	200
Recommendatio ns_Impact	Pearson Correlation	.254	.206	.015	.151
	Sig. (1-tailed)	.000	.002	.417	.016
	N	200	200	200	200

- Users who click on the second or third page of search results have a weak positive correlation with trust in the first page ($r = 0.138$, $p < 0.05$).
- Trust in the first page of search results has a weak positive correlation with making a purchase after conducting a search ($r = 0.130$, $p < 0.05$).
- The impact of reviews on user behaviour has a moderate positive correlation with trust in the first page of search results ($r = 0.298$, $p < 0.01$).
- The frequency of searching for a specific term has a moderate positive correlation with trust in the first page of search results ($r = 0.311$, $p < 0.01$) and the impact of recommendations on user behaviour ($r = 0.299$, $p < 0.01$).
- The impact of recommendations on user behaviour has a moderate positive correlation with the frequency of searching for a specific term ($r = 0.299$, $p < 0.01$).

c. Regression Analysis

H2: There is a positive impact on customer purchasing behaviour when websites rank at the top of search engine results.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.298 ^a	.089	.065	.459	.089	3.777	5	194	.003

a. Predictors: (Constant), 16.Frequency_SearchTerm, 8.Clicked_2nd3rdPage, 9.Trust_1stPage, 24.Recommendations_Impact, 13.Reviews_Impact

b. Dependent Variable: 11.MadePurchase_Search

ANOVA^a

Model		Sum Squares	df	Mean Square	F	Sig.
1	Regression	3.981	5	.796	3.777	.003 ^b
	Residual	40.899	194	.211		
	Total	44.880	199			

a. Dependent Variable: 11.MadePurchase_Search

b. Predictors: (Constant), 16.Frequency_SearchTerm, 8.Clicked_2nd3rdPage, 9.Trust_1stPage, 24.Recommendations_Impact, 13.Reviews_Impact

The regression analysis results indicate that the combination of predictors, including Frequency_Search Term, Clicked_2nd3rdPage, Trust_1stPage, Recommendations_Impact, and Reviews_Impact, has a weak positive relationship with the dependent variable MadePurchase_Search ($R = 0.298$, $R^2 = 0.089$). Approximately 8.9% of the variance in MadePurchase_Search can be explained by the predictors, with an adjusted R^2 of 0.065. The standard error of the estimate is 0.459, reflecting the average difference between predicted and actual values. The ANOVA results show that the regression model is statistically significant ($F = 3.777$, $p = 0.003$), indicating that the predictors collectively have a significant impact on MadePurchase_Search. However, it's important to note that the amount of variance explained by the predictors is relatively small, suggesting that there may be other factors not considered in the analysis that influence MadePurchase_Search.

CONCLUSION

The study concludes that SEO ranking significantly influences consumer trust and purchase behavior. Higher SEO ranks contribute to credibility and trust in websites, leading to improved consumer behavior. This has implications for website performance and digital marketing strategies, emphasizing the need to prioritize SEO efforts to enhance website visibility, credibility, and user experience. Businesses that invest in improving search engine rankings and building trust increase their chances of engaging customers and generating sales. Further research is needed to explore additional variables and gain a deeper understanding of this dynamic environment.

SUGGESTIONS

Based on the findings, several suggestions are offered to optimize SEO efforts and leverage the relationship between SEO ranking, consumer trust, and purchasing behavior. Firstly, organizations should focus on keyword research and optimization to ensure relevance and quality of content that aligns with users' search intentions. Enhancing website user experience, including page loading speed, mobile responsiveness, and navigation, is crucial for higher SEO rankings and increased consumer engagement. Creating high-quality back links from reputable sources can positively impact SEO performance and consumer trust. Lastly, consistent posting of high-quality content, active social media engagement, and improving website visibility are key to building consumer trust and increasing the likelihood of purchases.

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A STUDY ON DIGITAL MARKETING AND ITS IMPACT ON REVENUE GENERATION @CORIZO PVT LTD.

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ABSTRACT

The rapid growth of digital technology has transformed the business landscape, necessitating a shift in marketing strategies to leverage the power of the digital realm. This study aims to examine the impact of digital marketing on revenue generation for businesses across various industries. By analysing existing literature, industry reports, and conducting primary research, this study seeks to provide a comprehensive understanding of the relationship between digital marketing and revenue generation.

Keywords: Search engine optimization (SEO), social media marketing, content marketing, email marketing, and online advertising.

I. INTRODUCTION

Digital marketing has become an essential tool for businesses to reach their target audiences and promote their products and services. As more and more consumers turn to the internet to research and purchase products, companies are investing heavily in digital marketing strategies such as impact on revenue generation. While many businesses have embraced digital marketing, they may not have a clear understanding of how it contributes to their bottom line.

This study social media advertising, email marketing, and search engine optimization. Despite the growing importance of digital marketing, there is still a lack of understanding of its aims to address this gap by analysing the relationship between digital marketing and revenue generation.

OBJECTIVE OF THE STUDY

The aim of this research is to investigate the impact of digital marketing on revenue generation. This will be achieved through the following objectives:

1. To identify key factors that contribute to the effectiveness of digital marketing for revenue generation.
2. To determine the most effective digital marketing strategies for revenue generation.
3. To analyse the impact between digital marketing and revenue generation.
4. To provide recommendations for businesses on how to optimize their digital marketing efforts maximum revenue generation.

By achieving these objectives, this research will provide valuable insights for businesses looking to maximize the impact of their digital marketing efforts on revenue generation.

REVIEW OF LITERATURE

1. In a study conducted by Forrester Research, it was found that companies that invest in digital marketing can generate up to 10 times more revenue than those that do not. This study highlights the importance of digital marketing for revenue generation and suggests that businesses that invest in digital marketing can achieve significant growth (Forrester Research, 2021).
2. A study by McKinsey & Company found that companies that invest in digital marketing generate 2.8 times more revenue growth than those that do not. This study emphasizes the importance of digital marketing for revenue generation and highlights the potential for businesses to achieve significant growth through digital marketing (McKinsey & Company, 2016).
3. A study by Ad Roll found that targeted advertising campaigns generated 2.5 times more revenue than non-targeted campaigns. This study highlights the importance of targeting specific audiences in digital marketing campaigns to maximize revenue generation (Ad Roll, 2017).
4. In a study by Hub Spot, it was found that businesses that prioritize blogging as part of their digital marketing strategy are 13 times more likely to see a positive return on investment (ROI).

This study suggests that content marketing, such as blogging, can be an effective strategy for revenue generation (Hub Spot, 2021).

5. A study by Sales force found that companies that use analytics to measure the effectiveness of their digital marketing campaigns are 1.6 times more likely to exceed their revenue goals than those that do not. This study highlights the importance of measuring and analysing the results of digital marketing campaigns for revenue generation (Sales force, 2019).

DATA AND METHODOLOGY

This study will employ a Descriptive Research Design. Non probability sampling is the type of sampling used for the study. The number of individuals or observations included in a study is referred to as the sample size. A population size of 200 refers to the number of individuals within a particular group or area. The sample size for analysing the data is 50 respondents which help to develop the skills. Non probability sampling is the type of sampling used for the study. The study will use a convenience sampling method to select participants. The sample size will be determined based on the number of respondents needed to achieve statistical significance. Both primary and secondary data are collected for the research. Primary data was collected through surveys through questionnaires among the employees. Secondary data was collected from the company through various sources like journals and the company website. Descriptive, correlation and Regression test are the statistical tools used for the research

H0: There is no significant impact of digital marketing strategies on revenue generation.

IV. DATA ANALYSIS AND FINDINGS

TABLE 5.2.4 DESCRIPTIVE STATISTICS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
2. What is your industry?	52	1	7	4.00	1.950
3. Which digital marketing strategies do you currently use?	52	1	7	3.31	1.788
5. Which digital marketing strategy has been the most effective in generating revenue for your company?	52	1	7	3.35	1.532
7. How has your revenue generation changed in the last 1-2 years?	51	1	3	1.59	.804
11. Which email marketing campaigns do you use? (Check all that apply) [Checkboxes]	51	1	5	2.88	1.070
12. What is your email open rate?	51	1	5	2.86	1.096

13. Which influencer marketing campaigns do you use? (Check all that apply) [Checkboxes]	52	1	5	2.67	1.324
14. What is your return on investment (ROI) for digital marketing?	52	1	5	2.94	1.056
Valid N (list wise)	50				

INTERPRETATION

For this inquiry, 52 valid answers are available.

There are 7 industry categories, as shown by the lowest value of 1 and the maximum value of 7. The typical industrial category appears to fall somewhat in the middle of the spectrum, as indicated by the mean of 4.00.

With a standard deviation of 1.950, the responses across the industrial groups are very well distributed.

For this inquiry, 52 valid answers are available. There are currently 7 different digital marketing tactics being implemented because the minimum value is 1 and the maximum number is 7.

The median is 3.31, which indicates that businesses use digital marketing techniques at a moderately high rate on average. The standard deviation is 1.788, indicating some variation in the respondents' use of digital marketing tactics.

For this inquiry, 52 valid answers are available. There are 7 digital marketing tactics that are being assessed for efficacy; the minimum value is 1 and the maximum value is 7, respectively.

The average company considers its most effective digital marketing plan to be at a moderate level of efficacy, according to the mean (3.35). The respondents' perceptions on the efficacy of digital marketing tactics varied somewhat, as indicated by the standard deviation of 1.532.

For this query, there are 51 acceptable answers. Three different reaction groups for changes in income generation are shown by the values of 1, 3, and 1, respectively. The average company's revenue generation over the previous one to two years was 1.59, which suggests that there was either a modest improvement or little change overall. The stated changes in revenue generation are subject to some uncertainty, as indicated by the standard deviation of 0.804 (or 0.804).

For this inquiry, 51 valid answers are available. There are five potential email marketing campaign possibilities, as indicated by the minimum and maximum values of 1 and 5, respectively. The median is 2.88, which indicates that businesses use email marketing campaigns at a moderately high rate on average. The use of various email marketing campaign types is variable, as indicated by the standard deviation of 1.070.

For this inquiry, 51 valid answers are available. The scale for calculating email open rates has a minimum value of 1 and a maximum value of 5, respectively. The mean is 2.86, which indicates that businesses generally have a moderate email open rate. The stated email open rates are variable, as indicated by the standard deviation of 1.096.

For this inquiry, 52 valid answers are available. The values 1, 5, and 10 represent the range of possible influencer marketing campaign alternatives. The median is 2.67, which indicates that businesses use influencer marketing initiatives at a somewhat high rate on average.

The standard deviation, which stands at 1.324, shows some variation in the use of various influencer marketing strategies.

For this inquiry, 52 valid answers are available. The scale for calculating return on investment has a minimum value of 1 and a maximum value of 5, respectively. The median value is 2.94, indicating a decent amount of return on investment for businesses' digital marketing activities.

The claimed return on investment is variable, as indicated by the standard deviation of 1.056.

Correlation:

H0: There is no significant impact of digital marketing strategies on revenue generation.

		3. Which digital marketing strategies do you currently use?	5. Which digital marketing strategy has been the most effective in generating revenue for your company?	14. What is your return on investment (ROI) for digital marketing?	12. What is your email open rate?
3. Which digital marketing strategies do you currently use?	Pearson's r				
	p-value				
	Spearman's rho				
	p-value				
	N				

5. Which digital marketing strategy has been the most effective in generating revenue for your company?	Pearson's r	0.526	***	—				
	p-value	< .001		—				
	Spearman's rho	0.548	***	—				
	p-value	< .001		—				
	N	52		—				
14. What is your return on investment (ROI) for digital marketing?	Pearson's r	-0.063		-0.084	—			
	p-value	0.657		0.552	—			
	Spearman's rho	-0.045		-0.115	—			
	p-value	0.753		0.418	—			
	N	52		52	—			
12. What is your email open rate?	Pearson's r	-0.069		-0.043	0.902	***	—	
	p-value	0.632		0.763	< .001		—	
	Spearman's rho	-0.049		-0.069	0.882	***	—	
	p-value	0.731		0.630	< .001		—	
	N	51		51	51		—	
Note. * p < .05, ** p < .01, *** p < .001								

INTERPRETATION

- This variable and any of the other variables in the matrix have no documented associations.
- This variable and Variable 3 have a moderately strong positive connection ($r = 0.526$, $p = 0.001$). This shows that the efficiency of generating money is positively correlated with the utilisation of specific digital marketing techniques that are currently in use.

- This variable has no discernible relationships with any of the other variables in the matrix, according to the reports. The associations between Variables 5 and 12 are insignificant and just weakly correlated.
- The email open rate has a bad link with the employment of specific digital marketing tactics, as shown by the substantial negative correlation between this variable and Variable 3 ($r = -0.902$, $p = 0.001$).
- The most successful digital marketing technique (Variable 5), the return on investment (Variable 14), and the email open rate (Variable 12), however, have not been found to significantly correlate with one another.

Overall, the correlations indicate a link between the employment of particular digital marketing techniques and their ability to increase income (Variable 5). The employment of specific digital marketing methods (Variable 3), on the other hand, seems to have a negative correlation with the email open rate (Variable 12). The return on investment (Variable 14) and the other factors in the matrix, however, do not significantly correlate.

LIMITATIONS OF THE STUDY

The study may face limitations such as the:

- sample size
 - sample representativeness
 - self-reported data.
1. Sample size: The sample size of the study may be limited making it difficult to generalize the findings to a larger population.
 2. Time constraints: The study may be limited by time constraints, which can affect the depth and scope of the research.
 3. Data availability: The availability of relevant data may be limited, which can affect the accuracy of the research findings.
 4. Bias: The study may be biased due to the researcher's personal beliefs or interests, which can affect the objectivity of the research.

CONCLUSION

This study, which looked at how digital marketing affects revenue generation, came to the conclusion that it significantly contributes to corporate growth. The study produced a number of significant findings that highlight the value of digital marketing tactics in the contemporary industry.

First off, digital marketing offers companies a variety of platforms and tools to connect with and engage with their target market. Companies can efficiently sell their goods or services to a bigger pool of potential customers through search engine optimisation (SEO), social media marketing, email campaigns, content marketing, and online advertising. The creation of revenue is directly impacted by the greater lead generation and conversion rates brought on by this improved visibility and accessibility.

Second, targeted audience targeting made possible by digital marketing enables companies to concentrate their efforts on particular demographics, interests, and geographic regions. Companies can adjust their marketing messages and services to resonate with their target market by utilising data analytics and consumer insights, which leads to higher customer acquisition and retention rates. The likelihood of turning leads into paying customers and ultimately increasing revenue is greatly increased by the capacity to send personalised content and offers.

Additionally, extensive tracking and analytics tools provided by digital marketing enable companies to track, analyse, and improve their marketing activities in real-time. The effectiveness of marketing initiatives can be understood by key performance indicators (KPIs) like website traffic, click-through rates, conversion rates, and customer engagement measures. By using data-driven decision-making, businesses may improve their strategy, better allocate resources, and ultimately increase revenue.

Through interactive platforms and tailored information, digital marketing also encourages consumer engagement and brand loyalty. Businesses can forge direct and significant ties with their clients thanks to social media platforms, online reviews, and customer feedback channels. Businesses may foster loyalty, encourage good word-of-mouth, and encourage repeat business, which all help to increase long-term revenue production.

These actions can be accomplished by offering outstanding customer experiences, responding to questions and issues right away, and establishing strong relationships.

Finally, in comparison to conventional marketing strategies, digital marketing frequently provides cost-effective options. Online ad networks frequently offer customizable budgeting options, enabling companies to better target particular demographics and optimise their spending. Additionally, digital marketing strategies may quickly be expanded and modified in response to results, reducing extra costs and maximising return on investment (ROI).

In conclusion, this study emphasises the crucial part that digital marketing plays in generating money. Digital marketing is a crucial approach for companies looking to expand sustainably in the current digital era due to its capacity to reach a larger audience, precisely target potential customers, measure campaign effectiveness, encourage customer involvement, and optimise marketing costs. For businesses looking to maximise their revenue potential and maintain their competitiveness in the fast-paced business environment, adopting and successfully applying digital marketing tactics is essential.

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A STUDY ON INFLUENCE OF MACROECONOMIC VARIABLES ON SHARE PRICES OF DIFFERENT INDUSTRIES

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Abstract: Macroeconomic factors are crucial for any change in national capital markets. This study's goal is to investigate the relationship between macroeconomic variables and specific industry-specific business stock prices. The major goals of the study are to identify the important macroeconomic variables that have the greatest impact on stock prices, explore the relationships between these variables and stock prices, and quantify these impacts. The paper also offers advice for governments, stakeholders, and investors based on the research's conclusions. . The study provides relevant data on the relationships between stock prices in specific industries and macroeconomic factors, which can aid in the development of sound economic policies. The study emphasises the importance of macroeconomic issues in influencing the profitability of firms and their stock values as a result, laying the groundwork for future research in this area.

Key words: stock prices, interest rates, inflation rates, GDP rates

INTRODUCTION

The ability for both individual and corporate investors to diversify their portfolios is one way that stock markets encourage saving and investing. By mobilising, combining, and diversifying savings from many parties, these markets foster economic growth and providing them to businesses so they can use them most effectively. In that regard, higher savings mobilisations boost savings rates, which in turn encourage investments and give fund owners the opportunity to receive investment income. Additionally, because these markets are liquid, investors can exchange ownership of securities and realise capital gains by doing so.

Effects of Interest Rates, GDP and Inflation on Stock Market Returns

An interest rate is the amount of interest that a borrower must pay a lender in exchange for using money which they have loaned them. The main goal of adopting price stability is the main goal of monetary policy is to stabilise price expectations while also fostering a stable and non-inflationary environment for resource allocation. A successful anti-poverty approach is said to require maintaining low inflation. Inflation is also impacted by changing interest rates because they change the amount of money in circulation.

STATEMENT OF PROBLEM

Every economy depends on the stock market, thus it is essential for investors, decision-makers, and market players to comprehend the factors that affect share prices. The total performance of a stock market is greatly influenced by macro-economic indicators including GDP rate, inflation rate, interest, currency rates, and other economic indicators. To better understand the precise impact of these macroeconomic factors on the share prices of various businesses, a thorough analysis is required. Hence, study on influence of selected macro-economic variables on share price of different industries is conducted.

OBJECTIVE OF THE STUDY

1. To examine a relationship between the share prices of several industries and a few macroeconomic metrics (inflation, exchange, interest, and GDP rates).
2. To examine how macroeconomic factors affect the stock prices of various industries' performances.
3. To provide investors and decision-makers with advice on how to limit the stock market's susceptibility to macroeconomic issues.

REVIEW OF LITERATURE

R. Gopinathan & S. Raja Sethu Durai, (2019): The macroeconomic fundamentals are the independent variable, while the authors have used the Indian stock market indexes as the dependent variable. The goal of this article is to explore the long- and short-term relationships between the Indian stock markets and important macroeconomic factors including inflation and exchange rates. For the analysis, the authors employed the Unit root test and the Johansen's Co integration test. This study aimed to understand the time-varying, nonlinear links between stock prices and other significant macroeconomic factors using monthly data from India from April 1994 to July 2018.

Emmanuel Isaac John, (2019): For the purposes of the study, the author used macroeconomic variables as the explanatory variable and stock market prices as the explained variable. Finding out how interest rates and money management affect the Nigerian stock market is the study's main goal. The author has taken into account the statistics that are described, the normality test, least squares regression, and the causation test for the analysis. The study clarifies the impact of macroeconomic variables on the Nigerian stock market.

Pramath Nath Acharya, (2018): Macroeconomic factors and share price behaviour: a study of a few Indian industries with the idea that certain enterprises' share prices are influenced by macroeconomic issues. The review's broad goal is to identify and quantify the influence of certain macroeconomic factors on the value share costs in the Indian stock market. The writer has utilized The author has also used graphical representation to show the impact of the macroeconomic variables on the share prices of the Indian Stock market. The current study uses regression and correlation in an effort to determine the relationship as well as the effect of macroeconomic factors on the share price of selected industries.

Dr. Pooja Misra, (2018): In their research, they used the BSE Sensex as the dependent variable and the macroeconomic indicator as the independent variable. The study examines whether there is any connection—if any—between macroeconomic indicators and the BSE Sensex. Granger causality and Correction of vector errors are the methods or tools utilised for the analysis. The analysis' findings indicate that the effects of inflation, interest rates, and oil prices on the stock market are things that investors should be aware of in order to make wise investing decisions.

Shohani Badullahewage, (2018): The author used the unbiased variables—the macroeconomic indicators—and the biased variables—the stock market returns of the Sri Lankan market. The goal of the study is to explore how macroeconomic factors affect the Sri Lankan stock market in order to fully comprehend the market and its current state. Descriptive statistics and regression are the methods used for the analysis. The analysis's findings demonstrated that there is a significant relationship between the macroeconomic variables and the stock market. Due to the fluctuation within the factors as well, the stock exchange performance in the Democratic Socialist Republic of Sri Lanka changes periodically. The performance of the CPI and ASPI tends to be stronger when there is an upward movement in variables like the interest rate, currency rate, and GDP. Whereas the rate should be at its lowest possible level in order to have the best chance of performing well on the stock market.

RESEARCH DESIGN

TYPE OF RESEARCH: Type of research used is Empirical research.

SOURCE OF DATA

The secondary data is the information gathered for the analysis.

- From April 2015 to December 2022, share prices for companies in a variety of industries were gathered from the BSE (BOMBAY STOCK EXCHANGE) website.
- From April 2015 to December 2022, the rates of inflation were gathered from the rateinflation.com website.
- From April 2015 to December 2022, investing.com provided data on India's interest rates.
- The GDP rates from the years 2015 to 2022 were gathered from kaggle.com.

VARIABLES

VARIABLES	DEFINATION
Y	Share prices of different industries
X1	Inflation rates
X2	Interest rates
X3	GDP

DATA ANALYSIS METHODOLOGY

- The collected data is analysed using Microsoft Excel and Jamovi
- Various statistical tools are used for the analysis like descriptive Statistics, Correlation analysis, Regression analysis, Granger Causality test.

HYPOTHESIS

- H0: There is no significant influence of selected macroeconomic variables on share prices of different industries.
- H1: There is significant influence of selected macroeconomic variables on share prices of different industries.

DATA ANALYSIS AND INTERPRETATION**1. Descriptive Statistics of agriculture industry**

	SHARE PRICE	INFLATION RATES	INTEREST RATES	GDP RATES
N	93.00	93.00	93.00	93.00
Mean	2189.00	0.05	0.06	0.05
Standard deviation	507.00	0.02	0.01	0.05
Shapiro-Wilk p	< .001	0.18	< .001	< .001

INTERPRETATION

The medians of the three rates—inflation, interest, and GDP—are quite close to one another.

The very high standard deviation values for the independent variables, which are 0.0153, 0.0109, and 0.0479, indicate that there is significantly greater variance in the data.

2 Descriptive statistics of automobile industry

	SHARE PRICE	INFLATION RATES	INTEREST RATES	GDP RATES
N	93	93	93	93
Mean	8663	0.0491	0.0556	0.0515
Standard deviation	3253	0.0153	0.0109	0.0479
Shapiro-Wilk p	< .001	0.179	< .001	< .001

INTERPRETATION

The medians of the three rates—inflation, interest, and GDP—are quite close to one another. Share price standard deviation is 3253. The very high standard deviation values for the independent variables, which are 0.0153, 0.0109, and 0.0479, indicate that there is significantly greater variance in the data.

3 Descriptive statistics of infrastructure industry

	SHARE PRICE	INFLATION RATES	INTEREST RATES	GDP RATES
N	93	93	93	93
Mean	1477	0.0491	0.0556	0.0515
Standard deviation	422	0.0153	0.0109	0.0479
Shapiro-Wilk p	< .001	0.179	< .001	< .001

INTERPRETATION

The mean rates of GDP, interest rates, and inflation are all close to each other.

The standard deviation of Offer costs is 422, The standard deviation values for the free factors 0.0153, 0.0109, 0.0479 which are exceptionally high, expressing that there is a critical more measure of variety in the information.

4 Descriptive statistics of information technology

	SHARE PRICE	INFLATION RATES	INTEREST RATES	GDP RATES
N	93	93	93	93
Mean	1561	0.0491	0.0556	0.0515
Standard deviation	312	0.0153	0.0109	0.0479
Shapiro-Wilk p	< .001	0.179	< .001	< .001

INTERPRETATION

The medians of the three rates—inflation, interest, and GDP—are quite close to one another.

Share price standard deviation is 312, The very high standard deviation values for the independent variables, which are 0.0153, 0.0109, and 0.0479, indicate that there is significantly greater variety in the data.

5 Descriptive statistics of pharmaceutical sector

	SHARE PRICE	INFLATION RATES	INTEREST RATES	GDP RATES
N	93	93	93	93
Mean	2096	0.0491	0.0556	0.0515
Standard deviation	761	0.0153	0.0109	0.0479
Shapiro-Wilk p	< .001	0.179	< .001	< .001

INTERPRETATION

The medians of the three rates—inflation, interest, and GDP—are quite close to one another.

The independent variables' standard deviation values are quite high, 0.0153, 0.0109, and 0.0479, indicating that there is far more variance in the data than the standard deviation of share prices, which is 761.

CONCLUSION: The purpose of the study was to educate the general public on the change in share prices. Indians are drawn to participating in these capital markets as stock markets have recently become a crucial component of the country's economy. They are interested in learning how the share prices are being affected by these macroeconomic variables. The benefit of the study is that it will provide investors a clear image of the firms from which they may pick and how those assets will move in the market. Given that we used the best performing businesses from five industries, the data gathered for the study was quite trustworthy.

To sum up, it can be said that all five sectors are having an influence on their firms, but when the five industries are compared, it can be seen that the infrastructure and pharmaceutical industries are having the biggest effects on share prices, as well as the other industries of agribusiness, transportation, and information technology.

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A STUDY ON PERFORMANCE OF DIGITAL FINANCIAL SERVICES AT SKDRDP

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Abstract: A study on digital financial services at SKDRDP (Sri Kshethra Dharmasthala Rural Development Project), a rural microfinance institution, reveals positive outcomes. The adoption of digital channels has significantly increased financial inclusion, attracting previously unbanked individuals. The study shows a substantial rise in new customer registrations and greater access to formal financial services for underserved populations. Customers report enhanced convenience through mobile access, real-time updates, and transaction capabilities. Overall, the study highlights the positive impact of digital financial services on financial inclusion, operational efficiency, and customer experience at SKDRDP.

Keywords: Digital financial services, financial inclusion, Operational efficiency, Customer experience.

I. INTRODUCTION

Digital Financial Services (DFS) includes a wide range of services which can be delivered and accessed through different digital channels that includes credit, payments savings, insurance, and remittance. M – Banking is where mobile is used to access banking services and execute the financial transactions. All these takes place via digital channels. It can be defined as “financial services delivered over digital infrastructure – including mobile and internet –with low use of cash and traditional bank branches.” By using this mode of transaction that entails less use of cash and utility of traditional bank branches computers, mobile phone point of sale that connect individual to enable seamless transaction across all parties.

1. Statement of problem

Digitalization presents a crucial opportunity for microfinance providers to reach rural areas and low-income clients, enhancing customer engagement and product utilization. However, despite the potential benefits, financial education and tailored services are essential for successful digital financial inclusion. A study explores the performance of digital financial services in microfinance institutions and emphasizes the importance of adopting modern technologies and adapting business models to foster feasible financial inclusion.

Objectives of the study

1. To explore the Digital Financial Services techniques adopted in SKDRDP.
2. To study the performance of Digital Financial Services in SKDRDP.
3. To analysis the relationship between demographic factors and Digital Financial Services.

II. REVIEW OF LITRATURES

Joseph Kaumba Ssewanyana (2009) this study was conducted in Uganda where 88% of MFIs (Microfinance Institutions) had computers and 90% of them had access to internet. It is a few rural areas which has neither of this. The study has proved that the absence of digitalization was due to lack of appreciation of the benefits that was associated with information communication technology and preferring to use manual systems. The study also gives information about barriers to ICT (Information and Communication Technology) (Information and Communication Technology) usage like high costs of qualified personnel, high value added tax and high cost. The research also provides a benchmark for further digital financial services. The usage of digital financial services has also hampered due excessive cost involved in software adoption and due to lack of awareness.

Aishwarya Lakshmi Ratan (2010) this study was conducted to show the advantages of using digital financial services for the people. Micro- finance network brings formal savings to 86 million poor households. Yet there is inability maintain high quality records remains has weakness in functioning SHG. They have studied that problem and present a record to build on a low-cost digital slate prototype.

They had made a free trial with 200 SHG members in rural India to highlight the use of digital slate solution results in shorter data recording time, fewer incorrect entries and more complete records and it also has proved the digital solution is able to comfortably move between papers and achieve efficiency.

RJ Kauffman, FJ Riggins (2012) this study was conducted to know the role and impact of information communication technology in micro finance industry where the special attention was given to the industries stake holders and to the value chain of micro financial services that is provided to the poor people who need access to them. The research is aimed at encouraging new research that explores the micro finance institutions policy makers. It highlights the value chain and the transformations that are occurring that act as a basis where customers assess the extent to which information communication technology supports microfinance.

Ross P Buckley and Louise Melady (2014) this paper argues that financial regulators must first work to understand and build a demand for digital financial services instead of focusing on developing the regulatory framework. This paper highlights focus on building customer demand by promoting DFS and it also explains the financial regulators for better understanding and developing consumer demand which therefore encourages the DFS ecosystem sustainability that will in turn improves the financial inclusion and the paper also recommends paying attention for partnership to build consumer demand. They also refer partnership between payment providers, banks, MFIs.

Brian Muthiora (2015) the use of mobile phone technology has been widely acclaimed around the world. This study provides the update of the current state of Kenya's mobile phone financial services which teases out the future direction of the digital services. Which in this study is termed as digital financial revolution. The study also depicts how central bank has played its role for the development of digital financial services. It also says that traditional models of financial services have not been so transformative compared to digital services only 18% people was served by using traditional model, but the number has increased by digital financial services.

III. RESEARCH METHODOLOGY

Descriptive research is employed to analyse and describe the characteristics of digital financial services at SKDRDP without a specific research question or hypothesis. It involves collecting data through surveys, interviews, and financial analysis to gain insights into the organization's services. This research method allows for an in-depth investigation and provides preliminary data for further research and generating innovative ideas. A combination of qualitative and quantitative methods is used to gather information and draw conclusions about SKDRDP's digital financial services.

- 1. Types of Data:** Primary and Secondary data.
- 2. Sampling unit:** customers of SKDRDP, Nelamangala
- 3. Period of study:** 8 weeks.
- 4. Data collection:** Books, Published reports, Journals, Projects, Websites, of SKDRDP etc.
- 5. Statistical tools:** frequency distribution and Rank Ordering chi square analysis.
- 6. Sample Size:** 100

Hypothesis

- H0:** Transaction rate is independent of digital financial service provided by SKDRDP.
- H1:** Transaction rate is dependent of digital financial service provided by SKDRDP.
- H0:** There is no significant association between age and type of digital financial service.
- H1:** There is significant association between age and type of digital financial service.
- H0:** There is no significant association between education and purpose of digital transaction.
- H1:** There is significant association between education and purpose of digital transaction.
- H0:** There is no significant association between age and purpose of digital transaction.
- H1:** There is significant association between age and purpose of digital transaction.
- H0:** There is no significant association between education and type of digital financial service.
- H1:** There is significant association between age and type of digital financial service.

IV. DATA ANALYSIS AND INTERPRETATION**1. RANK ORDER CALCULATION****Table 1: Consolidated table showing rank allocated to various attributes**

ATTRIBUTES	RANK					
	1	2	3	4	5	TOTAL
Convenience	0	1	64	146	189	400
Adaptability	0	2	42	154	202	400
Affordability	0	0	46	173	181	400
Security	0	1	50	152	197	400
User friendly	0	2	58	155	185	400
Low service charge	0	0	28	165	207	400
Accurate timing	0	0	63	157	180	400
Internet	0	2	43	153	202	400
Connectivity	0	1	32	172	195	400
Useability	0	2	58	154	186	400

Source: Authors own calculation

Based on the calculations provided in the table, the ranking for the different attributes is assigned in descending order. The attribute with the highest value is given the first rank, while the attribute with the lowest value is assigned the last rank.

Table 2: Summary of rank with computation

Convenience: $(0 \times 1) + (1 \times 2) + (64 \times 3) + (146 \times 4) + (189 \times 5) = 1723$
Adaptability: $(0 \times 1) + (2 \times 2) + (42 \times 3) + (154 \times 4) + (202 \times 5) = 1756$
Affordability: $(0 \times 1) + (0 \times 2) + (46 \times 3) + (173 \times 4) + (181 \times 5) = 1735$
Security: $(0 \times 1) + (1 \times 2) + (50 \times 3) + (152 \times 4) + (197 \times 5) = 1745$
user friendly: $(0 \times 1) + (2 \times 2) + (58 \times 3) + (155 \times 4) + (185 \times 5) = 1723$
low service charge: $(0 \times 1) + (0 \times 2) + (28 \times 3) + (165 \times 4) + (207 \times 5) = 1779$
accurate timing: $(0 \times 1) + (0 \times 2) + (63 \times 3) + (157 \times 4) + (180 \times 5) = 1717$
Internet: $(0 \times 1) + (2 \times 2) + (43 \times 3) + (153 \times 4) + (202 \times 5) = 1755$
Connectivity: $(0 \times 1) + (1 \times 2) + (32 \times 3) + (172 \times 4) + (195 \times 5) = 1761$
Useability: $(0 \times 1) + (2 \times 2) + (58 \times 3) + (154 \times 4) + (186 \times 5) = 1724$

Source: Authors own calculation

In terms of prioritization, convenience and user-friendliness are not given high importance, as indicated by their values of 1723 and 1724, respectively. However, adaptability, affordability, security, internet, and connectivity are moderately emphasized, as suggested by their values of 1756, 1735, 1745, 1755, and 1761, respectively. Additionally, having a low service charge is deemed highly significant, with a value of 1779, while accurate timing is not considered a major priority, with a value of 1717. Overall, usability is also not highly prioritized, aligning with convenience and user-friendliness, as reflected by its value of 1724.

2. Chi-Square ANALYSIS

Table 3: chi-square for education and purpose of financial transactions.

χ^2 Tests					
		Value	df		p
χ^2		4.78	6		0.572
N		100			

Source: Authors own calculation

The test statistic, $\chi^2 = 4.78$, measures the extent of difference between the observed and expected frequencies based on the null hypothesis. With 6 degrees of freedom, indicating the number of categories minus 1, the data appears to have been divided into 7 groups. The obtained p-value of 0.572 suggests that if the null hypothesis were true (assuming no significant difference between observed and expected frequencies), there would be a 57.2% probability of obtaining a test statistic as extreme as 4.78 or even greater. Therefore, Accept H_0 . Therefore, there is no significant association between the education and type of financial transaction.

Table 4: Chi square for Age and type of service

χ^2 Tests			
	Value	df	P
χ^2	2.54	3	0.468
N	100		

Source: Authors own calculation

With three degrees of freedom (df) and a determined 2 value of 2.54, the 2 test was run. The test's resultant p-value is 0.468.

According to this interpretation, the 2 value of 2.54 represents the degree of departure from the values predicted by the observed data. To ascertain the significance of the relationship, this value is tested against the chi-square distribution with three degrees of freedom.

The derived p-value in this instance is 0.468, which, if the null hypothesis is true, denotes the likelihood of witnessing the observed 2 value or a more extreme number via pure chance. The high p-value (higher than the often-used significance threshold of 0.05) indicates that there is insufficient data to reject the null hypothesis. As a result, there is no meaningful correlation between the variables under study.

These 2 test findings show that there is no significant correlation between the variables under examination, considering the sample size of 100 (N). Therefore, Accept H_0 . Therefore, there is no significant association between the age and type of digital financial services.

Table 5: Chi square for Age and purpose of financial transaction

χ^2 Tests			
	Value	Df	P
χ^2	6.74	9	0.664
N	100		

Source: Authors own calculation

With 9 degrees of freedom (df) and an estimated 2 value of 6.74, the 2 test was run. The test's resultant p-value is 0.664.

The 2 values of 6.74, when used to interpret these findings, represent the degree to which the observed data deviates from what would be predicted. This value is compared to the chi-square distribution with 9 degrees of freedom to ascertain the significance of the correlation.

The calculated p-value in this instance is 0.664, which, if the null hypothesis is true, indicates the likelihood of witnessing the observed 2 value or a more extreme number via pure chance. The high p-value (higher than the often-used significance threshold of 0.05) indicates that there is insufficient data to reject the null hypothesis. As a result, there is no meaningful correlation between the variables under study.

These 2 test findings show that there is no significant correlation between the variables under examination, considering the sample size of 100 (N). Therefore, Accept H₀. Therefore, there is no significant association between the age and purpose of financial transaction.

Table 6: Chi square for education and type of service

x² Tests			
	Value	df	P
x²	2.34	2	0.310
N	100		

Source: Authors own calculation

With two degrees of freedom (df) and a determined 2 value of 2.34, the 2 test was performed. The test's final p-value is 0.310 consequently. When interpreting these findings, the 2 value of 2.34 indicates the degree to which the observed data deviates from the predicted values. This value is compared to the chi-square distribution with two degrees of freedom to ascertain the significance of the correlation.

The derived p-value in this instance is 0.310, which, if the null hypothesis is true, is the likelihood of detecting the observed 2 value or a more extreme number via pure chance. The high p-value (higher than the often-used significance threshold of 0.05) indicates that there is insufficient data to reject the null hypothesis. As a result, there is no meaningful correlation between the variables under study. These 2 test findings show that there is no significant correlation between the variables under examination, considering the sample size of 100 (N). Therefore, Accept H₀. Therefore, there is no significant association between the education and type of services.

V. FINDINGS, SUGGESTIONS AND CONCLUSIONS

1. Findings

The survey of 100 respondents reveals an equal gender distribution, with slightly more males (53%) than females (47%). Most respondents fall within the age ranges of 20-30 and 30-40, with a smaller proportion under 20 or above 40. In terms of education, SSLC is the most common qualification (43), followed by PUC (35) and graduation (22). The findings also indicate a preference for online financial transactions, with smart card usage being favoured by a significant majority (64 respondents) due to its convenience, adaptability, and low service charges.

2. Conclusion

Technology plays a crucial role in bridging the gap between customers and the formal banking system, offering a cost-effective solution. It facilitates rapid scalability of operations, enabling organizations like SKDRDP to expand their reach efficiently. The Technology Service Providers associated with SKDRDP provide a robust technology architecture that ensures secure front-end transactions, while the MIS system safeguards back-end transactions. However, there is room for improvement in certain areas. Introducing services such as opening savings accounts for members of SHGs and Non-SHGs and digitalizing other processes would enhance customer engagement and meet their diverse needs. Exploring the potential of mobile technology would enable the implementation of new models and deployments. As the Indian financial services landscape evolves, it is vital for organizations to adapt to industry changes and enable swift deployment to support future growth.

3. Suggestions

To enhance user experience, improvements should be made to the mobile wallet's functionality, transaction process, and connectivity. A targeted marketing campaign promoting internet and mobile banking, along with incentives and educational initiatives, can increase adoption and usage. Regularly reviewing and optimizing service charges, implementing robust security measures, and establishing effective customer feedback channels are crucial for competitiveness and trust-building. Expanding partnerships and conducting educational campaigns will further stimulate growth and customer satisfaction in the target market.

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Exploring Investment Analysis and Management: A deep dive into SHAREKHAN's Strategies.

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ABSTRACT

This research project analyses Share khan's investment strategies, focusing on stock selection, portfolio management, risk management, and other factors. Using secondary data sources, the study provides a detailed analysis of Share khan's strategies, sector-wise performance, and portfolio performance from April 2020 to March 2023. Employing empirical research with quantitative and qualitative information, the research highlights variations in performance across sectors, the influence of quality stocks on returns, and the outcomes of Share khan's mixed strategies. The findings offer valuable insights for investors, emphasizing the need for risk awareness and a well-diversified portfolio to achieve consistent returns while managing risk. The findings underscore the importance of individual stock performance over specific strategies.

Key Words: Investment analysis, investment management, risk and return, stocks performance.

I. INTRODUCTION

The financial intentions of individuals evolve over time, influenced by the balance between risk and return and their level of risk aversion. Establishing a successful investing plan requires understanding one's risk tolerance and constructing a well-diversified portfolio. Investment research involves analysing financial data and market trends to make informed decisions, while investment management actively manages a portfolio to maximize yield and minimize risk. Investment managers utilize various analytical tools and techniques to optimize performance and enhance the value of investments, aiming for consistent return.

Statement of problem

"Share khan" is a financial services firm that offers a variety of investment services to its consumers. However, as the investment landscape becomes increasingly complex and competitive, it is important for investors to have a comprehensive understanding of Share khan's investments. Therefore, there is a need to explore and analyse ShareKhan's investment strategies to provide valuable insights for investors.

Scope of the study:

The study will explore the various investment strategies utilized by Sharekhan, including their approach to stock selection, portfolio management, risk management, and other relevant factors. The study will be conducted by utilizing secondary data sources, including reports and disclosures, to analyse monthly data from the stock market. The purpose of this project report is to give insights into Sharekhan's investing methods, with the aim of helping investors to make educated investment decisions.

Objectives of the research:

1. To provide a detailed analysis of Sharekhan's investment and management strategies.
2. To assess the sector wise performance of Sharekhan's investments.
3. To compare the performance of portfolio during the period from April 2020 to March 2023.

II. INDUSTRY PROFILE AND COMPANY PROFILE

Industry profile

The history of stock brokerage firms dates to the 18th century when the London Stock Exchange was established. Over time, brokerage companies expanded their services beyond executing trades, offering research and investment advice. The Securities and Exchange Commission (SEC) was established to regulate the industry and protect investors. The advent of electronic trading platforms revolutionized the brokerage industry, allowing investors to trade securities without a broker.

The sector now includes a range of business models, from full-service to discount brokerage firms, as well as robo-advisors catering to changing investor preferences.

Company profile

Share khan, established in 2000 and later acquired by BNP Paribas in 2016, is a prominent online trading broker in India with a customer base of 2 million. With a widespread presence of branches and business partners across the country, Share khan has become one of the largest brokers in India, offering a comprehensive range of savings and investment products. BNP Paribas, a renowned European bank, has a strong presence in India for over 160 years, providing corporate banking, investment solutions, and retail banking services in partnership with local entities.

Investment strategies of Share khan

Prime Picks includes two distinct portfolios which are Quality folio and Alpha Portfolio in one scheme.

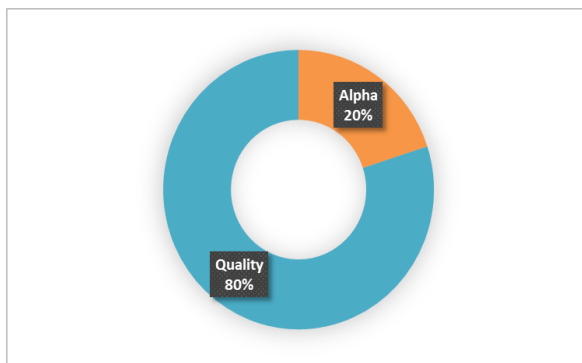
PARTICULARS	QUALITY PORTFOLIO	ALPHA PORTFOLIO
Investment Philosophy	Companies of superior quality with a multi-year structural growth theme.	An aggressive focused strategy that invests in early multibaggers stocks and special situations.
Company Profile	Companies that exhibit sustainable earning growth surpassing the growth of their respective industries.	Investment is made in tomorrow's leaders that possess a scalable business model and may be subject to temporary weak market perceptions. Such investments may also provide a large arbitrage due to low coverage.
Holding period and price Volatility	With a long-term holding strategy, the portfolio is cushioned by low price volatility.	The strategy involves both long-term and tactical churn.

(Source: Official Share khan's Website)

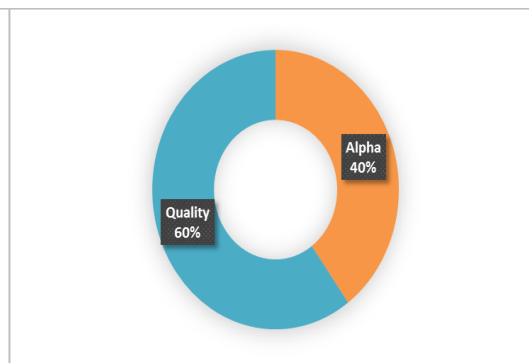
There will be 3 different approaches for investment under this strategy viz. Conservative, Moderate and Aggressive in Quality and Alpha portfolio based on client risk profile / preference as shown below.

Different Share Khan's Strategies.

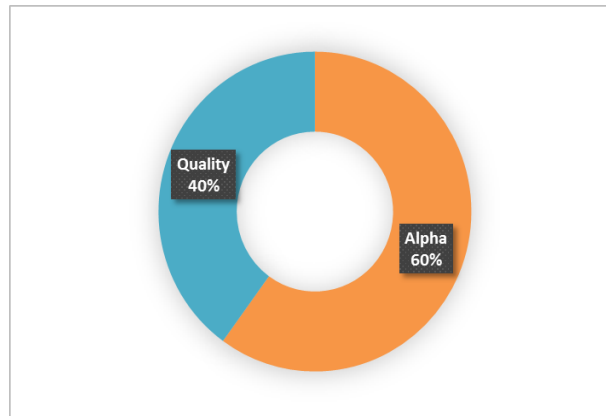
CONSERVATIVE



MODERATE



(Source: Official Sharekhan's website)

AGGRESSIVE

(Source: Official Sharekhan's Website)

III. REVIEW OF LITERATURE

1. Dr Bhadrappa Haralayya (2022) This study aims to provide investors with a fundamental understanding of mutual fund investments and motivate them to invest in areas that offer the highest return on investment, utilizing risk and return analysis as a statistical tool and primary data. The study concludes that investors prefer to invest in mutual funds due to their minimal risk of loss and potential for yielding returns, making them a suitable investment opportunity.
2. Dr. Raghu.G.Anand and Dr.Mala.K.M (2022) The study investigates changing investment patterns and the mindset of Indian citizens using primary and secondary data. It emphasizes the significance of investing and its benefits for individuals and the national economy. The study acknowledges the market's high volatility and encourages readers to leverage the situation for better development. Additionally, it highlights the distinctiveness of each financial service and the growth of the securities market and banks, conforming to RBI (Reserve Bank of India) norms. Contrary to the notion that saving alone can increase wealth, the study emphasizes the importance of making informed investment choices to enhance value.
3. Chandresh Patel (2022) This research examines factors influencing investor behaviour and ethical investment practices, using primary and secondary data. The study reveals that investment is vital for a healthy lifestyle, with investors favouring long-term, low-risk, high-return plans. Financial advisors, self-analysis, and family consultation play important roles. The research also highlights male dominance in financial product investment and identifies key objectives of investor codes of conduct.
4. Tejendrakumar, L. H., & Gondaliya, V. (2022) This study investigates how investors' investment choices are influenced by their demographics and perceptions. It explores the impact of factors such as demographics and perceptions on the decision-making process for various investment platforms. The research aims to provide valuable insights to investors regarding investment options like Systematic Investment Plans, Gold, Public Provident Funds, Equity Share Markets, Bonds, and more. The findings reveal limited knowledge about Systematic Investment Plans among investors and demonstrate that age, gender, qualification, and occupation significantly influence investment choices. Overall, investors show a preference for safer and less risky investment platforms over higher-risk options.
5. Dr. Vaibhav Kale, Ms. Yashashree Kendre and Dr. Charulata Kulkarni (2022) This paper aims to analyse the investment patterns of affiliated clients and identify the factors influencing these patterns. The study reveals that most investors possess good knowledge about available investment options. Additionally, individuals with a graduation degree show higher interest in investing compared to those with lower or higher qualifications. However, despite being aware of tax-beneficial investment options, investors lack proper guidance and exhibit limited interest. To encourage more investors, investment companies should introduce attractive offers that benefit both investors and the companies.

6. Tibor Kovács, Andrea Ko and Asefeh Asemi (2021) The objective of this study is to explore the advantages of a two-stage clustering technique that combines neural-network-based Kohonen self-organizing maps with hierarchical clustering, for analyzing the investment patterns of potential retail banking clients. To achieve this, the research applies descriptive statistics and multiple correspondence analysis (MCA) to understand the variables and uses Kohonen self-organizing maps (SOMs) along with hierarchical clustering to identify customer groups and describe their characteristics.

The findings indicate that the method is effective in identifying unique customer groups and describing their investment patterns and factors. What sets this research apart from previous studies is its innovative use of an AI-related approach to target "potential customers".

7. Jyothi and Dr. D. Jakir Hussian (2021) The objective of this study is to examine the investment behavior of Ultratech, SBI (State Bank of India), Dr. Reddy's Lab, Bharati Airtel, and Tata Motors, including their associated risks and returns, and to identify the optimal portfolio with statistical tools such as correlation and the Sharpe index. The study finds that organizing securities in a way that balances risk and return can result in a more profitable outcome.

8. Giridhar Maji, Debomita Mondal, Nilanjan Dey, Narayan C, Debnath and Soumya Sen (2020) This paper discusses the management of a diversified portfolio by analyzing multiple stocks from various business sectors. The analysis is conducted solely on the closing stock price, but it considers other factors such as dividends, bonuses, and stock splits. This approach simplifies the analysis process and avoids the need for complex tools. Additionally, the paper introduces a new methodology for constructing a mutual fund portfolio that aims to increase profits and mitigate risks over time. Investors seeking long-term returns will find this methodology useful, as it uses historical data and regression analysis to build a strong and stable portfolio.

9. Prof. Riteeka Rajeshwar Kamble (2020) The aim of this study is to analyze the effects of Covid-19 on investor behavior and compare the changes in investment behavior before and after the pandemic. Both primary and secondary data are used in this research, and trend analysis is utilized as a research tool. The paper concludes that Covid-19 has had a significant economic impact, with lockdown and social distancing measures creating instability in the financial sector due to the large population and challenging economic circumstances. As a result, individual investors' willingness to invest in mutual funds and the stock market has been negatively affected by these government control measures.

10. Dr. Ravi Maheshwari and Srashti Srivastava (2020) his paper examines various investment strategies in the Canadian market by analyzing past market data and their impact on trading. The study was conducted through a structured survey of investors in five major cities in India. ANOVA (analysis of variance) was used to analyze the data, and the study concludes that certain factors, such as the age and asset ratio of mutual funds, can impact their performance. Older funds with high asset ratios tend to perform poorly, while those with a history of strong performance are more likely to perform well in the future. The study also notes that retail investors often lack the skills and tools to make complex investment decisions and tend to rely on simple and less time-consuming approaches to investing in equity securities.

IV. DATA AND METHODOLOGY

4.1 Research type:

"Empirical research" by utilizing both quantitative and qualitative information obtained through empirical research, readers can gain knowledge and understanding of Sharekhan's investment strategies, as well as assess the relevant information presented in the study.

4.2 Data requirement:

To conduct the research, secondary data was utilized, which was obtained from reports and specific disclosures.

4.3 Tools and techniques:

Descriptive analysis, ANOVA and Trend Analysis

4.4 Hypothesis

1. H_0 : "There is no significant difference in the returns of the various Sectors".

H_1 : "There is significant difference in the returns of the various Sectors".

2. H_0 : “There is no significant difference returns of Quality stock and Alpha stocks”.

H_1 : “There is significant difference returns of Quality stock and Alpha stocks”.

V. DATA ANALYSIS AND FINDINGS

5.1 Descriptive analysis

- According to the descriptive analysis, it is evident that Indo National Ltd has a higher standard deviation compared to other stocks under consideration. This behaviour typically occurs due to fluctuations in prices, resulting in the potential for higher returns at the cost of increased risk exposure.
- Perfect-Octave Media Projects Ltd exhibits the least variation among the compared stocks. Investing in such stocks is ideal for investors seeking lower risk levels and anticipating steady returns.

5.2 AVOVA for Sector wise comparison

Anova single factor

SUMMARY

Groups	Count	Sum	Average	Variance
Steel industry	12	98.02998	8.169165	630.1194296
banking and finance	12	3.619863	0.301655	5.767528808
textile manufacturing	12	12.68582	1.057152	13.9096978
Chemicals industry	12	12.66936	1.05578	28.44625383
Cement industry	12	18.22622	1.518851	35.11629718
Engineering industry	12	0.020935	0.001745	0.0000365
others	12	12.12313	1.010261	9.663967755
transportation	12	4.302156	0.358513	0.919708643
aerospace and defence	12	0.650632	0.054219	0.004172702
healthcare industry	12	-0.08764	-0.0073	0.00276152
media and entertainment	12	0.153579	0.012798	0.003097095

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	670.42	10	67.0426	1.018669346	0.431843	1.909792
Within Groups	7963.48	121	65.8139			
Total	8633.90	131				

(Source: Author's own calculation using company's disclosure data and data obtained through BSE (Bombay Stock Exchange) website)

- In the ANOVA analysis conducted above, it is observed that the steel industry has a comparatively higher average return of 8.17, outperforming other industries. On the other hand, the healthcare industry exhibits the lowest average return of -0.08, resulting in a negative return.
- When considering variance, it is evident that the steel industry has a higher value of 630.12 compared to other industries, while the engineering industry has the lowest variance of 0.00004. This variance provides valuable insights into the risk factors associated with different sectors.
- Sum of squares used for measuring variation between groups and within the groups. The value for between groups is 670.42 and within groups is 7963.42. This shows that variation between groups is less compared to variation within the groups.

- F statistic and P value are 0.1019 and 0.431 respectively. This suggest that we must accept null (level of significance is 0.05 and p value is 0.431). Therefore, there is no significant difference between various sector's returns.

5.3 TREND ANALYSIS of Quarterly - wise summarized holdings data



(Source: Author's own calculation using company's disclosure data)

- In the first quarter of March 2020, the company allocated more investments towards alpha stocks. Over the following months until March 2021, there was a gradual shift in the company's portfolio composition, with a combination of quality stocks and alpha stocks. As time progressed, the company progressively directed more of its investments towards quality stocks rather than alpha stocks.
- In December 2020, there was a higher acquisition of alpha stocks, whereas in December 2022, the focus shifted to purchasing quality stocks.

5.4 ANOVA calculation for comparing Quality stocks and Alpha stocks.

ANOVA: SINGLE FACTOR

SUMMARY

Groups	Count	Sum	Average	Variance
Quality stocks	12	114.3357	9.5280	648.6548
Alpha stocks	12	48.0584	4.0049	56.7127

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	183.0284	1.0000	183.0284	0.5190	0.4789	4.3009
Within Groups	7759.0421	22.0000	352.6837			
Total	7942.0705	23.0000				

(Source: Author's own calculation using company's disclosure data and data obtained from BSE website)

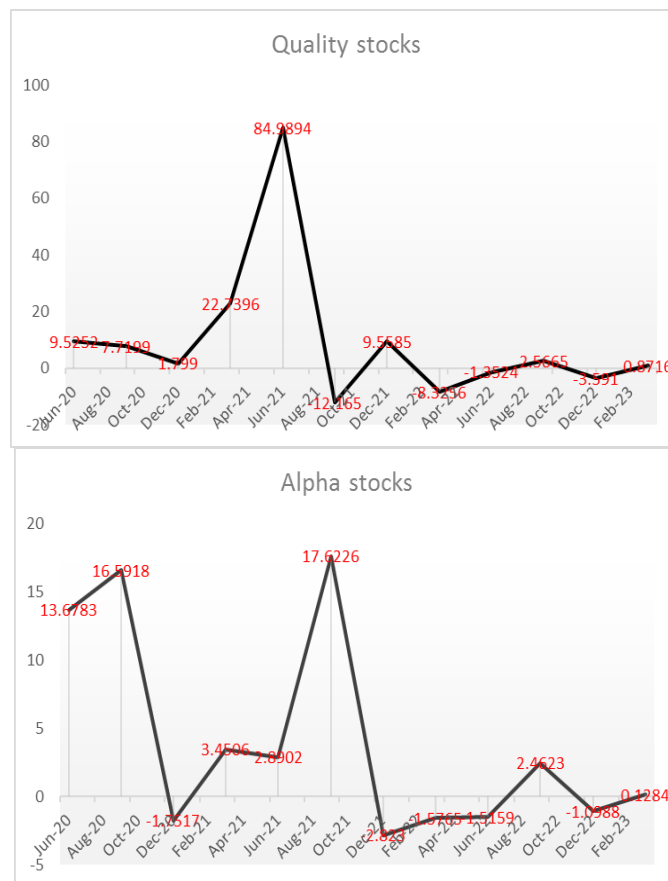
- The ANOVA analysis indicates that Quality stocks have an average return of 9.53, while Alpha stocks have an alpha value of 4.0. This suggests that, in comparison, Quality stocks exhibit a higher average return, indicating potentially better performance than Alpha stocks.

- Variance in ANOVA refers to variation in the quality of the stock in this case this defines the amount of risk involved in selected stocks. The variance of quality stocks is 648.6548 and Alpha stocks is 56.7127. From this we can confirm that quality stocks are more riskier than Alpha stocks but can also yield more returns because of this nature.
- Sum of squares used for measuring variation between groups (Quality stock and Alpha stock) and within the groups. The value for between groups is 183.0284 and within groups is 7759.0421. This shows that variation between groups is less compared to variation within the groups.
- F statistic and P value are 0.5190 and 0.4789, respectively. This suggest that we must accept null hypothesis (level of significance is 0.05 and p value is 0.4789). Therefore, there is no significant difference between returns of Quality stock and Alpha stocks.

Based on the interpretation, it becomes apparent that Alpha stocks exhibited lower risk but generated lower returns compared to Quality stocks. This can be attributed to the company's adoption of a more moderate and conservative approach rather than an aggressive one. Consequently, the company allocated a larger portion of its investment to Quality stocks rather than Alpha stocks.

When a particular investment receives greater emphasis or weightage, it can have a significant influence on the overall portfolio. In this scenario, such an influence is evident, resulting in Quality stocks displaying higher variance and delivering better returns. This outcome can be attributed to the company's strategic decision to allocate more resources to Quality stocks, which led to a stronger performance in terms of risk and returns.

5.5 Pictorial representation of quarterly - wise returns of Quality stocks and Alpha stocks



The company's investment strategies varied throughout the period, with a mix of moderate, aggressive, and conservative approaches. Quality stocks and alpha stocks showed varying levels of performance, with different strategies resulting in different returns. Alpha stocks played a significant role in compensating for lower contributions from quality stocks in some cases, while quality stocks outperformed alpha stocks in others. Overall, the company's investment decisions and strategy choices influenced the returns generated by these stocks.

VI. FINDINGS, SUGGESTIONS AND CONCLUSION

Findings

The study's descriptive statistical analysis reveals that HAL has a higher mean price, indicating it is an expensive acquisition. Indo National Ltd carries a higher risk factor and holds a cautious approach with a lower investment percentage. DIC India Ltd shows a low average return, requiring further evaluation for potential improvement. EPIC Energy Ltd has underperformed with a negative average return, calling for strategic measures to enhance profitability. The study highlights that individual stock performance and economic conditions can lead to varied outcomes. ANOVA analysis demonstrates that the steel industry exhibits significantly higher variance, while the healthcare sector displays lower variance. Price fluctuations within sectors outweigh variations between sectors, and Quality stocks exhibit higher price variance, but better returns compared to Alpha stocks. The company's predominant strategy is a mix of moderate and conservative approaches, with the conservative strategy delivering better performance. However, consistent positive returns cannot be guaranteed by any strategy.

Conclusion:

The analysis reveals that certain companies exhibit higher risk factors and adopt a conservative investment approach, while others underperform or achieve low average returns. Additional evaluations and strategies for improvement are necessary to address these issues effectively. Performance variation exists across sectors, with the steel industry demonstrating higher variability than the healthcare sector. Quality stocks have greater price variance but yield better returns, potentially influenced by their higher percentage of holdings. The company's moderate and conservative strategies outperform aggressive strategies overall, but consistent positive returns cannot be guaranteed. The mixing of strategies resulted in varying outcomes, with profitable returns in some quarters and negative returns in others. The underperformance of majority stocks suggests that stock performance has a stronger influence on returns than specific strategies employed.

Suggestions:

To optimize investment decisions, it is crucial to conduct a thorough analysis of each stock, considering performance, financials, market conditions, and competition. Diversifying the portfolio across sectors can reduce risk and potentially enhance returns. Staying informed about economic conditions and adjusting strategies accordingly is essential. Regularly evaluating and adapting investment strategies based on effectiveness is recommended. Implementing a reliable system for monitoring and tracking stock performance allows for the identification of trends and areas for improvement.

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DEMAND FORECASTING AND INVENTORY MANAGEMENT IN GAGAN TOOL TECH COMPANY

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ABSTRACT

Demand forecasting and inventory management are crucial components of supply chain management, enabling organizations to optimize their operations, minimize costs, and meet customer expectations. This abstract provides an overview of the importance and challenges of demand forecasting and inventory management, as well as the strategies and technologies that can be employed to enhance operational efficiency and customer satisfaction. Accurate demand forecasting plays a pivotal role in inventory management, enabling businesses to determine the optimal inventory levels required to meet customer demands while minimizing costs associated with stock outs or excess inventory. However, forecasting demand accurately can be challenging due to various factors such as seasonality, market trends, customer preferences, and unforeseen events. This abstract highlights the significance of utilizing historical data, market research, statistical models, and machine learning algorithms to improve the accuracy of demand forecasts. In this study regression analysis been used to know the impact of inventory management on profitability and productivity, efficiency or turnover ratios have been used to know the fluctuations or demand for year to year, ABC analysis used to know control over inventory .

Keywords: Inventory; Demand; ABC analysis; efficiency; regression; forecasting

I. INTRODUCTION

The process of using predictive analysis of historical data to estimate and predict the future demand for a product or service by customers is known as demand forecasting. By estimating the total sales and revenue for a future period, demand forecasting helps the business make better-informed supply decisions. The tracking of inventory from manufacturers to warehouses and from these facilities to a point of sale is an essential component of inventory management. Keeping the right products in the right place at the right time is the goal of inventory management. Inventory can include any packaging, work in progress, finished goods, raw materials, or component parts, depending on the business. The main goal of inventory management is to make sure that there are enough products or materials to meet demand without making too much inventory, or overstock.

STATEMENT OF THE PROBLEM

Company is facing a problem on wrong estimation of orders, and they don't rely on margin which is affecting the profitability of organisation. Stock has a negative effect, and every organization needs to work for different things. Each stock organizer strives for optimal stock management. Because of the impact that having too much, or too little stock has on the business's health and viability.

OBJECTIVE OF THE STUDY

- To forecast the demand for inventory and to understand the inventory management procedures followed by Gagan Tools.
- To find the impact of inventory management on productivity of the company.
- To study the effectiveness of inventory management on profitability of the company.

II. REVIEW OF LITERATURE

Gaurav Chawla and Vitor machado micel (2019) in the article demand forecasting and inventory management for spare parts - Because of its strategic significance in ensuring the availability of equipment and the continuity of operations, spare parts management is an essential component of many businesses' supply chains. When compared to more conventional fast-moving goods, the demand for spare parts is naturally more uncertain in many supply chains. This is due to the fact that demand for spare parts is extremely sporadic, typically manifested by a prolonged period of time between orders that are followed by periods of an order signal.

Companies tend to stock more inventories in order to reduce the risk of an irregular demand pattern because spare parts are so important to the operation's ability to continue.

Sagar .S (2019) in the article a study of inventory management in ABB India limited - The opportunity to consistently receive praise is presented to the organization. The project enables us to comprehend the organization's profile, Work process, and subtleties, enabling me to explore various avenues regarding experiences within the organization and allowing me to recognize content for my research. One of the vital pieces of collecting associations is stock organization of Stock Administration, the assessment decided for the examination, as the association has a place with the gathering industry. Stock Administration is management of non-advanced assets (endlessly stock things. An association of store network the leaders regulates the Stock Administration stream at the motivation behind offer from the Distribution centre and from these workplaces.

Aja Mathew, Prof.E.M.Somasekaran Nair and Asst.prof.Jenson Joseph (2013) in the article demand forecasting for economic order quantity in inventory management - In the uncertain economy of today, businesses are looking for new ways to stay ahead of their rivals. The quantities that should be purchased, produced, and shipped will be determined by forecasts of future demand. In this work, artificial neural networks (ANNs) and exponential smoothing (ESs) were used as training data to predict the demand for ammonium sulphate fertilizer. Sales data from the previous three years served as the training data.

Aris A. Syntetos and John E.Boylan (2008) in the article demand forecasting adjustments for service level achievements- Traditionally, demand forecasting and stock control are examined separately. Although this flaw has been pointed out in academic literature, little empirical research has been done on forecasting adjustments that address how forecasting and stock control interact. The relevant literature is critically examined in this paper. Following that, a comprehensive examination of the empirical performance of a few modifications and adjustments on slow-moving items is conducted. The individual demand histories of 753 intermittent line items from the Royal Air Force (UK) are included in the data set.

Rajat Bhagwat and Milind Kumar Sharma (2007) in the article performance measurement of supply chain management: A balance scorecard approach - A balanced scorecard that measures and evaluates day-to-day business operations from the following four perspectives is developed in this paper for supply chain management (SCM): customer care, internal business procedures, finance, and learning and development. The Balanced Scorecard was created with the help of a comprehensive literature review on SCM performance measures and three case studies, each of which demonstrates how BSC was developed and used in small and medium-sized businesses (SMEs) in India.

V. Viswanath Shenoi, T. N. Srikantha Dath and Chandrasekharan Rajendran (2021) in the article supply chain management in Indian manufacturing industries: An empirical study and a fuzzy approach - The free trade agreement's development over the past ten years has made it easier for goods to move around the world (Moore and Moore, 2003). Companies were able to compete in international markets with domestically produced goods without encountering trade barriers as a result. In addition, India's economic liberalization and subsequent reforms, such as Foreign Direct Investment (FDI), resulted in significant investments in the manufacturing sector, which not only presented an opportunity for the revival of the Indian economy but also increased competition (Kumar, 2005). Companies were forced to adopt an aggressive and integrated enterprise-wide risk management strategy as a result of globalization and fierce competition.

Salwinder Gill, Paras Khullar and Narinder Pal Singh (2016) in the article a review on various approaches of spare parts inventory management - Objectives: The motivation behind this paper is to effectively control the extra parts stock administration arrangement of different Associations. Statistical Methodology: The strategy adjusted to concentrate on the targets was to control proficiently the extra parts stock administration arrangement of different associations and by investigating the holes of the framework and killing them by setting the rules for estimating of extra parts stock. Findings: Since inventory control management is the most crucial aspect of optimizing spare parts demand by effectively managing spare parts inventory in various aspects in accordance with the requirements of the organization, the paper provides a comprehensive literature review of various techniques for effective control of the inventory management system.

Kavya. B, Deetchika .R, Rahamani .V, Manju. D (2022) in the article food inventory demand forecasting tool - People are busy in today's modern world, and they can't live without food. People benefit from good food provided by food service providers. Be that as it may, they deal with an issue with stock determining. Food service providers rely heavily on demand and inventory forecasting. Products with a short shelf life and seasonal shifts are of greater concern to food companies. The demand may be affected by numerous hidden contexts and seasonal shifts, which is still not straightforward. For better handling of fluctuations in consumer demands, we present an ensemble learning strategy that makes use of dynamic integration of regressors in this paper.

Mosaddek Hassan Chowdhury, Tasfia Ahmed, Md. Bayazid Rahman, A.H.M. Saiful Islam (2023) in the article A smart inventory system with forecasting technique applied to efficiency handle industrial asset - In today's business environment, inventory management has become increasingly intriguing and complicated. While balancing a variety of costs, businesses are working to improve their warehousing operations. Consequently, inventory management is essential for meeting customer demands and maintaining product quality. In order to stop problems like overstocking or understocking, this paper outlines an efficient inventory management system that takes demand forecasting into account.

II I. DATA AND METHODOLOGY

Type of research: Exploratory data analysis is been used.

Data collection Method: Secondary data on Financial Performance. Research data that has already been gathered and can be accessed by researchers are referred to as secondary data. The term appears differently in relation to essential information, which is information gathered straightforwardly from its source.

Sample size: 5years of Balance sheet data and P & L account of Gagan tool tech.

Tools and techniques

1. Regression analysis is been used as a tool in excel to find out the impact between productivity and inventory management and profitability and inventory management.
2. Ratios related to inventory
3. ABC (always better control) analysis is been performed in excel form 2018 to 2022. An inventory classification method known as ABC analysis divides products into three groups based on revenue: A, B, and C. 'A' in ABC examination implies the main merchandise, 'B' shows modestly vital products, and 'C' demonstrates the most un-fundamental stock.

Hypothesis

- 1) H_0 – There is no significant impact of inventory management on productivity.
 H_1 – There is a significant impact of inventory management on productivity.
- 2) H_0 – There is no significant impact of inventory management on Profitability of Gagan tools.
 H_1 – There is a significant impact of inventory management on Profitability of Gagan tools.

I V. DATA ANALYSIS AND FINDINGS

1. Stock efficiency ratio (inventory turnover ratio) = Formula – cost of goods sold / average inventory.

2. Commodity efficiency ratio (raw materials turnover ratio) = Formula –commodity consumed / average commodity

Commodity consumed = opening stock+ purchases- closing stock

3. In- process efficiency ratio (work-in-progress turnover ratio) = Formula – production cost / average in-process (Production cost – manufacturing expenses+ selling expenses + Administrative expenses+ personal expenses)

4. Finished product efficiency ratio (finished goods turnover ratio) = Formula – cost of merchandise sold / average finished product (Average finished product = opening finished goods + manufacturing expenses – cost of merchandise sold)

5. Comparability efficiency ratio (comparison turnover ratio)

6. Calculation of stock in days (inventory holding period) = Formula –Total days / stock turnover ratio (Total days = 365 days).

7. Calculation of commodity in days (raw materials holding period) = Formula – Total days / commodity efficiency ratio (Total days = 365 days).

8. Calculation of In – process in days (work-in-progress holding period = Formula –Total days / in – process ratio (Total days = 365 days).

9. Calculation of finished product in days (finished goods holding period = Formula – Total days / finished product efficiency ratio (Total days = 365 days).

10. Calculation of compatibility of stock in days (comparison inventory holding period).**1. Stock efficiency ratio (inventory turnover ratio)**

Formula – cost of goods sold / average inventory

Table_No - 5.1.1 representing Stock efficiency ratio from 2018 to 2022

Year	Net sales	Average stock	Efficiency ratio(cr)
31-3-2018	6,04,35,096	1,08,94,096	5.547509036
31-3-2019	6,02,24,079	2,03,03,045	2.96625846
31-3-2020	5,09,80,096	2,01,99,024	2.523889075
31-3-2021	5,02,42,036	1,07,37,025	4.679325605
31-3-2022	5,02,32,021	1,05,59,054	4.75724634

Source – Gagan tool tech company balance sheet and P and L account

Interpretation - The ratio of stock efficiency is shown in the pie chart. Year 2018 shows the most noteworthy turnover contrasted with rest of the years, in 2021 and 2022 there is brief changes. Essentially 2021 there is an extraordinary change. As a result, changes occurred frequently.

2. Calculation of stock in days (inventory holding period)

Formula –Total days / stock turnover ratio

Total days = 365 days

Table No – 5.1.11 representing Stock in days from 2018 to 2022

Year	Stock efficiency ratio	Stock in (days)
31-3-2018	5.55	66
31-3-2019	2.97	123
31-3-2020	2.53	144
31-3-2021	4.67	78
31-3-2022	4.75	77

Source – Gagan tool tech company balance sheet and P and L account

Interpretation – The stock in days is depicted in the above diagram. The stock in 2018 was 66 days, and in the years 2019, 2020, and 2021 and 2022, the period ranged from 123 to 144 days, which is bad news for the company. In 2016 however, the period was lower than in the other years, which is good news for the company.

Calculation of ABC (always better control) analysis for five years i.e. from 2018 to 2022 (inventory controlling technique)

Table ABC analysis for the year 2018

Class	Items	Value	Usage Volume	Cumulative%	% of items
A	Brass, Nylon, Aluminium 95.5% grade Stainless steel	6,57,96,000	64.89%	64.89%	20%
B	Helium, Alloy Steel, Scriber & Polymer	22060000	21.77%	86.66%	30%
C	98% pulse pure grade Mild steel Copper Washer & Angel Plate	13528480	13.34%	100	50%
		10,13,84,480			

Source – Gagan tool Tech Company

Interpretation - ABC classification is purely done based on Gagan tool Tech Company inventory, in the year 2018 in A category there are items consist of 4 items and the usage volume % is 64.89%, in B category the value consist of 21.77% and there items are 4, the category C consist of 5 items and the value is 13.34%.

Regression Analysis:

Dependent variable – inventory **Independent variable** – net income

Regression Statistics	
Multiple R	0.153545174
R Square	0.023576121
Adjusted R Square	-0.301898506
Standard Error	613.1968081
Observations	5

ANOVA	Df	SS	MS	F	Significance F
Regression	1	27236.731	27236.73	0.0724361	0.80527114
Residual	3	1128031	376010.3		
Total	4	1155267.7			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	5995.0640	766.2196	7.8242	0.0043	3556.6110	8433.5169
X Variable	-0.01705	0.0633	-0.2691	0.8052	0.2187	0.1846

Source – Gagan tool Tech Company

Interpretation – The above table depicts that R value is 0.023576 i.e. 23.57% this value is between productivity and inventory it shows the variation between both of the variable, and the multiple R is 0.15, t static value of intercept value 7.824, significance F value is >0.05 hence H0 is accepted and H1 got rejected which shows that there is no significant impact of inventory management on productivity.

FINDINGS OF THE STUDY

- The Gagan tool Tech Company's inventory is the sole basis for the ABC classification. In 2018, there were four items in the Always category, with a usage volume percentage of 64.89 percent. There were four items in the Better category, with a value of 21.77 percent, and there were five items in the Control category, with a value of 13.34 percent.
- Stock efficiency ratio is depicted in the table above. The year 2018 has the most efficiency among the other years, with minor shifts in 2021 and 2022. In 2021, most of the change will occur. So there was an unending changes should be visible.
- The commodity efficiency Ratio. In 2018, it was 3.72, 2.01 in 2019, 1.51 in 2020, and 1.92 in 2021. The proportion was greater than the standard in 2022, when deals were also expanded. There was significant expansion in the proportion of unrefined substances consumed.
- The above outline portrays that in 2018 the work in progress proportion was 6.05, in 2019 6.02, there was an efficient decrease in 2020 and 2021 for example 4.75 and 3.97 and afterward in 2022 the proportion increment to 4.01. It decreases annually.
- Compatibility efficiency ratio is shown in the chart above. It portrays the increase in all four combined ratios—commodity efficiency ratio, In-process efficiency ratio, finished product efficiency, and stock efficiency—in the years 2019 and 2022, company yield also rises significantly. The rate is more for completed products than for the other three. In 2019, the rate of finished product produced per worker was 40.54, and in 2022, the rate of finished product produced per worker was 35.58.

V.CONCLUSION

By involving key stakeholders in the forecasting process, collaborative forecasting improves accuracy. Although historical data analysis is useful, this can be supplemented by other elements like market trends and customer behaviour. Forecast accuracy would be changed and real-time adjustments made using advanced analytics and machine learning techniques. Forecasting can be more precise and inventory system would be tailored thanks to demand segmentation. The reduction of lead times reduces inventory costs and increases responsiveness. Optimizing safety stock is essential for balancing customer demand and reducing excess stock. Technologies for demand sensing and real-time data increase adaptability to shifting demand patterns. Nonstop checking and criticism assortment assist with further developing gauging models over the long run. Inventory management and the performance of the supply chain are improved when demand forecasting and supply chain planning are combined. By inculcating these outcomes into their operations, businesses have the potential to increase inventory control, minimum costs, and increase customer satisfaction. Effective demand forecasting and inventory management enable businesses to adapt to shifting customer demands, effectively respond to market dynamics, and maintain a competitive edge in today's dynamic business environment.

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“A Study on Impact of Employee Benefits on Job Satisfaction and Retention”

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ABSTRACT

This study examines the impact of employee benefits on job satisfaction and retention. Employee benefits play a crucial role in attracting and retaining talented individuals within organizations. The objective of this research is to explore how various employee benefits contribute to job satisfaction and ultimately influence employee retention. Through a comprehensive literature review, this study identifies key categories of employee benefits, including health insurance, retirement plans, paid time off, flexible work arrangements, and professional development opportunities. The research utilizes a mixed-methods approach, combining quantitative surveys and qualitative interviews, to gather data from a diverse sample of employees across different industries. The findings of this study will provide insights into the relationship between employee benefits, job satisfaction, and retention. By understanding the specific benefits that have the greatest impact on employees, organizations can tailor their benefits packages to enhance job satisfaction and increase employee retention rates. This research aims to contribute to the existing body of knowledge on employee benefits and provide practical implications for organizations seeking to improve employee satisfaction and retention.

INTRODUCTION

Employee benefits play a significant role in the overall package of compensation that businesses offer to their employees. These benefits are intended to increase staff happiness and wellbeing as well as attract and retain top talent. Recently, the importance of employee benefits has come to light, particularly in light of its impact on job satisfaction and retention. Work satisfaction is a crucial element in determining employee performance and fidelity to a company. It describes the degree to which a worker is content with their position, taking into account factors including the workplace atmosphere, job responsibilities, pay, and benefits. Employee benefits play a big role in job satisfaction and can influence a worker's decision to stick around or depart for another employer. Another important concern for organisations is employee retention. High employee turnover can be expensive, disruptive, and result in the loss of experience, knowledge, and abilities. By giving people a sense of safety, stability, and wellbeing, employee perks are essential for keeping employees. Therefore, it is vital for companies to understand how employee benefits affect work satisfaction and retention. The purpose of this study is to look into the connection between retention, work satisfaction, and employee perks. This study can offer important insights into how organisations can improve their compensation and benefits packages to attract and retain top talent by examining the various types of benefits that employees appreciate and the factors that influence their satisfaction and retention.

Literature Review

A study of relationship between managers' leadership style and employees' job satisfaction (2014)

Employee loyalty is regarded as one of the most important factors for business growth and sustainability in all industries. As a result, examining the variables that may have an impact on employee loyalty has emerged as one of the most interesting research topics. The goal of this study is to ascertain how satisfaction, trust, and leadership support affect employee loyalty in the Saudi Arabian hotel sector. With the aid of a structural questionnaire, data were gathered.

THE EFFECT OF JOB SATISFACTION ON EMPLOYEE RETENTION (2020)

Job satisfaction and employee retention, as an academic concept, has aroused wide attentions from the fields of management, social psychology, and practical operations in recent years. This research paper reviews more than a decade of researches on the antecedents and outcomes of job satisfaction and employee retention. Therefore, the current study attempts to explore the relationship between job satisfaction and employee retention.

For this, the study uses a descriptive research design. In conclusion, the findings of the study suggest that there was a positive correlation between job satisfaction and employee retention.

An Investigation into the Effect of Knowledge Management on Employee Retention in the Telecom Sector (2022)

Because telecom workers are knowledge workers, managers, HR experts, and industry policymakers must implement knowledge management practises to keep them on board. This study examined the impact of knowledge management on staff retention in the telecom industry in opposition to this concept. The research design used in this study is a cross-sectional survey employing a simple random sample technique on a population of thirty telecom businesses in the southeast of Nigeria.

The Impacts of Remuneration on Employee Retention and Job Satisfaction among Private Higher Education Institutions' Lecturers:

During the Covid-19 outbreak, this study examined the effects of compensation on staff retention and work satisfaction among professors at private higher education institutions in Sarawak, Malaysia. A theoretical framework involving compensation, employee retention, and job satisfaction was put out, and it had a considerable impact on academic staff members' satisfaction with their pay. This study polled 255 academic staff members from nine institutions using Microsoft Form. The results showed a substantial association between Employee Retention and Job Satisfaction as well as between Remuneration and Job Satisfaction. Employee retention and compensation, however, do not significantly correlate.

THE EFFECTS OF COMPENSATION, WORK ENVIRONMENT AND JOB SATISFACTION ON EMPLOYEE RETENTION:

Managers, HR experts, and industry officials must use knowledge management practises to keep telecom sector employees because they are knowledge workers. This study examined the impact of knowledge management on staff retention in the telecom industry in opposition to this concept. The research design used in this study is a cross-sectional survey employing a simple random sample technique on a population of thirty telecom businesses in the southeast of Nigeria. The Krejci and Morgan sample size determination table was used to determine the sample size. The instrument used to collect the data was a questionnaire. Frequency distribution was used to assess the respondent profiles, and linear regression was used to analyse the hypotheses that were developed.

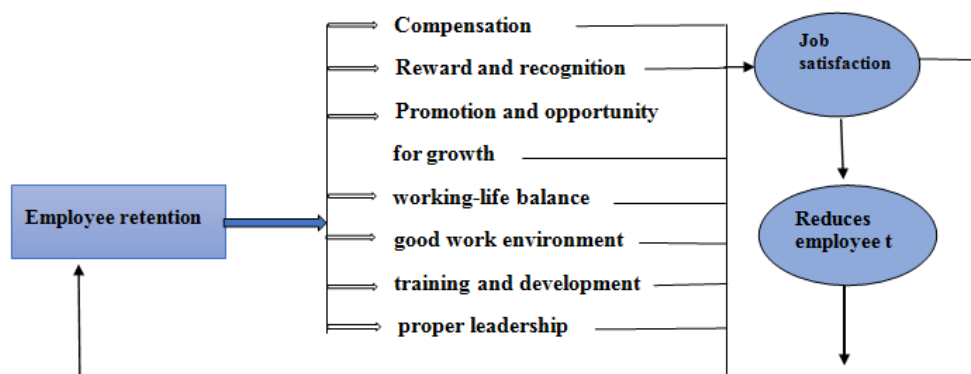
Objectives of study:

- To examine the relationship between employee benefits and job satisfaction and retention.
- To identify any gaps in the current employee benefit packages and determine how they can be improved to enhance job satisfaction and retention.

Research methodology

Type of research: Empirical research, it is the research which analysis done through empirical evidence.
Source of data: primary data & secondary data which is collected through the company.
Sample size: 100
Tools and techniques: Descriptive research Regression analysis.4.2

Conceptual framework



Summary of the model :

This study set out to determine how employee benefits affected job satisfaction and retention in the context of an organisation. The study set out to test the premise that appealing employee benefits have a favourable impact on job satisfaction and raise retention rates.

DATA ANALYSIS AND INTERPRETATION

	AGE	GENDER	Year of experience	Educational qualification	Salary	satisfied with my job & motivated	adequate health benefits	Overall, satisfied with my job.
Mean	1.960784314	1.666666667	2.137254902	2.568627451	1.990196078	3.715686275	3.784313725	3.519607843
Standard Error	0.082338148	0.056310792	0.059178377	0.078212663	0.06307819	0.084036965	0.078358537	0.093187053
Median	2	2	2	3	2	4	4	4
Mode	2	2	2	3	2	4	4	4
Standard Deviation	0.831574537	0.568711125	0.597672311	0.78990918	0.637058495	0.848731739	0.791382435	0.941143103
Sample Variance	0.69151621	0.323432343	0.357212192	0.623956513	0.405843526	0.720345564	0.626286158	0.88575034
Kurtosis	0.699716121	0.658291621	-0.25033559	0.253338282	0.303759687	0.210886849	0.190669795	0.514186983
Skewness	0.390281319	0.134209667	0.052959077	0.415083204	0.242399071	0.505464987	0.326972224	0.348456464
Range	3	2	2	3	3	3	3	4
Minimum	1	1	1	1	1	2	2	1
Maximum	4	3	3	4	4	5	5	5
Sum	200	170	218	262	203	379	386	359
Count	102	102	102	102	102	102	102	102
Confidence Level (95.0%)	0.163336738	0.111705464	0.117393981	0.155152885	0.125130162	0.166706732	0.15544226	0.184858046

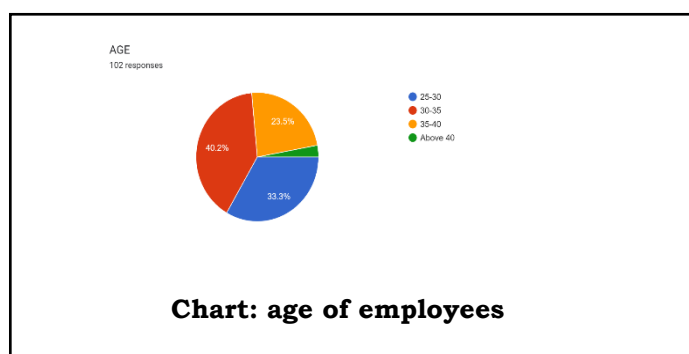
Descriptive statistics:**INTERPRETATION**

The mean score of the age is (1.96%) and the standard deviation is at (0.82%), and the mean value of the gender is analysed has (1.66) and the standard deviation is (0.056), the mean score of the number of years in a company is (2.13) and standard deviation is (0.059), as the mean value of Education is (2.56) and the standard deviation is (0.078) stratified with descriptive statistics.

Table showing frequency distribution of age of employees

Sl.no	Particulars	No of respondents	Percentage
1	25-30	34	33%
2	30-35	41	40.2%
3	35-40	24	23.5%
4	Above 40	3	2.9%
	Total	100	100%

Source: primary data collected through questionnaire



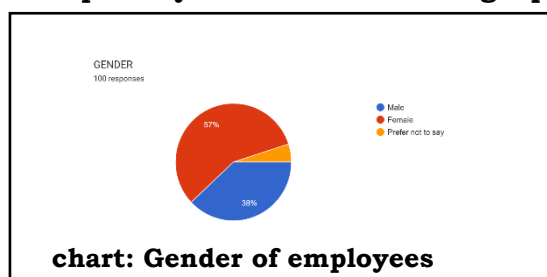
Interpretation:

The above graph showing respondents divided on the basis of age group of the respondent. As per the survey 33% of respondent are between 25–30-year age group 40.2% of the responders are between 30-35age group, 23.5% of the responders are between 35-40 age group and 2.9% of the responders are between above 40 age group.

Table showing frequency distribution of age of employees

Sl.no	Particulars	No of respondents	Percentage
1	Male	38	38%
2	Female	57	57%
3	Prefer not to say	5	5%
	Total	101	100%

Source: primary data collected through questionnaire

**Interpretation:**

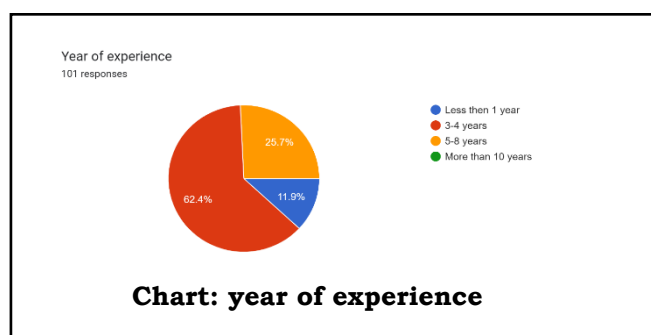
The above graph showing respondent divided on the gender, as per the survey, there are 57 female responders, 38 male responders and 5 prefer not say responders.

From the above chart we can analyse that out of 100% respondent 38% are male 57% are female 5% are prefer not say from the above survey it is conspicuous that majority of the respondent are female that is 57%.

Table showing frequency distribution of Year of experience

Sl.no	Particulars	No of respondents	Percentage
1	Less than 1 year	12	11.9%
2	3-4 years	63	62.4%
3	5-8 years	12	11.9%
	Total	101	100%

Source: primary data collected through questionnaire

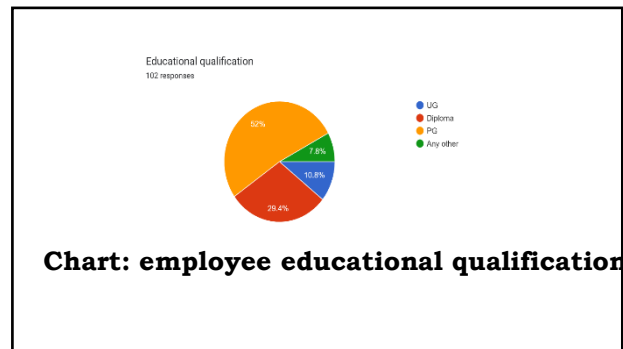
**Interpretation:**

The above table graph showing respondent divided on the basis of working year of employee The survey found that less than 1 year are 11.9%. And 62.4% respondents belong to 3-4 years and 11.9% respondents are belonged to 5-8 years.

Table showing frequency distribution of employee educational qualification

Sl.no	Particulars	No of respondents	Percentage
1	UG	11	10.8%
2	Diploma	30	29.4%
3	PG	53	52%
4	Any other	8	7.8%
	Total	101	100%

Source: primary data collected through questionnaire

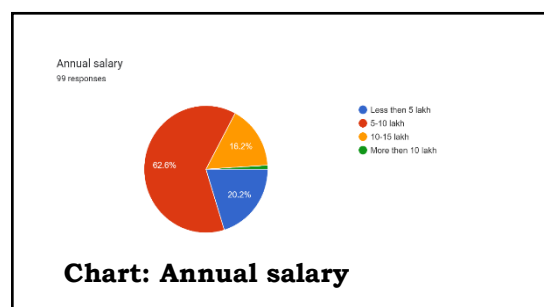
**Interpretation:**

From the above chart 10.8% respondents belong to UG category, 29.4% respondents are diploma, 52% respondents are PG, 7.8% respondents are other

Table showing frequency distribution of Annual salary

Sl.no	Particulars	No of respondents	Percentage
1	Less than 5 lakhs	20	20.2%
2	5-10 lakh	62	62.6%
3	10-15 lakh	16	16.2%
4	More than 10 lakhs	1	1%
	Total	100	100%

Source: primary data collected through questionnaire



Interpretation: From the above graph 20.2% respondents belong to less than 5 lakhs, 62.6% respondents belong to 5-10 lakh, 16.2% respondents belong to 10-15 lakh, 1% respondents belong to more than 10 lakh category in espicon company.

Regression and chi square Table:

SL.NO	VARIBELS	F	SIG
1	Employee job satisfaction v/s employee retention	5	1.91

INTERPRETATION:

From the above table it can be inferred that there is a significant relationship between impact on job satisfaction and retention rates. Since P value=0.000246 less than 0.05, H₀ is rejected and H₁ is accepted at 5% level of significance

SL.NO	VARIBELS	value	P
1	employee benefit v/s job satisfaction and retention.		

INTERPRETATION:

We may conclude that there is a gap in the current employee benefit package that improves job satisfaction and retention because the significance p value is less than 0.05.

FINDINGS:

- It is observed that there are 57% more male respondents than female ones.
- It is discovered that most of respondents (62.4%) have 3–4 years of experience.
- It is discovered that 52% of respondents—the highest percentage—have postgraduate degrees.
- The most of respondents (40.2%) are in the 30- to 35-year-old age range.
- It is discovered that 35.9% employees at Toyota report feeling content in their jobs when asked about workplace happiness.

CONCLUSION:

Employees are more likely to feel valued and supported by their employer when they have access to perks like healthcare coverage, retirement plans, flexible work schedules, paid time off, and opportunities for professional growth. Employee perceptions that their needs are being met in ways other than financial pay as a result of job satisfaction. A key factor in employee retention is job satisfaction. Employees that are happy with their jobs are more likely to be engaged, devoted, and driven to give their best work. They are less inclined to look for new employment options or consider offers from other companies. Furthermore, a supportive work environment fostered by extensive benefits encourages a sense of loyalty and dedication among employees, further boosting their propensity to stick with the business.

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**“A STUDY ON IMPACT OF SOCIAL MEDIA ON CONSUMER BUYING BEHAVIOUR AT
PARAMOUNT NUTRITION'S INDIA PVT.LTD (CP-UNIT OF BRITANNIA INDUSTRIES LTD)”**

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ABSTRACT

Purpose: The prime objective of the study is to analyze the impact of social media on consumer buying behavior. And To analyze the impact of social media on consumer loyalty and repeat purchasing behavior.

Design/Research methodology: Empirical study surveyed 104 respondents through convenience sampling technique and has been tested with correlation and regression, in the correlation coefficient ($p = 0.086$) is too high to reject the null hypothesis, which is the accepted scientific practice. Therefore, there is insufficient data to infer a significant relationship between the variables thought to affect the likelihood of a consumer taking advantage of a certain offer or promotion.

Findings: This study has found that most consumers are not impacted by considering that they should in rural areas, in accordance with collected statistics. So, social media doesn't have an appreciable effect on repeat purchases or customer loyalty.

Scope for future work/ Limitation: The study is restricted to consumer buying behavior at paramount nutrition's India pvt.ltd (CP-unit of Britannia industries ltd). The study was conducted for short duration due to time constraint, and in this study limited only 104 consumer buying behavior at paramount nutrition's India pvt.ltd.

Keywords: social media, consumer buying behavior, empirical, questionnaire, regression, correlation, consumer loyalty.

INTRODUCTION

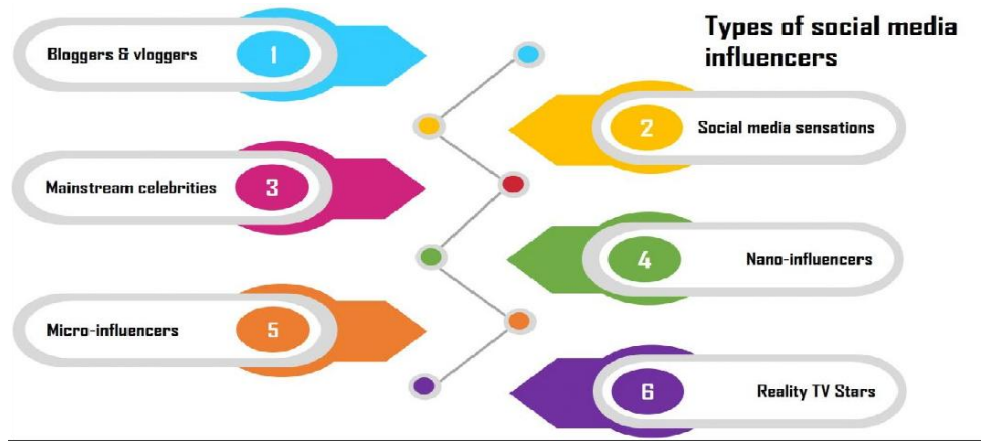
An online communication tool called social media enables peer engagement, content exchange, and data gathering. The various sorts of social media include social networking, forums, social bookmarking, and others. Examples of social media platforms include Face book, Twitter, Instagram, Snap chat, LinkedIn, and Tik Tok. Social media is a crucial part of modern life because millions of people use it to connect with others, share knowledge and ideas, and keep up with news and trends. It has also become a vital tool for businesses and groups to engage with their audiences and advertise their products and services. Social media has benefits like facilitating collaboration and granting access to information, but it also has downsides.

Consumer buying behavior: 1) Personal variables: 2) Psychological variables, 3) Social factors: 4) Cultural aspects, 5) Situational factors:

Social media's effect on consumer purchasing behaviour, How individuals shop is greatly influenced by social media. Because of the expansion of social media platforms, consumers now have easier access to more information than ever before, and they can easily share their ideas and experiences with others. This has changed how consumers select their items.

Here are a few instances of how social media might influence people's purchase choices:

1) Greater exposure for goods and brands: 2) Reviews and suggestions: 3) Influencer marketing: 4) Personalization: 5) FOMO (Fear Of Missing Out):



Why some consumers prefer offline shopping rather than social media.

There are a number of reasons why some customers choose to make their purchases offline rather than on social media. These are a few scenarios that could apply:

1. Tangible Experience:
2. Instant Ownership:
3. Personalized support:
4. Social involvement:
5. Trust and Security:
6. Returns and Exchanges:
7. Limited Digital Skills:
8. The need for individualized fittings or testing:

REVIEW OF LITERATURE

1) (Elisabeta Ioană, Ivona Stoica 2014) “Social Media and its Impact on Consumers Behavior”. Consumers now have the ability to research products, label them, and offer further feedback thanks to technology. As a result, a lot of businesses today have social media profiles to supplement their product information and customer reviews. Customers tend to feel more connected to a business after reading reviews. The research was quantitative because the paper is on how social media affects consumer behaviour. 16 respondents made up the sample, and from a statistical standpoint, univariate and bivariate analyses were used to draw findings.

2) (Amandeep Singha , Taranjit Singh Vijb , Rajveer Kaurc , Daljeet Kaurd 2021) “Impact of Social Media on Consumer Behaviour” This paper includes research studies on

The effect of social media on consumer behaviour. Social media is used by billions of people worldwide and has quickly emerged as one of the defining technologies of our time. People are using various social media websites, and as a result, the entire marketing landscape is changing. Changing. Given the large number of people who spend many hours a day on social media across various platforms and are primarily involved in information processing, entertainment, and social connection activities, it is not surprising that marketers have begun to use social media as a marketing channel.

3) (Michael Pütter 2017) “The Impact of Social Media on Consumer Buying Intention” Companies all over the world are constantly looking for new ways to reach out to customers. Television and print advertising were key components of marketing strategies just a few decades ago. These traditional marketing channels are only a small part of the picture today. A subset of the various approaches used to market and brand products. The growing emphasis on social media has shaped cutting edge advertising and altered how businesses interact with their target audiences. As a result, effective social media use has become an essential component of establishing and maintaining a competitive advantage.

4) (Kirti Sharma 2020) “Impact of Social Media Marketing on Consumer Buying Behaviour”

Internet-based presentation of life has become the most dominant mode for organizations seeking to connect with them opportunities and customers. The sample counted her 220 respondents, and in terms of facts, the endpoint was set there. Univariate and bivariate studies. Similarly, after conducting a complex measurable study in SPSS And the survey provided by the survey organizer's online stage gives a good sense of how and how severely it is affected. The real-world impact of social media marketing reflected in consumer decision-making processes.

5) (Mr. Sony Varghese1*, Ms. Mansi Agrawal2 2021) “Impact of Social Media on Consumer Buying Behavior” This research concerns the study of the purchasing process of complex consumer purchases with a particular focus. How is your process affected by social media use? Here, complex purchasing behavior is A rare purchase by consumers due to the high level of engagement that makes a big difference for brands. Socializing Media is becoming a new trend. Over the past decade, the World Wide Web has witnessed the rapid growth of the user-generated web. Technologies such as blogs, social networks, and social media websites. Collectively, this is known as social media, Technology is the very reason why it enables user-generated content, i.e. community expansion Worldwide.

OBJECTIVES

- 1) To identify the factors that affect the success of social media marketing campaigns, such as the quality of content, the timing of posts, and the choice of social media platforms.
- 2) To analyze the impact of social media on consumer buying behavior.
- 3) To examine how social media affects the decision-making process of consumers when they are considering purchasing a product or service.
- 4) To identify the different ways in which social media platforms influence consumer behavior, including through social proof, social influence, and other psychological factors.
- 5) To determine how social media can be used as a tool for marketers to increase brand awareness, generate leads, and ultimately drive sales.
- 6) To analyze the impact of social media on consumer loyalty and repeat purchasing behavior.

HYPOTHESIS

- 1) H0 : Social media has no significant impact on consumer buying behavior. HA : Social media has a significant impact on consumer buying behavior.
 - 2) H0: There is no significant relationship between social media on consumer loyalty and repeat purchasing behavior.
- HA: There is a no significant relationship between social media on consumer loyalty and repeat purchasing behavior.

DATA AND METHODOLOGY

Research design: Research design refers to the overall plan or structure that a researcher develops to guide the collection, analysis, and interpretation of data in a scientific study or investigation. It outlines the specific steps and procedures that will be followed to address research questions or objectives and provides a framework for ensuring the validity and reliability of the findings. A research design serves as a roadmap for the entire research process, helping researchers make informed decisions about various aspects of their study. It encompasses several key elements, including: research questions, study type , sampling, data collection, variable and measures, data analysis.

Type of research: Empirical research refers to a type of scientific research that relies on the collection and analysis of empirical evidence or data to answer research questions or test hypothesis. It is based on observation, experiences, and measurement obtained from the real world, rather than relying solely on theoretical or abstract reasoning.

Sources of Data: To carry out the research or testing the hypothesis the primary and secondary data is essential. Customer surveys and questionnaires provided the bulk of the study's primary data. Secondary information on the firm was acquired from many places, such as scholarly journals and the website.

(1) **Primary data:** primary data refers to original data that is collected firsthand by a researcher or research team for a specific research purpose. It is gathered directly from the source or through direct interaction with individuals, organizations, or phenomena under study.

(2) **Secondary data:** secondary data refers to data that has been previously collected and recorded by someone else for a purpose other than the current research study. It is data that already exist and is available for analysis and interpretation.

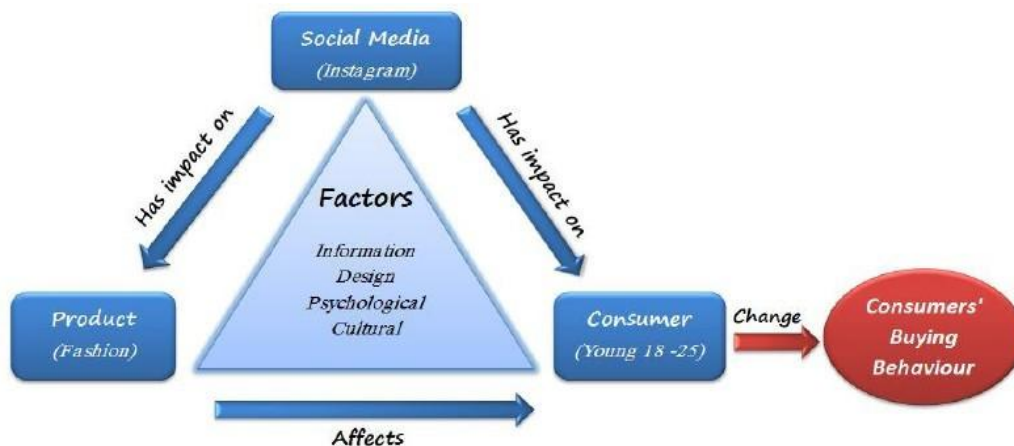
(3) **Questionnaire design:** refers to the process of creating and structuring a set of questions intended to gather specific information from respondents. It involves careful planning and consideration of various factors to ensure the questionnaire effectively collects the desired data. And in this paper the primary data collected through Google form.

Sample Size: The study relies on real data from participants who make regular use of internet shopping platforms. 104 well-selected respondents provided the primary data. A well-designed questionnaire collected the data.

Sampling techniques: Convenience sampling selects individuals who are accessible, cooperative, or close. This method is used when time, money, or resources prevent more careful sampling.

Statistical tool: correlation and regression are the tools used for the research.

Model framework.



Explanation of Model framework:

The above model framework of this study shows Matrix Model of Changing Consumer buying Behavior. Many consumers are now on social media network than ever before. When the consumer purchases the product firstly they are looking for review and recommendation. Social media platform are most important element which are influences the customers. Here are four ways in which social media influences consumer behavior: Social media impact on product: It plays a crucial role in increasing brand awareness, as companies can share product information and promotions to reach a wider audience. Customer feedback and reviews on social media influence the perception of products, affecting potential customers' purchasing decisions. Influencer marketing on social media leverages popular individuals to promote products, driving product awareness and consumer behaviour. Brands can use social media for social listening and market research, gathering insights on consumer preferences and market trends. Viral marketing and user-generated content shared on social media enhance product visibility and credibility. Overall, social media has transformed the way products are marketed, sold, and perceived by consumers. Social media impact on consumers: Social media platforms provide consumers with instant access to a wealth of information about products, services, and brands. It helps consumers stay updated, discover new products, and make informed purchasing decisions. Social media impact on consumer buying behaviour: Overall, social media has transformed consumer buying behaviour by increasing access to information, fostering peer recommendations, providing visual and interactive content, enabling real-time feedback, integrating social commerce, leveraging influencers, stimulating FOMO, and amplifying user-generated content. Consumers are now more empowered, informed, and connected, shaping their purchasing decisions in new ways.

Hypothesis

1) H0 : There is no significant impact of social media on consumer buying behavior.

HA : There is a significant impact of social media on consumer buying behavior.

2) H0: There is no significant relationship between social media on consumer loyalty and repeat purchasing behaviour.

HA: There is a significant relationship between social media on consumer loyalty and repeat purchasing behavior.

Limitations of the study

1) The study is restricted to consumer buying behaviour at paramount Britannia.

2) Study was conducted for short duration due to time constraint.

3) Study is limited only 104 consumer buying behaviour at paramount Britannia India pvt.ltd.

DATA ANALYSIS AND FINDINGS ANALYSIS:1**Linear Regression****Table 5.2(1) : Showing Linear Regression Analysis.**

Model Measures		Fit					
		Overall Model Test					
Model	R	R ²	Adjusted R ²	F	df1	df2	p
1	0.371	0.138	0.129	16.1	1	101	< .001

Omnibus ANOVA Test

	Sum of Squares	df	Mean Square	F	
11. Have you ever shared a product or service on social media with your friends or followers?	9.61	1	9.614	16.1	< .001
Residuals	60.23	101	0.596		

Note. Type 3 sum of squares

Model 1 - 9. Have you ever made a purchase based on an advertisement or recommendation you saw on social media?

Predictor	Estimate	SE	95% Confidence Interval		t	p	Stand. Estimate
			Lower	Upper			
Intercept	1.200	0.2044	0.794	1.605	5.87	<.001	
11. Have you ever shared a product or Service on social media with your friends or followers?	0.365	0.0909	0.185	0.545	4.02	<.001	0.371

Data Summary

Cook's Distance				
Range				
Mean	Median	SD	Min	Max
0.0103	0.00734 4.20e-	0.0118		0.0475
			5	

Assumption Checks

Normality Test (Shapiro-Wilk)	
Statistic	p
0.946	<.001

Source: primary data.

Based on the provided linear regression results, here's the interpretation:

Model Fit Measures:

- R: The correlation coefficient between the predictors and the response variable is 0.371. It indicates a moderate positive relationship.
- R²: The coefficient of determination is 0.138, which means that approximately 13.8% of the variability in the response variable can be explained by the predictors in the model.
- Adjusted R²: The adjusted R² accounts for the number of predictors and sample size. It is 0.129, suggesting that the predictors in the model explain about 12.9% of the variability in the response variable after adjusting for these factors.

➤ F: The F-statistic of 16.1 with 1 and 101 degrees of freedom is associated with a p-value of $< .001$, indicating that the overall model is statistically significant.

Model Specific Results:

➤ The omnibus ANOVA test examines the overall significance of the predictors in the model. The sum of squares for the predictor variable "Have you ever shared a product or service on social media with your friends or followers?" is 9.61, and the associated F-statistic is 16.1, with a p-value of $< .001$. This result indicates that this predictor variable is significantly related to the response variable.

➤ The coefficients table provides information about the individual predictor variables. The intercept has an estimated value of 1.200, indicating the expected value of the response variable when all predictors are zero.

➤ The predictor variable "Have you ever shared a product or service on social media with your friends or followers?" has an estimated coefficient of 0.365, suggesting that a one-unit increase in this predictor is associated with a 0.365- unit increase in the response variable. Both coefficients have p-values $< .001$, indicating their statistical significance.

Assumption Checks:

- Normality Test (Shapiro-Wilk): The p-value of $< .001$ suggests that the residuals in the model are not normally distributed. Violations of normality assumptions may affect the reliability of the regression results.
- Q-Q Plot: The Q-Q plot can help assess the normality assumption. However, without the plot itself, it is not possible to make a specific interpretation.
- Residuals Plots: The provided information does not specify the nature of the residuals plots, so their interpretation cannot be provided.

In summary, the linear regression analysis indicates that the predictor variable "Have you ever shared a product or service on social media with your friends or followers?" has a significant positive relationship with the response variable. However, it's important to note the violation of the normality assumption and the potential impact on the reliability of the regression results.

FINDINGS

- Bangalore is where the majority of the respondents to this survey work.
- From this survey, we can infer that majority of consumers in the study(81.7%) use "Instagram" and (1%) of consumers use twitter.
- The largest proportion of individuals in the study(57.7%) engage with social media platform multiple times a day.
- From this survey, the most common time spent on social media is in the range of "30 minutes to 1 hour" (31.7%).
- A significant portion of individuals in the study (68%) have made a purchase based on an advertisement or recommendation seen on social media, either occasionally (32%) or frequently (32%). However, 35.6% of individuals have never made a purchase based on social media ads or recommendations.
- a significant portion of individuals in the study (50%) always read online reviews before making a purchase, indicating a high reliance on reviews for decision-making.and while a smaller proportion (12.5%) never reads online reviews before making a purchase.
- In the study (60.6%) have shared a product or service on social media. However, 31.7% of individuals have never shared a product or service on social media with their friends or followers.

CONCLUSION

In conclusion, social media has a big influence on what people buy. It has completely changed how consumers research, assess, and decide what to buy. Consumers can access a multitude of information, peer recommendations, and direct brand contact through social media platforms, which has a variety of effects on how they make purchasing decisions.

From the study, in conclusion According to the findings of the linear regression study, social media sharing behaviour significantly positively affects the dependent variable. The model sheds light on how the predictors and dependent variable are related, emphasising the significant of social media sharing in affecting the outcome variable. It's crucial to keep in mind that the model only accounts for a modest amount of the variation, suggesting that additional variables that weren't considered in the analysis might possibly affect the dependent variable. And

In the correlation “Based on data collection, most of the (50%) consumers are from rural area and therefore they are not influenced by social media in any way. So, there is no significant relationship between social media on consumer loyalty and repeat purchasing behavior”.

Suggestions:

- Maintain active social media presence on platforms your target audience uses. Create a social media plan that involves regular posting, compelling material, and quick replies to consumer questions and comments.
- Look for well-known figures in your field or field of interest who also have a substantial online following. Utilize the credibility and following of influential people to influence customers' purchase choices in your favour.
- Request social media evaluations and comments from customers. User-generated content provides social evidence, which may sway future customers.
- Follow customer feedback on social networks input on your company, products, or sector. Use social listening to acquire target audience input to improve advertising and product offerings.
- Make Social networking sites usage give limited-time discounts or bargains to your online followers.
- Incorporate social media widgets that provide real-time customer feedback and ask for evaluations and ratings from customers. Customers' purchase choices might be influenced by social proof, which is increased by positive reviews and testimonials.

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“A STUDY ON CUSTOMER’S BRAND LOYALTY AND SATISFACTION AT GODREJ SMART INTERIOR SOLUTIONS, BENGALURU ”

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ABSTRACT

This study explores the connection between customer brand loyalty and satisfaction. It investigates how these factors impact business success and provides insights for effective marketing strategies. Data was collected through a questionnaire administered to diverse customers, measuring variables like brand loyalty, satisfaction, perceived value, trust, and brand image. Statistical analysis revealed a significant positive relationship between customer satisfaction and brand loyalty. Perceived value, trust, and brand image were identified as key drivers. The findings highlight the importance of delivering value, building trust, and maintaining a positive brand image to enhance customer satisfaction and foster loyalty. The study's implications include focusing on improving perceived value, trust, and brand image to increase customer satisfaction and loyalty. The research contributes to customer behavior and marketing knowledge, offering guidance for developing successful strategies. Future research could explore factors like customer engagement and emotional attachment to the brand.

I. INTRODUCTION

Building and keeping a loyal customer base is essential for any business' long-term success in the fiercely competitive business environment of today. Businesses spend a lot of money on customer relationship management and marketing techniques in order to both acquire new customers and keep their current ones. Customer happiness and loyalty are two important factors that affect brand performance and customer retention. These connected concerns have received considerable study interest from both academics and marketing experts.

Customer brand loyalty is the propensity of consumers to continue making repeat purchases of goods or services from a certain company over time. Customers that are loyal to a brand show a strong preference for it and are more inclined to pick it over rivals. Perceived value, emotional attachment to the brand, and recurrently pleasant brand experiences are some of the factors that influence brand loyalty.

II. REVIEW OF LITERATURE

Ahmed Muneeb Mehta & Maham Tariq (2018): The customer benefit provided by the brand, which conveys the brand essence to the clients, is a crucial component of brand image in the catering sector. Studies on customer happiness and the integration of brand image could be applied to the establishment of brand image to fully meet customer satisfaction based on the process to progressively develop the brand image in the catering sector.

AG Rahim, & IU Ignatius, & Olusola Elizabeth Adeoti (2019): By examining the connection between customer experience, brand image, and customer loyalty, this study advances current service research. In other words, this study shows that the quality of the service provided has an impact on how customers perceive their interactions with service providers. Also, this study has some managerial ramifications.

Aris Insan Waluya, & M Ali Iqbal, & Rhian Indradewa (2019): An analysis of a representative sample of the hotel's target clients was done. The study aimed to identify the explore the benefits of loyalty, pinpoint important perks for the customers, and assess the existing performance. There is a relationship between satisfaction and loyalty. The findings show there was a non-linear link between loyalty and satisfaction.

Bilsen Bilgili, & Emrah Ozkul (2022) :The study of Brand Loyalty and Consumer Loyalty will become more important as the market gets more competitive with substitute goods and services. To compete with competition, producers need to comprehend customer behaviour. It's possible that shoppers are irrational beings who decisions that are not supported by logic.

Cleopatra Veloutsou (2022): The results of the current study support the idea that there is a strong correlation between customer satisfaction and brand image; however, they do not support the idea that customer satisfaction can foster loyalty intentions in the absence of brand image. As a result, marketing managers must understand that they must first establish a strong brand image and should not attempt to foster customer satisfaction.

OBJECTIVES

1. To study the emerging marketing environment for the furniture market in India
2. To know Godrej smart interior solution's brand value and service satisfaction of the customers
3. To analyse the customers brand loyalty and satisfaction on Godrej smart interior solution

HYPOTHESIS

Hypothesis-1

H0: - There is no significance difference between brand loyalty and customer's satisfaction

H1: - There is a significance difference between brand loyalty and customer's satisfaction

III. DATA AND METHODOLOGY

RESEARCH DESIGN

A population, circumstance, or phenomena is intended to be correctly and methodically described through descriptive study. What, where, when, and how inquiries can be answered, but why questions cannot. A descriptive research strategy can study one or more variables using a wide range of research techniques.

SAMPLE DESIGN

The sample size chosen for my research study is 100 responses and these responses include users.

SOURCE OF DATA

Primary data: - Primary data is defined as information gathered directly from the researcher, the person or organization doing the research, or both. It is unique information that has never before been gathered, processed, or examined by anybody else. Primary data is gathered through a variety of techniques, including surveys; focus groups, interviews, observations, and experiments.

Secondary data: - Secondary data is defined as information that has already been gathered, processed, or examined by another party. Information is frequently accessible through reports that have been published, databases, and other sources like scholarly publications, governmental organizations, and private market research companies.

METHOD OF DATA COLLECTION

Questionnaire: In this instance, a closed-ended questionnaire should be created where responders might select from a list of pre-written answers.

ANALYTICAL TOOLS AND TECHNIQUE

The study used correlation analysis and chi-square test to test out the proportion

IV. DATA ANALYSIS AND FINDINGS

ANALYSIS: - 1

5. Correlations

		How likely are you to recommend Godrej brand to 5s?	How does Godrej brand is better compare to other brands in terms of quality?	How does Godrej brand offer value for money when compare to other brand?	How does Godrej brand compare to other brands in terms of customer service?	How likely are you to switch to a competitor brand?	Customer satisfaction
How likely are you to recommend Godrej brand to 5s?	Pearson Correlation	1	.289**	.145	.270**	.261**	.492**
	Sig. (2-tailed)		.004	.150	.007	.009	.000
	N	100	100	100	100	100	100
How does Godrej brand is better compare to other brands in terms of quality?	Pearson Correlation	.289**	1	.523**	.452**	.264**	.619**
	Sig. (2-tailed)	.004		.000	.000	.008	.000
	N	100	100	100	100	100	100
How does Godrej brand offers value for money when compared to other brand?	Pearson Correlation	.145	.523**	1	.543**	.200*	.509**
	Sig. (2-tailed)	.150	.000		.000	.046	.000
	N	100	100	100	100	100	100
How does Godrej brand compare to other brands in terms of customer service?	Pearson Correlation	.270**	.452**	.543**	1	.223*	.463**
	Sig. (2-tailed)	.007	.000	.000		.025	.000
	N	100	100	100	100	100	100
How likely are you to switch to a competitor brand?	Pearson Correlation	.261**	.264**	.200*	.223*	1	.451**
	Sig. (2-tailed)	.009	.008	.046	.025		.000
	N	100	100	100	100	100	100
Customer satisfaction	Pearson Correlation	.492**	.619**	.509**	.463**	.451**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100

INTERPRETATION: -

1. How likely are you to tell others about Godrej brand?

Each item in the table has a positive correlation with this question; however the link is not very significant. The correlation indices range from 0.145 to 0.492. According to the data and p-values (p 0.05), some of these correlations are statistically significant.

2. How does Godrej brand compare to other brands in terms of quality: - The correlation coefficients for current inquiry, which spans from 0.264 to 0.619, show moderately favourable correlations with all other parameters. Statistics show that each of these connections is significant.

3. How does Godrej brand offer value for-money when compared to other brands: - Although considering how weak the relationships are there is a positive association between this question and other variables. From 0.145 to 0.509, the correlation coefficients are measured. These associations include a few that are statistically significant.

ANALYSIS 2:**Descriptive Statistics**

	Mean	Std. Deviation	N
Customer satisfaction	1.8525	.58371	100
Brand Loyalty	1.8180	.56361	100

Customer satisfaction:

The mean (average) customer satisfaction score is 1.8525.

The standard deviation, which measures the spread or dispersion of the data, is 0.58371.

The sample size (N) for customer satisfaction is one hundred, indicating that the data represents one hundred observations.

Brand Loyalty:

The mean brand loyalty score is 1.8180.

The standard deviation for brand loyalty is 0.56361.

The sample size (N) for brand loyalty is also one hundred.

Correlations

		Customer satisfaction	Brand Loyalty
Pearson Correlation	Customer satisfaction	1.000	.757
	Brand Loyalty	.757	1.000
Sig. (1-tailed)	Customer satisfaction	.	.000
	Brand Loyalty	.000	.
N	Customer satisfaction	100	100
	Brand Loyalty	100	100

1. Pearson correlation coefficients:

Customer happiness and brand loyalty have a correlation coefficient of 0.757.

This suggests that the two variables have a significant positive association

2. Significance (p-values):

Customer-satisfaction and brand-loyalty are correlated, with a p-value of 0.000.

The correlation is statistically significant, as evidenced by this.

Sample size (N):

Customer happiness and brand loyalty both have a sample size of 100, meaning that the data contains 100 observations for each variable.

According to the table, there is an overall very substantial positive-correlation between customer-satisfaction and brand-loyalty (0.757). This demonstrates that brand loyalty often increases along with consumer satisfaction and vice versa. The correlation is statistically significant (p 0.05), which makes it improbable that the association could have arisen by pure chance.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.757 ^a	.572	.568	.38364	.572	131.177	1	98	.000

a. Predictors: (Constant), Brand Loyalty

b. Dependent Variable: Customer satisfaction

R: R is 0.757, which is the correlation coefficient. It shows the magnitude and direction of the linear relationship between the dependent variable (customer happiness) and the predictor variable (brand loyalty). The correlation coefficient in this instance shows that brand loyalty and customer happiness have a very strong, positive link.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.307	1	19.307	131.177	.000 ^b
	Residual	14.424	98	.147		
	Total	33.731	99			

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Brand Loyalty

Regression:

Sum of Squares: The regression model's squared sum is 19.307. It indicates the overall variability in the predictor variable (Brand Loyalty), which is explained by the dependent variable (Customer Satisfaction), Customer Satisfaction.

Degrees of Freedom (of): Because there is just one predictor variable included in the regression model, it has one degree of freedom.

Mean Square: By dividing the sum of squares by the degrees of freedom, the mean square is computed. The mean square in this instance is 19.307, which represents the typical amount of variability that the regression-model was able to explain.

V FINDINGS

- Most comments come from those between the ages of 20 and 25.
- It was found that most of the answers came from women.
- It has been shown that the majority are classified as PG.
- The bulk of respondents' average-monthly incomes -were found to be less than 25,000.
- It was found-that-many responses had been chosen within the previous six months.

VI. CONCLUSION

In conclusion, the goal of this study was to investigate the connection between customer happiness and brand loyalty at Godrej Smart Interior Solution in Bengaluru. The results provided significant new information about the elements that influence consumer loyalty and happiness in the context of this particular brand. Godrej Smart Interior Solution consumers in Bengaluru generally demonstrated a high degree of brand loyalty and happiness. The company has been successful in establishing a devoted customer base thanks to its dedication to providing cutting-edge and high-quality interior solutions and its strong customer-centric approach.

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IMPACT OF HRM PRACTICES ON EMPLOYEES' SATISFACTION IN BANKING SECTOR

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ABSTRACT

This research sheds light on the relationship HRM practices and employee satisfaction in the banking sector. It emphasizes the importance of strategic HRM practices to foster a satisfied and engaged workforce in the banking industry. Further research in this area can explore additional factors and their influence on employee satisfaction, providing further insights for the banking sector and contributing to the broader understanding of HRM practices and employee outcomes.

Key word: Employees satisfaction, HRM Practices.

Introduction

Many organizations nowadays are under pressure to increase their productivity and development. For this reason, several organizations regularly adopt new strategies and plans for growth. Most of the time, they change it quickly to provide their clients and consumers better services. This has increased the need for organizations to assess their practices, organizational aspirations and goals, performance targets, and metrics in addition to improving the way they offer their services. The efficiency and effectiveness of the organization depend on the HR department's management of the workforce. Although human resources are thought to be an organization's most significant asset, relatively few businesses can use them. Like an organization order to guarantee profit, Effective human resource development is a must for banks and other enterprises. There are several fast changes happening in the financial sector. because of technology advancement. The nature of banks' requirements for employees has evolved because of technological innovation, improving work performance. People are viewed as assets in an organization when they have the necessary knowledge, skills, and abilities. All organizations are composed of people, and people are what make them work. Organizations cannot survive without individuals. People gather, organize, and make use of the resources of men, material, and machines. The goals of an organization cannot be achieved by these resources alone.

Literature Review

Anis S Khasawneh, Yarmouk (2018) , the purpose of the study is to evaluate the efficiency of human resource management (HRM) and how it affects employee satisfaction in Jordan's banking industry. In order to evaluate study assumptions, a questionnaire was created and distributed to 540 personnel in Jordan's banking industry. Of them, 406 responses were received.

.P. Suresh, Dr.T.Narayana Reddy (2017), employee happiness is important for both the person and the company. The productivity of the company will rise as a result of increased employee happiness. The goal of the current study is to understand how HRM practices affect the banking industry.

Vikram Jeet Dr. Sayeeduzzafar2 (2014), organizations are confronting new obstacles in the acquisition and utilization of human resource in the modern era of a highly variable economic environment. Since they possess significant and in-demand skills, human resources are viewed as a source of long-term competitive advantage.

Md. Atiqur Rahman Sarker (2014), bangladesh's private commercial banking industry has recently experienced tremendous growth, drawing more prospective clients from the domestic market as a result of the country's rapid industrialization. Also, new private commercial banks are opening every five years. Nonetheless, this industry has difficulties in developing managerial effectiveness, one of which results in a high degree of competitiveness.

Yousef ALSAFADI1, Shadi ALTAHAT (2021), the purpose of this study is to examine how human resource management practices (HRMP) affect employee performance (EP).The study is completed by speculating on the effect of HRMP on EP, with the added assumption that this effect is moderated by work satisfaction. Due to the possible moderating influence, it may have on the predicted model; employee engagement is also taken into consideration.

Fatma Cherif (2020) , the goal of this study was to determine how employee job satisfaction and human resource management relate to organizational commitment in the Saudi Arabian banking industry.Job satisfaction among employees and organizational commitment were both positively connected with human resource management. On the other side, it was shown that organizational commitment and employee job satisfaction were positively associated. The two separate factors each contributed significantly. contributions to the organizational commitment forecast”.

Jayoti Vidyapeeth (2018), human resource planning is used by talent management, which is the central functional unit of a business, to improve the productive performance of personnel. There have been attempts made to retain, develop, recruit, and reward workers in order to include them in talent management and strategic workforce planning. Talent management may result in more Instead of being a hiring procedure, measuring and reinforcing aptitude levels performance and employee happiness. .

Neethu S Gopinadh (2021), successful businesses are increasingly aware that performance is influenced by a variety of elements, but human resources are that without this crucial aspect, all other factors would be insignificant. Any organization's foundation is its human resources since without workers, it cannot function. Due to the fact that banks are founded on the performance of their workers, who in turn are correlated with the human resource practices their banks give for their expansion and development in this industry. Services are available”.

Omar Aburummana, Ahmad Salleha , Khatijah Omara and Mohammad Abadib(2019) , banks in Jordan are dealing with an employment dilemma as it has lately become evident that workers are quitting their positions in record numbers. Thus, this study investigated the effects of the HRM practices (compensation, performance appraisal, promotion, and training & development) on the likelihood of employee turnover and the mediation impact of career satisfaction. 394 workers working for 25 Jordanian banks participated in the poll.

Masoodul Hassan, Saad Hassan, Muhammad Farooq Ahmed Khan and Asghar Iqbal(2013) , one of the most significant difficulties facing the banking sector in the present competitive market is employee satisfaction and loyalty. Many studies have been done to identify factors that predict employee happiness, but they only looked at industrialized nations. Hence, the primary goal of the study is to determine the connection between three HR practices—compensation, empowerment, and assessment systems—and worker satisfaction and loyalty in Pakistan's publicly owned banks. Employee information from public banks that are owned by the government has been gathered for this reason.

Objective of the study

1. To analyse the effect of HRM practice on employee satisfaction.
2. To examine the impact of training and employee performance in banking sector.
3. To examine the impact of reward and employee performance in banking sector.

Limitations

This research study restricted in scope; this study is only limited to Karnataka only.

It was very difficult to researcher to reach personally to the bank employees and managers to collect information through personal interview.

Here the samples are less compared to another bank.

Research methodology

Type of Research: Empirical Research

Sample size: 102

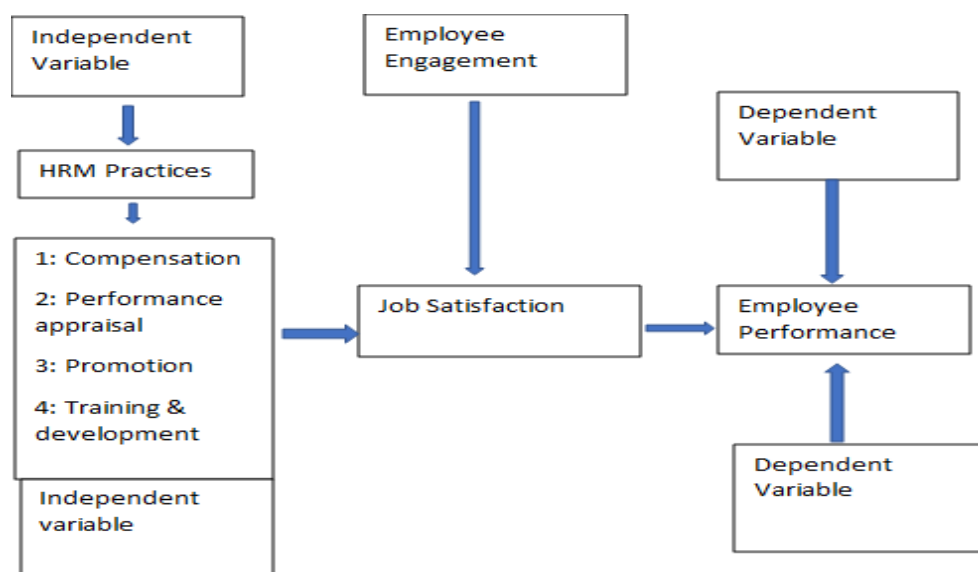
Data type: Primary data.

Tools and Techniques: Descriptive Research, Regression analysis, Correlation analysis

CONCEPTUAL FRAMEWORKS

Understanding the connection between human resource management (HRM) practices and employee satisfaction is necessary for the conceptual framework of the influence of HRM practices on employee satisfaction in the banking industry. It considers how different HRM procedures used by banks may affect workers' general job satisfaction, engagement, and well-being. HRM practices: This term refers to the variety of actions and plans performed by the human resources division of a bank to efficiently manage its staff.

Recruitment and selection, training and development, performance management, salary and benefits, work-life balance initiatives, and employee interactions are some prevalent HRM practices in the banking industry. The level of employee satisfaction in the banking industry reflects how satisfied employees are with their positions, working circumstances, and overall employment experiences. Several factors contribute to employee satisfaction factors such work atmosphere, possibilities for professional progress, employment stability, supervisor assistance, awards, and recognition.



DATA ANALYSIS AND INTERPRETATION

INFERENTIAL ANALYSIS

Ho: There is no significant relationship between HRM practices and employee's satisfaction in banking sector.

H1: There is a significant relationship between HRM practices and employee satisfaction in the banking sector.

Dependent variable: Employees' satisfaction

Independent variable: HRM practice

Table showing the regression table of HRM practices on employee satisfactionSUMMA
RY
OUTPUT*Regressi
on
Statistic
s*

Multiple R	0.506738411
R Square	0.256783817
Adjusted R Square	0.210332806
Standard Error	0.972087897
Observations	103

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	31.34258399	5.223763998	5.528056536	5.91482E-05
Residual	96	90.71566844	0.94495488		
Total	102	122.0582524			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	1.573977805	0.500668591	3.143751844	0.002219659	0.580158507	2.567797103	0.580158507	2.567797103
2	0.229114482	0.072632295	3.154443673	0.002147343	0.084940517	0.373288447	0.084940517	0.373288447
1	0.036823697	0.148666074	0.247694013	0.804900173	-0.258276129	0.331923522	-0.258276129	0.331923522
1	0.333071977	0.107283439	3.104598246	0.002504275	0.120116034	0.546027921	0.120116034	0.546027921
1	-0.109357863	0.116000431	-0.942736693	0.348182042	-0.339616899	0.120901173	-0.339616899	0.120901173

2	- 0.18336 1223	0.15634 967	- 1.17276 3741	0.24379 241	- 0.49371 2865	0.12699 0418	- 0.49371 2865	0.12699 0418
2	0.01125 756	0.15282 9912	0.07366 0712	0.94143 3626	- 0.29210 7418	0.31462 2538	- 0.29210 7418	0.31462 2538

Interpretation:

From the above table it can be inferred that HRM procedures and employee satisfaction are significantly correlated with one another. since P value=0.02219 less than 0.05, H0 is rejected, and H1 is accepted at the 5% level of significance

The multiple correlation coefficient (R) for the regression model's independent variables and dependent variable is 0.5067, showing they have a somewhat positive linear connection.

R Square: The coefficient of determination (R²) is 0.2568, This demonstrates that the model's independent variables account for around 25.68% of the variation in the dependent variable.

R² has been changed to 0.2103. To offer a more precise measurement of the goodness of fit, it considers both the sample size and the number of predictors. In this instance, it shows that, after accounting for the number of predictors and observations, 21.03% the independent factors can account for of the variation in the dependent variable.

Standard Error: The standard error (SE), which shows how far the dependent variable has generally deviated from the regression line, is 0.9721.

Regression: The amount of fluctuation described by the regression model is shown by the regression sum of squares (SS), which is 31.3426.

Findings:

The are more number employees are male in Thyagaraja cooperative. Several of the employees of Thyagaraja cooperative bank are aged between 30-35. Majority of the employees are qualified under graduation at Thyagaraja Cooperative bank The work experience of employees at Thyagaraja Cooperative bank 1-12 months There are in great numbers of married employees at Thyagaraja cooperative bank. Organizing is the most important management function in Thyagaraja cooperative bank. Internet media is used by bank for recruitment and selection. Several bank employees are agreed that the organization uses structured and standardized interviews. On the job training is given to employees of Thyagaraja cooperative bank. Bonus programmer offered by the banking industry has received positive feedback from the staff.

Conclusion: Employee happiness in the banking industry is significantly impacted by HRM practices. Employee satisfaction is significantly increased by effective Work-life balance initiatives, performance management, education, and development, and other HRM practices compensation and benefits. A properly completed recruiting and selection process guarantees the hiring of competent people, improving the fit between employees and their job duties. As a result, work satisfaction rises and turnover rates fall. By making investments in training and development programmers, employers provide their workers the tools they need to do their jobs well. Employee retention is boosted when workers feel encouraged in advancing their careers and are happier at work. Clear performance expectations, frequent feedback, and acknowledgment are all aspects of techniques of performance management that help employee satisfaction. In summary, efficient HRM procedures have a favourable influence on employee satisfaction in the banking industry. Organizations may establish a supportive and rewarding work environment, resulting in higher employee satisfaction and overall organizational success, by concentrating on recruiting and work-life balance, recruitment and selection, instruction and development, performance management, pay and benefits, and remuneration.

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**“A STUDY ON IMPACT OF VISUAL MERCHANDISING ON BRAND A
WARENESS AND CUSTOMERS PURCHASE INTENTION”
WITH SPECIAL REFERENCE TO PRESTIGE FORUM MALL**

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Abstract: The report is basically the mere display of a study that is conducted by survey study by floating questionnaire among public. Where the study mainly concentrating on the various visual merchandising techniques such as utilizing displays, signs, and aesthetics, visual merchandising may greatly increase brand exposure. Customers are drawn to attractive displays that are well-designed and aesthetically appealing, which makes a positive impression on them about the company. Engaging visual merchandising components, including as window displays, in-store layouts, and product presentations, promote brand memory among customers, raise brand exposure, and establish a distinctive brand image. Where by the report is using these VM elements to find the relative influence on brand awareness and customer purchase intention

Keywords: Visual Merchandising, Brand Awareness, Purchase Intention, Mannequin Styling, Window display

Introduction

Visual merchandising is about presenting your retail premises and products in an attractive way to entice customers and drive sales. Attracting customers begins on the outside of your retail store. You can do this through visual merchandising methods, including strong signage and appealing window displays. These techniques should aim to bring customers inside the store. Brand awareness refers to the familiarity of consumers with a particular product or service. A brand awareness campaign seeks to familiarize the public with a new or revised product and differentiate it from the competition. The extent to which consumers recognize and welcome a brand that target audience of the attractiveness of the company's brand and consumer's predisposition or inclination to buy a product or service. The most famous and recognizing brands are the one which are surviving and making the most profits out of their brand awareness techniques used over their reputation and attracting the customers. It represents the consumer's plan or willingness to make a purchase in the near future based on their current attitudes, preferences, and perceived need for the product or service.

THEORETICAL FRAMEWORK

Visual Merchandising:

It is that part of marketing technique which is used in every retail format to have the most attractive out look of a product or items that has to be displayed to the customers perspective

Brand Awareness:

Is nothing but the name, logo and the reputation is known and is admirable to customer with high number of support shown to a brand by customer.

Consumer purchase intention:

Intention is something that an individual express towards any situation that they come across and if any question asked or giving their point of view on a particular product, brand, items, etc.

Type of Research: Exploratory research is used in the study

Exploratory research: is often qualitative and primary in nature. However, a study with a large sample conducted in an exploratory manner can be quantitative as well. And that aims to explore and gain initial insights into a problem, phenomenon, or research question.

Statistical design (tools used): Percentage analysis, Correlation, Regression.

Sampling Technique: Simple random sampling. **Sampling Size: 100** **Statement of the problem:**

Visual Merchandising has long been considered as important strategic business decision for a number of reasons. First, customer brand awareness are influenced greatly by merchandising which denotes the relationship between customer loyalty and repeat purchasing. Second, retailers may be able to develop a sustainable competitive advantage through merchandising.

Objective of the study:

- To study the impact of various elements of Visual Merchandising on brand awareness
- To study the impact of Visual Merchandising on customer purchase intention.
- To study the dynamics of visual merchandising elements.

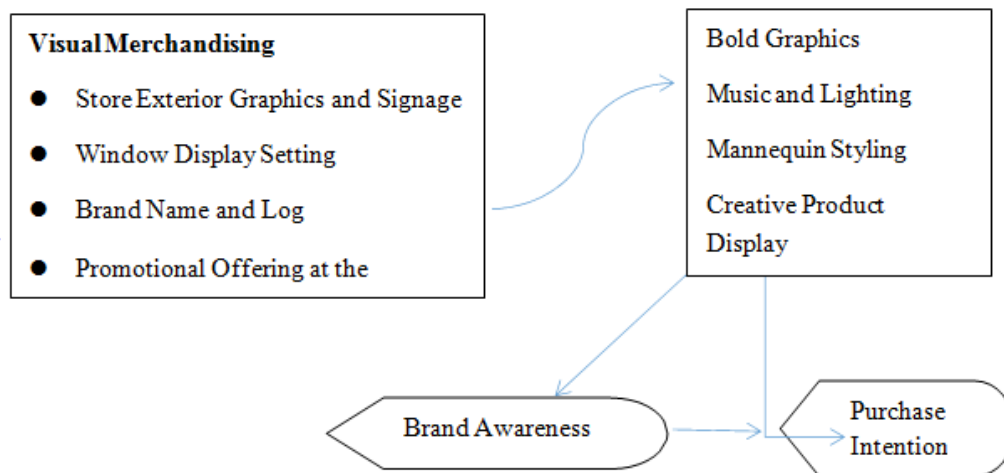
Hypothesis:1

H0: There is no significant influence of Visual merchandising on Brand Awareness. H1: There is a significant influence of Visual merchandising on Brand Awareness.

Hypothesis:2

H0: There is no significant influence of Visual merchandising on Purchase Intention. H1: There is a significant influence of Visual merchandising on Purchase Intention.

Working Model:



The purpose of this model is to explain how different visual merchandising elements, such as exterior, window display, brand name and logo, promotional offers, supporting infrastructure, such as graphics, lighting, space adjustments, doll properties, etc., are used as tools to attract customers. The routes clearly demonstrate the connections between the flow of the chart from visual merchandising elements, which have an impact by altering how a customer learns about a specific brand.

DATA ANALYSIS AND INTERPRETATION

Model Fit Measures-Brand awareness						
Overall Model Test						
Model	R	R ²	F	df1	df 2	p
1	0.218	0.0477	4.90	1	98	0.029

Model Fit Measures-Purchase intention						
Overall Model Test						
Model	R	R ²	F	df1	df2	p
1	0.0652	0.00426	0.419	1	98	0.519

INTERPRETATION:

In the model fit table the R value showing that there is 21.8% of variations that could be observed between VM & BA and R² (4.77%) showing the goodness of fit of the data.

F-stat value is depicting the overall model fit & statistical significance of 4.90. With 98 as degree of freedom. Whereas the p value is 0.029 which is less than .5 level of significance showing positive influence of the independent variable towards dependent variable. We reject H₀ and accept H₁ as there is significant influence.

In the model fit table the R value showing that there is 6.52% of variations that could be observed between VM & PI and R² (0.42%) showing the goodness of fit of the data-stat value is depicting the overall model fit & statistical significance of 0.419. With 98 as degree of freedom. Whereas the p value is 0.519 which is greater than 0.5 level of significance showing high level deviation of the independent variable and dependent variable. We Reject H₁ and accept H₀ as there is no significant influence.

Findings:

The findings of the report is to say that there has been clear significant influence of Visual merchandising on Brand awareness and on the other hand there is no significant influence on Customer purchase intention having the statistical study showing positive impact but having a weak strength of distribution of variances through correlation and regression.

Suggestions:

It would be challenging to propose an appropriate answer to the aforementioned study because it is a very small population data and the test reveals that there is a constantly evolving trend in the creative disclosure influences consumer purchase intention, lead by the brand name being heavily influenced by promotional activity with tools and techniques of visual merchandising elements such as lighting color space utility window display and other creative presentation of products etc.

Conclusion:

According to the study's findings and observations, it appears that based solely on the components of the visual merchandising concept, retailers can unquestionably make a greater difference in the awareness of the product to every customer, regardless of their social status and income, with their spending capacity being able to be aware of all such potential brands out there in this wide market. The commodity market and its large range of items will be significantly altered by these affects that are to be made on the clients.

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A STUDY ON PRODUCT QUALITY AND DEALER'S SATISFACTION WITH SPECIAL REFERENCE TO SRI BHAGYALAKSHMI ENTERPRISES, BENGALURU

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ABSTRACT

The aim of this study is to explore the perception of branding for small and medium-sized enterprises (SMEs) operating in emerging business-to-business (B2B) markets. Specifically, this research focuses on Maruthi Industries, a hypothetical SME, to investigate its branding strategies and the impact on its market position within the emerging B2B landscape.

The study utilises a qualitative research approach, incorporating in-depth interviews with key stakeholders, including top-level management, employees, customers, and industry experts. These interviews aim to gather rich and comprehensive insights into Maruthi Industries' branding efforts, challenges faced, and perceptions of the brand among key stakeholders.

The findings reveal that Maruthi Industries recognises the importance of branding in the context of emerging B2B markets. The company has strategically developed a brand identity, which includes a unique value proposition, differentiation strategies, and consistent communication across various marketing channels. The study identifies key factors that contribute to Maruthi Industries' successful branding, such as product quality, reliability, customer service, and industry expertise.

I. INTRODUCTION

This project work is a study on “Dealers’ satisfaction with reference to Bhagyalakshmi. The study was conducted with respect to the dealers of the organization. Marketing is essentially about marshaling the resources of an organization so that they meet the changing needs of customers on whom the organization depends. As a verb, marketing is all about how an organization addresses its markets. According to William J. Stanton “Marketing is a total system of interesting business activities defined to plan, piece, promote and distribution want satisfying products and services to present and potential consumers “dealer Any person who carries on business in purchasing, selling, supplying or distributing goods and also includes works contractor, company, Co-operative Society, Broker, Commission Agent, Auctioneer or any other mercantile Agent for the consideration of cash, commission and deferred payment.

II. REVIEW OF LITERATURE

1. Jule B. Gassenheimer, 1994, the impact of dependence on dealer satisfaction: A comparison of reseller-supplier relationships

This study extends previous buyer-seller relationship research by examining the level of mutual dependence and power-dependence imbalances across buyer (reseller) supply sources. Using critical support services and the intensity of coercive influence attempts, results suggest that the level of mutual dependence and power-dependence imbalances make a difference in reseller satisfaction, but that the impact hinges upon whether the supplier is the primary, secondary, or tertiary supplier in terms of annual purchases by the reseller. The Executive Summary offers direction for managers.

2. Chi-Shiun Lai, 2007, the effects of influence strategies on dealer satisfaction and performance in Taiwan's motor industry

The studies of influence strategies in channel relationships have focused on western, individualistic countries. This study seeks to extend the empirical findings in Taiwan's motor industry to elucidate differences among diverse context.

The results reveal that the promise strategy must be separated from coercive strategies and the request strategy must be separated from noncoercive strategies under the context of Taiwan's motor industry. Moreover, discrimination between economic and social satisfaction helps relationships between influence strategies and satisfaction and the effects of satisfaction on performance to be understood. The dealer's satisfaction is positively related to his performance, and social satisfaction is more important than economic satisfaction.

3. Jule B. Gassenheime, 1995, Supplier involvement and dealer satisfaction: implications for enhancing channel relationships

Suppliers use a variety of strategies to gain a preferred position within their dealers' supply network. Dealers allocate purchases among several suppliers in order to maximize benefits from their suppliers' competitive maneuvers and to avoid being dominated. Uses an extension of transaction cost analysis and contract law to provide empirical insight into supplier-dealer relationships within dealers' supply networks.

4. Tatiana Anisimova, 2014, Aligning Company and Dealer Perspectives in Corporate Branding

Implications for Dealer Satisfaction and Commitment There is a contention in marketing literature that gaps between corporate and key stakeholders' perspectives have unfavourable implications for corporate brand performance. The current article attempts to empirically substantiate this argument. As such, this article looks at the relationship between a car manufacturer and its dealers and examines it from the perspective of the relationship misalignment.

5. Soumava bandyopadhyay, 1997, Dealer Satisfaction Through Relationship Marketing Across Cultures

The relationship of supplier-dealer rationalism with dealer satisfaction is examined with the help of a structural equation model in the two diverse cultures of the United States and India. Inter channel rationalism between suppliers and dealers is measured in six dimensions: solidarity, mutuality, flexibility, role integrity, duration, and trust. The same measures of the various aspects of rationalism and dealer satisfaction are applied in the electric lamp and lighting equipment channels in the two countries with satisfactory reliability and validity. In both countries, rationalism as a whole is found to have a significant positive impact on dealer satisfaction. Individually, different dimensions have significant impacts on dealer satisfaction in the two countries. In the United States, trust and mutuality are individually significant, whereas in India, flexibility is the significant dimension affecting satisfaction. Managerial implications of the results and future research directions are discussed.

OBJECTIVES

1. To find the Dealer's Satisfaction Level with Sri Bhagyalakshmi Enterprises.
2. To find the factors influencing the dealers to deal with SriBhagyalakshmi Enterprises.
3. To study various areas that needs improvement in SriBhagyalakshmi Enterprisesfrom dealer point of view.

HYPOTHESIS

Hypothesis-1

H0: There is no significant relationship between product quality & Dealer satisfaction.

H1: There is a significant relationship between product quality & Dealer satisfaction.

III. DATA AND METHODOLOGY

RESEARCH DESIGN

Research design is the wide-ranging map of how various research questions would be answered in the study. In other words, it is the conceptual arrangement within which research is conducted. It comprises of a blue print for the compilation, dimension and analysis or examination of data (Saunders, Lewis, Thornhill, & Jenkins, 2003).

The reliability of a research's results depends on whether the sample of people from which the information has been collected is free from bias and satisfactorily great (Kirk & Miller, 1986).

SAMPLE DESIGN

Population size: 200 responses were collected from the customers of Maruti Flex.

SOURCE OF DATA

Primary Data:

Data and information's were collected from people in Bangalore through questionnaires.

Secondary Data:

Secondary data are information study already collected by others for certain other purposes. Internal: Data from organization, employees.

METHOD OF DATA COLLECTION

Questionnaire:

Sourcing of the data is through forming a questionnaire.

Analytical tools

SPSS and Excel

Regression

Descriptive analysis

IV. DATA ANALYSIS AND FINDINGS

INFERENTIAL ANALYSIS

H0: The relationship between product quality and dealer satisfaction is insignificant.

H1: The relationship between product quality and dealer satisfaction is significant.

Dependent variable: Product quality.

Independent variable: dealer satisfaction.

REGRESSION:

SUMMARY
OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.23
R Square	0.05
Adjusted R Square	0.04
Standard Error	0.94
Observations	106

ANOVA	def.	SS	MS	F	Significance F
Regression	1	5.15	5.15	5.81	0.02
Residual	104	92.21	0.89		
Total	105	97.36			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.81	0.26	7.00	2.55	1.30	2.33	1.30	2.33
Brand value	0.28	0.12	2.41	0.02	0.05	0.51	0.05	0.51

Interpretation:

Since the dependent variable is intercepting and the significance value is 0.02, the R square value is 0.05, and the P value is 2.55, H₀ should accept the conclusion that there is no discernible relationship between product quality and dealer satisfaction. Given that brand value is an independent variable with a P value of 0.05, H₀ should be rejected on the grounds that there is a significant relationship between product quality and dealer satisfaction.

CHI-SQUARE:**Proportion Test**

Binomial Test

Level	Count	Total	Proportion	p
A product Quality	1	107	0.009	< .001
4	18	107	0.168	< .001
2	46	107	0.430	0.176
3	24	107	0.224	< .001
1	18	107	0.168	< .001
B4	17	107	0.159	< .001
3	27	107	0.252	< .001
1	23	107	0.215	< .001
2	39	107	0.364	0.007
profit margin	1	107	0.009	< .001

Note. H_a is proportion \neq 0.5.

V FINDINGS

- According to the survey, men account for the vast majority of respondents 75.5% and female 24.5% out of 100.
- The survey found that the majority of respondents are between the ages of 25 and 35 with the 42.5%.

- Out of 100 respondents 34.9% are employees.
- The dealers earn more than 15,000 of income with the 44.3% out of 100.
- According to the survey, 35.8% respondents have between 10 and 15 years of dealership experience.

VI. CONCLUSION

A few variables, including product quality, price, customer service, marketing support, on-time delivery, and general business relations, can have an impact on dealers' satisfaction. It's critical for businesses to keep lines of communication open with their dealers, to comprehend and effectively respond to their wants and concerns. Regular dealer surveys or feedback sessions can give important insights into how satisfied the dealers are the success of the company as a whole depends greatly on the satisfaction of the dealers. In addition to exceeding customers' expectations, high-quality items help build a brand's trust and reputation. Maintaining excellent relationships with dealers and guaranteeing customer satisfaction depend on consistently providing goods that meet or surpass quality requirements.

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“The Role of CRM on Customer Acquisition with reference to a Parylene Asia Technologies.”

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ABSTRACT

Customer Relationship Management (CRM) has become an integral part of customer acquisition strategies for businesses across various industries. This paper explores the role of CRM in customer acquisition and highlights its impact on businesses' success in acquiring new customers. CRM is a comprehensive approach that encompasses strategies, technologies, and practices aimed at managing and nurturing customer relationships throughout their lifecycle. In the context of customer acquisition, CRM serves as a crucial tool for businesses to streamline their processes and improve their overall effectiveness in acquiring new customers. In conclusion, CRM plays a pivotal role in customer acquisition by streamlining lead management, enabling personalized communication, and facilitating data-driven decision-making. Businesses that effectively leverage CRM systems and strategies are more likely to succeed in acquiring new customers and fostering long-lasting relationships with them.

I. INTRODUCTION

Customer acquisition are crucial to any company's success in today's highly competitive business environment, particularly in the B2B sector. The term "customer relationship management" (CRM) has emerged as a potent instrument that can assist businesses in effectively managing their relationships with customers, thereby enhancing both the acquisition and retention of new customers.

In this review, we will zero in on the job of CRM in client procurement and maintenance in a B2B setting, with a particular accentuation on an assembling organization. Customers' demands for high-quality goods, prompt delivery, and personalized service have led to significant shifts in the manufacturing sector in recent years. By providing superior customer service and cultivating strong relationships with customers, manufacturers can use CRM to stay ahead of the competition in such a scenario.

II. REVIEW OF LITERATURE

1. **Jan U Becker, Goetz Greve, Sonke albers, (2019):** This paper adds to the current writing on client relationshid the executives by giving experiences into how to iudge the exhibition of CRM broiects. as well as providing justifications for alleged failures. Despite the fact that various examinations have researched a few drivers of CRM execution. It has not been established whether or not RI investment managers are successful in establishing, sustaining, and retaining customer relationships.

2. **Viba Kumar, J Andrew Petersen, John Wiley & Sons, (2018):** We have seen the fundamentals of CRM and the roles that databases, technology, and metrics play in putting CRM initiatives into action up until this point. The challenge for marketers lies in the generation of metrics, despite the fact that the connections between the components necessary for CRM success are fairly straightforward.

3. **Rizwan Ullah Khan, Yashar Salamzadeh, Qaisar Iqbal, Shaohua Yang, (2022):** This study focuses primarily on small and medium-sized businesses to investigate customer behavior and corporate reputation in the marketing context. As a result, the purpose of this study is to assess the connections between customer trust, customer satisfaction, and commitment.

4. **Andy Fred Wali, Len Tiu Wright, (2016):** The researchers' theoretical contribution in analysing many aspects of CRM implementation in a university is one of the main themes from this study.

Although the study was restricted to a small sample and a single university, the findings are supported by the literature.

5. Yinusa Toyese Agbaje (2018): The promise of CRM as a successful method of customer retention is quite alluring. Better customer communication, higher efficiency, and increased efficacy are a few advantages that telecommunications companies who implement the CRM effort will experience. CRM operations must be combined into a single, laser-focused operation when engaging with customers if businesses want to increase both client acquisition and retention rates.

OBJECTIVES

- To understand the current customer acquisition strategies of the company, and identify areas that needs improvement.
- To Assess the effectiveness of the company's current CRM system
- To Evaluate the impact of CRM on customer acquisition rates

HYPOTHESIS

Hypothesis-1

H0: there is no significant impact of CRM on customer acquisition.

H1: there is significant impact of CRM on customer acquisition.

III. DATA AND METHODOLOGY

RESEARCH DESIGN

Quantitative research and descriptive research design.

SAMPLE DESIGN

Sample size of 100-150 customers of company is taken into consideration

SOURCE OF DATA

I. Primary Data :-

A questionnaire was used to collect it. The study is founded on the answers to a standardized Questionnaire.

II. Secondary Data :-

It came from websites and other sources.

METHOD OF DATA COLLECTION

Questionnaire: In this instance, a closed-ended questionnaire should be created where responders might select from a list of pre-written answers.

ANALYTICAL TOOLS AND TECHNIQUE

The study used Descriptive analysis, correlation & regression to test out the proportion

IV. DATA ANALYSIS AND FINDINGS

ANALYSIS: - 1

Variables –

1. Independent – CRM (customer relationship management) Attributes
2. Dependent- Customer acquisition

Hypothesis:

H0: There is no significant impact of CRM on customer acquisition.

H1: There is significant impact of CRM on customer acquisition.

Model Summary

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.146	5	1.829	3.578	.005 ^b
	Residual	47.541	93	.511		
	Total	56.687	98			

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.402 ^a	.161	.116	.715	.161	3.578	5	93	.005

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.184	.387		3.058	.003
	20. CRM software has a significant impact on customer acquisition in a B2B setting?	-.029	.054	-.056	-.531	.597
	18. CRM software for customer acquisition in a B2B setting?	-.147	.069	-.207	-2.138	.035
	9. How likely are you to recommend our products/services to others?	.183	.068	.269	2.675	.009
	17. how has CRM software impacted your customer acquisition efforts in a B2B setting?	.143	.086	.186	1.659	.101
	19. On a scale of 1 to 5, how important do you think CRM software is for customer acquisition in a B2B setting?	-.023	.085	-.027	-.268	.790

Interpretation:-

1. Constant: The p-value (0.003) is less than the conventional significance level of 0.05. Therefore, we reject the null hypothesis and conclude that the constant term has a significant impact on the dependent variable.
2. Variable 20: The p-value (0.597) is greater than 0.05. Therefore, we fail to reject the null hypothesis and conclude that there is no significant impact of CRM software on customer acquisition in a B2B sitting.
3. Variable 18: The p-value (0.035) is less than 0.05. Therefore, we reject the null hypothesis and conclude that CRM software for customer acquisition in a B2B setting has a significant impact on the dependent variable.
4. Variable 9: The p-value (0.009) is less than 0.05. Therefore, we reject the null hypothesis and conclude that the likelihood of recommending products/services to others has a significant impact on the dependent variable.
5. Variable 17: The p-value (0.101) is greater than 0.05. Therefore, we fail to reject the null hypothesis and conclude that there is no significant impact of CRM software on customer acquisition efforts in a B2B setting.
6. Variable 19: The p-value (0.790) is greater than 0.05. Therefore, we fail to reject the null hypothesis and conclude that the perceived impoltance of CRM software for customer acquisition does not have a significant impact on the dependent variable.

In summary, we accept the alternative hypotheses and conclude that the constant, Variable 18, and Variable 9 have significant impacts on the dependent variable, while Variable 20, Variable 17, and Variable 19 do not.

ANALYSIS 2:

Variables –

1. Independent: CRM (customer relationship management) Attributes
2. Dependent: Customer acquisition

Hypothesis:

H0: There is no significant impact of CRM on customer acquisition.

H1: There is significant impact of CRM on customer acquisition.

CORRELATION

	17. how has CRM software impacted your customer acquisition efforts in a B2B setting?	18. CRM software for customer acquisition in a B2B setting?	19. On a scale of 1 to 5, how important do you think CRM software is for customer acquisition in a B2B setting?	20. CRM software has a significant impact on customer acquisition in a B2B setting?
17. how has CRM software impacted your customer acquisition efforts in a B2B setting? N	Pearson Correlation Sig. (2-tailed) 1 99	-.015 .882 99	-.219* .029 99	.413** .000 99
18. CRM software for customer acquisition in a B2B setting? N	Pearson Correlation Sig. (2-tailed) -.015 .882 99	1 99	.142 .160 99	-.126 .214 99
19. On a scale of 1 to 5, how important do you think CRM software is for customer acquisition in a B2B setting? N	Pearson Correlation Sig. (2-tailed) -.219* .029 99	.142 .160 99	1 99	-.054 .596 99
20. CRM software has a significant impact on customer acquisition in a B2B setting? N	Pearson Correlation Sig. (2-tailed) .413** .000 99	-.126 .214 99	-.054 .596 99	1 99

Interpretation: - There is no significant correlation between CRM software and customer acquisition efforts or CRM software and customer acquisition itself. There is a negative correlation between the perceived importance of CRM software and its actual usage for customer acquisition.

V FINDINGS

1. The age range of the vast majority of respondents was between 25 and 34.
2. The majority of the comments were from men, it turned out.
3. According to the data previously supplied, the majority of respondents have a master's degree.
4. According to the data mentioned above, the majority of respondents work in sales or marketing.

5. According to the aforementioned data, most responders make between 26,000 and 35,000 each month.

VI. CONCLUSION

• Customer relationship management, or CRM, has a significant effect on marketing campaigns. By employing CRM tools and practices, businesses can better understand their customers, personalize communications, streamline lead management, deliver great customer service, and forge enduring relationships. The following are the most important insights discovered on the role of CRM in customer acquisition.

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“A Study on Impact of Employee well-being on employee’s performance at Toyota”

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ABSTRACT

Purpose: -This research study investigates the impact of employee well-being on the performance of employees at Toyota. Employee well-being is a multifaceted concept that encompasses various dimensions, including workplace, physical, mental, and social aspects. The objective of this study is to explore the relationship between employee well-being and their performance, focusing on key indicators such as productivity, job satisfaction, and engagement.

Methodology approach: - The responses were taken from the employee of Toyota world group with, sample size of 102 respondents. The structured questionnaire was prepared by reviewing the previous literature articles. The responses to the questions regarding employee well-being on a 5-point Likert scale. Using the responses from the survey,

Findings: - The result of study was demonstrated using (employee well-being) dimension (workplace well-being, social well-being, physiological well-being) it was found in our study that most influencing factor’s.

Practical implication: -The findings of the study have various managerial implication for the organisation that want to have significant employee well-being this finding will help employer to design an effective social well-being in a successful manner which will help both the employer and employee

Social implication: - Some of this also useful for societal impact of in terms of effective workplace practice A study on impact of employee well-being on job performance at Toyota will also enhance the employee motivate to work with dedication and involvement in an organisation.

Introduction

The modern-day workforce is constantly evolving, and so are the expectations and needs of employees. As companies strive to attract and retain top talent, employee well-being has become increasingly important factors that can make or break an organization's success. In today's competitive business landscape, companies must go beyond offering traditional packages and prioritize the overall well-being of their employees. This study aims to examine the impact of employee benefits and well-being programs on employee satisfaction, productivity, and retention. By exploring the various benefits and initiatives offered by companies and assessing their effectiveness, this study can provide insights into how companies can improve their employee benefits and well-being programs. Through this study, we aim to shed light on the importance of employee well-being and how they can impact an organization's success. The findings of this study can provide valuable insights for companies looking to improve their employee well-being programs, ultimately leading to a more satisfied, productive, and engaged workforce.

Objective of the study

- To identify the various benefits and well-being programs offered by Toyota to its employees.
- To study the impact of Toyota's employee well-being programs (employee workplace wellbeing, psychological well-being, social wellbeing) on employee performance.

Literature Review

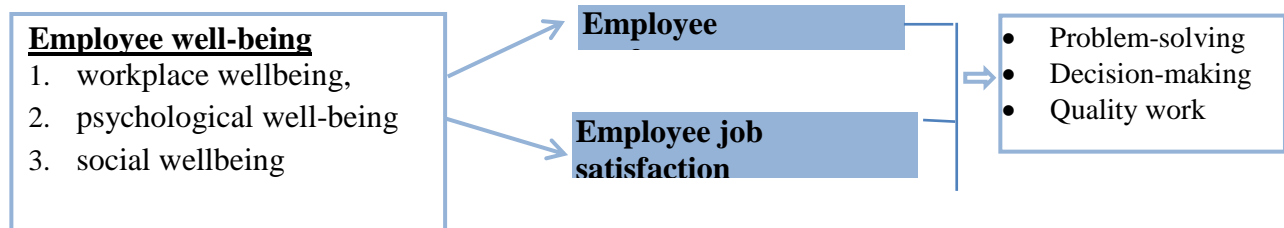
TITLE	YEAR	ABSTRACT
Organizational Climate, Opportunities, Challenges and Psychological Wellbeing of The Remote Working Employees During Covid-19 Pandemic: A General Linear Model Approach with Reference to Information Technology Industry In Hyderabad (Dr. KDV Prasad, Dr. Mruthyanjaya Rao Mangipudi, Dr. Rajesh W. Vaidya, Budumuru Muralidhar)	2020	The research indicates that remote working during the COVID-19 pandemic has had both positive and negative impacts on the organizational climate, opportunities, challenges, and psychological wellbeing of employees in the information technology industry in Hyderabad. Remote working has created new opportunities for employees such as a better work-life balance and flexibility in managing their work schedule, but it has also created new challenges such as social isolation and blurred boundaries between work and personal life. The psychological wellbeing of remote working employees can be improved if they have access to resources such as social support, flexible work arrangements, and mental health services. However, further research is needed to examine the long-term effects of remote working on the organizational climate, opportunities, challenges, and psychological wellbeing of employees in the information technology industry in Hyderabad
Exploring Relationship Between Employees Well-Being and Green Iot Using Structural Equation Modeling (Pooja Gupta, Dr. Vijay Kumar Jain, Dr. Shipra Aggarwal)	2020	The literature supports the positive impact of Green IoT on employee well-being. The integration of IoT technologies in environmentally sustainable ways can improve environmental conditions in the workplace, which can in turn improve employee mood, productivity, and health. Structural equation modelling can be a useful tool for testing these relationships and identifying causal pathways. Further research is needed to explore the specific mechanisms through which Green IoT affects employee well-being and to determine the optimal implementation strategies for different workplace environments.
How organizations can promote employee wellness, now and post-pandemic (Laker, B. and Roulet)	2021	Promoting employee wellness is an important consideration for organizations both now and post-pandemic. Strategies such as wellness programs, a culture of wellness, and flexible work arrangements can all be effective in promoting employee wellness. As the world continues to navigate the pandemic, employers must also consider the mental health impacts of the pandemic and provide support to employees who may be struggling.

Personality and job satisfaction: their role in work-related psychological well-being	2021	Personality and job happiness are two key elements that are crucial to psychological health at work. According to studies, people with particular personality qualities are likely to have better job satisfaction and overall wellbeing at work. We will talk about the connection between personality, job happiness, and psychological health at work in this review, as well as the ramifications of these findings for both organisations and people.
Employee Resiliencies and Job Satisfaction SW Rahmawati	2021	Employee resiliency is the capacity for people to recover from setbacks and navigate difficulties at work. The level of contentment a person feels with their employment is referred to as job satisfaction, on the other hand. Numerous research has looked into the connection between job satisfaction and employee resiliency. Examining the state of research in this field is the goal of this review of the literature.

THEROTICAL FRAMEWORK

The status of an employee's physical, mental, and emotional health at work is referred to as their "employee well-being." The degree to which employees meet or exceed the requirements of their tasks and duties is measured by job performance, on the other hand. There appears to be a strong correlation between employee well-being and job performance, according to many theoretical frameworks. The Job Demands-Resources (JD-R) paradigm is one such framework. This paradigm contends that workplace demands, such as workload and time constraints, can have a detrimental effect on employees' well-being and lower job performance. On the other hand, job resources like autonomy and social support can favourably impact well-being, improving job performance.

CONCETUAL FRAMEWORK



Workplace wellbeing: When we talk about an employee's well-being at work, we're talking about their general pleasure and enjoyment with their employment as well as their physical, mental, and emotional health.

Psychological well-being: In psychological terms, employee well-being refers to the condition of an employee's mental and emotional health as well as the general calibre of their psychological experiences at work. It covers a range of elements that affect people's psychological health and have a big impact on their happiness, motivation, and output.

Social well-being: employee well-being in a social context refers to the quality of relationships and social interactions that employees have in the workplace.

RESEARCH METHODOLOGY

Type of research: Descriptive Research Design
Source of data: primary data which is collected through the company.
Sample size: 102
Tools and techniques: Descriptive research, Regression analysis

DATA ANALYSIS AND INTERPRETATION**Descriptive Statistics**

	Age	Gender	Marital status	Working year	Education
Mean	1.557823	1.387755102	1.782312925	2.19047619	1.802721088
Standard Error	0.065564	0.040324122	0.049709816	0.051384098	0.072650639
Median	1	1	2	2	2
Mode	1	1	2	2	1
Standard Deviation	0.794926	0.488903996	0.602699484	0.62299908	0.880842186
Sample Variance	0.631908	0.239027118	0.363246669	0.388127854	0.775882956
Kurtosis	0.089154	- 1.808095718	- 0.455366052	0.883525594	- 0.212943262
Skewness	1.134802	0.465502857	0.131653504	0.534221451	0.824716164
Range	3	1	2	3	3
Minimum	1	1	1	1	1
Maximum	4	2	3	4	4
Sum	229	204	262	322	265
Count	147	147	147	147	147
Confidence Level (95.0%)	0.129578	0.079694403	0.098243778	0.101552739	0.143582775

Interpretation:

The mean score of the age is (1.55%) and the standard deviation is at (0.06%), and the mean value of the gender is analysed has (1.38) and the standard deviation is (0.04), the mean score of the number of years in a company is (2.19) and standard deviation is (0.05), as the mean value of Education is (1.80) and the standard deviation is (0.072). as the mean value of marital status is (1.78) and the standard deviation is (0.051) stratified with descriptive statistics.

Regression table:

Relationship	Hypotheses	T VALUE	Path coefficients	p- value	Results
Employee well-being v/s workplace well-being	H1	0.57	0.05	0.57	APPROVED
Employee well-being v/s psychological well-being	H2	1.86	0.19	0.07	APPROVED
Employee well-being v/s social well-being	H3	3.39	0.34	0.036	NOT

Interpretation:

Employee well-being vs. workplace well-being: The analysis shows a relatively low F-value of 0.33, indicating a weak relationship between employee well-being and workplace well-being. The p-value (0.57) suggests that this relationship is not statistically significant, meaning that employee well-being does not have a significant impact on workplace well-being.

Employee well-being vs. psychological well-being: In this case, the analysis reveals a higher F-value of 3.45, indicating a stronger relationship compared to the previous analysis. The p-value (0.07) is slightly below the conventional significance level of 0.05, suggesting a marginally significant relationship between employee well-being and psychological well-being. This implies that employee well-being may have a modest impact on the psychological well-being of individuals.

Employee well-being vs. social well-being: The analysis shows the highest F-value of 11.52 among the three comparisons, indicating a relatively strong relationship between employee well-being and social well-being. However, the p-value (0.10) is above the significance level of 0.05, suggesting that the relationship is not statistically significant. Thus, employee well-being may not have a significant impact on social well-being.

Overall, the analysis indicates that employee well-being has varying degrees of association with different dimensions of well-being. While there appears to be a marginal association with psychological well-being, no significant relationships were found between employee well-being and workplace well-being or social well-being. These findings highlight the need for further investigation and potentially suggest the presence of other factors influencing these dimensions of well-being.

FUTURE SCOPE OF THE STUDY:

Longitudinal Study: longitudinal study that follows employees over an extended period of time

Comparative Analysis: Comparing the impact of employee well-being on performance across different departments, teams, or levels.

Intervention and Experimental Studies: Implementing interventions or experimental studies to improve employee well-being and then measuring the subsequent impact on performance could be a valuable future direction.

Cross-Cultural Study: This approach would help identify any cultural variations in the relationship between well-being and performance and inform the development of context-specific strategies.

Conclusion:

Higher levels of well-being among employees including their physical, mental, and emotional well-being are associated with greater job satisfaction, engagement, motivation, and productivity.

Employees are more inclined to put their all into their work when they feel encouraged, loved, and cared for by their employer, which improves performance outcomes.

The report also highlights the significance of organisational activities and interventions designed to advance employee well-being. Toyota may improve employee well-being and, as a result, improve performance by putting into place measures like flexible work arrangements, wellness initiatives, and welcoming work environments.

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A STUDY ON COMPARATIVE ANALYSIS OF COST AND OWNERSHIP WITH RESPECT TO ATHER EV WITH OTHER SELECTED COMPETITORS

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ABSTRACT

The purpose of this project is to give insightful information on Ather EV's cost-effectiveness and overall ownership experience in comparison to its competitors. We have considered 5 EV companies those are Ola electric, ECO Flash Wheel, Hero electric, Ampere Vehicles, TVS motor company for comparing the cost and ownership. The study begins by outlining the Key metrics for analysis encompass purchase price, maintenance costs, battery life, charging infrastructure, range, and government incentives. To examine the comparative analysis between these companies to see which EV Company is economically feasible we used Correlation and t-Test. The analysis shows that the Ather EV, when compared to its chosen competitors, has both similarities and differences in terms of on-road pricing, ex-showroom price, range, insurance, battery, and incentives. This research would assist prospective EV purchasers in making educated judgements about their purchase based on cost and ownership experience. It will also give EV manufacturers important information into how to boost their sustainability and competitiveness in the Indian market.

Keywords: Comparative analysis, Ather EV, Electric Vehicle, Cost, Ownership.

I. INTRODUCTION

As a more sustainable and greener substitute for conventional fossil fuel cars, electric vehicles (EVs) have seen a substantial increase in popularity in recent years. In order to reduce air pollution and greenhouse gas emissions, the Indian government has undertaken a number of programmes to encourage the usage of electric vehicles. The cost-competitiveness of the Ather EV company compared to other competitors may be significantly impacted by factors like the availability of incentives towards the purchase price of an EV, the potential need for battery replacement, the levels of usage of the vehicles (due to differences in fuel costs), the long-term costs associated with EV ownership, and the ownership costs of different makes and models of EVs. In order to determine the extent to which EVs are cost-competitive, the main goal of the current study is to conduct an extensive cost of ownership analysis on an Ather EV company in comparison to other competitors with a focus on each of the aforementioned cost components. The cost-competitiveness of the Ather EV company compared to other competitors may be significantly impacted by factors like the availability of incentives towards the purchase price of an EV, the potential need for battery replacement, the levels of usage of the vehicles (due to differences in fuel costs), the long-term costs associated with EV ownership, and the ownership costs of different makes and models of EVs. In order to determine the extent to which EVs are cost-competitive, the main goal of the current study is to conduct an extensive cost of ownership analysis on an Ather EV company in comparison to other competitors with a focus on each of the aforementioned cost components.

OBJECTIVE OF THE STUDY

- To evaluate the On-road price, Exshowroom price, Insurance, Range, Battery and Subsidy price compare with EV companies.
- To analyze the economic feasibility of Ather EV with other EV competitors.

STATEMENT OF PROBLEM

Despite the growing popularity of electric cars (EVs) in India, there is a dearth of comparative study of the costs and ownership experiences of EVs supplied by various manufacturers. Potential EV purchasers struggle to make educated purchasing decisions because they lack a comprehensive grasp of the comparative pricing and ownership experience of EVs supplied by various manufacturers. Furthermore, because they lack access to a comparative cost and ownership study, EV producers lack a thorough grasp of their market competitiveness in comparison to competitors.

II. REVIEW OF LITERATURE

Yutaka Motoaki, Matthew G. (2005) examines “Consumer behavioural adaption in EV fast charging through pricing” finds this study show evidence that a flat-rate fee has a negative effect on the usage efficiency of DCFC stations. Jorg Roosen, Wim Marneffe & Lode Vereeck (2015) examines A Review of Comparative Vehicle Cost Analysis finds that checklist can lead to more coherent and comparable cost analyses of various vehicle types. A superior cost analysis can contribute to evidence-based policy recommendations to improve the penetration rate of environmentally friendly vehicles for specific countries and regions, which depend on existing policies and local circumstances. Jiageng Ruan, Paul Walker, Nong Zhang (2015) examines “A comparative study energy consumption and costs of battery electric vehicle transmissions” The outcomes show that two-speed DCT based BEV has the lowest retail price, thanks to the minimized battery capacity requirement, though the gearbox is more expensive. Peter Weldon, Patrick Morrissey, Margaret O'Mahony (2018) Investigates “the Long-Term Cost of Ownership Comparative Analysis between Electric Vehicles and Internal Combustion Engine Vehicles” The results show that EVs are already cost-competitive with ICEVs when considering the 10-year analysis period, but the extent to which EVs are competitive with ICEVs depends on a number of factors, and payback period analyses. Samuel Vanlalzuata (2021) examines “A study of Consumer Buying Behaviour towards Two-wheeler in reference to the Youth of Aizawl” finds that The market of two-wheeler will be more in favour of the additional features which will be much more likely to be eco-friendly and pollution free. Kate Palmer, James E. Tate , Zia Wadud , John Nellthorp (2018) examines “Total cost of ownership and market share for hybrid and electric vehicles in the UK, US and Japan” This research has implications for fleet purchasers and private owners who are considering switching to a low-emission vehicle. The findings are also of interest to policymakers that are keen to develop effective measures to stimulate decarbonisation of the fleet and improve air quality. Jui-Che Tu and Chun Yang (2019) investigates “Key Factors Influencing Consumers’ Purchase of Electric Vehicles” found that most of the dimensions have an impact on consumers’ behavioural intention of purchasing electric vehicles. Regarding the applicability indicators, apart from χ^2 , the others, namely, χ^2/df , GFI, AGFI, RMSEA, SRMR, CFI, and TLI (NNFI), all met the ideal standards. Therefore, the application of the key influencing factor model constructed in this study to explain consumers’ behavioural intention of purchasing electric vehicles is acceptable.

III. DATA AND METHODOLOGY

3.1 Type of Research: It is a descriptive study.

3.2 Sampling framework: The sample should be representative of the EV industry in India. We have considered 5 EV companies those are Ola electric, ECO Flash Wheel, Hero electric, Ampere Vehicles, TVS motor company for comparing the cost and ownership with respect to Ather EV.

3.3 Data: Secondary data for a period of 4 years has been taken for the study.

3.4 Tools: Comparative analysis, Percentage analysis, Correlation analysis.

3.5 Vehicle information: We chose six electric vehicle companies to compare which EV manufacturer is more cost-effective. The EVs chosen for the study are Ather, TVS, Ola, Ampere, Eco Flash Wheel, and Hero. The study focused primarily on electric two-wheelers.

3.5. Table showing the selected EV model information:

CATEGORY	ATHE R 450X PLUS	OLA 1S PRO	ETRY ST- 350	I QUB E S	AMPE RE PRIMU S	PHOTO N LP SINGLE BATTE RY
Ex showroom price	170136	103999	162689	159360	109900	86391
Insurance	7499	10049	5578	5551	5880	5781
RTO	1412	2061	999	766	4200	4260
Incentives (FAME II SUBSIDY)	55500	59550	47500	51000	65990	25500
CESS	NA	5199.95	500	762	5495	700
On road price	153911	139997	163471	132644	119980	101392
Weight	108kg	118kg	120 kg	100 kg	130kg	116kg
Range	85 km	75 km	90km	78 km	107km	90 km
Battery	2.9 kwh	2.2 kwh	3.5 kwh	4.56kwh	3kwh	1.8 kwh
Charge Time	6 hours	5 hours	6 hours	5 hours	5 hours	5 hours
Motors	6 kw	4.5 kw	4.0 kw	3.8 kw	5 kw	5.2 Kw

olaelectric.com, atherenergy.com, heroelectic. in, ampere.greaveselectricmobility.com, bikewale.com.

3.6 HYPOTHESIS

HO: The economic feasibility of Ather EV is not similar with other EV competitors.

H1: The economic feasibility of Ather EV is similar with other EV competitors.

3.7 LIMITATIONS

We have considered only 5 companies for the analysis and also limited availability of data, High levels of government intervention, Lack of standardization, Dependency on imports, Limited customer base and rapidly evolving industry.

IV. DATA ANALYSIS AND FINDINGS

For the study we have considered 6 strong variable for the analysis:

4.1 ONROAD PRICE

4.1.1 Multiple Correlation Analysis between Ather 450x pro and other competitors based on On-road Price

	ATHER 450X PRO	AMPERE PRIMUS	PHOTON LP SINGLE BATTERY	OLA 1S PRO	ETRYST-350	I QUBE S
ATHER 450X PRO	1					
AMPERE PRIMUS	-0.94789	1				
PHOTON LP SINGLE BATTERY	0.706387	-0.45058	1			
OLA 1S PRO	0.785065	-0.58685	0.957125	1		
ETRYST-350	0.857844	-0.67821	0.94626	0.991447	1	
I QUBE S	-0.95717	0.999448	-0.4752	-0.60395	0.69496	1

Source: Refer 3.5.1

Interpretation: The Ola 1S Pro, Ampere Primus, and ETRYST-350 on-road pricing are all positively correlated with the Ather 450X Plus's, according to the correlation coefficient. The Ather 450X Pro and the I QUBE S's on-road costs have a -0.95717 correlation coefficient. This suggests a potentially adverse association. The Ather 450X Pro and Photon Lp Single Battery's on-road costs have a moderately positive link, according to the correlation coefficient.

4.1.2 T-Test between Ather 450x pro and other competitors based on On-road Price

	Ola 1s pro	I QUBE S	Ampere Primus	Photon Lp Single Battery	ETRYST-350
Pearson Correlation	0.785065	-0.95717	-0.94789	0.706386761	0.857844
Df	3	3	3	3	3
t Stat	1.139782	-2.90127	-1.31016418	5.413886949	-5.29794
P(T<=t) one-tail	0.16857	0.031219	0.14071376	0.006179971	0.006562
t Critical one-tail	2.353363	2.353363	2.353363435	2.353363435	2.353363
P(T<=t) two-tail	0.33714	0.062438	0.281427519	0.012359942	0.013124
t Critical two-tail	3.182446	3.182446	3.182446305	3.182446305	3.182446

Source: Refer 3.5.1

Interpretation: On-road costs: The Ather 450X PLUS, Ola 1s Pro, and Ampere Premium did not have any statistically significant differences in on-road price, according to the study. For this comparison, the null hypothesis (H₀) that there is no difference is accepted. However, significant discrepancies between the Ather 450X PLUS and I Qube S, Photon Lp Single Battery, and ETRYST-350 were found, which caused H₀ to be rejected in these instances.

4.2 Exshowroom Price

4.2.1 Multiple Correlation Analysis between Ather 450x pro and other competitors based on Exshowroom Price

	ATHER 450X PRO	I QUBE S	ETRYST-350	AMPERE PRIMUS	PHOTON LP SINGLE BATTERY	OLA 1S PRO
ATHER 450X PRO	1					
I QUBE S	0.57735	1				
ETRYST-350	0.922027	0.848419	1			
AMPERE PRIMUS	0.592134	0.368166	0.558432	1		
PHOTON LP SINGLE BATTERY	0.781003	0.480003	0.733898	0.965654	1	
OLA 1S PRO	0.57735	0.333333	0.532332	0.999308	0.960006	1

Source: Refer 3.5.1

Interpretation: The Ather 450X Pro and the Ola 1S, I QUBE S, Ampere Primus' ex-showroom prices have a moderately favourable link, according to the correlation coefficient. A strong positive linear link between the ex-showroom prices of the Ather 450X Pro and the ETRYST-350 electric scooters is indicated by the correlation coefficient of 0.922027.

4.2.2 T-Test between Ather 450x pro and other competitors based on Exshowroom Price

	Ola 1s pro	I QUBE S	Ampere Primus	Photon Lp Single Battery	ETRYST-350
Pearson Correlation	0.577350269	0.57735	0.592134	0.781003	0.922027
Df	3	3	3	3	3
t Stat	67.02853178	80.33733	6.049262	30.779	15.19842
P(T<=t) one-tail	3.65859E-06	2.13E-06	0.004531	3.77E-05	0.000309
t Critical one-tail	2.353363435	2.353363	2.353363	2.353363	2.353363
P(T<=t) two-tail	7.31718E-06	4.25E-06	0.009062	7.53E-05	0.000619
t Critical two-tail	3.182446305	3.182446	3.182446	3.182446	3.182446

Source: Refer 3.5.1

Interpretation: The t-test analysis revealed that the Ather EV's ex-showroom pricing comparable to those of its EV rivals. Each business asserted that it was considerably unique from the others, which led to the rejection of H0. This implies that even if the Ather EV is more economically viable than those of its rivals, there are variations in ex- showroom cost amongst the firms.

4.3 Range

4.3.1 Multiple Correlation Analysis between Ather 450x pro and other competitors

Based on Range

	ATHER 450X PRO	I QUBE S	ETRYST-350	AMPERE PRIMUS	PHOTON LP SINGLE BATTERY	OLA 1S PRO
ATHER 450X PRO	1					
I QUBE S	0.182574	1				
ETRYST-350	0.288675	0.316228	1			
AMPERE PRIMUS	-0.11323	0.744208	-0.39223	1		
PHOTON LP SINGLE BATTERY	0.599145	-0.14064	-0.593	0.203519	1	
OLA 1S PRO	0.166667	0.547723	-0.57735	0.905822	0.599145	1

Source: Refer 3.5.1

Interpretation: The Ather 450x Plus and the Ola 1S Pro, I QUBE S, Ampere Primus, and ETRYST-350 on range show a positive but modest link, according to the correlation analysis. A moderately positive association between the Ather 450x Pro and Photon LP Single Battery on range is revealed by the correlation analysis.

4.3.2 T-Test between Ather 450x pro and other competitors based on Range

	Ola 1s pro	I QUBE S	Ampere Primus	Photon Lp Single Battery	ETRYST-350
Pearson Correlation	0.166667	0.1825	-0.11323	0.599145	0.288675
Df	3	3	3	3	3
t Stat	-3.28634	13.279	5.669467	-18.716	-9.89949
P(T<=t) one-tail	0.023103	0.0004	0.005435	0.000166	0.00109
t Critical one-tail	2.353363	2.3533	2.353363	2.353363	2.35336
P(T<=t) two-tail	0.046205	0.0009	0.01087	0.000333	0.00219
t Critical two-tail	3.182446	3.18244	3.182446	3.182446	3.18244

Source: Refer 3.5.1

Interpretation: The t-test analysis revealed that the Ather EV's Range comparable to those of its EV rivals. Each business asserted that it was considerably unique from the others, which led to the rejection of H0. This implies that even if the Ather EV is more economically viable than those of its rivals, there are variations in Range amongst the firms.

4.4 Battery

4.4.1 Multiple Correlation Analysis between Ather 450x pro and other competitors based on Battery

	ATHER 450X PRO	PHOTON LP SINGLE BATTERY	ETRYST- 350	AMPERE PRIMUS	I QUBE S	OLA 1S PRO
ATHER 450X PRO	1					
PHOTON LP SINGLE BATTERY	-0.18732	1				
ETRYST-350	-0.18257	0.923381	1			
AMPERE PRIMUS	-0.24618	0.345857	0.6742	1		
I QUBE S	-0.49237	0.899229	0.94388	0.636364	1	
OLA 1S PRO	0.866025	-0.64889	-0.63246	-0.4264	-0.8528	1

Interpretation: There is a significant positive association between the Ather 450x Pro and Ola 1S Pro on battery, according to the correlation analysis. The Ather 450x Pro and I QUBE S on batteries show a moderately negative correlation in the correlation analysis. The Ather 450x Pro with Ampere Primus, Photon LP Single Battery, and ETRYST-350 on battery show a weak negative association in the correlation analysis.

4.4.2 T-Test between Ather 450x pro and other competitors based on Battery

	Ola 1s pro	I QUBE S	Ampere Primus	Photon Lp Single Battery	ETRYST- 350
Pearson Correlation	0.8660 25	-0.49236 5	-0.2461	-0.18731	-0.1825
Df	3	3	3	3	3
t Stat	24.494 9	6.54846	-24.327	-0.7276	-5.28422
P(T<=t) one- tail	7.46E- 05	0.00362	7.612	0.2597	0.00660
t Critical one- tail	2.3533 63	2.3533	2.3533	2.3533	2.3533
P(T<=t) two- tail	0.0001 49	0.0072	0.00015	0.5194	0.01321
t Critical two- tail	3.1824 46	3.18244 6	3.1824	3.18244	3.1824

Source: Refer 3.5.1

Interpretation: The t-test compares the means of the Battery for the Ather 450X PLUS with Ola 1s Pro, Ampere Premium and ETRYST-350. A substantial difference between them is shown by the p-value. Since the p-value is less than 0.05, we reject H₀ in this instance.

We accept H₀, meaning that there is no discernible difference between them, as long as the p-value for the Photon Lp Single Battery is more than 0.05.

4.5 Insurance

4.5.1 Multiple Correlation Analysis between Ather 450x pro and other competitors based on Insurance

	ATHER 450X PRO	I QUBE S	ETRYST- 350	AMPERE PRIMUS	PHOTON LP SINGLE BATTERY	OLA 1S PRO
ATHER 450X PRO	1					
I QUBE S	0.810605	1				
ETRYST-350	0.851021	0.966686	1			
AMPERE PRIMUS	0.913083	0.936815	0.88295	1		
PHOTON LP SINGLE BATTERY	0.866263	0.90753	0.984331	0.826423	1	
OLA 1S PRO	0.905543	0.967806	0.926523	0.994124	0.873297	1

Source: Refer 3.5.1

Interpretation: The correlation coefficient shows that the Ather 450x Pro and the Ola 1S Pro, I QUBE S, Ampere Primus, Photon LP Single Battery, and ETRYST-350 have a very strong positive correlation.

4.5.2 T-Test between Ather 450x pro and other competitors based on Insurance

	Ola 1s pro	I QUBE S	Ampere Primus	Photon Lp Single Battery	ETRYST- 350
Pearson Correlation	0.9055 4	0.8106	0.913083	0.866263	0.85102
Df	3	3	3	3	3
t Stat	18.555 0	- 22.7280	17.28549	13.29813	12.78684
P(T<=t) one- tail	0.0001	9.3268	0.000211	0.00046	0.000516
t Critical one- tail	2.3533 6	2.35336	2.353363	2.353363	2.353363
P(T<=t) two- tail	0.0003 4	0.0001	0.000422	0.000919	0.001032
t Critical two- tail	3.1824	3.18244	3.182446	3.182446	3.182446

Source: Refer 4.5.2.1

Interpretation: The t-test analysis revealed that the Ather EV's Insurance comparable to those of its EV rivals. Each business asserted that it was considerably unique from the others, which led to the rejection of H₀. This implies that even if the Ather EV is more economically viable than those of its rivals, there are variations in Insurance amongst the firms.

4.6 Incentives

4.6.1 Multiple Correlation Analysis between Ather 450x pro and other competitors based on Incentives

	ATHER 450X PRO	I QUBE S	ETRYST-350	AMPERE PRIMUS	PHOTON LP SINGLE BATTERY	OLA 1S PRO
ATHER 450X PRO	1					
I QUBE S	-0.66981	1				
ETRYST-350	-0.51453	0.981336	1			
AMPERE PRIMUS	0.953921	-0.41954	-0.23751	1		
PHOTON LP SINGLE BATTERY	-0.51453	0.981336	1	-0.23751	1	
OLA 1S PRO	0.587096	-0.06614	0.076584	0.654816	0.076584	1

Source: Refer 3.5.1

Interpretation: The correlation coefficient between the Ather 450x Pro and Ola 1S Pro shows a moderately positive link. The incentives for the Ather 450X Pro with I QUBE S and ETRYST-350 scooters seem to be somewhat negatively connected. The incentives for the scooters Ather 450X Pro and Ampere Primus seem to be substantially positively connected. The Ather 450X Pro and Photon LP Single Battery incentives appear to be moderately negatively correlated, as indicated by the correlation coefficient of -0.51453.

4.6.2 T-Test between Ather 450x pro and other competitors based on Incentives

	Ola 1s pro	I QUBE S	Ampere Primus	Photon Lp Single Battery	ETRYST-350
Pearson Correlation	0.587096	-0.66981	0.953921	-0.51453	-0.51452
Df	3	3	3	3	3
t Stat	1.561172	-1.3432	-0.67987	-1.92937	-0.30153
P(T<=t) one-tail	0.108201	0.1358	0.272675	0.07463	0.391350
t Critical one-tail	2.353363	2.35336	2.353363	2.353363	2.353363
P(T<=t) two-tail	0.216403	0.27175	0.545349	0.149259	0.78270
t Critical two-tail	3.182446	3.18244	3.182446	3.182446	3.18244

Source: Refer 3.5.1

Interpretation: Ather EV's economic viability differs from that of its EV rivals, according to the t-test analysis of the incentives for the Ather 450X PLUS and its competitors. Nevertheless, each business asserted that there weren't many distinctions between them, which led to the acceptance of H0.

V FINDINGS, CONCLUSION AND SUGGESTION

5.1 FINDINGS

From the study the means of the on-road pricing for the Ather 450X PLUS, Ola 1s Pro, and Ampere Premium are compared using a t-test. The observed difference is not statistically significant. There are noticeable differences between the Ather 450x plus with I Qube S, Photon LP Single Battery, and ETRYST-350, according to comparisons.

The t-test contrasts the means of the Ather 450X PLUS's ex-showroom price, range, and insurance with those of other competitors. We discovered that the economic viability of Ather EV is similar to that of its EV competitors. Each company claims to be significantly different from the others. The t-test compares the means of the Battery for the Ather 450X PLUS with Ola 1s Pro, Ampere Premium and ETRYST-350. A substantial difference between them is shown by the p-value. The t-test compares the incentives for Ather 450X PLUS means with those of other competitors. We discovered that Ather EV's economic viability is different from those of its EV competitors. According to each company, there aren't many differences between them.

5.2 CONCLUSION

In conclusion, the analysis shows that the Ather EV, when compared to its chosen competitors, has both similarities and differences in terms of on-road pricing, ex- showroom price, range, insurance, battery, and incentives. These results give people and organizations important new information about how Ather EV compares to other alternatives on the market in terms of ownership costs and costs. To investigate other issues and obtain more thorough insights to make informed decisions, extra research and analysis are necessary.

5.3 SUGGESTIONS

The ATHER brand provides the best quality and is also user-friendly in terms of battery consumption and cost. Although the entire cost of an ATHER vehicle on the road may be greater, its quality, service, model range, battery, insurance plan, and incentives are affordable and helpful to customers. They are actively engaging in market competition with their competitors.

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