

**FINANCIAL AND ADMINISTRATIVE PROBLEMS FACED BY COOPERATIVE BANKS:
OVERVIEW OF AHMEDNAGAR DISTRICT**

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Abstract:

The aim of this research paper is to analyze the basic problems and difficulties which face by the co-operative banking institution at large scale. This study is taken the sample size of the Ahmednagar district only and will represent all the co-operative banks in Maharashtra.

This study will try to provide a permanent and amicable solution on their problems. It will help to increase the performance of these sectors. Nowadays they are facing so many difficulties and create the question of survival. They are facing the competition risk with public sector as well private sector banking institution. This sector faces the triple control system from RBI, Cooperative board and State Government Political decision. The management could not take prompt and situational base decision as enjoy by private bank. Their business ratio like, Current Loan to previous loan ratio, Current Deposit to previous deposit ratio credit deposit ratios are declining day by day. Expenses increase by at least 10 to 20% per year but business ratio goes downtrodden. This research will investigate those problems which directly or indirectly influence the performance of the co-operative banks. It may be regulatory or operational problems which directly affect the performance of these sectors. This research project will provide the relevant information to the bank managers, bank employee, investor, RBI and Regulatory body for further development of these sectors.

Keywords: Banking, Cooperative, Reserve Bank of India, Credit

Introduction:

Features of Cooperative Banks:

- Customers are the Owner & Account Holder of the Cooperative Banks.
- Chairman & Vice Chairman are elected from the Board of Director and Board of Directors are the representative of shareholders.
- Members/ Shareholder have voting rights in the bank election on the principal " One Person, One Vote"
- Cooperative Banks have played a vital role in financial inclusion of rural household.
- The profit of banks is equity participated with member grounded on legal and statutory limitations
- Cooperative Banks offered higher rate of interest
- Cooperative Banks is a organization for poor, illiterate and unskilled people
- Cooperative Banks works on cooperative principal.

Origin of Research Problems:

The entire co-operative bank grows very fast up to 1999-2000, then after when private banks emerges at large scale then co-operative bank could not performs or they could not sustain the cut throat

competition.

The main reasons behind the problems are

1. According to changing scenario co-operative bank could not adopt new trends to improve their business standards.
2. They are not capable to fulfill the customer expectations.
3. The rules and regulation are more complex as compare to the other sectors.
4. The managerial decision making skills and employee efficiency is very poor as compared to the other sectors.
5. Customers want easy and fast process of business, where they may lack.
6. The customer of co-operative sector is financially weak and politically bias, their intention is not favorable to the banks.
7. Their disclosure norms, and methods of presentation are not so transparent.
8. It may be problems with regulatory body. Or they apply different treatment to those Sectors.
9. What will be situation when new corporate level banks lunches, it is ongoing process and RBI is going to permit licenses to them?
10. Will the entire co-operative bank merge with the big nationalized bank or winding up these banks?
11. What will be the employee situation after the liquidation of these banks?
12. What are the main reason and which influence at large behind the downtrodden?

This study will try to find out reasonable and permanent solution on it and it will provide solution and suggestion to the co-operative board, RBI and State Government for their improvement, otherwise the life of the co-operative banks is going declining position.

Interdisciplinary Relevance:

The problems of the co-operative are

- 1) Competitive risk or Business risk management
- 2) Policy risk
- 3) Credit risk management.
- 4) Decision making risk
- 5) Risk of inefficiency faces by the co-operative banking sector
- 6) This study related with all types of business risk.

For the banking reforms the Basel Committee introduce various norms in the international level but in national level Narshiham committee recommendation and other committee also recommendation but no any committee has been form to strengthen these sector.

Importance of the study:

- This study will provide guidelines for cooperative banks in Ahmednagar District for Effective utilization of banking operations
- This study will find out the major problems of cooperative banks and suggest the remedies.
- This study suggest the development measures for the cooperative banks and continues development and appreciation of human assets.

Objectives of The Study:

1. To study the Financial & Administrative challenges faced by Cooperative Banks.
2. To Study the impact of Financial & Administrative problems faced by cooperative banks.

3. To know the satisfaction level of the customers from Banks financial policies.
4. To Study the challenges faced by the cooperative banks in implementing the computerized system and to suggest the remedial measures.
5. To study the adoptability capacity according to changing scenario. The co- operative bank could adopt new trends to improve their business standards.

Statement of Hypothesis:

The study is attempted to test the following hypotheses

1. The NPAs of the cooperative banks are higher than those of commercial banks in NPAs to asset ratios.
2. They are performing the unethical practices by the bodies of chairman.
3. They are largely depends upon govt. capital than the shareholders contributions
4. They are facing infrastructural weakness and structural laws.

Research methodology

a. Primary Data

The Primary data is collected through the personal interviews of top management (i.e Chairman & Directors of various co-operative bank) and the bank officials (Various Co-operative bank staff) data collected through Questionnaire.

b.Secondary Data

The secondary data is playing the major role in the study which is collected through various News papers, Journals, Articles, Internet, Financial Reports And Books. The study is confined to overall co-operative banking in Ahmednagar District .

Methodology of Study:

- a. Primary data will be collected from the bank managers, executives, chairman and Customers of those banks.
- b. Micro Financial study of the sample of at least 165 different Co-operative banks (As Per Morgan Table) in around Ahmednagar District.
- c. Details questions will be asked to the executives and manager at least 384 sample size & 320 Customers (As per Morgan Table).
- d. Details analysis using different statistical and financial tools.
- e. Comparative study of balance sheet.

Sr. No.	Particular	Population (N)	Sample Size(S)
1.	Total Number of Cooperative Bank Branches in Ahmednagar District	290 Branches of 16 Cooperative Banks	165
2.	Total Number of Cooperative Bank Customers Ahmednagar District	1606064	384
3.	Total Number of Cooperative Bank Employees	1840	320

Table: Sample Size Selection Table

Sr.No	Name of Taluka	Total Number of Branches of Cooperative Banks	Sample Size(N) (No. of Branches Selected)
1	Akole	21	12
2	Sangamner	39	22
3	Kopargaon	20	11
4	Rahata	17	10
5	Shrirampur	15	9
6	Newasa	26	15
7	Shevgaon	17	10
8	Pathardi	14	6
9	Nagar	31	18
10	Rahuri	26	15
11	Parner	24	14
12	Shrigonda	19	11
13	Karjat	13	7
14	Jamkhed	8	5
		290	165

(Source: Social Economic Review Report of Ahmednagar District Statistics Department)

Limitations Of The Study:

1. This study is restricted to Ahmednagar District only.
2. Only challenges and prospects of cooperative banks are studied.

Findings of the Study:

1. Majority of the cooperative banks are facing administrative problems like
 - a) Dormancy
 - b) Low Coverage of Population
 - c) Uneven Development
 - c) Absence of Federal Structure
 - d) Absence of Branch Banking
 - e) Clearing House facilities
 - f) Restriction to open new banks branches
 - g) Lack of response to RBIs help.
2. NPA of cooperative banks is higher than those of commercial banks it will impact on profitability of banks.
3. Customers satisfied with the relationship of employees with them and services of the cooperative bank.
4. Cooperative Banks are not offering modern banking facilities to their customer.
5. Cooperative Banks employees are not having a skill set as compare to commercial bank employees.

Conclusion:

Failure of cooperatives may indicate failure of a large possibility for rural India. It is anticipated that the victuals recommended in this research paper will not only ensure the impartial and self-governing

Functioning of cooperatives, but will also guarantee the accountability of governance to participants and different stakeholders, and will provide deterrence for violations of the victuals of the law.

A STUDY ON IMPACT OF GOVERNMENT SOCIAL SCHEMES IN THE HEALTH CARE SECTOR IN INDIA –FINDINGS, CONCLUSION, AND SUGGESTIONS

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Abstract

Agency research vouches for an overwhelming marketing opportunity in the Indian health care sector. They have highlighted the fact that a major chunk of the population is still uninsured despite the cost of health insurance in India is one of the lowest. There is a clear agreement that the current awareness level and penetrations are pretty low particularly in the rural and semi-urban areas. A research exploring the macro and micro impacts of different government social schemes on the Indian Health Care sector was undertaken. Impact on overall market penetration, customer segmentation, consumer behaviour, supply-side factors like prices and problems with the current products/services were to be assessed. 400 beneficiaries each from Maharashtra and Karnataka were surveyed. This paper presents findings, conclusions and suggestions of the study.

Keywords: Healthcare, Social inequality, Government schemes, Marketing

Introduction

Agency research vouches for an overwhelming marketing opportunity in the Indian health care sector. They have highlighted the fact that a major chunk of the population is still uninsured despite the cost of health insurance in India is one of the lowest. There is a clear agreement that the current awareness level and penetrations are pretty low particularly in the rural and semi-urban areas. A research exploring the macro and micro impacts of different government social schemes on the Indian Health Care sector was undertaken. Impact on overall market penetration, customer segmentation, consumer behaviour, supply-side factors like prices and problems with the current products/services were to be assessed. 400 beneficiaries each from Maharashtra and Karnataka were surveyed. This paper presents findings, conclusions and suggestions of the study.

Findings

a. Findings related to profile –

- i) The distribution of respondents State was 400 of Maharashtra group; and 400 for Karnataka group.
- ii) The division of respondents Category was 400 of Urban group; and 400 for Rural group.
- iii) The distribution of Age was 224 of 20 -29 years group; 158 for 30-39 years group; 208 for 40-49 years group; and 210 for ≥ 50 years group.
- iv) The spread of respondents Gender was 378 of Male group; and 422 for Female group.
- v) The distribution of respondents Type was 541 of Beneficiary group; and 259 for Hospital employee group.
- vi) The division of Experience of dealing with Government Health Schemes was 424 of < 3 years group; 158 for 3-5 years group; and 218 for > 5 years group.
- vii) The spread of respondents predominant experience with Government Schemes types was 308 of Insurance group; 258 for Non-insurance group; and 234 for Both group.

b. Inferential analysis

- i) Findings show that for the variable macroeconomic and microeconomic impact of different social schemes the disagreement for sizable positive impact by the sample was 85% for macro-impact and 71% for micro-impact.
- ii) For the variable impact on overall market penetration, customer segmentation and supply side factors the disagreement for success by the respondents is 71%.
- iii) It was found that for the variable customer satisfaction the dissatisfaction was expressed by majority of the respondents, 77%.
- iv) In case of the variable critical evaluation of service offerings the agreement to problems with the schemes by the respondents is 78%.
- v) For the variable management of social healthcare schemes the disagreement of the sample is 74% for effectiveness of the management.

c. Finer data analysis

While in case of Macro-impact, micro-impact and market penetration, the responses from the two states of Maharashtra and Karnataka are not significantly different, in case of customer satisfaction, critical evaluation and management effectiveness, the responses are significantly different.

Conclusion

- i) There is no significant macroeconomic impact of social healthcare schemes of Central and State Government. Wide disagreement to the ten statements, namely, Social schemes have led to increased awareness about health care, Schemes of the Government have given wide publicity to the concept, They have led to inclusion of classes like women, rural people etc., Major portion of middle class and working class have been included, Schemes have eased overall access to health care, Government intervention has made health care protection more affordable, The divide between classes and masses has been considerably reduced, People today have recognized that health care expenditure is a risk and needs protection, Governments active participation has prompted an active participation from the private sector and Areas like medical tourism are taking off, clearly show that respondents just do not agree for a macroeconomic impact of the government social schemes in healthcare.
- ii) Similar is the case with micro-impact. Wide disagreement to the ten statements, namely, Family health care expenditure has come down, As a result of lower health care expenditure savings have gone up, Tax benefits like 80 D have increased, Cost of insurance premium has reduced, Reimbursement of claims has speeded, Cashless coverage has increased, Coverage now extends to entire family, Despite being from BPL family, health care is now affordable for my family, Personal level anxiety of health care expenditure has reduced and Feeling of being financially secured has increased clearly show that respondents just do not agree for a microeconomic impact of the government social schemes in healthcare.
- iii) That the overall market penetration is deep in terms of reach of social healthcare schemes of Central and State Government has been summarily rejected. Strong disagreement to statements, namely, Health insurance schemes like Ayushman Bharat have helped big penetration, Cost of insurance has come down, Number of health care organizations have increased substantially, A new service channel in the form of Public Private Partnership (PPP) has emerged due to Government schemes, Number of health care products have increased substantially, Coverage to BPL families has widely increased, Affordable options in products have increased, Number of private trust hospitals have widely increased, Systems

- are becoming more transparent thanks to technology and Technology has also helped in improving quality and efficiency clearly conveys that the penetration levels are far from satisfactory.
- iv) The customers are not at all satisfied with the schemes. Outright expression of dissatisfaction on various parameters like Doctor Qualification & Medicine Updating, Speed in Completing Medical Examination, Expertise Service Providers, Accuracy & Timely Report, Cost Feasibility, Modern Equipment for Diagnosis, Environment & Toilet Cleanliness, Care of Nursing, Friendliness & Courtesy of Staff Members and Treatment Outcome Level proves that there is high level of customer dissatisfaction with the schemes.
 - v) The health-care offerings have been ineffective on a number of fronts. Wide agreement to statements, namely, Quality is far off from desirable levels, Price remains on the higher side, Delivery chains are poorly managed, Products are not customized to the extent required, Generic medicines (available at low cost) are not readily accessible, Duplicates affect quality, Costly diagnostic tests are often unnecessarily prescribed, "Cut practice" is rampant, Insurance procedures are cumbersome and Insurance procedures involve sizable manipulations, clearly prove the ineffectiveness of the offerings.
 - vi) Management of the schemes has been grossly ineffective. Strong disagreement expressed to statements, namely, Management is effective in terms of the objectives stated, Management is efficient and no wastage of resources is seen, Schemes have been well-planned, Communication of schemes is quite clear, Directions for implementation are clear and effective, Control over schemes is strong, Schemes reflect strategic thinking, Implementation at operational level is well coordinated, Central and State schemes complement each other well and Schemes are comprehensive and cater to high inclusion clearly spells out the ineffective management of the schemes.

Suggestions

- i) There should be a proper segmentation of the beneficiaries to include rural, backward, and tribal people.
- ii) The PPP model has to be more effectively used to cover the length and breadth of a vast country that India is. Sufficient commercial incentives to the private sectors should be available and at the same time the private sector should take into account its social responsibility.
- iii) Publicity campaigns propagating the schemes need drastic improvements. Modern methods like apps, social media etc., need to be extensively used to increase awareness and popularity of the schemes.
- iv) Quality audits, customer satisfaction audits and other administrative audits should be used on a larger scale to improve controls.

Recommendations

- i) Government should take the implementation of the healthcare schemes more responsibly than ever. This suggestion comes strongly in the backdrop of breakout of a pandemic like Covid-19.
- ii) There should be improvement in efficiency of delivery of the health care schemes.
- iii) There should be better coordination between Centre and State on implementation of the health care schemes,

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**A STUDY ON IMPACT OF GOVERNMENT SOCIAL SCHEMES IN THE HEALTH CARE
SECTOR IN INDIA –LITERATURE REVIEW**

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Abstract

India's health system faces the progressing challenge of responding and responding fast to the needs of the most disadvantaged groups of the society. Therefore, to decrease inequalities in health and ensuring equity in health care, India as one of the developing nations in the world has taken steps such as Rashtriya Swasthya Bima Yojana (RSBY), Mukhya Mantri State Health Care Scheme (MMSHCS), Bhamashah Swasthya Bima Yojana (BSBY), and Bhai Ghanhya Sehat Sewa Scheme (BGSSS) at center as well as state level to bridge the gap between rich and poor in terms of health care. This review is planned to concentrate on different positive steps taken by center and State Government of India and mention its effect on overall health of poor masses so that indisputable proof can be pointed out from such steps in terms of social inequality. This paper reviews literature related to the topic.

Keywords: Healthcare, Social inequality, Government schemes, Literature review

Introduction

Health-care sector in India is projected as a big market. Thanks to the continuously exploding population, health-care services have continued to face a huge demand vis-à-vis a scarce supply. At the same time the service is something that is subject to social dimensions. Hence the role of the Government is an important aspect affecting the entire marketing ecosystem for such a service. Health-care system in a society must be created around the term of equity so that every individual should have equivalent opportunities for maintaining good health, but human societies are portrayed by unevenness at each perspective, and it has even not spared the health-care system. Health disparity in a populace is proposed to exist when there is a significant disparity announced in the overall rate of disease incidence, morbidity, prevalence, mortality, or survival rates in the populace as compared to the health status of the healthy people from a similar populace. Few of the common disparities of social architecture are based on caste, gender, and social hierarchy. In human society, there is an inconsistent dissemination of privileges across the strata. In simple words, the layers of a society are positioned. Those occupying higher positions are more advantaged than those who occupy lower position. Therefore, social stratification might be designed as social inequality. Stratification is usually based on 3 major premises, i.e., power, prestige, and wealth.

Literature Review

1) Shreedevi (2014) conducted a study on 'Evaluation of Rajiv Aarogyasri Scheme in Andhra Pradesh and survey of patients' opinion'. This investigation captures the objective, achievements, functioning and impact of Aarogyasri. The investigation was led for the period April 2007 to Dec 2013 based on patient data. Simple tools such as frequency counts, ratios, percentages, averages, and so on were utilized to comprehend efficiency of insurance mode, and measure the presentation of the scheme. A concise investigation of the scheme based on officially available data and media reports from a public health perspective revealed that 87 % of population of Andhra Pradesh was covered under the scheme. From the sample study, it was discovered that males had 40 % higher use than females under the scheme. The cost benefit ratio of insurance mode was 81 % when compared to 91 % for Trust mode.

Execution of the scheme through the insurance mode is extremely inefficient in terms of cost. Patients' opinion regarding the scheme uncovered that greater part of them was happy with the scheme; none of them had a poor view about the flagship project of Government of Andhra Pradesh. The scheme has already contributed to its effective replication throughout the state. It aims to help, the replication of such a scheme elsewhere in order to accomplish 'Health for All', ensuring that the most underprivileged areas of society are able to claim their 'right to live'. She presumed that the Rajiv Aarogyasri Community Health Insurance in Andhra Pradesh has been well known social insurance scheme with a private public partnership model to manage the issues of catastrophic medical expenditures at tertiary level care for the poor households.

2) Mallikarjuna, K. (2014) studied on 'Health Care Policy and Administration: A Case Study of Rajiv Aarogyasri Health Insurance Scheme in Andhra Pradesh'. He stated that Aarogyasri model is a holistic approach to Healthcare, ensuring that individuals are given free health check-ups by the network Hospitals & 24 hour Helpline, operated by 100 Doctors & 1,600 paramedics that handle around 53,000 calls per day. 108 and 104 Ambulance services will always accessible to the patients at their doorsteps with a simple phone call by the individuals. He travelled that since the coverage of diseases under Aarogyasri was restricted, a large number of patients continued to seek help from Chief Minister's Relief Fund for treatment of different ailments. The Aarogyasri Health, Scheme vouches for the State Governments skewed priorities. It helps only 500 out of the 20,000 odd patients who admitted to the Network Hospitals, both in the public and private sectors in the state each day. The rest of the patients have to incur out of pocket expenditure. The opposition political parties asserted that Aarogyasri with its focus on super specialty care has just helped corporate Hospitals paying step motherly treatment to the Government Hospitals. So as to redress the deficiencies in this scheme, the efforts would be made to set up 40 % of the Aarogyasri operations back to the Government Hospitals. It would help Government Hospitals to get increasingly sophisticated equipment and Doctors better equipped and empower them to earn incentives under this scheme. Recently, the Andhra Pradesh Government has halted payments to the Corporate Hospitals and propelled punitive action against 66 Hospitals in the state for committing inconsistencies while offering treatment to the patients under Arogyasri Health Insurance Scheme.

3) Suman Goel (2014) in his article 'Health Insurance: An Empirical Study of Consumer Behaviour in Rohtak District of Haryana', abridged that health insurance is fast rising as an important mechanism to funding health care needs of the individuals. The examination has conducted in Rohtak district of Haryana and based on primary data collected from a sample size of 150 respondents by means of questionnaire method. The outcomes have been investigated with the help of various statistical tools. The outcomes have shown low level of awareness and eagerness to participate in subscription of health insurance. Health insurance companies should turn out with clear cut policy details, as many of the respondents had indistinguishable thoughts regarding the various benefits and risks associated with a policy. The middle and low socio-economic groups are a potential market to be tapped as they are ready to spend a sensible amount as premium payable per annum rather than huge medical expenses in case of any afflictions. If the private insurance players need to wander in the market, they should attempt to assimilate trust in the individuals as most of the respondents preferred government health insurance schemes, the reason being ensure for their capital. To develop a viable health insurance scheme, it is important to comprehend individuals' perceptions and develop a package that is accessible, available, reasonable and acceptable to all sections of the society. To conclude, majority of the respondents were of the opinion that government should come out with a clear cut policy, where the public can be made to contribute necessarily to a health insurance scheme to guarantee unnecessary out of pocket expenditures and also better use of their health care facilities.

4) Rajesh K. Yadav, et.al (2014) viewed that 'Health Insurance Portability is a regulation set by IRDA where an individual is permitted to switch between insurers at their own choice without agonizing about their no claim bonus and pre-existing diseases cover'. The investigation intends to highlight the purpose of portability, a system that enables the policyholder to move the policy from one insurance company then onto the next. In case of disappointment with respect to the existing policy or the services or to switch over to an innovative/another product, which could be accessible elsewhere in health insurance services. The Indian health insurance market share is a mixture of mandatory Social Health Insurance (SHI), Community Based Health Insurance (CBHI) and voluntary private health insurance. Health insurance is actually a small player in the Indian health ecosystem. The examination depends on the secondary data collected from IRDA and research papers from different journals. The investigation inferred that it has been more than two years since health insurance portability came into force yet because of its complex nature, lack of interest of insurance agents, inappropriate correspondence and lack of customer's awareness, it isn't that much popular in health insurance services.

5) Santosh Kumar, et.al (2013) summarily presumed that 'Public-private partnerships in the domain of public service delivery have become trademark since the time India opened its economy to the global market'. This has been the case especially with health services, both in rural and urban areas. India's southern state of Andhra Pradesh is actualizing the Aarogyasri (health services) programme which is famous with the majority. In this mode of health services delivery, corporate hospitals handle the greatest portion of the cases. Sadly, there is no arrangement for day-to-day services (outpatient) which in fact could have made this programme comprehensive. The focus on tertiary healthcare to the rejection of all other forms of medical assistance leads to an inefficient medical care model with lesser effect on meeting the needs of majority of the people. There is requirement for a discussion on the healthcare and techno-commercial performance of the programme, particularly, if it is going to be copied by other states and even by the centre in presenting some form of universal healthcare under the National Rural Health Mission. The scheme aims to give medical care for BPL families up to a value of 0.2 million (Indian National Rupees) per annum for tertiary surgical & medical treatment of serious ailments, which thusly, will support them from excessive private borrowing. The scheme is controlled by a public-private partnership called the Aarogyasri Health Care Trust between Star Health & Allied Insurance, the corporate hospitals and state agencies. This partnership has, in any case, come to an end in early March 2013. Medical and health services in the private division are unregulated and where obstetrics is the single largest specialisation. The present investigation is of exploratory in nature and will attempt to assess the dimensions of PPPs in the health sector where public funding is generally poor. It will also explain the effect of cooperation on the general reach of health services in the state of Andhra Pradesh where the government's role has virtually become dead.

6) Shankar Reddy Dudala et al. (2013) took an examination on 'Use example of Aarogyasri Health Insurance Scheme by Cancer Patients in Khammam District, Andhra Pradesh'. They reasoned that assembly for wellbeing can be evoked by giving far reaching quality general wellbeing administrations comprehensive of essential medicinal services, screening administrations, tertiary consideration administrations and rehabilitative consideration, commended with network health care coverage plans like RACHIS. The long haul maintainability of such enormous scale open segment programs for the destitute and poor must be guaranteed practical, if the premium of protection, which is at present borne exclusively by State Government, is shared or contributory in nature. RACHIS can broaden medicare for the individuals who need it generally (powerless and minimized gatherings). Individuals' interest to be empowered both regarding usage and administration conveyance. Area Cancer Control Program should be increased with a crisp driving force and responsibility. Malignancy vaults to be created both field based and institutional based to distinguish the main plausible point for a

conclusive intercession. To support proof based practice in the administration of malignant growth with the goal that efficient and pertinent treatment can be given. At last, they suggested that moreover, in the time of Globalization, Privatization or state Corporatisation there are numerous locale in India, favored with Private Medical organizations or have corporate wellbeing part infiltration, can additionally contribute towards supportability of plans like RACHIS through improvement or conveying quality oncology care. There is a need to proceed with Health Insurance Scheme for the individuals who are beneath destitution. Cervical disease (26.2%) can be distinguished at a previous stage with PAP smear and henceforth general screening of ladies over the age of 40 years with multiparity to be considered. There ought to be a composed Breast Cancer Control Program in order to decrease the dreariness and mortality by early recognition.

7) Amandeep Kaur Shahil and Harinder Singh Gill (2013) assessed 'Execution and progress of medical coverage business that has advanced in the course of recent years in India'. The destinations of the examination are to discover birthplace of medical coverage in India and abroad and to look at the development example and patterns of open and private wellbeing back up plans in post-advancement period. The investigation examinations the exhibition of medical coverage segment based on commitment to GDP, health care coverage portfolio share rate altogether non-disaster protection business, part and friends shrewd investigation of open and private wellbeing back up plans. The investigation found that the market pattern and entrance level of medical coverage business are changing over some undefined time frame. The superior level and list of mindful about the advantages of medical coverage has been consistently expanding. The development rate and piece of the overall industry of private medical coverage has been expanding and general wellbeing safety net providers has been diminishing, because of number of expanding private wellbeing back up plans, rivalry impulses and inclusion of rustic territories with new and inventive items.

8) Nilay Panchal (2013) led a contextual investigation on 'Client's Perception towards Health Insurance: An Empirical Study in Bardoli and Mandvi Region'. He saw that Respondents' information and certainty about medical coverage is acceptable. Further research demonstrates that mindfulness about the presence of medical coverage is fine however inclination is normal. Most respondents' think about medical coverage yet some of them don't have any strategy due to low mindfulness or absence of data in regards to health care coverage. Research shows that there are clear conceivable outcomes for medical coverage showcase in India; there are additionally potential outcomes for the general population and private medical coverage organizations. It tends to be said that salary of respondents assumes an indispensable job for obtaining medical coverage.

9) Rohit Kumar, Rangarajan and Nagarajan Ranganathan (2013) study inspects 'The Indian medical coverage showcase by exactly watching the supplier's discernments and its association with the safeguarded, the safety net provider and the Third Party Administrators (TPAs)'. The investigation attempts to discover the mindfulness level among the guaranteed populace and their frame of mind towards treatment cost. It at that point looks at the job of TPAs and the effect of cashless administrations on the expense of treatment by examining a couple of cost drivers. Aside from contemplating the supplier's observations, it additionally attempts to take a gander at a portion of the proof of good risks and that of fake movement. The discoveries recommend that the mindfulness level in regards to arrangement terms and condition is low among the guaranteed populace and the vast majority of them couldn't care less for the expense of treatment. The suppliers increment their rates much of the time and incline toward the center pay bunch for broadening cashless advantages. The TPA model has not been fruitful in cutting down the case cost however has helped in giving impartial administrations including cashless advantages. The value structure of social insurance administrations are connected to the room lease classification and the majority of the protected patients, who are all the more requesting, favor

remaining in higher classification rooms. The idea of cost-sharing by the safeguarded will help handle this issue somewhat. The Indian medical coverage advertise isn't safe from supply-side good perils and fake exercises and there is a need to create various procedures to handle them. There exists an open door for the insurance agencies to manufacture long haul associations with the favored medicinal services suppliers by utilizing innovation and by seeing each other's jobs in serving the regular customer.

10) Priyadarsini, M. (2013) made exact examination on 'Speculation design towards medical coverage at Salem area, Tamilnadu.' This exploration paper had made an endeavor to investigate the venture conduct of speculators towards medical coverage in Salem region, Tamil Nadu state. The essential information assortment made through organized poll. The assessments of 200 respondents were considered for the examination. Through this investigation, it was discovered that awareness' of medical coverage are missing among general society of Salem locale, just as their pay level don't bolster for high premium arrangement.

Conclusion

Agencies have concluded that there is a tremendous scope for health care in India. “Indian health care is a story of great contradictions: it has one of the lowest cost health care systems in the world, yet it is unaffordable to the large majority of its population.” Health insurance is really a small player in the Indian health ecosystem. The market trend and penetration level of health insurance business are changing over a period of time. Exact reasons for untapped market potential have not been thoroughly investigated especially in the light of impact of Govt. Schemes. Why such contradictions like “It has one of the lowest cost health care systems in the world, yet it is unaffordable to the large majority of its population!” are observed has not been studied in depth. A detailed study investigating the role of various government social schemes as a major enabler in the Indian Health Care sector is not seen on record.

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Comparative Study of Amazon Web Services, Google Cloud and Microsoft Azure Cloud

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Received 23/07/2022 ; Accepted 16/08/2022

Abstract:

In the current pandemic situation, all the IT and Non-IT companies thought of switching on Cloud Computing. Main advantage of cloud computing is to provide computing services over the internet and these services accessed by the user with the help of heterogeneous devices like PC, laptop, tablet, mobile phone etc. Therefore work from home concept is possible in today's scenario. It is not feasible to every company to directly switch to any cloud without preparation. Lots of cloud service provides now a day available on internet and amongst that Amazon AWS, Google and Microsoft Azure are the leaders.

In this research, researchers have given detailed comparison based on few important services offered and Magic quadrant for cloud infrastructure and platform services provided by Gartner.

Keywords:-Amazon Web Services, Cloud Architecture, Google Cloud Platform, Microsoft Azure Services, Virtual Machine

1. INTRODUCTION

Gartner Magic Quadrant for Cloud Infrastructure and Platform Services provides unique insights into the globe's top providers of cloud offerings. The vendors that are considered in the 2020 Magic Quadrant include Infrastructure as a service (IaaS) and integrated platform as a service (PaaS) platforms. Gartner defines cloud infrastructure and platform services (CIPS) as "standardized, highly automated offerings, in which infrastructure resources (e.g., compute, networking and storage) are complemented by integrated platform services." [3][4] In order to qualify for inclusion in this quadrant, vendors must:

- Sell public cloud Infrastructure As A Service as a stand-alone service
- Be among the top global providers for the relevant segments
- Offer the public cloud Infrastructure as a Service globally

Have public cloud Infrastructure as a service and Platform as a service that are suitable for supporting mission-critical, large-scale production workloads [3][4].

In order to fully utilize the results of the Cloud Infrastructure and Platform Services Magic Quadrant, it's necessary to understand each category:

- Leaders: Innovative giants in the industry that successfully execute their vision.
- Challengers: Companies that dominate a large market segment.

- Visionaries: Providers that have a strong vision for the future market.

Niche Players: Those providers hyper-focused on a small segment.

With these category definitions in mind, below are the results comparing last year’s Magic Quadrant to this year’s final results:

Criteria	2020 Results	2019 Results	2018 Results
Leaders	Amazon Web Services (AWS) Microsoft Google	Amazon Web Services (AWS) Microsoft Google	Amazon Web Services (AWS) Microsoft Google
Challengers	(none)	(none)	(none)
Visionaries	(none)	(none)	(none)
Niche Players	Alibaba Cloud Oracle IBM Tencent Cloud	Oracle Alibaba Cloud IBM	Oracle Alibaba Cloud IBM

Table 1: Year Wise Magic Quadrant Final Results

Although the three main vendors remained consistent in the Leaders Quadrant from 2018 to 2020, their positions within this quadrant shifted slightly. Jumping on the quadrant this year is newcomer Tencent Cloud. Mainly focused on segments in China, Tencent Cloud has expertise in social networking, gaming, and digital ecommerce, with a big focus on gaming companies worldwide. With a larger global IaaS market share than Oracle and IBM, Tencent Cloud has the technical know-how to quickly become a major competitor to its closest domestic challenger, Alibaba Cloud. [3][4]

II. CLOUD SERVICE PROVIDERS

Amazon Web Services: With a commanding lead this year, AWS is cementing its place as a strong candidate for edge use and hybrid cloud cases. Amazon Web Services (AWS) is the world’s most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centers globally. Millions of customers - including the fastest-growing startups, largest enterprises, and leading government agencies - are using AWS to lower costs, become more agile, and innovate faster. Organizations of every type, size, and industry are using the cloud for a wide variety of use cases, such as data backup, disaster recovery, email, virtual desktops, software development and testing, big data analytics, and customer-facing web applications. [7]

AWS has:

- The largest share of the worldwide market in both database PaaS offerings as well as IaaS offerings.
- The resources and skills to deliver their complete solutions from end-to-end

Generating more than 50% of Amazon's operating income, it's no wonder AWS is referred to as a supreme leader. [3][4]

Microsoft:The Azure cloud platform is more than 200 products and cloud services designed to help you bring new solutions to life - to solve today's challenges and create the future. Build, run and manage applications across multiple clouds, on-premises and at the edge, with the tools and frameworks of your choice.The Microsoft cloud platform, a growing collection of integrated services, including infrastructure as a service (IaaS) and platform as a service (PaaS) offerings. [9]

Next up but not far behind in the Leaders category is Microsoft. Microsoft Azure provides a complete set of end-to-end solutions that address a varying of applications and workloads, perfectly suited for organizations that are already Microsoft-centric. The tech giant leads the hyperscale cloud providers in the application developer PaaS segment, focusing on open-source software with tools like GitHub and Azure DevOps. Microsoft will continue to be a strong competitor to AWS, especially with its efforts to strengthen solutions for containers, serverless, and hybrid environments. [3][4]

Google:Leading companies across industries are choosing Google Cloud to solve their toughest challenges. Google Cloud's security model, world-scale infrastructure, and unique capability to innovate will help keep your organization secure and compliant. [7]

Rounding out the Leader category is Google, known for its open-source contributions TensorFlow and Kubernetes that have completely changed the course of enterprise IT. Enhancing its partnerships with telco providers while building out its hybrid capabilities, Google has seen a major increase in its market share of dbPaaS and IaaS with its Google Cloud Platform (GCP). With GCP's exploration into new territory with Anthos, Google's container and Kubernetes - based middleware layer, it appears that the small gap between GCP and Microsoft Azure will continue to shrink. [3][4]

COMPARISON BETWEEN AMAZON WEB SERVICES, GOOGLE CLOUD AND MICROSOFT AZURE CLOUD SERVICES

TABLE 2: Comparison between Amazon Web Services, Google Cloud and Microsoft Azure Cloud Services

Parameters	Amazon Web Services	Google Cloud	Microsoft Azure
Compute Service	Amazon EC2	Compute Engine	Azure Virtual machines and Scale sets
Storage Service	Simple Storage Service, Elastic Block Storage, Elastic File System, Storage Gateway	Cloud Storage, Persistent Disk, Transfer Appliance, Transfer Service	Azure Files, Azure Blobs, Azure Disks, Azure Queues, Azure Tables
Database Services	Relational Database Service, DynamoDB, Aurora	Cloud SQL, Cloud Bigtable, Cloud Spanner, Cloud Datastore	SQL Database, MYSQL, PostgreSQL, Data Warehouse, CosmosDB
PAAS	Elastic Beanstalk	App Engine Standard Environment, Flexible Environment	Cloud Services
Docker / Kubernetes Container	EC2 Container Service, Kubernetes	Kubernetes Engine, Container Engine	Azure Container Service
Functions	Lambda	Cloud Functions (Beta)	Functions, Event Grid
Auto Scale Instance	Auto Scaling	Instance Group	VM Scale Sets, Auto Scaling
Networking	Virtual Private Cloud	Virtual Private Cloud	Virtual Network
Cross premises connectivity	API gateway	Cloud VPN	VPN gateway
DNS	Route 53	Google Cloud DNS	Azure DNS
Global Content Delivery Network	CloudFront	Cloud Interconnect, Cloud CDN	Content Delivery Network
Load Balancing	Elastic Load Balancing	Cloud Load Balancing	Load Balancer
Dedicate Private Network	Direct Connect	Cloud Interconnect	ExpressRoute
Cloud Advisor	Trusted Advisor	Cloud Platform Security	Advisor
DevOps	OpsWorks, CloudFormation	Cloud Deployment Manager	Automation, Resource Manager
Management and Monitoring	CloudWatch, X-Ray, Management Console	Stack Driver Monitoring, Cloud Shell, Debugger	Portal, Monitor, Debugger, Application Insights

Administration	Application Discovery Service, Personal Health Dashboard, Systems Manager	Cloud Console	Log Analytics, Operation Management Suite, Resource Health
Billing	Billing API	Cloud Billing API	Billing API
Authentication and Authorization	Identity and Access Management	Cloud IAM	Active Directory

2. CONCLUSION

AWS is a very strong performer in most Gartner use cases, and a strong candidate for hybrid cloud and edge use cases. Google has evolved by enhancing its strengths and attacking its limitations to providing a strong offering in every use case, other than the edge use case. Microsoft is strong in all use cases. This includes the extended cloud and edge computing use cases, where many of the other vendors struggle. Azure is particularly well suited for Microsoft-centric organizations. It is suggested that organizations can select the cloud resources based on the organization size, resource requirements, time, budget, operating system, development environments.

AWS has a future focus on attempting to own increasingly larger portions of the value chain that delivers cloud services to customers. Google has a future focus on building out hybrid capabilities and partnerships with telco providers. Microsoft is strong in all use cases. This includes the extended cloud and edge computing use cases, where many of the other vendors struggle. Azure is particularly well suited for Microsoft-centric organizations. Microsoft has an investment focus on making architectural improvements to the Azure platform and providing a broad range of enterprise focused services.

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Received: 15th April 2022

Revised: 10th May 2022

Accepted: 8th June 2022

A STUDY TO FIND THE ASSOCIATION BETWEEN ACCURACY OF ESTIMATED COST AND PROJECT MANAGEMENT ACTIVITIES FOR PROPOSED SOFTWARE DEVELOPMENT

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Abstract: proposed

Software cost estimation is an important activity in software project management. This activity takes place in planning stage of project management. Cost estimation means prediction of development cost it is an important issue in any software development because all project management activities like planning, scheduling, staffing, controlling are totally depends on estimated cost. In project management, a schedule is a listing of a project's milestones, activities, and deliverables, usually with intended start and finish dates. Those items are often estimated in terms of resource allocation, budget and duration, linked by dependencies and scheduled events. A schedule is commonly used in project planning and project portfolio management parts of project management. This paper aimed to discuss how the project cost estimation is directly related with scheduling and interleaved management activities. This study will help software development communities to increase the success of software development projects by focusing more on accuracy of software cost estimation.

Keywords: Cost Estimation, Software Project Management, Realistic Cost, Project scheduling.

I. INTRODUCTION

Cost estimation is an important issue in any software development project. The accurate prediction of software development costs is a critical issue, because success and failure of whole project is depends on the accuracy of estimated cost. We can say that software cost estimation is integrated with software development process. All project management activities like project planning, Project scheduling etc. are totally depends upon estimated cost for that software project. [2].

The possibility of software projects failing due to various reasons—including costs, scheduling and quality issues, and/ or achievement of objectives—pose a tangible threat to companies wishing to outsource their software development needs. These failures, which often cause huge losses in time and money, can prove to be detrimental to a company's growth and development. Being able to identify the causes of failure and categorizing them can lead to lower failure rates in future endeavors [1]

In this paper, literature survey is carried out in order to gather related information to study how the cost estimation is directly related with Project scheduling and other project management activities.

II. WHAT IS PROJECT MANAGEMENT?

In project management, a schedule is a listing of a project's milestones, activities, and deliverables, usually with intended start and finish dates. Those items are often estimated in terms of resource allocation, budget and duration, linked by dependencies and scheduled events. A schedule is commonly used in project planning and project portfolio management parts of project management. Elements on a schedule may be closely related to the work breakdown structure (WBS) terminal elements, the Statement of work, or a Contract Data Requirements List.[4]

Before a project schedule can be created, the schedule maker should have a work breakdown structure (WBS), an effort estimate for each task, and a resource list with availability for each resource. If these components for the schedule are not available, they can be created with a consensus-driven estimation method like Wideband Delphi. The reason for this is that a schedule itself is an estimate: each date in the schedule is estimated, and if those dates do not have the buy-in of the people who are going to do the work, the schedule will be inaccurate.

In order for a project schedule to be healthy, the following criteria must be met:

- The schedule must be constantly (weekly works best) updated.
- The EAC (Estimation at Completion) value must be equal to the baseline value.
- The remaining effort must be appropriately distributed among team members (taking vacations into consideration).[4]

To build complex software systems, many engineering tasks need to occur in parallel with one another to complete the project on time. The output from one task often determines when another may begin. It is difficult to ensure that a team is working on the most appropriate tasks without building a detailed schedule and sticking to it. [5]

III. ROOT CAUSES FOR LATE SOFTWARE

Poor project management is the main root cause for delay in software delivery.

Why do good projects go bad? CIO.com surveyed dozens of IT executives and project managers and came up with a list of 12 Common Project Management Mistakes

- Not assigning the Right Person to Manage the Project
- Failing to Get Everyone on the Team behind the Project
- Not Getting Executive Buy-in
- Putting Too Many Projects into Production at Once
- Lack of (Regular) Communication/Meetings
- Not Being Specific Enough with the Scope/Allowing the Scope to Frequently Change
- Providing Aggressive/Overly Optimistic Timelines
- Not Being Flexible
- Not Having a System in Place for Approving and Tracking Changes
- Micromanaging Projects.
- Expecting Software to Solve All Your Project Management Issues.
- Not Having a Metric for Defining Success. [6]

IV. PROJECT SCHEDULING PERSPECTIVES

- One view is that the end-date for the software release is set externally and that the software organization is constrained to distribute effort in the prescribed time frame.
- Another view is that the rough chronological bounds have been discussed by the developers and customers, but the end-date is best set by the developer after carefully considering how to best use the resources needed to meet the customer's needs. [5]

V. SOFTWARE PROJECT SCHEDULING PRINCIPLES

- Compartmentalization - the product and process must be decomposed into a manageable number of activities and tasks
- Interdependency - tasks that can be completed in parallel must be separated from those that must be completed serially
- Time allocation - every task has start and completion dates that take the task interdependencies into account
- Effort validation - project manager must ensure that on any given day there is enough staff members assigned to complete the tasks within the time estimated in the project plan
- Defined Responsibilities - every scheduled task needs to be assigned to a specific team member

- Defined outcomes - every task in the schedule needs to have a defined outcome (usually a work product or deliverable)
- Defined milestones - a milestone is accomplished when one or more work products from an engineering task have passed quality review [5]

VI. TRACKING PROJECT SCHEDULES

- Periodic status meetings
- Evaluation of results of all work product reviews
- Comparing actual milestone completion dates to scheduled dates
- Comparing actual project task start-dates to scheduled start-dates
- Informal meeting with practitioners to have them assess subjectively progress to date and future problems
- Use earned value analysis to assess progress quantitatively [5]

VII. PROJECT PLANNING

The Plan, Do, Check, act cycle is fundamental to achieving project quality. [7] The overall project plan should include a plan for how the project manager and team will maintain quality standards throughout the project cycle. Time spent planning is time well spent. All projects must have a plan with sufficient detail so that everyone involved knows where the project is going. [8]

A good plan provides the following benefits:

- Clearly documented project milestones and deliverables
- A valid and realistic time-scale
- Allows accurate cost estimates to be produced
- Details resource requirements
- Acts as an early warning system, providing visibility of task slippage
- Keeps the project team focused and aware of project progress

It is a well-known fact that software industry is unable to provide accurate estimation of effort, time and cost, as very less information about the proposed software is available at the beginning of the project.

Accurate estimation of effort, time and cost plays an important role in software project management as they provide an input for all software project management activities.

Planning for proposed software is totally based on estimated cost for that software while inaccurate estimation results in poor plan, and poor planning often leads to project faults and dramatic outcomes for the project team so we can say that core activities in software project management are based on estimated cost.

VIII. RESEARCH DESIGN

Objective of this research is:

- 1) To identify the *impact* of software cost estimation on project management activities.

Hypothesis;

In order to formulate hypothesis a review of literature was carried out. Previous research findings were also reviewed and help of experts was taken. Then the hypothesis was formulated and is given below:

H1: There is no association between estimated cost and project management activities.

The research design is as follows

Types of Data:

A combination of primary and secondary data is used in this research. The primary data is collected from 300 software development Organizations. The primary data is collected with the help of questionnaires. Total

sample size is 300 questionnaires. Here researcher has used **Purposive Sampling**: Purposive sampling, one of the most common sampling strategies, group's participants according to preselected criteria relevant to a particular research question. Sample sizes, which may or may not be fixed prior to data collection, depend on the resources and time available, as well as the study's objectives.

A pilot survey of 25 respondents was carried out to test the questionnaire. The errors identified in the pilot survey were removed and the final questionnaire was drafted.

- The questionnaire drafted for Software Development Organizations consists of 16 questions. From these 16 questions 2 important questions for this research are as given below

1. To what extent does your organization pursue estimation as being important in comparison with other aspect of development?

- Very Important
- Extremely Important
- Most Important
- Less Important

2. According to you which project Management activities needs accuracy in Cost estimation of the project?

Sr. No.	Project Management Activities	Need Accuracy	Do not need Accuracy
1.	Project Planning		
2.	Project Scheduling		
3.	Risk Management		
4.	Project Control		
5.	Managing People		
6.	Software Configuration Management		
7.	Project Monitoring		
8.	Change Management		

First, the collected data was classified and then presented in tables, the classification and tabulation in fact goes together. Therefore, classification is the basis for tabulation. Tabulation is a mechanical function of classification because in tabulation classified data are placed in row and columns. Classification is a process of statistical analysis whereas tabulation is a process of presenting the data in suitable form.

Graphical / Diagrammatic representation of data:

The data collected from primary sources is analyzed with the help of MS-Excel, SPSS and other software. The analysis is presented in two ways:-

- a) Graphical Presentation
- b) Quantification

IX. ANALYSIS OF RESPONSE

1. Importance of Estimation in comparison with other aspect of software development

Software Project Management is a main issue in software organizations while Cost estimation is the key part of projects management, because on the basis of this, estimated cost organization can plan the project development activities as well as decide the project schedule to complete the project within time and budget

and recourses. Table1 shows importance of Estimation in comparison with other aspect of software development.

Table1. Importance of Estimation in comparison with other aspect of software development

Importance of Estimation	Responses	Percent
Very Important	120	40.0
Extremely Important	136	45.3
Most Important	42	14.0
Less Important	2	.7
Total	300	100.0

Table1 shows that 45.3% agreed that estimation of cost for proposed software is Extremely Important in comparison with other aspect, 40% respondents agreed that cost estimation is Very Important factor in comparison with other aspect of software development while 14% respondents communicated that it is most important while very few respondents told that cost estimation is less important.

This research is mainly focused on cost estimation for software development, so this analysis shows that the cost estimation is extremely important activity in software project management in comparison with other aspect of software development.

The data in Table1 is shown graphically using pie chart and presented in Figure 1.

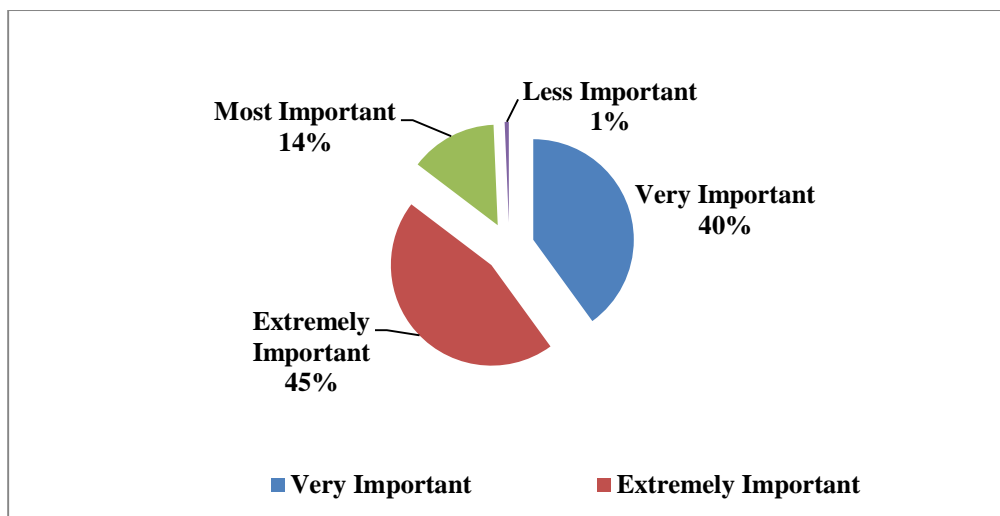


Figure1 . Importance of Estimation in comparison with other aspect of software development

2. Project Management activities depending upon accuracy in cost estimation

There are various project management activities which are depends upon the estimated cost of that poject. Data collected to find out which project managemnet activities are depends upon estimated cost according to the respondents is presented in the Table2.

Table2. Project Management activities depending upon accuracy in cost estimation

Project Management Activities	No. of Responses		Percent of Cases
	Responses	Percent	
Project Planning	200	17.7%	66.7%
Project Scheduling	182	16.1%	60.7%
Risk Management	146	12.9%	48.7%
Managing People	96	8.5%	32.0%
Software Configuration Management	90	8.0%	30.0%
Project Monitoring	98	8.7%	32.7%
Project Control	124	11.0%	41.3%
Change Management	104	9.2%	34.7%
All	90	8.0%	30.0%
Total	1130	100.0%	376.7%

Table2 shows that according to the 66.7% respondents Project Planning needs accurate estimated cost, according to the 60.7% respondents Project Scheduling needs accurate estimated cost, according to the 48.7% respondents Risk Management needs accurate estimated cost, according to the 41.3% respondents Project Control needs accurate estimated cost, while according to 34.7% respondents Change Management needs accurate estimated cost, very few respondents goes with other activities, while according to 30% respondents all the mentioned activities needs the accuracy in estimated cost for the project.

The data in Table2 is shown graphically using Bar Chart and presented in Figure2.

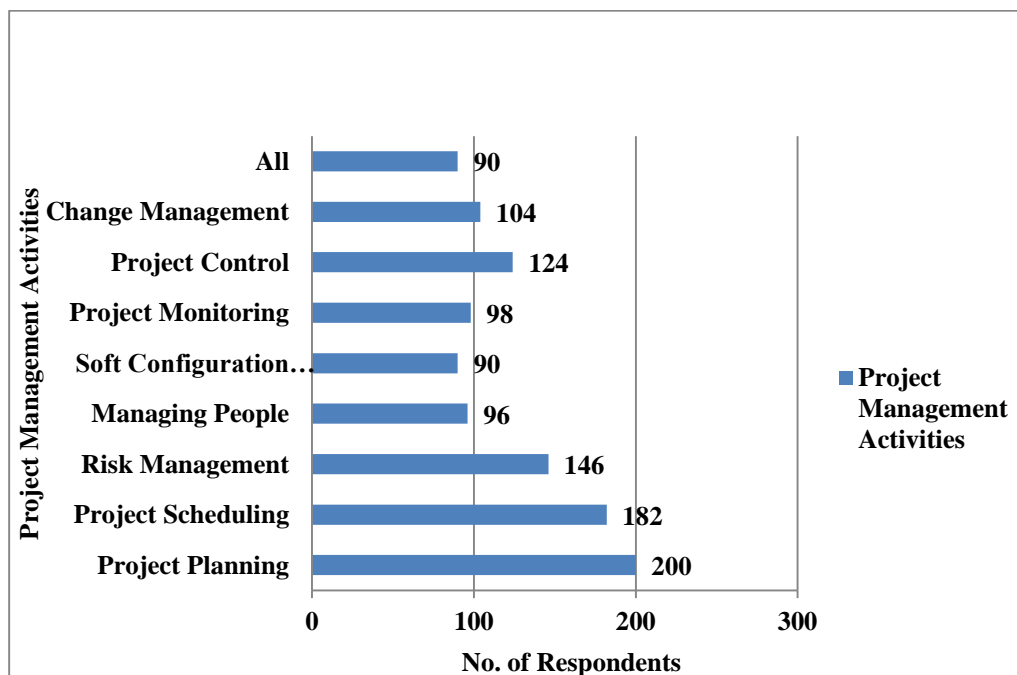


Figure2. Project Management activities depending upon accuracy in cost estimation

X.HYPOTHESIS TESTING

For hypothesis testing here we have classified all project management activities into two types **Core Project Management activities:** Project Planning, Project Scheduling and Risk Management and

Supportive Project Management activities: Project Control, Managing People, Software Configuration Management, Project Monitoring, Change Management etc.

Hypothesis H1 - There is no association between estimated cost (accurate, inaccurate) and project management activities (core, supportive).

Table3. Chi-Square Test for core and supportive project management activities

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Core	300	.50	.501	0	1
Supportive	300	.32	.469	0	1

Table4. Frequencies-Core Project Management Activities

	Observed N	Expected N	Residual
Inaccurate	150	150.0	.0
Accurate	150	150.0	.0
Total	300		

Table5. Frequencies-Supportive Project Management Activities

	Observed N	Expected N	Residual
0	203	150.0	53.0
1	97	150.0	-53.0
Total	300		

Table6. Test Statistics for Core and Supportive Project Management Activities

	Core	Supportive
Chi-Square	.000 ^a	37.453 ^a
Degrees of freedom	1	1
Asymp. Sig.	1.000	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 150.0.

The chi square value of 0.00 (Degrees of freedom=1, N=300), significance value is 1 which is more than 0.05 ($p > 0.05$) is not significant at 1 degree of freedom, showing that there is no significant difference in the expected and observed frequencies. As such we can't reject the hypothesis that there is no association between estimated cost (accurate, inaccurate) and project management activities (core). Hence, there is no association between estimated cost (accurate, inaccurate) and project management activities (core).

The chi square value of 37.45 (Degrees of freedom =1, N=300), significance value is 0.00 which is less than 0.05 ($p < 0.05$) is significant at 1 degree of freedom, showing that there is significant difference in the expected

and observed frequencies. As such we can reject the hypothesis that there is no association between estimated cost (accurate, inaccurate) and project management activities (supportive). Hence, there is association between estimated cost (accurate, inaccurate) and project management activities (supportive).

XI. CONCLUSION

In this study chart and tabular format data analysis shows that Project Planning, Project Scheduling, Risk Management, Project Control and Change Management are the project management activities depends upon the accuracy of estimated cost. Hence we can't reject the hypothesis that there is no association between estimated cost and project management activities. For more accuracy when Chi-Square Test is applied for the collected data it shows that we can partially reject and partially accept the hypothesis. The results of Chi-Square Test shows that there is no association between accuracy of estimated cost and core project management activities for proposed software but it also shows that there is association between accuracy of estimated cost and supportive project management activities. Here it is clear that as the core project management activities takes place at the beginning of SDLC life cycle it is not possible for the team to estimate the cost of software with more accuracy as very less information is available at the beginning stage. This study will help software development communities to increase the success rate of software development projects by focusing more on accuracy of software cost estimation.

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A SYSTEMATIC REVIEW RELATE TO IMPACT OF SOCIAL MEDIA MARKETING ON BRAND EQUITY**Dr Sanjay Martand Dharmadhikari**Director, Dr. Vithalrao Vikhe Patil Foundation IBMRD, Vadgaon Gupta (Viladghat) Post-M.I.D.C.,
Tal: Ahmednagar Dist: Ahmednagar**Abstract:**

Web-based media has affected a wide range of organizations and advertising as far as advancing a brand and expanding its worth. The reason for this study is to find, assess, sum up, and incorporate the aftereffects of past examinations exploring the effect of web-based media promoting on brand value, as well as the discoveries of each element of brand value parts, stages, and web-based media. Is to do. Industry. The PRISMA explanation characterizes a review determination process. Web look were performed on 11 data sets utilizing all conceivable watchword and expression blends. Clear and point by point predefined choice rules were utilized to observe discoveries connected with the subject. To stay away from duplication, query items were transferred to Endnotes programming, and articles and outlines were looked for information connected with the theme. A large portion of the examination shows the effect of online media on brand mindfulness, brand significance, saw quality, and brand reliability, with a sum of 26 distributions meeting the determination measures. Furthermore, the investigation discovered that the Facebook stage was the most famous of the overviews, assessed by numerous ventures, and the majority of the studies announced five parts of online media. In outline, online media advertising emphatically affects the CBBE parts of brand mindfulness, saw quality, pertinence, and reliability. Online media, brand value, customer based brand value, and parts of web-based media are a portion of the terms utilized in this review. 1. Give an outline

Web-based media (SM) is changing the plan of how brand materials are arranged, consumed, and scattered, moving the effect on brand picture working from conventional advertising to advanced substance and association with purchasers (Geiser). , 2017). As per Hudson, Huang, Roth, and Madden (2016), strong brands make and hold new likely customers to give professionals startling chances to meet new purchasers via web-based media. Perceiving the force of web-based media in holding and associating. Assemble a solid relationship with them. SM purchasers can connect with numerous in a moment or two. This shows that the quick participation and reaction of overseen associations is turning into the focal point of purchasers, and they are turning out to be increasingly more familiar with sending messages as opposed to searching for them. information. Regardless of the way that web-based media offers unlimited open doors for advertisers and brands, customary showcasing strategies have huge disadvantages, including the deficiency of command over business recognizable proof. Clients generally leave remarks about the items they buy and their experiences with different clients. Awful encounters are imparted to a great many clients via web-based media stages. This tremendously affects an organization's image. Furthermore, the worldwide idea of SM gives clients all over the planet admittance to the brand. Organizations are progressively focusing closer on their essential interest in online media organizations, tracking down the most effective way to use and arrive at paramount brands. Brand names are profoundly significant lawful resources that can impact purchaser inclinations, trade, and give organizations long haul income security. As indicated by (Kapferer 2012; Keller 2014), brand value alludes to the worth that comes from an assortment of advantages. The hidden idea of brand value is the way a brand's solidarity lies in the shopper's psyche and the way that it sees the brand after some time. time. What's more, image value has numerous methodologies that acquire worth to items terms of

contemplations, words and client inclinations, empower brand esteem creation, and advantage the business as far as expanding income or lessening costs. Can bring. Positive brand value for solid brands brings many advantages, including better brand extension possibilities, better benefit, better brand devotion, better advertising correspondences adequacy, and better client inclinations. Furthermore, brand value guides showcasing choices and serves vital goals, so advertisers should completely comprehend the critical wellsprings of brand value and what they mean for positive results like deals. Is significant. Understanding Brand Equity Sources and Results is the place where and where organizations are by creating promoting techniques, giving pointers to estimating brand value, and chiefs comprehension and underscoring the drivers of brand value. Permits you to recognize whether you are adding esteem. To this end, we have restricted, fundamentally assessed, summed up, and summed up the aftereffects of all significant individual reviews that are straightforwardly connected with the effect of online media showcasing (SMM) on purchaser based brand value (CBBE). , We intend to group the review as follows. Size. Proposed by Aaker (1991), CBBE distinguishes the sent SM stage and the aspects and industry sort of SM. 2. Audit of writing

Because of the different signs of brand value introduced by various researchers, two fundamental thoughts have arisen: undertaking put together brand value and CBBE with respect to how to oversee and conceptualize brand value. The superior worth an organization gets from a notable marked item/administration contrasted with an unbranded item is called corporate-based brand value (Christodoulides and De Chernatony, 2010). As indicated by Atilgan, Akinci, Aksoy and Kaynak (2009), corporate-put together brand value is based with respect to item/market results, for example, value, piece of the pie and monetary market results. The CBBE viewpoint, then again, centers around client esteems that are affected by the blend of item execution, enthusiastic associations, and shopper ways of life. CBBE gets its significance from purchaser appraisals for things and administrations.

CBBE is the predominant viewpoint in brand value writing, and it is liked by most researchers and experts in the advertising field (Christodoulides and De Chernatony, 2010; Keller, 1993). Keller (1993) and Aaker (1991) were pioneers in creating brand value as an idea, but the two of them alluded to it according to the viewpoint of the client. Keller (1993) authored the expression CBBE to depict brand value, expressing that it happens when individuals know about the brand and have positive and exceptional associations with it to them. CBBE is best depicted as an idea coming about because of brand relationship, with the significance of brand connections focused.

CBBE, then again, as per Aaker (1991), has five parts that are the essential wellsprings of significant worth age. These variables incorporate brand mindfulness, brand quality mindfulness, brand affiliation and brand unwaveringness, and extraordinary brand value that demonstrations instead of licenses and brand names. Some portion of this model is a legitimate and exhaustive model that has been acknowledged by numerous researchers, so this review will be utilized to group acknowledged works in light of their parts. CBBE part of Aaker (1991). Brand mindfulness is a significant component of brand value and is frequently ignored by researchers and professionals (Aaker, 1996). Brand mindfulness is characterized by (Aaker, 1996) as the capacity of a client to perceive or recall that a brand is related with a specific item class. Brand mindfulness, as indicated by Farjam and Hongyi (2015), has two levels: acknowledgment and review. Levels of acknowledgment convey a feeling of commonality while likewise demonstrating brand substance, mindfulness, and dedication. Buyers' decision and determination are affected by review level. For most organizations, brand mindfulness is basic since it assists organizations with thriving (Aaker, 1991). As per Kuhn, Alpert, and Pope (2008), fostering a solid brand requires first laying out an exact brand character to lay out memorability and association in the personalities of clients; to do as such, brand striking nature is required. It's worth focusing on that

the interest for delight and ID are two subdimensions of striking nature. Seen quality is a fundamental element of CBBE, as per Aaker (1992). It offers some benefit to customers by giving motivation to purchase, making an upper hand by recognizing brands from their rivals, working with line expansions, and selling at an exceptional cost. Kuhn et al. (2008) characterized apparent quality as a feeling of a brand's prevalence or greatness when looked at over contenders, while (Aaker, 1992) characterized apparent quality as a customer's assessment of an item's predominance or greatness. Seen quality is a significant monetary stimulus for most organizations and is an essential choice that empowers the improvement of projects to develop brand value (Aaker, 1992). The brand affiliation, otherwise called the brand picture, is a broadly perceived property, a significant component of brand value, and alludes to the affiliation that a brand has in the personalities of its clients (Aaker, 1996). Objects, insight, character, feelings, item quality, connections or pictures, client interests, utilizes, clients, ways of life, item classes, contenders, and nations are instances of brand affiliations (Aaker, 1991). Furthermore, the Brand Association upholds clients in handling and recovering data, gives impetuses to purchase, goes about as the reason for separation and extension, and summons great feelings. As per Aaker (1991), shoppers use brand relationship to ingest, coordinate, and store data to assist them with settling on buying choices. To lay out brand value, you want to comprehend the center parts of a brand affiliation. At the point when a brand is exceptionally pertinent, the brand drive is probably going to be effective and profoundly applicable to the client (Netemeyer et al., 2004). Brand dedication is characterized by Aker (1991) as a customer's connection to a brand. As per Yoo and Donthu (2001), brand devotion is portrayed as a shopper inclination to remaining faithful to the brand as far as purchasing expectation and settling on it the main buy choice. As indicated by Oliver (1999), brand steadfastness is characterized as a solid obligation to repurchase and support your cherished brands later on. Firms gain esteem from brand faithfulness since it brings down showcasing costs while likewise utilizing exchange (Keller, 1993). Clients who are faithful to a brand expect that it is generally accessible and propose it to other people. As per Bilgin (2018), enrolling new clients is definitely more costly than continuing to exist ones. Moreover, contenders will make some intense memories drawing in brand faithful customers since they are less headed to search for options. Thus, contenders will be less disposed to focus profoundly on drawing in faithful clients since it will consume a large chunk of the day (Bilgin, 2018; Ngah et al., 2021). Subsequently, as per Aaker (1992), zeroing in on brand dependability is a strong strategy for controlling brand value. Expanding brand value in online media has become vital for basically all organizations, and it is a broadly involved channel for advertisers to work on the accomplishment of their promoting drives. Notwithstanding the way that many firms perceive the worth of SM, it is basic to evaluate how powerful it is. Subsequently, Kim and Ko (2011) examined five attributes of what SM means for clients, including commitment, diversion, personalization, popularity, and wordofmouth, and observed that they decidedly affect the evaluation of SMM exercises. Besides, with regards to media clients, person to person communication stages are expected to have 3.6 billion individuals, with these numbers expected to keep on ascending later on. Facebook, the primary web-based media stage to outperform one billion substantial records, today has over 2.74 billion month to month dynamic clients, trailed by YouTube with 2 billion, WhatsApp with 2 billion, Facebook Messenger with 1.3 billion, and WeChat with 1.2 billion. The importance of noticing online media stages, as well as the components of web-based media, gives advertisers significant knowledge into how to focus via web-based media stages and how SM aspects may impact customers' image choices.

Numerous specialists have as of late become keen on brand and marking with regards to online media, and an enormous number of investigations have been directed on this theme, inspecting different areas, web-based media stages, and viewpoints (Berthon, Pitt, Plangger, and Shapiro, 2012; Filo, Lock, and

Karg, 2015; AlGasawneh& AlAdamat,2020; Whitelock, Cadogan, Okazaki, and Taylor, 2013). Regardless of the developing revenue in research and the enormous number of investigations that look at the effect of web-based media on marketing for most organizations, there has been minimal precise examination of what web-based media promoting means for brand value, which is a significant marketbased resource. Thus, this examination distinguished the need to direct a precise survey of past investigations of SM in the promoting field to incorporate and coordinate the key subjects covered by these examinations, as well as how these investigations tried those issues. This survey is additionally vital to examine how earlier examinations tended to the ramifications of SM for promoting themes. Accordingly, the current review benefits scholastics and business by offering an itemized, uptodate appraisal of current writing on the effect of web-based media promoting on brand value building. Supposedly, this is one of the primary thorough audits to find that web-based media is impacting CBBE. This concentrate additionally assists experts with investigating the power and capability of promoting exercises and configuration better web-based media showcasing procedures for online business the board. As a rule, this exploration can be utilized as a venturing stone to additional examination and foster a general comprehension of what web-based media means for online brand value. technique

The reason for precise surveys is to find, test, investigate, and observe the best accessible proof related with a specific exploration point to give exact and confirm based responses (Gopalakrishnan and Ganeshkumar, 2013; Muka). et al., 2020). As per Cook, Mulrow and Haynes (1997), efficient surveys are the most broadly involved technique for summing up and incorporating research brings about all areas that think about a similar inquiry. Besides, methodical audits follow a welldefined design and strategy that incorporates deciding the exploration issue or issue, characterizing and fundamentally assessing the current writing, joining the discoveries, and closing (Wamba, Akter, Edwards, Chopin, and Gnanzou, 2015). Game plan for your inquiry

To observe the papers that should be remembered for this audit, a hand search was directed. The objective of the hunt was to uncover research that took a gander at the effect of web-based media advertising on brand value. Training Data Base, Academic Search Complete, Education Research Complete, PsycINFO, Eric, Science Direct, Web of Science, Scopus, Emerald, Research Library, Taylor and Francis, and Sage were among the 11 data sets looked through online in December 2020. Those data sets were picked in the wake of chatting with administrators who helped with convoluted inquiry plans, information base extension look, and other methodical surveys. "Web-based media" OR "informal community" OR "person to person communication" OR "Web 2.0" OR "Facebook" OR "LinkedIn" OR "Twitter" OR "MySpace" OR "Instagram" AND brand* OR "brand value" OR "customerbased brand value" OR "CBBE" AND "promoting" OR "web-based media advertising" OR "web-based media showcasing" OR "web-based media advertising" OR "online media advertising" OR "web-based media showcasing" OR "web-based media advertising" OR " To ensure that the hunt finds whatever number important records as would be prudent, we invested some energy recognizing every conceivable equivalent word and related terms for every one of your components or ideas, along these lines we looked through terms utilized in earlier examination or efficient surveys, and actually look at significant word references. Choice of examination

Since incorporation and avoidance measures lay out the limits of any precise survey, clear, definite, and predefined qualification models are a major essential for an orderly audit (Brereton, Kitchenham, Budgen, Turner, and Khalil, 2007). The momentum investigation sifted through each possibly applicable article looking for concentrates on that introduced unique and experimental information on the issue of the effect of web-based media on brand value. To be remembered for this audit, studies needed to selfidentify as SM showcasing. The consideration measures incorporate search for exact

examinations that took a gander at the impact of SM on CBBE model components. Moreover, examinations should be done in English and distributed in a peerreviewed distribution somewhere in the range of 2008 and 2020 to be qualified. Concentrates on writing about highlights of SM other than promoting were, then again, rejected. Likewise disallowed were surveys, reasonable and methodfocused works, and papers that checked out SM from a social or mental viewpoint. Systems

On every information base, a web search was led utilizing the previously mentioned catchphrases and equivalents. The digests from the list items were brought into Endnotes programming, which is strongly suggested and utilized in the methodical survey. There were two stages in this work: screening and determination of results. The first is the essential screening stage, which comprises of erasing copy records, titles, and synopsis examines for a theme, and the second is the auxiliary screening stage, which comprises of erasing. Copy, title, and synopsis outputs of reports connected with the topic. Second, the screening system includes extra definite testing of things that have passed the underlying screening. At this stage, papers are assessed in light of convention consideration and prohibition standards, and why a few investigations were barred. Screening of the information in this study started by eliminating copy articles. We then, at that point, screened the titles to wipe out undesirable articles and broke down the other papers to discover their ebb and flow importance to extra research. At long last, the applicable distributions were inspected, as well as the articles that they referred to. Acknowledged articles were partitioned into four classes in light of Aaker's (1991) CBBE parts, SM aspects, SM stages, and industry type.

Extraction of information

The PRISMA graph shows the review choice cycle. The titles and synopses of the recognized examinations were separately audited by two qualified scientists to decide whether they met the choice rules. At each stage, conflicts between analysts were settled through conversations and choices by the third Principal Investigator. result

The PRISMA graph outlines the review choice cycle (Figure 1). A sum of 1123 records were tracked down utilizing the predefined search watchword. Then, at the title level, I checked out 876 records, of which 317 were articles. The remainder of the paper was then looked into at a theoretical level and 463 extra articles were eliminated. After a full-text audit of 96 investigations, another 68 articles were erased. The overview contained a sum of 25 records. As per Aker (1991), brand value is the worth of an organization's image. As per Aaker (1991), aside from its own image esteem, saw quality, brand steadfastness, brand mindfulness, and brand pertinence are four vital components of brand value. Different analysts ordinarily utilize just these four aspects (Bendixen, Bukasa, and Abratt, 2004; Bhardwaj, Kumar, and Kim, 2010; Ogunnaike, 2017). Thus, this study utilizes Aaker's most broadly prescribed model to conceptualize brand value. Brand mindfulness

The initial phase in laying out CBBE is to build brand mindfulness, which is a significant component of brand value (Aaker, 1991). As per Aaker (1991), "the capacity of customers to recollect and recollect that a brand has a place with a specific item class." According to Keller (1993), brand mindfulness comprises of two principle parts: brand review and acknowledgment. The vast majority of the work in this issue investigated brand mindfulness in various settings. For instance, Amoako, Okpattah, and Arthur (2019) examined the effect of Facebook pages on Vodafone and MTN brand mindfulness and tracked down a solid positive effect. An investigation of the effect of SM on the financial business, Owino et al. (2016) We observed that SM represents 81.2% of changes in brand mindfulness. Various investigations (Cheung, Pires, and Rosenberger III, 2020; LlopisAmorós, GilSaura, RuizMolina,

LlopisAmorós, GilSaura, RuizMolina, LlopisAmorós, GilSaura, RuizMolina, LlopisAmorós, GilSaura, RuizMolina, L and FuentesBlasco, 2019; Sadek, Elwy, and Eldallal, 2018; Schivinski and Dabrowski, 2015, 2016; Vinh, Phuong, Nga, and Nguyen, 2019; Wright, Williams, and Byon, 2017) found that firm-created content decidedly affects memorability. Additionally, Cheung et al., 2020; Coulter, Bruhn, Schoenmueller, and Schäfer, 2012; LlopisAmorós et al., 2019; Rachna, 2017; Sadek et al., 2018; Schivinski and Dabrowski, 2015, 2016; Vinh et al., 2019) offered proof of user-generated content affecting brand mindfulness. Moreover, Stojanovic, Andreu, and CurrasPerez (2018) brought up that the power with which individuals utilize online media has an effect. Brand mindfulness impacts brand quality, mental and emotive picture, and purchaser esteem, as well as the reason to spread WOM. Brand mindfulness tweaks the connection among EWOM and brand relationship, as per Severi, Ling, and Nasermoadeh (2014). As indicated by Brand Affiliate

(Aaker, 1991), the second most significant piece of CBBE is the Brand Association, which manages brand picture relationship in the personalities of shoppers. As indicated by Keller (1993), a brand affiliation is "a feeling that is connected with the impression of the brand in the client's psyche and depends on extra data that incorporates the importance of the brand to the customer." Most of the examination included addresses this part of CBBE. A review exploring the effect of client produced content tracked down a connection among SMM and brand affiliations (Llopis Amorósetal., 2019; Rachna, 2017; Sadek et al., 2018; Schivinski and Dabrowski, 2015; Vinh et al., 2019). Then again, content made by organizations has been displayed to emphatically affect brand affiliations (Llopis Amorósetal., 2019; Sadek et al., 2018; Schivinski and Dabrowski, 2015; Vinh et al., 2019; Wright. et al., 2017). Also, a few investigations (Amoako et al., 2019; Khajuria, 2017; Sehar, Ashraf, and Azam, 2019) have observed that web-based media promoting has an immediate beneficial outcome on brand affiliation. What's more, Stojanovic et al. (2018) He contended that the utilization of online media influences brand mindfulness and subsequently the quality, mental and enthusiastic picture of the brand. As indicated by Severi et al. (2014).

Seen Quality

Seen Quality is the third variable that decides CBBE, as per Aker (1991). As indicated by Erenkol and Duygun (2010), saw quality alludes to the client's view of the brand's capacity to measure up to the assumptions of customer greatness and prevalence. It is essential to take note of that quality insight isn't equivalent to the nature of the real item. Rather, it alludes to a singular's very own evaluation of an item (Erenkol and Duygun, 2010), which is affected by the customer's utilization situation, past experience, and individual prerequisites (Yoo et al., 2000). Most examinations have shown that apparent quality is the "significant part". Many examinations have explored the impacts of SM on this aspect and observed that it has huge impacts (Amoako et al., 2019; Khajuria, 2017; Owino et al., 2016; Sehar et al., 2019. Sharma and Sahni, 2015; Stojanovic et al., 2018). Also, client produced content in SM has been tried in a few investigations and viewed as certain for saw quality (Cheung et al., 2020; Schivinski and Dabrowski, 2015, 2016; Vinh et al. ., 2019). We additionally observed that the organization that made the SM impacted the apparent quality (Cheung et al., 2020; Llopis Amorósetal., 2019). Client devotion to the brand

Client Loyalty to a Brand According to Aker (1991), brand dependability is a "proportion of client devotion to a brand" (p. 91). Brand reliability is the main component of CBBE, as faithful clients focus on the brand, make rehased buys and partake in WOM over the long haul. Brand buys, repurchases, and investment in WOM are the most widely recognized measures used to gauge brand dedication. The part of brand devotion was analyzed in every one of the investigations included. Many examinations have shown that online media showcasing straightforwardly affects client maintenance (Amoako et al.,

2019);

Author	Aim	Finding
(Amoako et al., 2019)	To research the impacts of SMM on brand value	SMM sway brand mindfulness; brand affiliation brand steadfastness; and saw quality $p \leq 0.01$ to all aspects
(Owino et al., 2016)	To determine the influence of SM on brand equity in the banking industry	SM clarifies 81.2% of the variety in brand mindfulness; 82.5% of seen quality; and 85.9% of brand unwaveringness

SM promoting aspects

Kim and Ko (2010) proposed SM promoting practices framework that joins five angles (redirection, correspondence, notoriety, customization, and EWOM. Regarding, Netemeyer et al. (2004) uncovered that entertainment impacts customer demeanor toward the brand and grows relationship among client and brand, which achieves dynamic collaboration. Further, Martin and Todorov (2010) suggested that affiliations use customization as a technique in SM to confer the tendency and uniqueness of brands and to extend client commitment. Also, Muntinga, Moorman, and Smit (2011) pushed that SM fame gives information that includes four motivations: observation, prebuy information, data, and inspiration. In outline, EWOM assumes a significant part since it causes disturbance. The current audit was unsurprising in past examinations, as 18 investigations recognized these angles. Seven investigations (Ebrahim, 2020; Godey et al., 2016; Koay et al., 2020; Nobar et al., 2020; Sadek et al., 2018; Sehar et al., 2019; Seo and Park, 2018; Vinh et al. Al., 2019; Hawamleh et al., 2020) applied every one of the five angles. A few distinct investigations have attempted a portion of these angles. For instance, WOM has arisen as the main part of surveys (Severi et al., 2014) and equivalent associations (Amoako et al., 2019; Ahmad et al., 2020). .. Critically, a few examinations don't perceive parts of SM (Cheung et al., 2020; Colicev et al., 2018; Coulter et al., 2012; Khajuria, 2017; Owino et al., 2016; Schivinski and Dabrowski, 2015; Nusairat et al., 2017). Table 2 summarizes all angles used in all audits.

Author	SM dimensions	platform	application
(Amoako et al., 2019)	Interaction	Facebook	Vodafone and MTN
(Owino et al., 2016)	Not specified	N/A	N/A
(Llopis- et	WOM, Interaction	All	Festival attendee

Amorós		n,		
(Stojanović et al., 2017)	Customization, WOM		N/A	Tourist destination
(Severi et al., 2014)	WOM		N/A	N/A
(Rachna, 2017)	Not specified		Facebook	Retail brand
(Cheung et al., 2020)	Not specified		N/A	Laptop-Pc and sportswear
(Coulter et al., 2012)	Not specified		N/A	Tourism, Telecommunication
(Vinh et al., 2019)	Customization, WOM,		Facebook	Cinemas
(Wright et al., 2017)	Trend, Customization,		Facebook	Fitness
(Nobar et al., 2020)	Customization, WOM,		N/A	Leather industry
(Ebrahim, 2020)	Customization, WOM,		N/A	Telecommunication
(Chahal & Rani, 2018)	Interaction, Entertainment		N/A	Multinational corporations
(Godey et al., 2016)	Customization, WOM,		Facebook	Luxury brand
Khajuria (2017)	Not specified		Facebook	Beauty, & fashion products
Sadek et al. (2018)	Customization, WOM,		Facebook	N/A
Colicev et al. (2018)	Not specified		N/A	Retail

Sánchez-Casado et al.	Entertainment, WOM	Facebook	N/A
Schivinski and ki	Not specified	Facebook	Beverages, clothing, and
Schivinski and ki	Interaction, WOM	Facebook	Beverages, clothing, and
Dwivedi et al. (2019)	Customization	N/A	Various brands
Sehar et al. (2019)	Customization, WOM,	N/A	Online store
Seo and Park (2018)	Customization, WOM,	N/A	Airline industry
Koay et al. (2020)	Customization, WOM,	Facebook	N/A
(Sharma & Sahni,	Interesting, Impressive,	N/A	Fashion

Concerning which have been applied in safeguarded examinations affirmed that enormous a piece of papers endeavored Facebook ranges (Amoako et al., 2019; Khajuria, 2017; Rachna, 2017; Sadek et al., 2018; Sánchez-Casado et al., 2018; Schivinski and Dabrowski, 2015, 2016; Vinh et al., 2019; Wright et al., 2017). Further, Twitter became broke down in examinations with Facebook (Godey et al., 2016; Koay et al., 2020). The extra examinations have surpassed at the choice to shoppers in gentle of the reaches they use (see work area 2).

A sizable assortment of examines have assessed one kind of big business withinside most of the articles. Regardless, on this article, we intend to highlight a relationship for the business endeavor examined in each article as shown in work area 2. Some

evaluation have endeavored a few undertaking, for example, Coulter et al. (2012) reviewed the visit endeavor, broadcast correspondences, drugs, furthermore, Colicev et al. (2018) investigated Supermarket, bistro, clothing, pharmacy, gadgets retail, and Nonalcoholic beverages, get dressed and movable manager chiefs became

conveyed in examinations (Schivinski and Dabrowski, 2015, 2016). Further, still up in the air for Fashion

(Khajuria, 2017; Sharma and Sahni, 2015), the supplier business venture (Seo and Park, 2018), Online store (Sehar et al., 2019), luxury logo (Godey et al., 2016), worldwide organizations (Chahal and Rani, 2017; Nusairat, Rashid and Rembielak, 2015), telecom (Amoako et al., 2019; Ebrahim, 2020), cowhide undertaking (Nobar et al., 2020), health (Wright et al., 2017), film (Vinh et al., 2019), traveler objective

(Stojanovic et al., 2018), birthday celebration member (Llopis-Amorós et al., 2019). It plainly lovely fundamental that couple of examinations put away open determination for respondents to choose out the logo that they follow (Koay et al., 2020; Owino et al., 2016; Sadek et al., 2018; Sánchez-Casado et al., 2018; Severi et al., 2014).

Discussion

This paper has summarized and incorporated the educational composing roughly the effect of SM displaying on logo cost that became coordinated somewhere withinside the assortment of 2008 and 2021 and has enabled a relationship of the keys concentrates on subjects and giving a well off sign of SM selling research on logo cost. As in accordance with each unmarried safeguarded appraisal, SM displaying proactive tasks strongly increase motivator with the guide of utilizing granting a special all around definitely worth to gatherings and buyers.

Aaker (1991) CBBE adaptation stimulates a real level of logo, and the manner in which clients see, sense and act in regards to the logo. Aker CBBE adaptation is profoundly dependable that the most extreme not unusualplace way of developing CBBE begins at the base with making logo character, then, manufacture logo realities that individuals will like, acknowledge as obvious with and as an approach to at last achieve targets. The adaptation outfits bunches with beneficial understandings roughly consumers' tendencies, clients' wants and wants, and buy assumption, the logo decisions show individual ideal responses to added substances of the logo while differentiating and unique brands, which permit gatherings to play out the advantages of logo cost. The achievement of exhibiting proactive tasks is generally relying on clients' response, which in this manner, depends on the realities that has been engraved in clients' minds roughly marks. Creating logo cost strategy should manufacture gradually beginning from developing interest to spreading out a stupendous connection, demand reasonable and energetic issue and finished with the guide of utilizing leading clients steadfastness.

Past composition to an extraordinary amount focused in at the impact of SM exhibiting on logo cost, but the houses and attributes of SM. The added substances of SM (entertainment, prevalence, association WOM, and customization) will be also included and explored to look how every perspective might be found a method for moving the utilization of such contraptions and the way should transfer to developing logo cost. Those variables are in need additional examinations in time-frame of information the elements that awaken purchasers to set up and bestow experiences, a method for handling current trends in the cutting edge circumstance, a method for conveying a lump of adjusted data that clearly thinks about to the flavor and clients tendencies, a method for making substance interfaces with appealing added substances.

Results of this view showing that SM ranges and their substance uncovered an enormous dating with CBBE for complete types of foundations. As in accordance with Carranza (2015), SM has demonstrated the effect of 7 endeavors; which contain entertainment, land, exhibiting, retail, preparing, bistros, and style. The impact of safeguarded assessments presented and a lump of proof that affected gatherings with the guide of utilizing SM of extra, that's is, birthday celebration member, traveler area, Pc, the visit endeavor, media interchanges, drugs, cowhide venture, worldwide gatherings, greatness, and design thing, plane undertaking. It tends to be valuable for the test intend to really take a look at additional foundations so impacts might be summarized.

SM ranges give a likelihood to clients to blend and collaborate, sidekick with inestimable social occasions, fan pages, and getting a feeling of neighboring area in an advanced world. SM Platforms progressed open entryways permit enterprises to associate with customers and advantage grumbling around their brands, comprehend their necessities and wants. There are severa SM ranges at the web, the greatest notable are Facebook, Instagram, YouTube, Linked In, QZone, Tumblr, WhatsApp, Twitter,

Weibo, TikTok, Snapchat. It standard size that Facebook has quickly was the greatest notable furthermore the most extreme utilized by private clients and gatherings. Facebook exhibiting is one fervently discussed trouble that obtains the leisure activity of researchers in a manner that has not the slightest bit been more noteworthy. This review affirmed that Facebook turned into the winning level. This will be connected with the way that Facebook is the greatest notable level with the biggest assortment of clients, notwithstanding the biggest for SM selling utilizations (Stelzner, 2018).

Through carefully keeping an eye on the past composition on the impact of SM advancing on brand esteem (26 assessments), experts found that there are different displaying ideas in this field. The value of this paper gets from its uniqueness in giving a wide layout of force research endeavored regarding this matter and an essential systematization of the emerging key assessment subpoints. Academic composing intentional review about SM advancing activities brand esteem is incredibly limited, thusly, the gave proficient composing study contributes in filling this opening a couple ways; an observational assessment of the effect of a couple of SM stage practices results on CBBE. also, this audit requested the impact of SM perspectives (redirection, affiliation, stunning quality, verbal, and customization) on brand esteem parts as well as the sort of industry which have not been done as of now. Further, this paper adds to the educational composition by giving a revived fundamental preparation and systematization of present examinations of what SM mean for brand esteem parts, also, to recognize the openings of the previous assessments in this subject. By analyzing the situation with SM show exploration and brand value logical examination, you can advance future charges for brand value and SM, advance school tests, and direction potential further test upgrades. .. The outcomes likewise give organizations a far reaching comprehension of the aftereffects of SM works out, how they can uphold brands, and how to utilize them all the more successfully in SM observing. In general, most organizations anticipate that SM should draw in new purchasers or develop a steady client experience to benefit and business. SM is an innovative and proficient medium that empowers you to convey, rehash and coordinate with your purchasers. This permits organizations to finish show strategies all the more expertly and successfully. This study gives verification of how using SM could add to the spot of affiliations. Further, brand directors, who need wide market data to relate with clients, can get encounters into how past assessments structure a SM advancing method enlightening and concluding an affiliation's picture esteem.

End

SM has advanced to transform into a troublesome and significant instrument in the advancing field and brand correspondence. Accordingly, SM publicizing is out and out assisting associations and buyers with noticing new correspondence channels. Brands increase their correspondence with the vested party and further develop client commitment persistently. As a fundamental piece of the IMC, SM advancement practices actually support CBBE by giving purchasers differentiating, customary media merit ideas. Creating brand value is basic since it empowers organizations to draw in purchasers all the more successfully, increment brand validity, and empower them to keep on advancing. A brand's internet based social presence can be an asset that improves brand value and upgrades customers and brand esteem.

Obstructions and Future Reviews

The focal point of this paper is to look at all of the past compositions connected with the effect of SM introductions on brand value. By the by, this study has a few constraints. Above all else, the momentum paper disregards the immense measure of exploration that has investigated a few parts of the CBBE part. Accordingly, future examination might be reflected in these papers prompting various settings. Second, while this test contributes via looking, requesting, and connecting with key composing gatherings, it

could be useful to give quantifiable proof through major meta-examination review. Specifically, there are a few quantitative investigations that go past the extent of SM. Show and brand value.

A J O M C

Asian Journal of Organic & Medicinal Chemistry

Volume 7, Number 2

April - June 2022

ISSN: 2456-8937



<http://ajomc.asianpubs.org>



Asian Publication Corporation
Sahibabad (India)
<http://asianpubs.org>

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Threats and Defense for Social Networking in Current Era – An Eye Opener

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ABSTRACT

Nowadays, social media sites are becoming increasingly popular among teenagers and young people, but they also create major security threats, so all users should exercise caution. Social networking sites are becoming more prevalent in our daily lives. For some, it has become as natural as breathing.

Because they are based on the concept of traditional social networks, where users can interact with new individuals through people they already know, social websites are sometimes known as "friend-of-a-friend" networks. The objective of a few social sites may be purely social, ie. Such sites are more focused on establishing users' social relationships while others may concentrate on enterprise connections. Millions of people throughout the world use their mobile phones, apps, and online sites to access social media sites. According to statistics given by the renowned networking social site, Facebook has approximately 2800 million active users, Whatsapp has 1500 million active users, LinkedIn and Telegram have 760 million and 400 million active users respectively whereas Twitter has 330 million registered users, and Snapchat has 265 million active users.

Furthermore, the same technologies that encourage user participation make it easier for malware, such as worms that can be closed down corporate networks system or spyware and keyloggers that steal corporate data, to infect users. Employees can also mistakenly "leak" confidential firm information by posting images, videos, and audio recordings to sites.

Keywords: Threats, Defense, Firewall, Intrusion Detection, Anti-Malicious-Software systems, Vulnerability, Internet Service Provider, Multi-Factor Authentication, Cryptosystem.

Threats: Threats and risks abound, including some that are more threatening than others. Viruses that wipe out your overall system, someone getting into your device and altering files, someone using your computer to attack others, or even someone grabbing your credit card information and using it to make illicit purchases are all examples of these risks. Even with the best precautions, there's no guarantee that any of these incidents won't happen to you, although there are things you can do to minimize your risks.

Defense: Recognizing the hazards and learning some of the terminology connected with them will be the first step in protecting yourself.

- Hacker, attacker, or intruder
- Malicious code, Vulnerability

To preserve the integrity of an enterprise's data resources, the defense uses different security countermeasures in a coordinated manner. Malicious hackers' attempts are less likely to succeed when defense in depth is used. This type of approach can also help network managers and security personnel detect those who try to break into a computer, server, internal network, or (ISP) Internet service provider.

Social Networking – Threats and Defense:

When sharing information on the web, people must be aware of the hazards and cautious about what they disclose and with whom.

Threat actors may exploit social media platforms to spread malicious code, infect a user's computer, or obtain personal information such as the identity of the user, address, contact info, and personal or business relationships. Certain actions may also unintentionally provide information to third parties. Some of the most prevalent risks to social networking sites are listed here.

Viruses: Social media platforms are an excellent target for cyber criminals wanting to make the biggest effect with the minimum of effort because of their widespread use. By creating a virus, inserting it in a webpage or a 3rd party, and then relying on individuals to transmit the dangerous links to their friends, an attacker can easily infect millions of computers. A virus can be transmitted by email attachments, corrupted files on floppy discs or CD-ROMs, or by exploiting a security hole in Microsoft Windows.

1. **Defense:**

- Maintain good anti-virus, anti-spyware, and firewall software by installing and updating them on a regular basis.
- Emails, advertisements, newsletters, and other forms of communication are used to raise awareness and educate people.
- Downloading software from unreliable web pages or other sources is not a good idea.
- Never run a .exe file that you haven't received from someone you don't know.
- Ensure that all software patches are installed and current.
- Have an outside team check the source code for backdoors
- Maintain the most recent version of your operating system.
- Increase the security settings on your browser.
- Avoid visiting any shady websites.
- Only download software from reputable sites. Before you download free software or file-sharing applications, give them a thorough examination.

2. **Tools:** To gain access to a customer's profile, cybercriminals may employ tools. The attacker has access to the user's personal information as well as the information of any contacts with whom the user has shared their information. If an attacker gains a login to a customer's profile, they can impersonate them and submit harmful content.

3. **Defense:**

- Download and install an Internet Security software suite, such as Norton Internet Security, which includes anti-spyware, anti-virus, and firewall protection.
- Before you surf the Internet or download email, make sure your Internet Security suite is up to date.
- If you've disabled Windows Automatic Updates, manually check for crucial updates from Microsoft Windows.
- Back up your critical files on a regular basis. As a general guideline, the more significant the information is and the more often it changes or is added to, the more frequent the backups should be.
- Never use a computer to access a website that contains your credit card or bank account information unless you are certain that the computer is virus-free.
- Examine your credit card and bank statements on a regular basis.
- Keep a close eye on demands for predatory conduct from online "friends" or acquaintances.
- If you agree to meet an internet "friend" or acquaintance in person, be extremely cautious.

4. **Social Engineering Attacks:** Threat actors could send an e - mail or make a post that appears to be from a trusted social media website or user. The message could contain a fake URL or an asking for personal information. If you follow the advice, you risk revealing sensitive information or risking the security of your system.

5. **Defense:**

- Never hand out personal information to someone you haven't verified through a third party. Internet searches can occasionally yield further information.
- User education via a portal, email newsletters, and customer meetings, among other things.
- Never give out your email address on a website that is unfamiliar to you.

6. **Identity theft:**

Threat actors might be able to gather adequate personally identifiable information from social media platforms to impersonate yourself or one of your friends. Threat actors may be able to deduce the answers to log-in or password reminder inquiries for mail, debit card, or banking information using just a few pieces of personal data.

7. **Defense:**

- Passwords that are extremely strong
- SSL (Secure Sockets Layer)
- Clear Screen / Desk Policy
- Effective Anti Spyware and virus
- Alertness

8. **Third-party applications:** Users may be able to add third-party apps, such as games and surveys, to some social networking services to provide extra features. Use caution when using these apps; even if they don't include harmful code, they may gain access to your profile information without your knowledge.

Defense:

- Don't give out your email address on dubious websites
- Use anti-spam filtering software
- Computer security
- User education
- Spam detection and blocking
- Always download software from reputable sources. While installing free software or data sharing applications, give them a thorough evaluation.

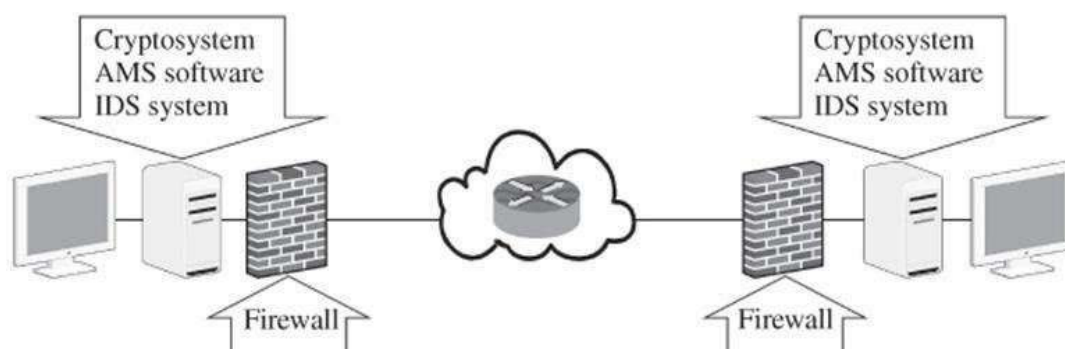
Follow Good Practices

Social networking platforms come with their own set of hazards, which you can mitigate by following basic security procedures.

1. Make sure your privacy and security settings are strong.
2. Third-party services that are suspicious should be avoided.
3. Everything should be treated as if it were public.
4. Only share with those you know.
5. Keep the quantity of personal information you share to a minimum.
6. Remember that the world wide web is a public resource.
7. Strangers should be avoided as much as possible.
8. Keep an open mind.
9. Examine your options.
10. Third-party Programmes should be avoided at all costs.
11. Make use of strong passwords.
12. Make sure to read the terms of service.
13. Keep your software up to date, especially your web browser.
14. Anti-virus software should be used and kept up to date.

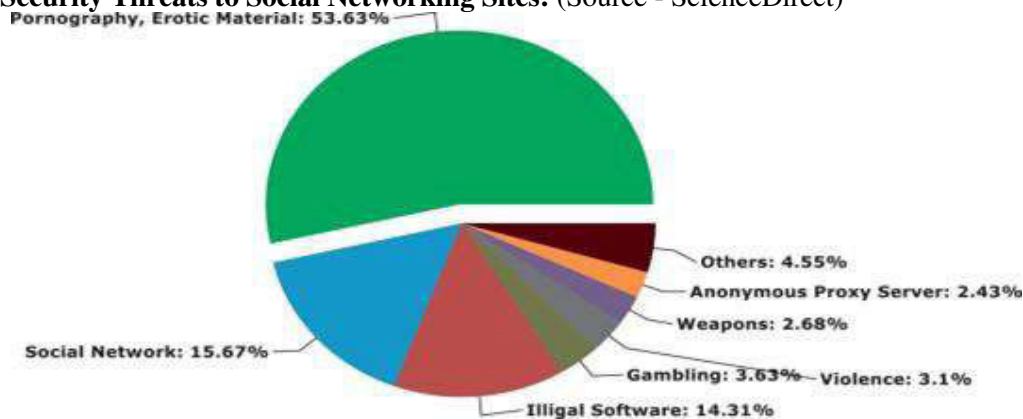
Basic Security Model:

The core security paradigm consists of cryptographic techniques, gateways, (AMS software) anti-malicious software systems, and (IDS) intrusion detection systems.



- Infrastructure for Network Security (SSL, Firewall, NIPS, HIPS with Good AV and Anti Spyware on the server and gateway)
- Firewall for Web Applications
- Server Vulnerability Analysis and Penetration Testing should be performed on a regular basis.
- Multi Factor Authentication

2020's Top Security Threats to Social Networking Sites: (Source - ScienceDirect)



- Cyber security threats, like the coronavirus pandemic, will happen on a worldwide scale every few seconds in 2020.
- Cyber safety similar to how the coronavirus spreads from individual to individual, malware can spread fast from device to device and network to network.
- Cyber-attacks, like the recent coronavirus epidemic, have the potential to put you out of business.

There are various cyber security threats businesses face in 2020:

- Phishing attacks: phishing scams frequently employ social engineering to get login information for both on-campus as well as cloud-based attacks.
- Remote worker endpoint security: remote workers commonly work without network security protection, which means they're missing out on an important part of multilayer cyber defence.
- Iot devices: it's difficult to keep up with the rapid growth of new iot devices while developing cyber security solutions.
- Sophisticated and targeted ransomware attacks: a single ransomware attack can do significant damage to small and midsize businesses, resulting in costly downtime and recovery costs.
- Deep fakes: when artificial intelligence (ai) and machine learning are used to alter a current photograph or video of a person to portray an incident that didn't happen, it is referred to as a deep fake.
- Mobile malware: mobile malware is software designed to especially attack android mobile operating systems. As more crucial and sensitive processes are performed on cellphones, it's just a question of time until mobile malware emerges among the most serious cyber security issues. (2020, emmitt)

CONCLUSION

On social networking sites like Facebook, WhatsApp, Snapchat, Instagram, YouTube, LinkedIn, and Wikipedia, as well as Web services like eBay and Gmail, blog posts, Newsfeeds, podcasts, and certain other technologies enable self-publishing and strong interactivity between users. These sites get a large number of visits, which makes them very appealing to hackers. Social networking services are designed to bring as many people together as possible on one platform, and there is a high return on investment for attackers in doing so. One of the most practical techniques for improving IT security is to restore your systems and SaaS app data to enable efficient and quick recoveries from cyber-attacks. Automate patch and vulnerability management to keep your systems up to date and secure against cyber threats. Make very sure that every computer or gadget that leaves the workplace is equipped with a comprehensive security suite, including a local firewall and powerful malware detection. To better cope with the attack and get your firm back on the right track as early as possible, you'll also need a strong plan of action. Because "prevention is better than cure," we must all take maximal precautions while using social networking sites.

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शोध-प्रभा
Shodha Prabha

UGC CARE LISTED
ISSN : 0974-8946

CERTIFICATE OF PUBLICATION

This is to certify that the article entitled
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UGC
University Grants Commission

Published in

Shodha Prabha; ISSN 0974-8946

Volume-47, Issue-3, No 3 : 2022

UGC Care Approved, Group I, Peer Reviewed and Referred Journal



ज्ञान-विज्ञान विमुक्तये
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A CONCENTRATE ON CUSTOMER DISCERNMENT TOWARDS E-VEHICLE IN AHMEDNAGAR CITY

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Abstract

The reason for this study is to plan how customers in Ahmednagar see electric vehicles. We run over a ton of subjects and stories on the significance of electric vehicles and how legislatures are elevating them to lessen their dependence on oil, cut ozone depleting substance discharges, and further develop air quality. Metropolitan urban communities are a significant wellspring of contamination, in this manner it is critical for occupants of enormous regions to know about the issue and do whatever it may take to restrict their openness to poisons and perilous gases.

The reason for this study is to record assessments, sentiments, and discernments in regards to attention to and penchant to buy vehicles to keep up with natural supportability.

The examination of the exploration articles depends on catchphrase looks for the subject in different distributed diaries, working papers, and other distributed books.

We utilized a distinct exploration plan for this review. We utilized polls to procure the information from essential sources.

keywords: Opinion investigation, customer insight, and electric vehicle.

1.INTRODUCTION

Producers were worried about how Indian metropolitan regions' air contamination was developing. The 100 most contaminated metropolitan districts in the country incorporate in excess of 25 critical Indian urban areas, as per World-Country. There are a wide range of sources that add to the formation of air contamination in metropolitan settings, yet the division of transportation makes a significant commitment. Division is insignificant, and transport releases are vital. Given the notable adverse consequences of unfortunate air quality on both human wellbeing and the economy, makers are envisioning ways of decreasing their adverse consequences in the world.

Barely any public legislatures have successfully refreshed their objectives for advancement improvement, and electric cars are viewed as a promising transportation choice. Native states rush to advance electric vehicles as a green option for conveyability and as a serviceable method for diminishing air contamination in urban communities.

A couple of worldwide instances of critical thinking methods and best practices are accessible. For instance, half breed vehicles are exceptionally famous in China for driving and cycling. Metropolitan areas in the UK, similar to London, offer advantages. For example, in certain wards, obstructing expenses and flight charges are postponed or fundamentally decreased for the acquisition of new electric vehicles.

Electric power dissemination is still really wasteful in India, in spite of the general notoriety of electric 3-wheelers. For metropolitan transportation, there were bikes, four-wheelers, and a fleet of vehicles. In the event that the public authority gives motivation charging powers and establishments, tests uncover that electric bicycles can be economically feasible by 2020 and electric four-wheelers will be a predominant option for development by 2030. The explanation electrical machines are pushed by the strong barometrical methodology. The presentation of electric vehicles has the organization overjoyed. The aggressive objective of being all electric by 2030 has additionally been laid out by the priest of protection power. The Pastor of Street Transport and Roadways, specifically, made areas of strength for a to the General public of Indian Vehicle Producers (SIAM) yearly custom that has frightened the car business.

Notwithstanding, characterizing strategies would require input with respect to how much help required, suggestions for administrative use plans, vital methodology apparatuses, and use of the confidential area.

2.OBJECTIVES

- To check shopper information on electric vehicles.
- To bring issues to light about electric autos.
- To explore what persuades customers to buy electric autos.
- To fathom the various e-transportation endeavors attempted by the Indian government.

3. Issue Rundown

In the ongoing Coronavirus circumstance, numerous automakers are encountering diminished deals. We will endeavor to tackle the issue by finding out if customers' inclinations for e-vehicles have changed or their method of transportation. Or on the other hand they are as yet uninformed about the benefits of electric cars. With the assistance of this exploration, we desire to bring issues to light.

4 READING REVIEW

Natural issues propel the transportation business to embrace all the more harmless to the ecosystem innovations (Chan, 2002). Electric vehicles (EVs) are seen as an economical method of transportation. The paper's primary spotlight is on batteries since they are fundamental for make electric vehicles all the more naturally harmless, financially feasible, and reasonable for day to day use.

(Hoyer, 2008) Electric vehicle innovation has been around for over a long time. Electric driving, nonetheless, was required to be postponed because of burning motors' availability and straightforwardness of purpose. Different (moving back and forth) factors are at present resuscitating interest in electric cars. On the driving side, lessening oil supplies and developing ecological cognizance about the effect of customary gas powered motors on the climate prepare for cleaner electric vehicles. Late headways in battery and electric engine innovation empower electric vehicles to contend well with regular vehicles on the pulling side.

As per Neumann et al. (2010), the presentation of electric vehicles should be visible as a wellbeing measure and an assurance of future security because of natural worries, rising CO2 emanations, and the consumption of non-renewable energy source holds. The innovation that will be utilized later on EV is very exceptional and on the rise, taking into consideration proficient and agreeable really long travel.

(M Pierre, C Jemelin, and N Louvet - Energy Productivity, 2011) Practically identical cases have occurred throughout recent many years — presumably more unobtrusive yet at the same time brimming with learning amazing open doors: during the 1990s, a few neighborhood states advanced developments in view of electric vehicles, and a few people picked this kind of vehicle for day to day transportation. We intend to introduce research from concentrates on finished in 2006 and 2008 to make sense of the drivers' imaginative modular decision, feature the difficulties they looked at that point, and analyze the use designs that affected their portability and utilization of electric vehicles.

(Rezvani, Jansson, and Bodin 2015) give an outline of concentrates on EV reception; nonetheless, they just focus on mental viewpoints that are special to every person and that influence individuals' goals to embrace electric vehicles, and they just pick few delegate studies. Our survey adds to it in the accompanying ways: first, we look at a more extensive scope of reception impacting factors for electric vehicles other than mental develops; and second, we present a careful image of the cutting edge by ordering all scholarly examinations on electric vehicle inclinations.

Request studies have analyzed the monetary, mechanical, basic, and political thoughts of EVs to help states and vehicle producers in surveying shopper inclinations (Ghasri et al., 2019; Sierzchula et al., 2014). (Liao et al., 2017). A few examinations have involved expressed

inclination ways to deal with concentrate on heterogeneity in client inclinations while choosing to obtain an electric vehicle. Driving reach, topping off time, and claiming costs have been distinguished as a portion of the components impacting EV buying choices.

Marcello Contestabile, Dr. Gregory Offer, and Dr. Robin North's review, "Electric Vehicles: A Combination of the Flow Writing with an Emphasis on Financial and Ecological Reasonability," arrives at the resolution that progressions in battery innovation, which will bring down expenses and increment energy thickness, as well as the arrangement of an appropriate re-energizing foundation, will fundamentally affect the more drawn out term take-up of EVs. (2012) Marcelo Contestabile

India could participate in limited scope fortifications to deal with the heap concerns locally as opposed to going for the gold redesign, as per Praveen Kumar and Kalyan Run's article, "Possible Requirement for Electric Vehicles, Charging Station Framework and its Difficulties for the Indian Market." Home

Charging should be advanced. Prior to setting up the enormous scope charging foundation, appropriate making arrangements for area, populace, gridlock, and security ought to be considered. joining different exercises

is huge in the areas of transportation and energy. Advancement targets through different state of the art approaches and projects, for example, the monetary customer impetuses proposed to drivers of electrical vehicles, for example, tax breaks, buy endowments, limited tolls, free leaving, and admittance to confined expressway paths, will support the market's development. (2013) Run P. K.

Which Innovation for a Metropolitan Circulation Community: Traditional, Mixture, or Electric Vehicles?

Cargo travel altogether affects metropolitan development, as per Philippe Lebeau, Cedric De Cauwer, Joeri Van Mierlo, and Cathy Macharis. The expected utilization of electric vehicles in metropolitan calculated tasks was examined by scientists. The open door exists to bring down last-mile costs by utilizing an armada with various innovations. An armada size and blend vehicle directing issue with time windows for EVs was given by the scientist. The creators' essential commitment was considering the reach vacillation of EVs. Electric vehicles are every now and again the most serious innovation in the conservative van classifications. With regards to gigantic vans,

According to a monetary point of view, diesel has shown to be the most engaging choice since electric vehicles need to go farther to be cost-cutthroat. Mixture vehicles are liked in the truck market on the grounds that

In contrast with a diesel truck, it has decreased running expenses and fixed costs. 2015's Philippe Lebeau

Customer inclinations for electric vehicles: by Fanchao Liao, Eric Molin, and Bert van Small, Far reaching utilization of EVs could assist with decreasing issues including natural contamination, an Earth-wide temperature boost, and reliance on oil. Despite the fact that legislatures have critical advancement approaches set up, EV infiltration is still generally low. They introduced an exhaustive examination of concentrates on purchaser inclinations for EV with an end goal to illuminate strategy producers and give direction to future review.

They analyzed the mental and financial points of view on why individuals lean toward electric vehicles. The utility of an EV's monetary and mechanical attributes is for the most part decided to be main considerations, like its expense of procurement and activity, driving reach, charging time, vehicle execution, and market brand assortment. The amount of charging stations well affects the utility and EV advancement Duty decrease and motivation plans have a critical effect. 2017's Fanchao Liao

The early market development for electric vehicles is as yet continuing forward, however different impediments are holding them back from turning out to be broadly utilized, as per

Lingzhi Jin and Peter Slowik of the Worldwide Gathering on Clean Transportation. These hindrances incorporate the new innovation's greater cost, relative disturbance when contrasted with range and re-energize terms, and shopper obliviousness of the innovation's common sense and accessibility. This The last component, some of the time alluded to as "client mindfulness," is critical. 2017's Lingzhi Jin.

By Mohamed M, G Tamil Arasan, and G Sivakumar, Concentrate on Electric Vehicles in India Open doors and Difficulties, supplanting gas powered motors (ICE) with electric motors will fundamentally diminish contamination and be financially savvy for purchasers. This innovation has been embraced by various countries, which is helping the climate. The review noticed the open doors and troubles related with sending EVs in India. Government drives, batteries, ventures, and the climate have all been thought about. With these hardships, factors including the cost of EVs, their viability in India, and interest for EVs were considered. India's reception of EVs is essentially expected to decrease ozone depleting substance discharges and oil costs. The gov. ought to take full advantage of the open doors within reach and recognize successful procedures to address the challenges. 2018 (Mohamed M).

Electric vehicles are particular in India because of the country's various approaches and guidelines. As indicated by Pritam K. Gujarathi, Varsha A. Shah, and Makarand M. Lokhande, The EV/PHEV portion of the overall industry as of now is around 0.1%. Practically all vehicles these days think about involving petroleum products for impetus. These reason a worldwide temperature alteration by delivering ozone harming substances into the climate warming. Homegrown oil result and utilization are veering at a rising rate. India imports more than 70% of its yearly oil needs. In this way, there is a squeezing need to explore the drivers behind economical and cleaner choices. (Pritam K. Gujarathi, 2018) Discernment and Mindfulness Level of Planned Purchasers Toward Electric Vehicles: As per Masurali.A. what's more, Surya.P., India creates generally 18% of the nation's all out fossil fuel byproducts from the vehicle area.

One of the most viable elective responses to the emergency is the electric vehicle (EV). Numerous automakers are presenting EVs and differentiating their product offerings. EV advancement can add to fuel investment funds.

Reliance and contamination are favorable for both the country and its residents. Individuals' degree of attention to EVs is considerably more impacted by their schooling. Aside from producers, Government ought to put forth a purposeful attempt to bring issues to light and shape great discernments among likely clients.

(Masurali.A, 2018) An Investigation of Buyer Insight and Buy Expectation of Electric Vehicles: Pretty Bhalla, Inas Salamah Ali, and Afroze Nazneen. The choice to buy a vehicle is impacted by various elements, including the expense, solace, unwavering quality, innovation, social worthiness, and the accessibility of foundation. These cases have been approved for both ordinary and electric vehicles. They accept that these components straightforwardly influence an individual's decision of vehicle. They found that EV makers and the public authority should make more prominent speculations to increment public acknowledgment of the vehicle by building more framework and putting a more prominent accentuation on innovation to cultivate certainty.

The examination shows that the overall population knows about the benefits to the climate. Government organizations and organizations that produce vehicles have an obligation to put resources into their creation.

(Pretty Bhalla, 2018) Worldwide contamination is on the ascent, and each endeavor is being made to decrease CO2 outflows and salvage the planet. Electric vehicles for India: Outline and Difficulties is composed by Mr. A. Rakesh Kumar and Dr. Sanjeevikumar Padmanaban. The presentation of EVs is one such drive. Since the transportation business is one of the greatest producers of CO2, scaling back is significant. The public authority has created aggressive

designs to present electric vehicles (EVs) to the Indian market and stay aware of the worldwide reception of EVs.

A broad report on EVs is essential for the Public Electric Versatility Mission Plan 2020. India faces a huge obstruction in its progress to EVs from gas powered motors (ICE). This needs Research and development is joined with a ton of arranging. Range nervousness should be successfully overseen by means of charging foundation. Request age should be framed by charging all administration transports and forcing charges exceptions for people who buy EVs. 2019 (Mr. A. Rakesh Kumar)

Open doors and Degree for Electric Vehicles in India: by Janardan Prasad Kesari, Yash Sharma, and Chahat Goel, Fostering a strong arrangement for the take-up of EVs in India and guaranteeing a top notch execution is troublesome however fundamental for the public authority. India's topography and variety will make gives that requirement for cautious reactions. With the obtaining of three-wheeled vehicles, transports, and four-wheeled vehicles for government workplaces, public acquirement is expected to be a critical figure EV development. The underlying extension of two-and four-wheeled electric vehicles is additionally expected to be supported by ventures made by armada administrators like Ola and Uber as well as administrators of food appropriation administrations. Nonetheless, it could take the confidential EVs 5-6 years to turn out to be broadly utilized and acknowledged.

5. RESULT Examination Techniques

Research Approach:

Illustrative study exploration will be utilized for both essential and auxiliary examination.

Information sources:

Auxiliary information sources incorporate Google Researcher, Google sites, official and business destinations, periodicals, books, and papers, among others.

Essential reviews can be led internet utilizing a google structure or disconnected by moving toward the main interest group.

Information Social event Method:

essential exploration procedure.

Population: The age scope of the Ahmednagar city's objective market is 18 to 55.

Inspecting Strategy:

There are three kinds of testing: comfort, arbitrary, and share.

Test Period:

Business catalog in Ahmednagar City or an examining outline made utilizing Google Structures for a phone overview for business-to-business research.

Information Social affair Technique:

Poll including shut finished, unconditional, dichotomous, Likert scale, and quantitative inquiries like rating and positioning scales.

5.1. Data Analysis

Gender	Responses	%age
Male	187	62.33
Female	113	37.67
Total	300	

Age	Responses	%age
20-30	82	27.33
30-40	114	38
40-50	89	29.67
More than 50	15	5

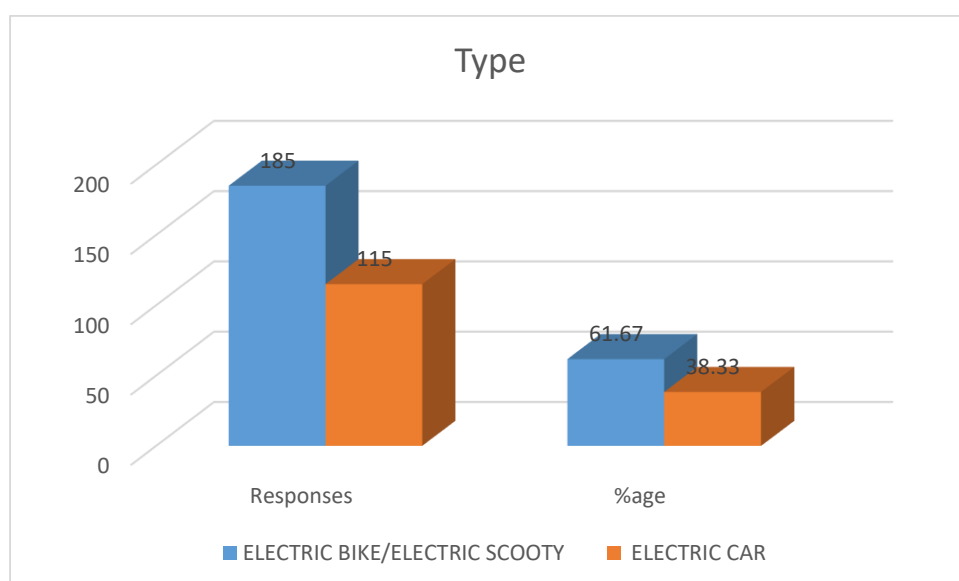
Total	300
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Occupation	Responses	%age
Business	85	28.33
Employee	125	41.67
Household	45	15
Student	45	15
Total	300	

Income	Responses	%age
Rs.3,00,000- Rs. 5,00,000	85	28.33
Rs. 5,00,000- Rs. 10,00,000	115	38.33
More than Rs. 10,00,000	100	33.33
Total	300	

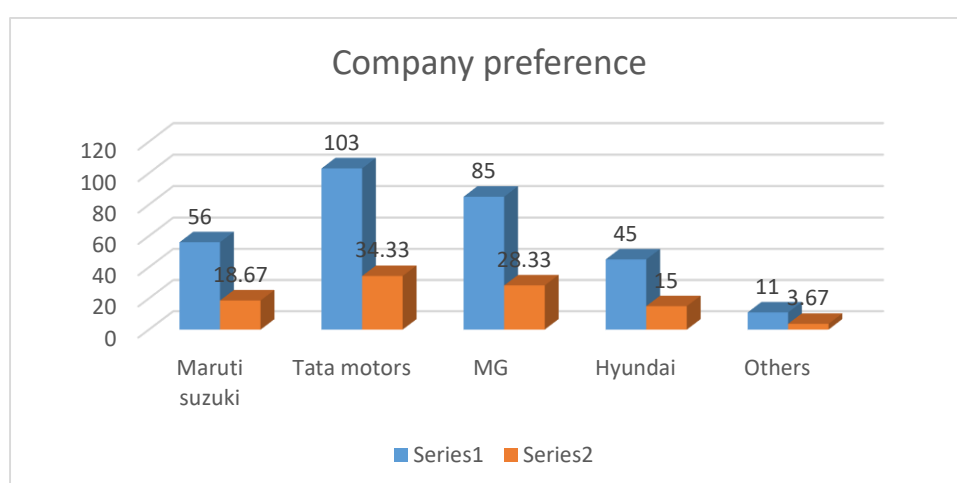
1. Which vehicle will you choose an E-vehicle?

Type	Responses	%age
ELECTRIC BIKE/ELECTRIC SCOOTY	185	61.67
ELECTRIC CAR	115	38.33
	300	



2.If you have any desire to purchase E-vehicle, which organization will you like?

Company preference	Responses	%age
Maruti suzuki	56	18.67
Tata motors	103	34.33
MG	85	28.33
Hyundai	45	15
Others	11	3.67
	300	100



6. FINDINGS

Out of 300 individuals, 187 are men, 113 are women,. That indicates that men are more knowledgeable about electric automobiles than women who are employed.

The majority of responders who are younger than 30 to 40 years old are interested in electric vehicles.

The majority of respondents are businessmen and employees.

According to study, 80% of people are concerned about the environment.

According to the analysis, 61% of individuals prefer electric cars, while 38% choose electric bikes or scooters.

The majority of respondents say that when choosing an electric vehicle, they look for factors like pricing, low noise level, and new trends.

According to study, 26% of people choose online resources, 14% prefer friends and family, 11% prefer television, and the rest people prefer newspapers.

According to analysis For information regarding e-vehicles, 26% of people choose internet sources, 14% prefer friends and family, 11% prefer television, and the remainder people prefer newspapers and outdoor advertisements.

As indicated by study, if a buyer needs to buy an electric vehicle, 34.33% of purchasers favor Goodbye, 28% favor Hyundai, 3.67% lean toward other, 15% incline toward MG, and 18.67% incline toward Maruti Suzuki.

Most of respondents trust electric cars to be pricey.

Most of respondents agree that electric vehicles can replace ordinary vehicles with regards to addressing customer needs.

Most of purchasers favor an electric vehicle to a conventional vehicle since they predict changes in things like travel effectiveness, solace, upkeep, normal, and sturdiness.

Electric vehicles can assist proprietors with setting aside a ton of cash. For this case, respondents gave the accompanying reactions: impartial (46%), concur (35%), and firmly concur (19%).

As per studies, most people don't lean toward electric vehicles.

We found utilizing factual apparatuses that the chi-square test neglects to dismiss the invalid speculation. It infers that the invalid speculation should be acknowledged. The huge are not more liked as an E-vehicle, as per the invalid speculation. This shows that buyers don't incline toward electric vehicles more. Generally, we can say that individuals incline toward different kinds of vehicles over electric ones.

7. End

We can derive from the exploration introduced above and the chi-square test talked about over that the invalid speculation isn't dismissed. It suggests that the invalid speculation should be acknowledged. The critical are not more liked as an E-vehicle, as indicated by the invalid speculation. This shows that shoppers don't lean toward electric vehicles more. Generally speaking, we can say that individuals favor different sorts of vehicles over electric ones. We can likewise derive from the poll's inquiry that buyers favor electric vehicles over electric bicycles or electric bikes. While buying an electric vehicle, shoppers consider the vehicle's cost, low commotion level, and latest things. Most of respondents accept that electric vehicles are incredibly costly. Most of respondents agree that electric vehicles can replace ordinary vehicles regarding addressing buyer needs. Most of purchasers favor an electric vehicle to a customary vehicle since they predict changes in things like travel proficiency, solace, upkeep, normal, and sturdiness. By and large, in view of our examination, we can reason that most people lean toward different sorts of vehicles over electric ones.

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FUTURE OF ON-LINE INDIAN RETAIL INDUSTRY-SHOPS OF THE FUTURE

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Abstract

E-commerce has returned to India and is here to stay, that much is certain. Even the nation's small and medium-sized shops want to catch the wave and are prepared to make a killing off the marketplace idea. Online shopping may have gained popularity recently, but the idea of e-Commerce was first established much earlier in the 20th century.

With the advent of internet media, consumer perceptions of purchasing have evolved. In India, the retail industry has undergone a significant change as a result of the country's shifting business environment and emphasis on technology. The world has become smaller due to the internet.

With the advent of information technology, the rules of the game in retailing are rapidly changing. The online store's front door is the e-Retailing website, which serves as the point of contact between the e-Retailer and customers. The model of selling retail items via electronic media, particularly the internet, is known as electronic retailing (also known as e-Tailing, e-Retailing, online retailing, etc.). A division of e-Commerce is e-Retailing (Electronic Commerce). About 10% of the overall growth of the e-Commerce market is attributed to E-Retailing.

An effort has been made in the current study to examine the state of the online retail industry in India, and as a result, some recommendations and proposals are derived for the industry's success in India.

Keywords: E-commerce, Payout Gatewa, Phishing, Customer Psychology

1. Introduction:

Online retailing is very popular these days. As more and more individuals engage in online purchasing in one way or another, the industry is seeing growth. Online commerce has given buyers and sellers a single platform, as well as other middlemen like logistical partners, payment gateways, credit/debit card providers, and so forth. Nowadays, purchasing or selling things is simple and only just a few clicks to complete.

The largest industry in India, retail, has gone through several stages. The history of retailing dates back to the emergence of the barter system. We can trace the practise of selling entertainment at retail back to the fairs of the Indus Valley Civilization, which is the earliest known instance of service retailing. Additionally, the advent of money sparked a plethora of commercial activity, and small business owners opened stores to sell goods like groceries, medicine, hardware, etc. Small "kiranans," also referred to as general merchants, became an essential part of people's daily lives, helping to establish retailing as a legitimate profession. Durant and Spencer's arrival into India in 1863 heralded the beginning of a professionally organised retailing scene in that country. The second phase of retailing in India began in the post-British era when the government of India established a public distribution system in the form of fair price shops to distribute necessities. With the arrival of Bata, where retailing gained specialised credence, the third phase of organised retailing got under way. Stores like Shoppers Stop, Food World, Nilgiri's, Kemp chains, Lifestyle, etc. spearheaded the fourth phase of the retail revolution, which also saw the emergence of



supermarket retailers, specialty retailers, franchisee retailers, discount retailers, and service retailers.

This evolution combined with other factors has caused a rise in two types of retailing: store retailers and non-store retailers like direct sales, catalogues and mailers, TV home shopping, and finally virtual stores or online retailing. Consumers are now considered to be king, and businesses are vying for their place in the hearts of consumers.

1.1 Ingredients industry in retail

Increasing online store prices

The demand for physical offices and buildings has decreased as a result of the development of dependable, affordable remote corporate collaboration solutions like teleconference phone systems and video conferencing systems (like Skype). Due to some customers' "showrooming," the existence of internet stores in the 2010s is negatively hurting some brick and mortar-only businesses. Customers test and try out things in a local brick and mortar business's showroom, take note of the brand and model number, and then leave the store. They then purchase the item from an online retailer, frequently for a lesser price. According to several physical and mortar retailers, this tendency is hurting their sales.

Consumer behaviour is evolving, and the future of retailing

The retailing sector must advance along with changing consumer behaviour. It appears that brief internet journeys are increasing while filling the buckets with products is falling. In-store retail and technology are working together to eliminate traditional central store purchases and upend the entire market. Time constraints have led to the development of prepare food and grab and go options. This innovation puts regular food stores to the test by offering more than simply price breaks. Because of all the change, today's retailing leaders must develop cutting-edge, customer-focused shopping experiences to satisfy the needs and demands of contemporary consumers. The layouts of today's stores do not satisfy the needs of today's customers. Future stores must have a variety of customer-focused features.

technologies and methods that are thriving

1) Apps for online shopping

As more and more business owners and well-established institutions produce lucrative web "apps" (software applications) and mobile apps, the gap between offline and online commerce has widened in the 2000s. There is less need for product manufacture, warehousing, and distribution via shipping and delivery services and/or actual retail outlets because many web and mobile apps are digitally disseminated to users online and provide value without delivering a real product or direct service.

2) Electronic media

Due to the transition to digital audio and video, businesses are now able to sell customers digital audio files of songs, digital movies, or digital TV shows over the Internet. Customers can either purchase the file directly from the store or pay a subscription fee to "stream" the songs, movies, or TV shows to their digital device.

3) Walmart's achievement

Some businesses offer both a robust in-person retail experience and a comprehensive online shopping platform. Examples include Walmart and Best Buy, among others. Despite being predominantly known as brick-and-mortar businesses, some stores also have significant internet



shopping portals. This characteristic of Walmart contributed to the brand's development as a retail leader and allowed it to compete with the shifting wants and demands of consumers.

Smart House

When smaller cities are properly examined, it becomes clear that there has been significant brand penetration, and Indians now have access to premium MNC brands that were previously out of their price range. This is closely related to the rise in consumer purchasing power. Consumers are now interested in products that weren't a part of their lifestyle 10 years ago due to improved customer experience that has been recognised as increased intensity.

Many foreign brands have successfully established themselves in the Indian market over the years by comprehending the Indian market. As long as people are purchasing their stuff, they will continue to prosper. This is a really good and encouraging sign that the retail business is changing. Another important factor contributing to rising consumerism is foreign direct investment. Major corporations will increase their investments as a result of FDI liberalisation. With this, we can also observe a change for the better in consumer living. In India, customers' tastes and inclinations have been evolving. And this is bringing India's consumption habits up to line with those of the developed world. Numerous global juggernauts have been drawn by changes in government policy to the Indian retail market in search of a promising opportunity for success.

India is now relishing and enjoying the consumption pattern that is being adopted in industrialised countries thanks to the easing of government regulations around FDI. Another important development in shopping is the Goods and Services Tax (GST). Foreign brands have benefited from this and are eager to engage in the Indian market as a result. Foreign brands are very eager to expand when there is a single framework that can be used for a wide range of investment procedures. The retail industry in India is experiencing a similar situation at the moment.

The transformation from disorganised retail to organised retail has eased the procedure. As a result, we may forecast that the Indian retail sector is progressively moving into a new era.

According to projections, sociodemographic and economic factors like urbanisation, income growth, and an increase in nuclear homes would cause the Indian retail sector to grow to \$2 trillion by 2032. The Indian e-commerce market, on the other hand, is projected to grow at a CAGR of 23% and reach \$350 billion by 2030.

In the first half of 2021, e-commerce accounted for around a third of sales in a variety of electronic categories, close to half of all smartphone sales, and roughly a fifth of all textile sales in India. Consumer internet and e-commerce companies produced US\$38 billion in revenue in 2021, up from US\$8 billion in 2020, as large-scale investments are made in the fintech, hyperlocal, and e-commerce industries and the Indian start-up ecosystem continues to grow. With a projected yearly gross merchandise value of \$350 billion by 2030, India would be home to the third-largest online retail market.

The retail industry in India is typically unorganised. In the next three to five years, the share of modern retail, which includes e-commerce, will increase to 30 to 35%, while the share of traditional retail will decrease to 65 to 70%.

2. Objective :

to study the current scenario of the online retail sector in India

to study CHALLENGES OF E-COMMERCE IN INDIA

to observe the future of developments in retailing



3. PRESENT SCENARIO of retail sector

The retail industry in India has been expanding quickly, with many factors contributing to its growth. The rise in digitization, consumer spending power, urbanisation, and the consumer's quickly changing lifestyle are a few crucial variables.

The retail sector has grown and is anticipated to increase by \$1.3 trillion by 2020 as a result of a strong rise and improvement in Indian consumers' buying habits. The organised retail sector has noticed a positive effect. According to published reports, organised retail penetration will increase from its current level of 7 percent to 10 percent over the next few years. The organised retail market will also expand, rising from its current level of 9 percent to 19 percent.

4. E-COMMERCE DIFFICULTIES IN INDIA:

The 2012 Global Retail Development Index™'s top 30 nations were reviewed by A.T. Kearney's 2012 E-Commerce Index (GRDI). In no rankings is India. India, which has 1.2 billion people and is the second most populous nation in the world, does not rank in the Top 30 due to its low internet penetration rate (11 percent) and worse financial and logistical infrastructure when compared to other nations. The following list includes some of the infrastructure issues causing e-commerce in India to grow slowly. Some of these even provide fresh business prospects.

1. Payment Collection: Even in a thinly margined business, one must ultimately give a sizeable portion of revenue (4% or more) in order to get payment through net banking. This effectively entails giving away about half of the profits. Fraudulent charges, charge backs, and other issues become the responsibility of the merchant and must thus be taken into consideration in the business model.

2. Logistics: You need to get the product to the right person in the right amount of time, safe and secure. Regular mail doesn't provide a sufficient degree of service, and courier services have expensive and limited options.

reach. For high-value delivered items, you may first need to purchase insurance, which may increase the cost.

3. Vendor Management: Regardless of how sophisticated the technology, vendors will still have to work with an ineffective system for inventory management. This will cause a significant slowdown. majority of them

will not include digital data in their products. Lack of attractive images, a digital data sheet, a way to check for daily costs, and the opportunity to update your website.

4. Taxation: A number of state-specific forms that go along with octroi, entry tax, VAT, and other taxes have significant tax ramifications. With so many exceptions and unique regulations, these can occasionally be perplexing.

5. Limited customer and MSMEs access to the internet: In a nation where the population is getting close to 150 crore, providing internet connectivity to everyone is a major difficulty. Despite the fact that smart phones have expanded internet usage, a sizable portion of the population still lacks access to even the most basic online services. There is a glimmer of optimism that internet connectivity may eventually reach remote and far-off India thanks to the "Digital India" initiative, which was launched in September 2015.

6. Poor Internet and Telecommunications Infrastructure: When it comes to infrastructure for internet and telecommunications, it is even worse in rural areas. The two key enablers of online selling are communication and the internet. While the Internet offers a platform for selecting and



ordering products, telecom extends its assistance in logistics by easing the delivery process. The penetration of these industries is chaotic due to inadequate infrastructure. significant portions of India offer such services.

7. Multiple Gaps in the Current Legal and Regulatory Framework: Although there are regulatory systems in place to safeguard consumers through retailing, such as the Consumer Protection Act and the MRTP Act, they are sometimes exceedingly challenging to uphold and implement.

at online platforms. It is quite challenging to file a lawsuit on a site where buyers and sellers operate virtually. To date, India lacks a comprehensive legislative framework that would deal only with and regulate etailing activities. Only a few consumer laws and cyber laws are now in effect to regulate this industry, which is expanding at a compound annual growth rate (CAGR) of more than 50%.

8. Multiple trust difficulties and a lack of payment gateways: Online fraud occurs frequently. Phishing and Vishing assaults are now commonplace for customers making purchases online. The security and confidentiality of data transmitted over the Internet cannot be guaranteed, and neither can the privacy of personal and corporate data. It can be quite challenging for the average person to tell whether a website is legitimate or not because websites can be hacked and made to look official.

not.

5. Future developments in Retailing

1) Click and pick up merchandise

The most important function is "click and collect," which allows customers to record their shopping lists by clicking on a screen, which is then carried out and delivered at the counter, which relieves congestion in typical grocery stores or stores. This will give traditional departments access to an updated, new, and modern market. For a nation like India, which is becoming overpopulated in every sector and area, this could be a stroke of genius. As technology advances, more and more product information, including prices, nutritional data, and health advantages, may be included in QR codes.

2) Omni Channel

Omni Channel made it incredibly simple for retailers to implement the range of in-store fulfilment and assistance options that meet the demand of today's customers, such as • Buy online and ship from store, while maintaining the offline experience through instant gratification and in-store assistance.

- Place an online order and pick up in-store
- An endless aisle that allows businesses to digitally, rather than physically, fit catalogues.

3) A physical store's function

Different categories will experience this in different ways. For Indian shoppers, going shopping with the family is still a significant occasion, especially when buying jewellery and clothing. E-commerce lacks the human touch that shopping in a physical store has. Prior to purchasing, people conduct a significant lot of research. For the product review, online data is consulted. The experience of shopping in stores can be improved by online data. Omni Channeling will be helpful in enhancing the physical stores' "touch and feel" component.

4) Smart mirrors



Smart mirrors can be used in apparel stores to use gesture detection, virtual reality, and artificial intelligence. In a sense, smart mirrors can take the place of trial rooms in a hectic method by turning into your virtual changing room. Depending on the customer's physical characteristics, a smart mirror may incorporate several clothing designs and offer solutions that will be most suitable for them in the future. Additionally, new colour possibilities can be added. Additionally, these smart mirrors can be linked to a customer's social media accounts, enabling them to click and share with friends and family to enlist their assistance in choosing their clothing and belongings.

5) Food court touchscreen orders

Additionally, food courts need to be modernised by installing touch screens on each table so that customers may browse all the available options without having to wait in line at congested counters. To surprise and draw in clients with conventional tastes, some unexpected products might also occasionally be presented. Self-checkout stations can also be created, allowing customers to connect with products further and learn about deals associated with certain products.

6. SUGGESTIONS & RECOMMENDATIONS:

Even if India's economy is booming, there is still a long way to go. Without a question, e-retailing is thriving in India, but our infrastructure and accessibility to the typical Indian are still lacking. In this regard, a few suggestions and recommendations are made in order for the e-retailing industry to develop and grow in all necessary ways.

1. The use of digital devices is encouraged:

In order to raise awareness and generate a sense of urgency, the government should take the necessary steps to encourage the use of digital devices by the general population, such as smartphones, tablets, laptops, and palmtops. The government should also provide tax breaks for the production and sale of these digital devices so that the average Indian can afford them.

2. Launch National Digital Programs:

The government should launch numerous digital initiatives at the national level to increase people's knowledge of computers and the internet. The general people needs to be educated how to use the Internet to access a variety of services. A leading initiative in this area is the Digital India Programme. Several government portals are now operational, and services are now being offered, but the average Indian still cannot access them. Therefore, it is strongly advised that the Government start moving to

finance various public awareness campaigns to encourage the usage of different portals to obtain services on the internet.

3. Better Wi-Fi Access in Public Spaces:

Having better wi-fi access at significant public locations is a crucial tip for enhancing internet retailing. With just a few clicks, customers will be able to find a variety of nearby services, and unexpected delays and stampedes can be avoided. The CEO of Google Inc. recently committed to install high-speed wi-fi in 500 of India's selected train stations. Mr. Narendra Modi, the Prime Minister, has also taken the effort to provide wireless access in all the Ghats in Varanasi, his home city. The demand for e-commerce will undoubtedly rise if all significant public spaces are connected.

4. Rural Area Benefits Package: The government needs to make specific benefit announcements for rural India's access to the internet. The wide spread of connection, which may prove crucial in the future, may be aided by encouraging service providers to extend their reach into distant areas of India.



Even in the most rural areas of India, establishing a platform for online retail.

5. Adding Computer Education to the Primary Curriculum:

Education is currently listed under the current list of the constitution, where both the federal government and the state governments have equal rights to initiate and change a framework. It's been noticed that Most states do not provide basic computer education until high school, and pupils at this level barely have any experience using a computer. Therefore, the central government should adopt a policy. in order to instil the need for computers in the younger generation of our nation, in consultation with the state education boards, to mandate the delivery of computer education at the primary level.

6. Additional suggestions

- A. Access to free basic internet services
- B. Online players will receive a tax break for boosting e-commerce.
- C. Adopt sufficient laws and regulations to safeguard consumers in e-commerce
- D. To support marginal e-retailers, the government should permit e-retailing in MSMEs.
- E. By offering customised packages for e-retailing, India Post may serve as a logistics partner, enhancing the effectiveness and profitability of the postal service.
- F. lowering the service tax on internet services to make them more accessible to the average Indian
- G. Without prejudice or preferences, e-commerce service providers should put equal effort into providing services to all 21000 or so PIN codes.
- H. For the smooth payment of internet services, more non-banking businesses should be granted licences to handle small-scale financial transactions.

7. CONCLUSION:

Compared to ten years ago, the environment that supports e-commerce has substantially changed. The growth of E-Commerce depends on the Internet, which has permeated daily life. People heavily rely on the internet for tasks like accessing email and looking up information to purchase goods and services. When it comes to exercising consumers' intelligence by evaluating products online and making the most of it, e-retailing is a positive development. With the current expansion, this industry is anticipated to continue growing, but it also depends on a number of different factors. It is still too early to describe the sector's success story, and only time will be able to do so in the future.

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Journal of the Oriental Institute



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This is to certify that the article entitled

GROWTH , CHALLENGES AND RECENT DEVELOPMENT IN INDIAN RETAIL MARKET

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Published in

Journal of the Oriental Institute ; ISSN: 0030-5324

Vol. 71, Issue. 02 , 2022

UGC Care Approved, Group I,
Peer Reviewed and Referred Journal



Journal

of the

Oriental Institute

M.S. University of Baroda

ISSN: 0030-5324

GROWTH , CHALLENGES AND RECENT DEVELOPMENT IN INDIAN RETAIL MARKET

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Abstract

India's retail area is supposed to increment at a 9% rate somewhere in the range of 2019 and 2030, from US\$ 779 billion of every 2019 to US\$ 1,407 billion by 2026, and more than US\$ 1.8 trillion by 2030, as per Kearney Exploration. In FY20, disconnected retailers in India, ordinarily alluded to as blocks and cement (B&M) vendors, are expected to raise their income by Rs. 10,000-12,000 crore (US\$ 1.39-2.77 billion). Toward the finish of 2021, the immediate selling area in India is expected to be worth US\$2.14 billion. E-retail has profited from the pandemic, and a report by Bain and Company as a team with Flipkart named "How India Shops Online 2021" predicts that the market would arrive at US\$ 120-140 billion by FY26, developing at a pace of around 25-30% every year, in the resulting five years.

The fifth-biggest retail market on the planet is in India. The Indian retail area, which incorporates both coordinated and chaotic areas, has had one of the nation's quickest paces of development as of late. The retail area in India was already generally sloppy, yet as purchaser tastes and inclinations have changed, the area is presently turning out to be more famous and coordinated. By 2015, the Indian retail market is projected to increment from US\$330 billion to US\$640 billion. The 10th Yearly Worldwide Retail Advancement List (GRDI) distributed by A.T. India has an exceptionally strong development crucial establishment, in this manner this present time is the best opportunity to enter the Indian retail market, as per Kearney. The Indian retail market represents 22% of the country's Gross domestic product and 8% of all positions. In the accompanying five years, it is anticipated that complete retail spending would twofold. Coordinated retail, which is as of now ascending at a CAGR of 22%, is remembered to represent 21% of complete spending. Deals for the sloppy retail area are anticipated to increment from \$309 billion out of 2006-07 to \$496 billion of every 2011-12, developing at a pace of generally 10% yearly. This article zeroed in on the advancing retail business, including its significant entertainers, its coordinated and chaotic areas, as well as the issues that the area would almost certainly experience sooner rather than later.

Catchphrases: Central parts, Industry, and Retail.

1.Introduction

India's Retail Area

With unfamiliar organizations testing in the Indian market and the country's as of now settled titans utilizing bold, imaginative measures to prevail upon the purchaser, India's retailing blast has acquired speed, dynamism, and liveliness. The early participants are at the same time changing their system to stay cutthroat and adjust to the new market climate. In the forthcoming years, the coordinated retailing area is supposed to encounter fast development as various top global organizations venture into India and adjust their plans of action to suit neighborhood inclinations and buying designs. In the mean time, territorial contenders have moved forward their guards and are endeavoring to outmaneuver worldwide contenders by using how they might interpret provincial business sectors. Clearly the retail blast's next stage has shown up.

One of the central areas of the Indian economy is retail. In India, retail deals have been drifting at 33-35% of Gross domestic product for the beyond couple of years, contrasted with 20% in the US. The fifth-biggest retail market on the planet is in India. The Indian retail area, which

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incorporates both coordinated and chaotic areas, has had one of the nation's quickest paces of development lately. The retail area in India was once generally disordered, however because of buyer tastes and inclinations, the area is currently turning out to be all the more popular and coordinated. Now that shopper request is expanding, the business is expected to increment at a pace of 25-30% every year. The Indian retail market is extending rapidly at this moment, and by 2013 it's anticipated to contact US \$ 833 billion. Purchaser use in India has expanded by up to 75% during the beyond four years. In any case, formal retail represents applications exist in India. With a youthful populace, rising discretionary cashflow, evolving ways of life, and a solid economy, India is ready to become one of the quickest developing coordinated retail commercial centers on the planet, representing just 5-6% of in general retail incomes.

Authorized vendors who are enlisted for deals charge, personal expense, and so on participate in organised retailing, or organised exchanging. These incorporate the corporately financed enormous corporate store and hypermarkets as well as the separately held ones. On the opposite side, chaotic retailing alludes to the traditional minimal expense retailing structures, for example, neighborhood kirana shops, proprietor monitored corner shops, general stores, pushcart and asphalt dealers, and so on.

1.1 Changes in Indian retail

Quite possibly of the biggest business in India is retailing, which is going through a transformation. The passage of the new retailer in India denotes the beginning of a transformation in retail. In the impending years, the retail market in India is expected to fundamentally extend. Retailing in India was simply getting everything rolling in 1995, and presently, as per AT Kearney's The Glimpses of daylight, it is arriving at its apex in 2006. The introduction of Kirana stores and mother and-pop shops can be connected to the starting points of retailing in India. These shops used to serve the local occupants. With the guide of the Khadi and Town Ventures Commission, various native establishment organizations ultimately emerged thanks to the public authority's supporting for rustic retail. During the 1980s, the economy began to open up, evolving retailing. The material business created the initial not many organizations to lay out corporate store, for example, Bombay Coloring, S Kumar's, Raymond's, and so on. In the coordinated retail area, Titan later opened retail display areas. Newbies progressed from assembling to unadulterated trade after some time.

Before 1995, stores like Food World in the FMCG area, Planet M and Music World in the music area, and Crossword in the books area joined the market. Metropolitan regions saw the rise of retail outlets that offered benefactors a first rate insight. Stores and hypermarkets in the end showed up. The area is developing because of progressing headways in innovation, back-end tasks, conveyance channels, and production network the executives, which will eventually bring about more noteworthy union, consolidations, and acquisitions, as well as huge uses. In the forthcoming years, the retail market in India is expected to essentially grow. With present day retailing just beginning, India has a US\$330 billion retail market that is projected to increment 10% every year. Most of the retail business in India is disorderly. The competition from the disorderly area is the greatest issue the coordinated business is encountering. In India, chaotic retailing has existed for centuries. Customer commonality that perseveres from one age to another is the essential advantage of sloppy retailing. They are basically claimed and run, have extremely insignificant land and work costs, and have little expense commitments, thus it is a minimal expense structure. India's coordinated retail area is tiny, yet it has colossal potential.

1.3 Indian retail arranges

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- Hypermarkets/grocery stores: huge self-overhauling foundations with an expansive choice of products.
- Mother and-pop shops: they are freely run, family-possessed organizations that take care of explicit specialty markets. They have an individual touch.
- Retail chains are quality suppliers of general retail wares and administrations.
- Odds and ends shops: These are tracked down in neighborhoods and proposition comfort at a little greater cost.
- Shopping centers: the most well-known kind of retail in India, shopping centers give clients admittance to a great many labor and products, including food and diversion, all under one rooftop.
- E-trailers: These are dealers that offer internet buying and selling of labor and products.
- Rebate shops: they are producer's outlets that proposition limits off the MRP.
- Distributing is an extremely ongoing expansion to the retail business. Here, candy machines are accessible for buying beverages, snacks, and other minor items.

Little niche stores that give a scope of classifications are known as "class executioners." They are alluded to as "classification executioners" since they focus on specific classes like athletic products and hardware. Multi Brand Outlets, or MBOs, are one more term for this.

- Specialty stores: These corporate store manage specific item classes and proposition a wide choice. Crossword Book shop in Mumbai and RPG's Music World are two models.

2. Current patterns in the retail area

- The rise of coordinated retail: The country's land advancement, for example, the structure of uber shopping centers and shopping centers, is advancing the development of the coordinated retail industry.
- Youth spending power in India: India has a sizable youth populace, which makes a good air for the extension of this industry.
- Expanding profit and buying power: Between 2000-2001 and 2009-2010, India's per capita pay multiplied, which improved buying power.
- Moving customer outlook: Shoppers' needs are progressively pushing away from low costs toward more prominent accommodation, more noteworthy worth, and further developed buying encounters.
- Straightforward client credit: The presentation of thoughts like speedy and basic advances, EMIs, and charge card credits has empowered Indian clients to buy merchandise like purchaser durables.
- Higher brand cognizance: Youth in India, where 60% of the populace is under 30, have an elevated degree of brand awareness, which has assisted brands and products with turning out to be all the more notable.

3. India's retail industry is extending.

Because of the conventional farming and assembling areas' moderately low compensation scales, an ever increasing number of individuals in India are searching for work in the administrations area. The chaotic retail area is supposed to increment at a pace of 6% while the coordinated retail market is supposed to develop at a pace of 3.5 % yearly. India's retail industry is presently at a defining moment. A few Indian and unfamiliar organizations are arranging quick change with speculations adding up to US\$25 billion over the course of the following five years. As indicated by the board counseling firm Techno Park Guides Pvt., it is a sizable industry. Ltd., it is worth generally US\$350 billion. In the following five years, coordinated retail is anticipated to represent 16-18% of the worldwide retail business, or \$65-75 billion.

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India is positioned fourth in the GRDI and has a truly good retail climate, as per the 10th GRDI research from AT Kearney. Its essential drivers are the high saving and speculation rate, higher buyer spending, and the genuine Gross domestic product development of 9% in 2010, as most would consider to be normal to grow at a typical yearly pace of 8.7% through 2016. Coordinated retail, which right now makes around 7% of India's \$435 billion retail industry, is anticipated to develop to 20% by 2020. 70% of retail deals in India are for food, yet coordinated retail has not yet completely embraced this market. With a 31% piece of the pie in the garments and clothing industry, coordinated retail is as yet extending. As per an overview by Boston Counseling Gathering, coordinated retail in the country merits an expected \$ 28 billion with a 7% entrance. Throughout the following decade, it is expected to develop to a US\$ 260 billion market with an infiltration pace of around 21%. The area is supposed to develop essentially over the course of the following decade, as per examiners, and coordinated retail is supposed to rise rapidly, with an offer liable to arrive at a more decent 25% by 2018. As per the BMI India Report for the main quarter of 2012, all out retail deals are supposed to increment from US\$422.09 billion of every 2011 to US\$825.46 billion out of 2015. The paper recognizes populace increment, rising extra cash, considerably basic financial development, and the fast improvement of coordinated retail foundation as the principal drivers of the expected ascent.

Indian retail is wearing new pieces of clothing, and it is the Indian economy's quickest developing area with a three-year accumulated yearly development pace of 46-64%. With in excess of 35 million laborers and 5.5 million additional positions made through discount exchange, the area is the second biggest manager in the country after horticulture. Land is in very popularity because of the retail area's marvelous ascent. Retail land is being worked by property engineers rapidly. In Mumbai, the Public Capital Area, Bangalore, Kolkata, Chennai, Hyderabad, and Pune, around 55 million square feet of retail space will be prepared somewhere in the range of 2010 and 2012, as per the Knight Straightforward report named "India Coordinated Retail Market 2010". Moreover, the coordinated retail land will expand from its ongoing 41 million square feet to 95 million square feet somewhere in the range of 2010 and 2012. By 2015, the complete number of shopping centers is expected to increment at a CAGR of 18.9%. Hypermarket, which as of now consumes 14% of shopping center space, is expected to have quick development. As per industry specialists, the country market will drive the retail business' forthcoming development stage. The rustic retail market is expected to hold an all out portion of the overall industry of over half by 2012.

4.Retail FDI Strategy

One of the significant components that assisted India with going from being a shut economy to one of the favored areas for unfamiliar speculation throughout recent years has been the developing progression of the FDI strategy. The entire deluge of unfamiliar interests into the country is administered and constrained by the FDI strategy.

To expand India's allure for unfamiliar financial backers, the public authority is thinking about authorizing unfamiliar direct interest in multi-brand business. The arrangement is presently in the conversation stage and is forthcoming government endorsement. It is being driven by the Division of Modern Arrangement and Advancement (DIPP). Progression of unfamiliar direct interest in multi-brand retail is drawing nearer. A retail FDI draft record has been submitted to the Association Bureau for endorsement after almost an extended period of thought, as per the white paper delivered by the DIPP Service of Business and Industry. This is the last snag that should be survived. One thing shows up clear: FDI won't be brought into multi-brand retail in a single shot, enormous detonation sort of way. All things being equal, we could expect a steady

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progression process with a ton of introductory limitations on the section of unfamiliar shops. The prerequisites would be set up to console the resistance groups, neighborhood retailer lobbyists, ranchers, worker's guilds, and so forth that the public authority has embraced a decent methodology after cautiously considering the assessments of all gatherings included.

Despite the fact that the bigger change measure opening multibrand retailing to unfamiliar financial backers is as yet stalled in political entanglement, the Indian government permitted unfamiliar venture to drift and work completely possessed single brand retail outlets as of January 10, 2012. FDI is currently not permitted in that frame of mind, except for single brand retail, where it is permitted up to 51% of the time under specific limitations. Under the public authority endorsed approach, the DIPP, a division of the service of trade and industry, has now allowed FDI up to 100 percent in single brand item retail retailing. In any case, the public authority has suspended plans for 51% FDI in multibrand retail.

It would just apply to items that are marked during assembling, and it would have to guarantee that no less than 30% of the worth of the item sold was obtained from Indian little ventures/town and cabin enterprises, Craftsmans and Specialists. These circumstances would should be met before the unfamiliar venture limitations for single brand retailing could be loose.

A little industry is one where the whole interest in gear and hardware doesn't surpass \$1 million. The public authority has had the option to arrive at a political split the difference to open multibrand retail locations for unfamiliar financial backers, so the unwinding of unfamiliar interest in the single brand retail area fills in as that split the difference.

5.Challenges the Retail Business Appearances

- **Worldwide Norms:** India actually has quite far to go before it can really have a retail business comparable to Global principles, notwithstanding having above and beyond 5 million retail foundations of different sizes and styles. Indian organizations and worldwide brands both play a critical part to play in this.
 - **Insufficient production network the board:** The chaotic area keeps on ruling Indian retailing, and there is as yet a lack of compelling inventory network the executives. India necessities to zero in on smoothing out its store network the board to lessen stock expenses, which can then be given to clients as lower costs.
 - **Restricted shop space:** most of India's stores are less than 500 square feet in size. As indicated by global guidelines, this is somewhat little.
 - **Social Variety:** Because of India's huge size, financial variety, and social variety, the country comes up short on generally acknowledged model or utilization design. It will be hard for producers and retailers to foster procedures for different enterprises and market sections.
 - **Land concerns:** The retail area's quick extension has expanded interest for land. Retail land is being worked by property engineers rapidly. By 2011, India is supposed to have around 1,000 hypermarkets and 3,000 general stores, which will require 700,000,000 sq. ft. (65,000,000 m²) more retail space than it as of now has.
 - **Issues with HR:** The coordinated retail area in India is faced with an issue of an absence of prepared work. Finding prepared faculty is difficult for Indian organizations, and they should pay more to keep them. Yet again this brings down the overall revenues of Indian retailers.
- Fakes in the retail area are one of the primary challenges that the organizations will experience. The issues that are hard to handle are cheats, including seller tricks, robberies, shoplifting, and mistakes in organization and oversight. Indeed, even after the execution of safety efforts like CCTVs and POS frameworks, this is as yet the situation. The quantity of robberies, fakes, and irregularities in the framework would ascend as the size of the area developed.

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- Framework and operations issues: Deficient foundation and dispersion networks in the country lead to incapable cycles. This represents a huge test for retailers in light of the fact that wasteful conveyance channels are trying to oversee and can cause critical misfortunes. India's establishment for framework is feeble. Organizations are being compelled to build infrastructural offices by urbanization and globalization. Railroad frameworks included, transportation should be more powerful. Interstates should stick to worldwide guidelines. The power supply and air terminal limit should be gotten to the next level. One more area of trouble is convenient conveyance and distribution center offices. These huge boundaries should be wiped out to involve India's true capacity in the retail area completely.

6.Future Possibilities for India's Coordinated Retail Area

The US-based worldwide administration consultancy business recognized India as the third most beneficial country for retail speculation among 30 arising economies. Of the multitude of major worldwide business sectors, India has the most reduced degrees of both contest and immersion, as per an AT Kearney investigation on worldwide retailing patterns. This proposes that, as far as the cutthroat climate, there are amazingly low passage obstructions for players endeavoring to lay out bases in India. As per the examination, worldwide retailers like Wal-Shop, Carrefour, Tesco, and Club would profit from the more altruistic FDI regulations that India is probably going to force. By 2042, India is anticipated to outperform the top retail economies on the planet because of a solid expertise pool, boundless potential, sizable commercial centers, and the reasonable accessibility of excellent unrefined components.

As per projections from Techno Park, the business will get more than \$30 billion in speculations throughout the following five years, bringing the all out worth of present day retail in the country to somewhere in the range of \$175 and \$200 billion. India is the last undiscovered market for global shippers in light of the fact that the Chinese retail market is likewise becoming soaked. In India, homegrown players are developing decisively by deferring forceful development plans, laying out outlets sparingly, and zeroing in on level 2 and level 3 areas. India is a provoking business sector to break into, yet the potential prizes are colossal. India's populace of around 1.2 billion, as most would consider to be normal to ultimately outperform China's, is in like manner a positive objective.

- In New Delhi, Carrefour, the second-biggest retailer on the planet, has sent off its most memorable money and-convey area there. Metro Money and Convey (MCC), a discount enterprise with central command in Germany, added one more discount area to its organization in Hyderabad, carrying the complete to six the country over.

- In the 2011-12 monetary year, adornments corporate store Tanishq means to open 15 extra retail stores around the country.

- Over the accompanying three years, the medium-sized corporate store V Shop Retail Ltd. plans to open 40 areas in Level II and Level III urban communities, starting with 13 stores in 2011.

- Mukesh Ambani's Dependence Ventures, a completely claimed auxiliary, plans to open 150 stores toward the finish of December 2011 and increment the quantity of stores cross country in all organizations in five years or less.

- Future Worth Retail, a Future Gathering organization, would contribute between US\$1.54 million and US\$4.41 million to extend its hypermarket fasten Enormous Marketplace to more modest urban communities in Andhra Pradesh.

- Spencer's Retail, which is claimed by RPG, expects to open 25 hypermarkets cross country by 2012.

- Fight Hypermarkets, a worldwide organization of supermarkets claimed by Dubai-based Milestone Gathering, expects to utilize India's homegrown income to begin supporting its

Journal

of the

Oriental Institute

M.S. University of Baroda

ISSN: 0030-5324

development after 2013. The Milestone Gathering has previously dedicated US\$51.31 million in the development of five hypermarkets and means to add one more US\$51.31 million to the extension cycle.

- To arrive at a business objective of US\$ 87.31 million throughout the following five years, driving watchmaker Titan Ventures Restricted plans to contribute around US\$ 21.83 million to open 50 premium watch stores called Helios.

- Imprints and Spencer (M&S), a very good quality English retailer, needs to significantly grow its retail presence in India throughout the following three years, with an objective of opening 50 outlets.

- India's retail area, which makes occupations, is the nation's second-biggest after farming. ASSOCHAM, a relationship of Indian business and industry chambers, projects that before long, the retail area would produce 50,000 new positions.

- Retail organizations are sending off retail the executives programs in a joint effort with the board schools, enrolling the assistance of ability from different enterprises, and making broad dedication and vocation development programs for current staff individuals. Top contenders incorporate Customer's Stop, Pantaloons Retail India Restricted, Trent, and RPG.

Black and Gathering are practically alert. Consider The Pantaloons Retail India Ltd's. expectations; the organization has formulated a total methodology and guesses that it won't recruit any new chiefs from outside India in the following two years.

7.Conclusion

The size of the coordinated retail market in 2011 has been approximated by different associations in various ways. These forecasts all settle on a certain something: the coordinated retail business in India will be very huge in 2011. Notwithstanding the activities of retailers and buyer requests, the condition of the retail business is generally impacted by outer factors including government rules, arrangements, and land costs. The opportunities for expanding retail efficiency and diminishing expenses is projected to decline as the retail area creates and rivalry rises. Thus, it's basic for traders to lay out a novel situation in the market in view of values, connections, or mastery.

Moreover, esteem is a consequence of value, quality, and administration, yet can likewise be improved by customizing and giving an essential encounter, consequently it is fundamental to remember that these systems are not rigorously free of each other.

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JOURNAL OF MANAGEMENT & ENTREPRENEURSHIP

CERTIFICATE OF PUBLICATION

This is to certify that the article entitled
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University Grants Commission

Published in Vol. 16, No.2(III), April-June 2022

JOURNAL OF MANAGEMENT & ENTREPRENEURSHIP with ISSN : 2229-5348

UGC-CARE List Group I

Impact Factor: 4.257



ज्ञान-विज्ञान विमुक्तये
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University Grants Commission



Editor in chief

**ANALYTICAL STUDY OF SERVICE QUALITY IN PUBLIC ROAD TRANSPORTATION
WITH SPECIAL REFERENCE TO AHMEDNAGAR DISTRICT.**

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Abstract

In the ongoing outline of expansion, public transportation helps (PTS) need to introspect sense towards the worth of obligations advertised. In this conditions, this study checked the suburbanites' thought on help quality introduced by all transport obligations of Ahmednagar segment, India. The SERVQUAL scale is directed to quantify the worker's comprehension on help esteem. A study was gone to among the suburbanites the one were continuously profiting public vehicle helps for relocating. An arbitrary example of 534 charged were caught for dossier assortment, with administering class 512 were finished up for convincing examination. The review concluded that the obligation include labor meets the impression of suburbanites. As a general rule, public of Ahmednagar are assisted going with the guide quality communication by open vehicle duties. This with papering produces out an obligation quality figure that perhaps chosen by different puts whose individuals relies upon public travel administration administrations.

Keywords: Public transportation obligations, Service esteem, Commuters thought, SERVQUAL

1. Introduction

Administration status is normally considered the amount of clients' opinion on how they were helped (Johns, 1992). The contrast between help trademark and fulfillment is that obligation trademark is an overall judgment, or position, that has to do with how significant the assistance is. While, what satisfies individuals is the exceptional undertaking (Parasuraman, Valarie, Zeithaml and Berry, 1988). Assuming the apparent assist falls beneath what clients with needing, they are distraught. On the off chance that the apparent assistance is above what clients need, it fulfills them (Andreassen, 1995). Advertisers need to consider their clients something beyond a wellspring of important quality efficiency; they are likewise co-manufacturers of the interaction that makes them what their identity is (Gronroos and Ojasalo, 2004). Individuals who expound on open transportation in 1988 say that transportation by a vehicle gives everybody admittance to a similar sort of administration, however not school transports, contract, and touring transports. Public transportation arrives in an assortment of structures, similar to transports, streetcars, cable cars, and ship boats (Tran and Kleiner, 2005). As open transportation establishments age and more full grown, general society is left with no decision except for to acknowledge what is introduced (Andreassen, 1994). However open transportation administration is vital, very little exploration is being done to investigate this issue (Friman, Edvardsson, and Garling, 2001). Generally, this is another region to investigate. Public transportation administration helps are the least demanding and least expensive method for getting around. Consistently, 3.8 million individuals utilize public transportation to get around (PC network.msrtc). In the sketch above, methodical exploration that ganders at workers' opinion on the help they land from all transportation positions will be really great for purchasers and great for developers. Andreassen (1995) said that a decent objective for public transportation administration was to get individuals to have confidence in it, which would likewise be really great for general society. The objective of this study was to apportion and figure how well and significant travelers' opinion on help values on the SERVQUAL scale that Parasuraman and others utilized in 1988, with an instructive measure added in.

2. Literature Review

Research on help esteem has been done according to a wide range of points of view throughout a significant stretch of time. Berry, Zeithaml, and Parasuraman, 1985; Parasuraman, Zeithaml, and Berry, 1985; Brady and Cronin, 2001, have worked really hard of fostering the obligation character thought. There is a requirement for applied changes in light of the fact that help condition doesn't function admirably with the various kinds of positions that individuals have in various nations. (Cronin and Taylor, 1992; Brady and Cronin, 2001) in their review, they said that gifted individuals need to manage various things that make them significant. Examiners have investigated the topic of how to gauge the nature of various kinds of help (Parasuraman and others, 1985; Parasuraman, Berry, and Zeithaml, 1991; Koelemeijer, 1991; Cronin and Taylor, 1992; Vandamme and Leunis, 1993; Parasuraman, Zeithaml, and Malhotra, 2005). However SERVQUAL was utilized in a ton of studies, it was made to fit the region and the circumstance, similar to E-S-QUAL for photoelectric region and SERVPERF for help inclination, so it functioned admirably. Along these lines, SERVQUAL will change significantly more to ensure that everybody is something very similar (Parasuraman and others, 1991). The subject of how to work on the nature of help by setting up this way and that opposition has been taken a gander at by individuals (Reicheld and Sasser, 1990; Berry, Zeithaml, and Parasuraman, 1990; Hensel, 1990; Berry, Parasuraman, and Zeithaml, 1994; Berry and Parasuraman, 1997; Glynn and Brannick, 1998; Johnston and Heineke, 1998; Harvey, 1998). Secondhand, administration esteem has been a significant piece of understanding how administrations work. Then again, a decent help conduct on help quality will prompt greater returns (Zahorik and Rust 1992; Boulding, Kalra, Staelin, and Zeithaml, 1993; Zeithaml, Berry, and Parasuraman, 1996; Liu, Sudharshan, and Hamer, 2000).

Parasuraman et al. (1988) concocted a method for sorting out how great an assistance is. The system displayed in Figure 1 incorporates the nonexclusive parts of substance, dependability, responsiveness, confirmation, and sympathy. It influences the general aspects due to populace elements and public transportation-explicit variables. Accordingly, the idea of estimating administration quality is changed to meet the review's requirements. In his work, Svensson (2004) discusses that making a model that fits the review environment is so significant.

3. Research Methodology

Subsequent to finding out about how the help quality build was brainstormed and utilized in open transportation administrations in Ahmednagar locale, the principal instrument was made by thinking of 28 things. Individuals from a public transportation organization assisted plan the first instrument with assistance from the SERVQUAL (Parasuraman, et al., 1988), which is a device for estimating client support. The principal segment of the poll had four things about the substantial quality variable, the subsequent area had five things about the dependability factor, the third segment had four things about the responsiveness factor, the fourth segment had four things about the confirmation factor, and the fifth area had five things about the compassion factor. The 6th segment had six things about the social component. Intended to find solutions on a five-point Likert scale: - 1 unequivocally deviates, - 2 seriously dissents, 0 disagrees or deviate, +1 concurred, and +2 concurred emphatically. Cui, Lewis, and Park (2003) utilized a five-layered SERVQUAL to quantify administration quality, and they obtained great outcomes with a seven-point likert scale. In any case, for this review, a five-point likert scale is utilized in light of the fact that respondents are met at transport stops (transport stations), which diminishes reaction time and makes respondents more agreeable. Perez, Abad, Carrillo, and Fernandez, (2007) utilized a five-direct scale toward figure out individuals' opinion on open transportation in Spain. This scale was made in light of the possibility that SERVQUAL ought to be made remarkable for every business (Stafford, 1999; Akan, 1995). Subsequently, culture has been added as a 6th part to this review, as displayed in figure 2. SERVQUAL does a ton of examination, and many investigations say that the

nonexclusive SERQUAL scale ought to be extended with new aspects (Boulding et al., 1993; Cronin and Taylor, 1992; Parasuraman et al., 1991;2005; Zeithaml et al., 1996). The SERVQUAL model has been utilized and worked on a great deal in the United States. Many investigations have not been done in India (Malhotra et al., 2005; Satyabhusan, Ed, and Kalyan, 2009). A pilot study with an example of 45 individuals was finished the ongoing review, and two things were eliminated. The excess 26 things were spread across five help quality aspects: substance three things, dependability three things, responsiveness five things, affirmation five things, sympathy five things, culture five things, and trust three things. There were 534 individuals in the review, which was sufficient to do factor examination. The quantity of assertions duplicated by ten is the base number of individuals required for factor examination; this study checked twofold that out. When did the review occur? It ran from the first of February to the third of March, 2010. Individuals who partook in the review were looked over everyone utilizing a basic examining strategy since it was not difficult to get to and modest. Yu, Hong, Gu, and Wang (2008) involved this testing technique in a learn about individuals' opinion on the public library framework.

In this review, it just discussions around one MSRTC and doesn't discuss private players. The overview technique was utilized to get data from workers who utilize public transportation consistently at specific bus stations. Every week in Ahmednagar District, information was gathered from Monday to Friday between the long periods of 5 pm and 8 pm on those days, for quite some time, 512 surveys with all fields finished up were finished; the non-reaction rate was exceptionally low. A ton of care has been taken not to gather a lot of information from the example components.

4. Examining the Data

4.1 The profiles of the people who answered the question.

Males answered 53.5 percent of the questions that had been answered, while females answered 46.5 percent of the same questions. They had less of a percentage difference between male and female respondents. This is because the male-female population ratio in urban India is close to even. Most of the people who answered were under 25 years old, between 26 and 35, and 36 and 45. Only 10.8% were over 45 years old. There are 71.8 percent of people between the ages of 26 and 35 in the first group and those under 25 in the second group. This is because India has a very young population. 65.8% of the people who took the survey said that they were single, and 34.2% said they were married. The typical age of marriage in urban India is between 30 and 32 years old, which means that it takes more time for men and women to earn enough money to live on their own.

Some 64.5 percent said they had a postgraduate degree, 28.3 percent said they had a degree, and 7.2% said they had another kind of education. In India, parents help their kids pay for and emotionally support their education. Also, higher education is seen as a way to rise in the social ladder, so finding more post-graduates in urban India is a big deal. Only 44.3 percent of the people who lived in the United States last year were professionals, 39.7 percent were students, 9.1 percent worked for someone else, and 4.6 percent were self-employed. This means that most of the people who took the survey are in professional jobs, and India is one of the countries that makes the most engineers, doctors, MBAs, MCAs, and other Masters degrees. 60% of respondents used in the last two to five years, 21.4 percent used for more than five years, and 15% used in the last two years.

37.9 percent of respondents said they travelled between 16 and 20 kilometres per day, 30.9 percent travelled between 11 and 15 kilometres per day, 19.4 percent travelled more than 20 kilometres per day, 8.2 percent travelled between 5 and 10 kilometres per day, and 3.6 percent travelled less than 5

kilometres per day. 57.3 percent of respondents travelled a distance of 16 to 20 miles or more; this is correct. India's rapid urbanisation growth and expansion of cities to larger scales are the main reasons people travel long distances for jobs and other reasons.

4.2 Factor Analysis

Factor examination was utilized to sort out which aspects and things went together. Head part examination with a symmetrical (varimax) pivot was utilized to take a gander at the information, and a component stacking benchmark of 0.4 was utilized to ensure the outcomes were right. This model did exclude substantial quality (see figure 2), yet kept the other five factors, every one of which had 23 passages. Ten things have been moved in this review, which shows that the item staff in the PTS region have forever been well mannered to you as they moved from aspect affirmation to dependability. Representatives at PTS encourage you, and they know how to address your inquiries. PTS additionally expects that its records are without blunder, and it has working hours that work for everybody. In a concentrate on open transportation (Pe'rez et al., 2007), the consequences of a part examination showed that things were moved around.

These five sections each have alpha coefficients of 0.9332, 0.9012, 0.9142, 0.8994, and 0.9630. (ref table1). These discoveries show that the four factors are truly dependable (Nunnally, 1978). This helps the pieces that make up each aspect cooperate overall. PTS's center had changed from sympathy to culture. Ladies, youngsters, and the debilitated were at this point not the concentration. Subsequently, the things in the SERVQUAL scale made by (Parasuraman et al., 1988) for each aspect aren't immediately helpful.

4.3 Validity

Relationship and relapse investigation were utilized to check whether the instrument was precise. Utilizing Table 2, you can perceive how well the general help quality (OSQ) and the instrument's five aspects (aspects) are connected. As you can find in Table 2, all coefficients are genuinely critical at the 0.001 level, which is shown. This shows that the instrument is great at what it does. Additionally, a relapse investigation was done to check whether the outcomes were valid. The relapse model is worked as follows: All of f(Reliability, responsiveness, confirmation, compassion, and culture) in single word: Table 3 shows the relapse results. Table 3 shows that the R-square worth is 0.716. 71% of the variety in help quality comes from five factors that are not connected to one another. R-square is significant at the 0.001 level. These things amount to the aggregate: 0.241 (unwavering quality) + 0.2202 (responsiveness) + 0.247 (affirmation), 0.227 (compassion), and 0.298 (trust) (culture). Each of the aspects in Table 3 have huge coefficients at the 0.01 level. The way of life aspect has a huge coefficient at the 0.05 level. This shows that the survey is solid (Webb et al. 2000). This additionally shows that fitting assistance quality pointers to various circumstances and countries is so significant.

5. Conclusion

The objective of this study is to figure out how suburbanites feel about help quality in open transportation by utilizing SERVQUAL. It additionally accentuates that the nonexclusive SERVQUAL aspects can be extended to incorporate a part that is intended for the review setting. Culture has been added as another thing to contemplate (Paul and Alain, 1996; Malhotra, Agarwal, and Peterson, 1996; Malhotra et al., 1994; Malhotra et al., 2005; Mattila, 1999; Winsted, 1997; Liu and McClure, 2001; Karen and Boo, 2007; Satyabhusan et al., 2009). Many examinations have observed that culture is significant. Pe'rez et al. (2007) observed that public transportation is no exemption. To get a superior feeling of how public transportation functions, scientists conversed with individuals in the transportation organization's advertising division. The meeting clarified that culture is a significant piece of administration plan, so it appeared to be legit to remember it for the review. The method involved with

making the instrument prompted six aspects and 28 inquiries. Nonetheless, a pilot study with 45 individuals prompted the evacuation of two things, carrying the absolute to 26. The information is finished with 512 surveys. They utilized factor examination, which prompted the end of one aspect: substantial quality, as well as three additional things, making the complete number of things down to 23. This showed that different aspects are solid and legitimate. A few investigations on help quality estimation (Parasuraman et al., 1988; Parasuraman et al., 1991; Parasuraman et al., 2005; Sahu, 2006; Snipes et al., 2006; Stafford, 1999; Vandamme and Leunis, 1993; Yu et al., 2008) utilized scale refinement to eliminate specific things and aspects from the scale. This prompted a lower score. As indicated by the relapse model, culture is a major element in how great public transportation administration is. This shows that SERVQUAL's technique for estimating administration quality should be changed or extended to fit different review circumstances.

Driving propensities show that the vast majority who utilize the help in their forties have a moderate pay and travel a brief distance every month. Most suburbanites have involved the assistance for quite a while. Individuals' readiness to help and their certainty moving way of behaving are given the most noteworthy need when we check every individual thing out. This is in accordance with the twin urban communities setting. Workers frequently request that transport drivers stop the transport for a couple of additional minutes at transport stops. In any case, suburbanites likewise anticipate that the transport should stop in places other than transport stops so they don't need to stroll back from the bus station to their work environment or home. Ideal guaranteed administrations and helpful working hours were the explanations that got the most focuses. Since Ahmednagar is so packed, a many individuals who work and go to class need public transportation. Individuals who need to return home on time from work or school need transports.

Something else: Buses should be accessible at both beginning and end seasons of the work day. Since suburbanites esteem time, they are more worried about getting to their objective on time. This may not be the situation for relaxation travel, which this study didn't investigate. The accompanying assertions got more focuses in light of the fact that they are in accordance with neighborhood values and give additional consideration to ladies, youngsters, and the crippled. Also, the plan of public transportation administrations in the twin urban areas is in accordance with neighborhood culture. Ladies and kids have saved seats, and they anticipate that the transport guide should assist them with tracking down seats for them. There are transport courses that are just for ladies, called "women just." In and of itself, this is exceptionally fascinating. Ladies are given more regard in the native culture, which significantly affects the nature of the assistance that individuals get. Akan (1995), Brysland and Curry (2001), Buttle (1996), Cui et al. (2003), and Parasuraman et al. (1988) all observed that substantial quality was the main aspect in most SERVQUAL research. This study said it was the inverse. As indicated by the request in which they are positioned when the method for the aspects are looked at: responsiveness guaranteed dependability culture The exploration shows that public transportation frameworks address the issues of suburbanites with regards to support quality. Specialist co-ops can address the issues of their clients assuming they focus on their clients' interests. This is on the grounds that the universe of business is turning out to be more serious. Subsequently, the public transportation framework should understand that its principal obligation is to constantly offer dependable assistance to suburbanites, which will prompt better help quality.

6. The Social Consequences

Public transportation can assist all major metropolitan urban communities with eliminating contamination. Since vehicular contamination is a significant wellspring of contamination in metropolitan regions, better help in open transportation can make a many individuals more averse to

utilize their own vehicles, bicycles, or different vehicles to get around. Public transportation can be utilized to solve two problems at once, in light of the fact that better assistance quality in open transportation would make more individuals use it. This wouldn't just decrease contamination in urban communities, yet additionally most of traffic issues in many urban communities.

7. Scope for Further Research

This concentrate fundamentally viewed at SERVQUAL as a method for estimating administration quality. Assuming you live in numerous nations, public transportation is a vital help. You can make a scale for estimating administration quality that is exceptional to your country. Despite the fact that this study didn't completely investigate culture, different factors like qualities, ethos, independence, and language all play a part in help quality, so more examination should be possible to take advantage of these elements completely. Extra long haul studies should be possible at standard spans over the course of the years to back up the cases. To look at public and private working administrations, you can do as such. What's more, it tends to be utilized in semi-metropolitan and provincial regions to figure out individuals' thought process.

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SHODHASAMHITA शोधसंहिता

ISSN No. 2277-7067

CERTIFICATE OF PUBLICATION

This is to certify that

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For the paper entitled

**AN APPLIED INVESTIGATION OF IMPACT OF COVID-19 ON CONSUMER'S BUYING
PREFERENCES WITH EXTRAORDINARY REFERENCE TO COMPUTERIZED SHOWCASING.**

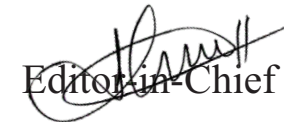
ज्ञान-विज्ञान विमुक्तये
Vol. No. IX, Issue- 5 (II) January – June 2022

in

Shodhsamhita

Impact Factor: 4.95

UGC Care Group 1 Journal


Editor-in-Chief



AN APPLIED INVESTIGATION OF IMPACT OF COVID-19 ON CONSUMER'S BUYING PREFERENCES WITH EXTRAORDINARY REFERENCE TO COMPUTERIZED SHOWCASING.

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Abstract

Before the COVID-19 Pandemic, people used to buy things the old-fashioned way, but now they don't. So used to this way of buying that they didn't even think about changing their buying habits or their favourite things to buy. Consequently, there has been a lot of change in buying habits and priorities since Covid-19 came out and the lockdown from March to June, when people were afraid to go outside. In the last few years, there has been a big change in how people buy things and how they buy them. Advanced technology, changes in demographics, and new ideas are helping people change their habits and manage their work, leisure, and school boundaries.

Words to know: Social media is a part of COVID-19, digital habits.

Overview:

If you run a business that deals with customers, marketing is the most important thing you can do. Marketing has become the heart of every business in order to stay alive in a world that is changing all the time. People are more interested in making customers happy and getting them to pay more for their products because of the rise of internationalisation and free trade. There was a shift in the 1970s from "doing the right thing" to "doing the right thing." It used to be that "optimization," "cost-cutting," and "customer satisfaction" were the main things people talked about. Now, they talk about customer satisfaction and employee satisfaction and loyalty. Now, marketing isn't just about selling things to people. Customer service and building relationships are also important.

It has changed a lot since the 1960s, when the focus went from making things to selling them to people in society. People now live in a world where everything comes to their door. Today, most people buy things online, and the amount of people who shop around for brands, products, and prices has gone up. It's called Covid-19, and it's been killing people all over the world for a few months now (Corona). Because this pandemic has spread all over the world, it has had a big impact on everything from education to entertainment to health care. Their strategies and ways of getting in touch with the customer have changed over time, going from traditional distribution channels to digitalization and back again.

1.1 Digital marketing: This is the general idea behind it.



People use the term "digital marketing" to mean advertising your business on the internet. There are a lot of integrated marketing services that help people find, connect with, and buy products online. Tools for digital marketing that are used the most often are social media, SEO, e-mail marketing, and more. People use these tools to connect with brands and see how marketing programmes are working in real-time.

Definitions:

Kevin M Green	“Digital marketing is the tip of the spear when engaging with a desired audience.”
Scott Gardner, Senior Vice President, SEO and Content Channel Lead at Bank of America	1) Digital Marketing is “Engaging customers and prospects in digital channels, including mobile and social, where they are increasingly seeking information.”
Becky Ewert, Content Marketing Strategist at Capella University	“Anytime you use connected devices to reach people with your content, you’re engaging in digital marketing.”

When it comes to digital marketing, it's very different from other types of marketing because it can easily reach customers and goes beyond just telling people about brands. It's now possible for brands to talk to customers directly 24 hours a day through blogs and social media like LinkedIn, Facebook, Twitter, and paid media. There are three things that make up a digital framework: People, Process, and Technology.

- People: Making customers do things they don't want to do while making content or having an experience that makes them want to do them.
- Process: Involved in managing changes to build a marketing platform.
- Technology: Using new technology to build a platform that is easy for people to use.

Marketing's role has changed a lot because of things like recessions, inflation, terrorism, economic changes, technological changes, and now the pandemic, which has changed the way people think about marketing. Using the power of ecommerce, you can use the internet to market and sell your products and services.

1.2 Innovation in marketing: Taking a look at what people want.

For every new business practise, it is important to look at how people and businesses buy things and how well they can accept new things. Before introducing any new products, services, or practises, marketers must look at

how buyers start, search, evaluate, choose, and experience market offerings. This is important because it will help them figure out how to improve their marketing. Changes in customer preferences and changes in consumer needs drive marketing innovation and the introduction of new technologies based on market ideas.

They found a new model of the consumer decision journey (CDJ) in a report from McKinsey. It's different from the traditional funnel model, where the consumer starts with a few well-known brands in mind and then makes a buying decision. Customers use technology to help them choose between different brands, products, and services. They can also remove or add choices during the CDJ. This journey also includes a feedback loop, where customers keep an eye on the performance of brands and products even after they buy them. This has put a lot of pressure on the products to do well so that people have a better experience.

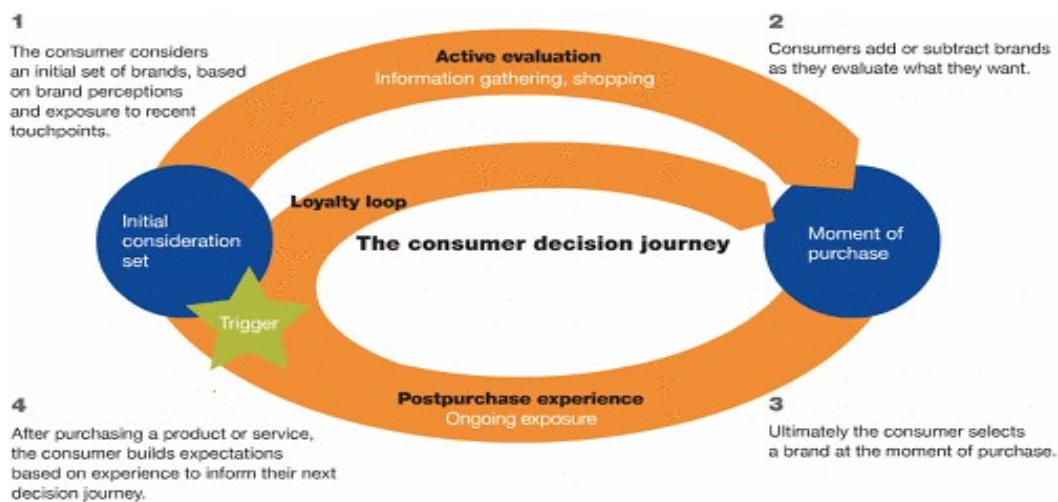


Fig: 1 The Consumer Decision Journey (CDJ) (McKinsey, 2009)

However, according to a survey from the Association of National Advertisers, companies are now giving personalised and consistent experiences to customers through automation instead. Now, the company's ability to deliver value is based on four things: Automation speeding up the journey, proactive personalization, contextual interaction, and journey innovation that adds new digital sources to the journey.

1. The impact of Covid-19 on marketing

People in Wuhan, China, were hit first by the pandemic of corona at the end of the year 2019. Then, its effects were felt all over the world. Lockdowns in a lot of countries caused the economies to start spinning. Most businesses are trying to stay alive in this kind of crisis. In this case, marketing will be the most important part of getting back on your feet.



Arun Gupta, who wrote an article for BrandEquity.com from the Economic Times on April 14, 2020, said that because of the Covid-19 pandemic, businesses and economies are at a standstill. The only way to avoid this is to "wait and see." But in the marketing field, there has been a shift from traditional marketing to digital and mobile marketing. People who are inside are more likely to use social media and TV to get information.

2.1 Changes in Consumer Behavior after Covid-19

After the lockdown, marketers have seen a big change in people's attitudes and how they buy things. Consumers have had to change their shopping habits because of the pandemic, which has made them think about using Indian brands, buying local products, and paying attention to prices and preferring online shopping websites.

Consumers have had their lives changed a lot by the corona virus. Currently, people are more concerned about their own health and hygiene as well as their job prospects. This has made people think about whether they will be able to buy things like food and medicine. This has caused customers to cut back on how much money they spend.

At the same time, people were becoming more and more isolated, which made them want to buy things online. Even when people have free time, they use gadgets like phones and laptops to surf the web. People have become more reliant on technology in the last few years. After the pandemic, this will also be going on.

Consumers have changed their shopping habits because of the lockdown period. Shopping on the internet isn't easy for people who don't want to do it. Thus, when people get used to online shopping and how easy it is, they will be less likely to use traditional shopping methods.

Consumers are now more interested in health and hygiene than luxury brands, travel, and entertainment.

2.2 People's buying preferences have changed. Covid-19

A pandemic and lockdown have changed how people buy things. People now prefer to buy things online instead of in stores. Consumers are getting better at shopping thanks to digitalization. People will also form new habits because of new technology, demographic changes, and new ways people have found to deal with difficult situations, making their lives easier.

Consumers are now more likely to buy things online because this is the best place to compare brands, products, and services and choose the best one that fits their needs and is also the least expensive. In this period of isolation, people have changed their buying habits from traditional to digital. This includes everything from vegetables and groceries to health care products.

2.3 There was a survey done by Influencer Marketing Hub.

The following are some of its findings:

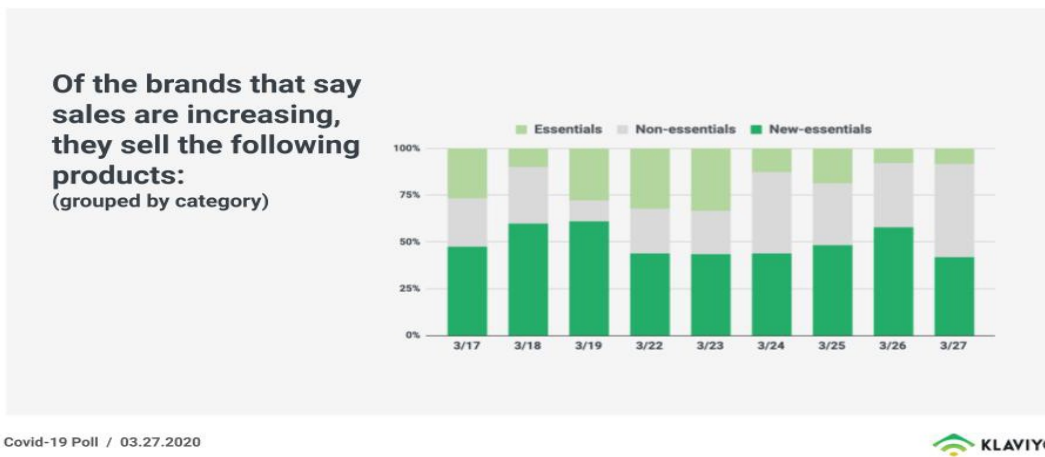
a) The percentage of Display Ads that have been cancelled or paused during lockdown is 47%.



The display ads were hurt a lot by other types of media. The spend budget was cut by 47%, which is the biggest loss we've ever seen. Paid social media has seen a drop, but paid search engines haven't changed their budgets. Linear TV has seen 42% of people pause, cancel, or cut back on their money.

b) Product Brands in the Essentials Category have seen sales rise 40%.

Lockdowns happen in a lot of places, so there are often restrictions on what people can buy. This has led to a rise in the number of things people buy that they think are important. To make sure they aren't breaking any rules, many brands have set limits on what they will sell. A lot of businesses that sell things online now only put basic things on their site. There are now deals on a lot more things in the Essentials category from more than 40% of the brands.



Source: Klaviyo report

c) The number of people who go to media websites has gone up more than 30%.

It has been found that not every business is doing well, but most of the websites saw a rise in traffic. Some traditional media, like printed magazines, are having a hard time because they don't have as many ways to get people to read them. However, people are still going to the news to keep up with the most recent COVID-19 news.

d) The number of people adapting to food places has gone up by almost 60%.

Obviously, what a company is most interested in is how it changes. The more money your guests spend while they are at your site, the better. People in some areas, like the Finance Sector, have seen big changes in traffic, but in other areas, things haven't changed much at all. As far as changes go, the food segment hasn't changed much, but there has been an almost 60% rise in changes. This is an example of people not going to the store to buy food. Many people might want this measurement to go up even more, but stores first need to improve their delivery capacity and coordination before they can do much more.



e) The cost per click and the cost per 1,000 impressions are lower.

Most of the brands that are advertising Cost per Click and Cost per Impressions have cut back on their costs. This is why their profits for publicising spend (ROAS) are going up a lot faster than they thought they would be.

f) In the United States, the amount of money spent on advertising for e-commerce has doubled between February 17 and March 9. Internet businesses have clearly seen the opportunity for bigger deals and have spent more money on advertising. Because they had both an online and a real-world presence, brands that had both have moved their marketing to the web. In the next four weeks, the amount of money that web-based business sites spent on advertising went from \$4.8 million to \$9.6 million.

g) Supermarket websites have seen a 161.4 percent rise in traffic.

There has been a big change in the types of websites that people go to for their web-based business. Interest in online market shopping has grown a lot, and it's now outpacing the limit in many places. This has led to a 161.4 percent rise in the number of people stuck in traffic at rush hour in March, compared to a month earlier. Media and telecom sites have also become more common. Amusement/events and the travel industry have been the biggest losers when it comes to web-based business (- 56.8 percent).

Growth of 25% in the number of people who open emails from retailers has been seen.

During the time that buyers stay at home, emails are opened at a high rate. Email open rates in retail have risen by up to 25% week-on-week. People have more free time now, so they can spend more time opening and reading their messages.

Every week, the number of people who open emails on a daily basis tends to rise by 5% to 10%. Another thing that has changed is that email opens and collaborations have become more common on the work area than on the go. More and more people are working at home on their workstations, which they use to check their messages, instead of their cell phones, as they used to do before, People who read emails on their workstations have a less distracting experience than people who read emails on their cell phones. People are spending more time reading longer content.

I Messaging and posting on Facebook has gone up 50% in the countries that get the most hits.

Another popular app during the Coronavirus has been texting apps. Facebook has seen a huge surge in the use of both Messenger and WhatsApp over the last few months. Informing apps have been used the most in countries that have the strictest restrictions on them. Facebook has seen a 70% increase in the amount of time its apps have been used in Italy since the emergency began. Instagram and Facebook Live views grew by a lot in



seven days. Over the course of a month, gathering calls (calls made by at least three people) grew by more than 1,000 percent.

People have talked about COVID-19 on Twitter four times more in March than they did in February.

Twitter has seen a four-fold rise in the number of people talking about COVID-19 in March compared to February.

The number of COVID-19 issues that were shared around the world in February was about the same as it was in January. However, in March, there was a big spike in tweets because of sudden events in the world. When the US stock market started to move, almost 5-6 million spikes were seen.

During the middle of March, the number of tweets rose to 20 million per day. Between 13 and 20 million posts were made every day in March.

k) Influencers posted about the Coronavirus more than 2.9 billion times. This shows the maximum number of people who saw the posts.

Producer IQ looked at more than 1.4 million Instagram posts by more than 1 million people. Posts that had the hashtags #covid19, #covid, #pandemic, and #corona disease erupt were looked at by them. It was #coronavirus, which they found was used in 466,175 posts and 1,882,051,405 jobs. All in all, there were more than 800,000 posts from influencers that got 2.9 million people to do something.

3. Changes in Consumer Behavior

3.1 Changes in consumer behaviour will have a big impact on the future of the industry.

The pandemic has changed the way people think about food a lot. They began to think differently, shop differently, and live in many different ways. Consumers across the world are looking for new ways to buy things like food and clothes.

This crisis has made people change their habits and how they look at the market for the rest of their lives. This has changed the way businesses and marketers work all over the world. Now, they have to think about how to change the process and how to get the goods to people. AI bots must be used by businesses in order to communicate with customers on their own.

3.2 People now have new and long-lasting shopping habits and buying habits.

As a result of Covid-19, the priorities of consumers have changed. They are more concerned with things like basic needs and hygiene products, while non-essential categories have dropped. As more people buy local, their



brand preferences are changing. This has given our Indian businesses a chance to get in on the act and take over the market.

Digital commerce has encouraged more people to shop online when they are alone. It has been said that during lockdown, the consumer's awareness of how much they consume has risen, and the desire to shop locally has changed the brand loyalty of the consumer.

Consumer research done by Accenture Covid-19 found that the two most important things for people were to cut down on food waste and to buy more health products. Job loss and salary cuts made people think about how much money they were spending when they went shopping and made more eco-friendly choices.

The implications of research

As in Covid-19, lockdown and social isolation have changed the way people used to act, from figuring out what they needed to looking for information to buying. This has changed the way people used to act. Even after the consumer has used the product or service and thrown away the waste, things have changed. The current situation has opened up a lot of research opportunities in the areas of blurring work-life boundaries, social life, and the use of social media in times of crisis, among other things. The main areas of academic research that can be done are to look at how people can be resilient and change their purchasing habits.

The researcher has a great chance to do research on cultural differences and how technology changes. Another problem in the Covid-19 crisis is how to keep people isolated from each other.

Consumers are very interested in the virtual world, and AI is playing a very important role in developing new applications that make it easier for people to shop.

4. Conclusion

Consumers have changed their behaviour a lot because of the Covid-19 outbreak, which led to a lockdown and a lot of people not talking to each other. Consumption is now time and location bound as well. Consumers are looking for new ways to replace their old ways of buying and their favourite things to buy. They have learned how to come up with new and creative ways to improvise. People are working at home, studying at home, and having fun at home. People can't go into a store because they can't get there, so the store has come to them. They use a digital interface because they can't get there. This has changed the way marketers should talk to customers now, too. In order for a marketer to connect with people directly through digital commerce, they need to come up with new ways.

As a result of long-term house arrest, people have switched to newer technologies that make it easier for them to work, study, consume, and have fun. Finally, the digital platform is revealed, and people have permanently changed how they buy things. In the last few years, online delivery and pick-up services have been on the rise.



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Journal

of the

Oriental Institute

M.S. University of Baroda

ISSN: 0030-5324

GROWTH , CHALLENGES AND RECENT DEVELOPMENT IN INDIAN RETAIL MARKET

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Abstract

India's retail area is supposed to increment at a 9% rate somewhere in the range of 2019 and 2030, from US\$ 779 billion of every 2019 to US\$ 1,407 billion by 2026, and more than US\$ 1.8 trillion by 2030, as per Kearney Exploration. In FY20, disconnected retailers in India, ordinarily alluded to as blocks and cement (B&M) vendors, are expected to raise their income by Rs. 10,000-12,000 crore (US\$ 1.39-2.77 billion). Toward the finish of 2021, the immediate selling area in India is expected to be worth US\$2.14 billion. E-retail has profited from the pandemic, and a report by Bain and Company as a team with Flipkart named "How India Shops Online 2021" predicts that the market would arrive at US\$ 120-140 billion by FY26, developing at a pace of around 25-30% every year, in the resulting five years.

The fifth-biggest retail market on the planet is in India. The Indian retail area, which incorporates both coordinated and chaotic areas, has had one of the nation's quickest paces of development as of late. The retail area in India was already generally sloppy, yet as purchaser tastes and inclinations have changed, the area is presently turning out to be more famous and coordinated. By 2015, the Indian retail market is projected to increment from US\$330 billion to US\$640 billion. The 10th Yearly Worldwide Retail Advancement List (GRDI) distributed by A.T. India has an exceptionally strong development crucial establishment, in this manner this present time is the best opportunity to enter the Indian retail market, as per Kearney. The Indian retail market represents 22% of the country's Gross domestic product and 8% of all positions. In the accompanying five years, it is anticipated that complete retail spending would twofold. Coordinated retail, which is as of now ascending at a CAGR of 22%, is remembered to represent 21% of complete spending. Deals for the sloppy retail area are anticipated to increment from \$309 billion out of 2006-07 to \$496 billion of every 2011-12, developing at a pace of generally 10% yearly. This article zeroed in on the advancing retail business, including its significant entertainers, its coordinated and chaotic areas, as well as the issues that the area would almost certainly experience sooner rather than later.

Catchphrases: Central parts, Industry, and Retail.

1.Introduction

India's Retail Area

With unfamiliar organizations testing in the Indian market and the country's as of now settled titans utilizing bold, imaginative measures to prevail upon the purchaser, India's retailing blast has acquired speed, dynamism, and liveliness. The early participants are at the same time changing their system to stay cutthroat and adjust to the new market climate. In the forthcoming years, the coordinated retailing area is supposed to encounter fast development as various top global organizations venture into India and adjust their plans of action to suit neighborhood inclinations and buying designs. In the mean time, territorial contenders have moved forward their guards and are endeavoring to outmaneuver worldwide contenders by using how they might interpret provincial business sectors. Clearly the retail blast's next stage has shown up.

One of the central areas of the Indian economy is retail. In India, retail deals have been drifting at 33-35% of Gross domestic product for the beyond couple of years, contrasted with 20% in the US. The fifth-biggest retail market on the planet is in India. The Indian retail area, which

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incorporates both coordinated and chaotic areas, has had one of the nation's quickest paces of development lately. The retail area in India was once generally disordered, however because of buyer tastes and inclinations, the area is currently turning out to be all the more popular and coordinated. Now that shopper request is expanding, the business is expected to increment at a pace of 25-30% every year. The Indian retail market is extending rapidly at this moment, and by 2013 it's anticipated to contact US \$ 833 billion. Purchaser use in India has expanded by up to 75% during the beyond four years. In any case, formal retail represents applications exist in India. With a youthful populace, rising discretionary cashflow, evolving ways of life, and a solid economy, India is ready to become one of the quickest developing coordinated retail commercial centers on the planet, representing just 5-6% of in general retail incomes.

Authorized vendors who are enlisted for deals charge, personal expense, and so on participate in organised retailing, or organised exchanging. These incorporate the corporately financed enormous corporate store and hypermarkets as well as the separately held ones. On the opposite side, chaotic retailing alludes to the traditional minimal expense retailing structures, for example, neighborhood kirana shops, proprietor monitored corner shops, general stores, pushcart and asphalt dealers, and so on.

1.1 Changes in Indian retail

Quite possibly of the biggest business in India is retailing, which is going through a transformation. The passage of the new retailer in India denotes the beginning of a transformation in retail. In the impending years, the retail market in India is expected to fundamentally extend. Retailing in India was simply getting everything rolling in 1995, and presently, as per AT Kearney's The Glimpses of daylight, it is arriving at its apex in 2006. The introduction of Kirana stores and mother and-pop shops can be connected to the starting points of retailing in India. These shops used to serve the local occupants. With the guide of the Khadi and Town Ventures Commission, various native establishment organizations ultimately emerged thanks to the public authority's supporting for rustic retail. During the 1980s, the economy began to open up, evolving retailing. The material business created the initial not many organizations to lay out corporate store, for example, Bombay Coloring, S Kumar's, Raymond's, and so on. In the coordinated retail area, Titan later opened retail display areas. Newbies progressed from assembling to unadulterated trade after some time.

Before 1995, stores like Food World in the FMCG area, Planet M and Music World in the music area, and Crossword in the books area joined the market. Metropolitan regions saw the rise of retail outlets that offered benefactors a first rate insight. Stores and hypermarkets in the end showed up. The area is developing because of progressing headways in innovation, back-end tasks, conveyance channels, and production network the executives, which will eventually bring about more noteworthy union, consolidations, and acquisitions, as well as huge uses. In the forthcoming years, the retail market in India is expected to essentially grow. With present day retailing just beginning, India has a US\$330 billion retail market that is projected to increment 10% every year. Most of the retail business in India is disorderly. The competition from the disorderly area is the greatest issue the coordinated business is encountering. In India, chaotic retailing has existed for centuries. Customer commonality that perseveres from one age to another is the essential advantage of sloppy retailing. They are basically claimed and run, have extremely insignificant land and work costs, and have little expense commitments, thus it is a minimal expense structure. India's coordinated retail area is tiny, yet it has colossal potential.

1.3 Indian retail arranges

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ISSN: 0030-5324

- Hypermarkets/grocery stores: huge self-overhauling foundations with an expansive choice of products.
- Mother and-pop shops: they are freely run, family-possessed organizations that take care of explicit specialty markets. They have an individual touch.
- Retail chains are quality suppliers of general retail wares and administrations.
- Odds and ends shops: These are tracked down in neighborhoods and proposition comfort at a little greater cost.
- Shopping centers: the most well-known kind of retail in India, shopping centers give clients admittance to a great many labor and products, including food and diversion, all under one rooftop.
- E-trailers: These are dealers that offer internet buying and selling of labor and products.
- Rebate shops: they are producer's outlets that proposition limits off the MRP.
- Distributing is an extremely ongoing expansion to the retail business. Here, candy machines are accessible for buying beverages, snacks, and other minor items.

Little niche stores that give a scope of classifications are known as "class executioners." They are alluded to as "classification executioners" since they focus on specific classes like athletic products and hardware. Multi Brand Outlets, or MBOs, are one more term for this.

- Specialty stores: These corporate store manage specific item classes and proposition a wide choice. Crossword Book shop in Mumbai and RPG's Music World are two models.

2. Current patterns in the retail area

- The rise of coordinated retail: The country's land advancement, for example, the structure of uber shopping centers and shopping centers, is advancing the development of the coordinated retail industry.
- Youth spending power in India: India has a sizable youth populace, which makes a good air for the extension of this industry.
- Expanding profit and buying power: Between 2000-2001 and 2009-2010, India's per capita pay multiplied, which improved buying power.
- Moving customer outlook: Shoppers' needs are progressively pushing away from low costs toward more prominent accommodation, more noteworthy worth, and further developed buying encounters.
- Straightforward client credit: The presentation of thoughts like speedy and basic advances, EMIs, and charge card credits has empowered Indian clients to buy merchandise like purchaser durables.
- Higher brand cognizance: Youth in India, where 60% of the populace is under 30, have an elevated degree of brand awareness, which has assisted brands and products with turning out to be all the more notable.

3. India's retail industry is extending.

Because of the conventional farming and assembling areas' moderately low compensation scales, an ever increasing number of individuals in India are searching for work in the administrations area. The chaotic retail area is supposed to increment at a pace of 6% while the coordinated retail market is supposed to develop at a pace of 3.5 % yearly. India's retail industry is presently at a defining moment. A few Indian and unfamiliar organizations are arranging quick change with speculations adding up to US\$25 billion over the course of the following five years. As indicated by the board counseling firm Techno Park Guides Pvt., it is a sizable industry. Ltd., it is worth generally US\$350 billion. In the following five years, coordinated retail is anticipated to represent 16-18% of the worldwide retail business, or \$65-75 billion.

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India is positioned fourth in the GRDI and has a truly good retail climate, as per the 10th GRDI research from AT Kearney. Its essential drivers are the high saving and speculation rate, higher buyer spending, and the genuine Gross domestic product development of 9% in 2010, as most would consider to be normal to grow at a typical yearly pace of 8.7% through 2016. Coordinated retail, which right now makes around 7% of India's \$435 billion retail industry, is anticipated to develop to 20% by 2020. 70% of retail deals in India are for food, yet coordinated retail has not yet completely embraced this market. With a 31% piece of the pie in the garments and clothing industry, coordinated retail is as yet extending. As per an overview by Boston Counseling Gathering, coordinated retail in the country merits an expected \$ 28 billion with a 7% entrance. Throughout the following decade, it is expected to develop to a US\$ 260 billion market with an infiltration pace of around 21%. The area is supposed to develop essentially over the course of the following decade, as per examiners, and coordinated retail is supposed to rise rapidly, with an offer liable to arrive at a more decent 25% by 2018. As per the BMI India Report for the main quarter of 2012, all out retail deals are supposed to increment from US\$422.09 billion of every 2011 to US\$825.46 billion out of 2015. The paper recognizes populace increment, rising extra cash, considerably basic financial development, and the fast improvement of coordinated retail foundation as the principal drivers of the expected ascent.

Indian retail is wearing new pieces of clothing, and it is the Indian economy's quickest developing area with a three-year accumulated yearly development pace of 46-64%. With in excess of 35 million laborers and 5.5 million additional positions made through discount exchange, the area is the second biggest manager in the country after horticulture. Land is in very popularity because of the retail area's marvelous ascent. Retail land is being worked by property engineers rapidly. In Mumbai, the Public Capital Area, Bangalore, Kolkata, Chennai, Hyderabad, and Pune, around 55 million square feet of retail space will be prepared somewhere in the range of 2010 and 2012, as per the Knight Straightforward report named "India Coordinated Retail Market 2010". Moreover, the coordinated retail land will expand from its ongoing 41 million square feet to 95 million square feet somewhere in the range of 2010 and 2012. By 2015, the complete number of shopping centers is expected to increment at a CAGR of 18.9%. Hypermarket, which as of now consumes 14% of shopping center space, is expected to have quick development. As per industry specialists, the country market will drive the retail business' forthcoming development stage. The rustic retail market is expected to hold an all out portion of the overall industry of over half by 2012.

4.Retail FDI Strategy

One of the significant components that assisted India with going from being a shut economy to one of the favored areas for unfamiliar speculation throughout recent years has been the developing progression of the FDI strategy. The entire deluge of unfamiliar interests into the country is administered and constrained by the FDI strategy.

To expand India's allure for unfamiliar financial backers, the public authority is thinking about authorizing unfamiliar direct interest in multi-brand business. The arrangement is presently in the conversation stage and is forthcoming government endorsement. It is being driven by the Division of Modern Arrangement and Advancement (DIPP). Progression of unfamiliar direct interest in multi-brand retail is drawing nearer. A retail FDI draft record has been submitted to the Association Bureau for endorsement after almost an extended period of thought, as per the white paper delivered by the DIPP Service of Business and Industry. This is the last snag that should be survived. One thing shows up clear: FDI won't be brought into multi-brand retail in a single shot, enormous detonation sort of way. All things being equal, we could expect a steady

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progression process with a ton of introductory limitations on the section of unfamiliar shops. The prerequisites would be set up to console the resistance groups, neighborhood retailer lobbyists, ranchers, worker's guilds, and so forth that the public authority has embraced a decent methodology after cautiously considering the assessments of all gatherings included.

Despite the fact that the bigger change measure opening multibrand retailing to unfamiliar financial backers is as yet stalled in political entanglement, the Indian government permitted unfamiliar venture to drift and work completely possessed single brand retail outlets as of January 10, 2012. FDI is currently not permitted in that frame of mind, except for single brand retail, where it is permitted up to 51% of the time under specific limitations. Under the public authority endorsed approach, the DIPP, a division of the service of trade and industry, has now allowed FDI up to 100 percent in single brand item retail retailing. In any case, the public authority has suspended plans for 51% FDI in multibrand retail.

It would just apply to items that are marked during assembling, and it would have to guarantee that no less than 30% of the worth of the item sold was obtained from Indian little ventures/town and cabin enterprises, Craftsmans and Specialists. These circumstances would should be met before the unfamiliar venture limitations for single brand retailing could be loose.

A little industry is one where the whole interest in gear and hardware doesn't surpass \$1 million. The public authority has had the option to arrive at a political split the difference to open multibrand retail locations for unfamiliar financial backers, so the unwinding of unfamiliar interest in the single brand retail area fills in as that split the difference.

5.Challenges the Retail Business Appearances

- **Worldwide Norms:** India actually has quite far to go before it can really have a retail business comparable to Global principles, notwithstanding having above and beyond 5 million retail foundations of different sizes and styles. Indian organizations and worldwide brands both play a critical part to play in this.
 - **Insufficient production network the board:** The chaotic area keeps on ruling Indian retailing, and there is as yet a lack of compelling inventory network the executives. India necessities to zero in on smoothing out its store network the board to lessen stock expenses, which can then be given to clients as lower costs.
 - **Restricted shop space:** most of India's stores are less than 500 square feet in size. As indicated by global guidelines, this is somewhat little.
 - **Social Variety:** Because of India's huge size, financial variety, and social variety, the country comes up short on generally acknowledged model or utilization design. It will be hard for producers and retailers to foster procedures for different enterprises and market sections.
 - **Land concerns:** The retail area's quick extension has expanded interest for land. Retail land is being worked by property engineers rapidly. By 2011, India is supposed to have around 1,000 hypermarkets and 3,000 general stores, which will require 700,000,000 sq. ft. (65,000,000 m²) more retail space than it as of now has.
 - **Issues with HR:** The coordinated retail area in India is faced with an issue of an absence of prepared work. Finding prepared faculty is difficult for Indian organizations, and they should pay more to keep them. Yet again this brings down the overall revenues of Indian retailers.
- Fakes in the retail area are one of the primary challenges that the organizations will experience. The issues that are hard to handle are cheats, including seller tricks, robberies, shoplifting, and mistakes in organization and oversight. Indeed, even after the execution of safety efforts like CCTVs and POS frameworks, this is as yet the situation. The quantity of robberies, fakes, and irregularities in the framework would ascend as the size of the area developed.

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ISSN: 0030-5324

- Framework and operations issues: Deficient foundation and dispersion networks in the country lead to incapable cycles. This represents a huge test for retailers in light of the fact that wasteful conveyance channels are trying to oversee and can cause critical misfortunes. India's establishment for framework is feeble. Organizations are being compelled to build infrastructural offices by urbanization and globalization. Railroad frameworks included, transportation should be more powerful. Interstates should stick to worldwide guidelines. The power supply and air terminal limit should be gotten to the next level. One more area of trouble is convenient conveyance and distribution center offices. These huge boundaries should be wiped out to involve India's true capacity in the retail area completely.

6.Future Possibilities for India's Coordinated Retail Area

The US-based worldwide administration consultancy business recognized India as the third most beneficial country for retail speculation among 30 arising economies. Of the multitude of major worldwide business sectors, India has the most reduced degrees of both contest and immersion, as per an AT Kearney investigation on worldwide retailing patterns. This proposes that, as far as the cutthroat climate, there are amazingly low passage obstructions for players endeavoring to lay out bases in India. As per the examination, worldwide retailers like Wal-Shop, Carrefour, Tesco, and Club would profit from the more altruistic FDI regulations that India is probably going to force. By 2042, India is anticipated to outperform the top retail economies on the planet because of a solid expertise pool, boundless potential, sizable commercial centers, and the reasonable accessibility of excellent unrefined components.

As per projections from Techno Park, the business will get more than \$30 billion in speculations throughout the following five years, bringing the all out worth of present day retail in the country to somewhere in the range of \$175 and \$200 billion. India is the last undiscovered market for global shippers in light of the fact that the Chinese retail market is likewise becoming soaked. In India, homegrown players are developing decisively by deferring forceful development plans, laying out outlets sparingly, and zeroing in on level 2 and level 3 areas. India is a provoking business sector to break into, yet the potential prizes are colossal. India's populace of around 1.2 billion, as most would consider to be normal to ultimately outperform China's, is in like manner a positive objective.

- In New Delhi, Carrefour, the second-biggest retailer on the planet, has sent off its most memorable money and-convey area there. Metro Money and Convey (MCC), a discount enterprise with central command in Germany, added one more discount area to its organization in Hyderabad, carrying the complete to six the country over.

- In the 2011-12 monetary year, adornments corporate store Tanishq means to open 15 extra retail stores around the country.

- Over the accompanying three years, the medium-sized corporate store V Shop Retail Ltd. plans to open 40 areas in Level II and Level III urban communities, starting with 13 stores in 2011.

- Mukesh Ambani's Dependence Ventures, a completely claimed auxiliary, plans to open 150 stores toward the finish of December 2011 and increment the quantity of stores cross country in all organizations in five years or less.

- Future Worth Retail, a Future Gathering organization, would contribute between US\$1.54 million and US\$4.41 million to extend its hypermarket fasten Enormous Marketplace to more modest urban communities in Andhra Pradesh.

- Spencer's Retail, which is claimed by RPG, expects to open 25 hypermarkets cross country by 2012.

- Fight Hypermarkets, a worldwide organization of supermarkets claimed by Dubai-based Milestone Gathering, expects to utilize India's homegrown income to begin supporting its

Journal

of the

Oriental Institute

M.S. University of Baroda

ISSN: 0030-5324

development after 2013. The Milestone Gathering has previously dedicated US\$51.31 million in the development of five hypermarkets and means to add one more US\$51.31 million to the extension cycle.

- To arrive at a business objective of US\$ 87.31 million throughout the following five years, driving watchmaker Titan Ventures Restricted plans to contribute around US\$ 21.83 million to open 50 premium watch stores called Helios.

- Imprints and Spencer (M&S), a very good quality English retailer, needs to significantly grow its retail presence in India throughout the following three years, with an objective of opening 50 outlets.

- India's retail area, which makes occupations, is the nation's second-biggest after farming. ASSOCHAM, a relationship of Indian business and industry chambers, projects that before long, the retail area would produce 50,000 new positions.

- Retail organizations are sending off retail the executives programs in a joint effort with the board schools, enrolling the assistance of ability from different enterprises, and making broad dedication and vocation development programs for current staff individuals. Top contenders incorporate Customer's Stop, Pantaloons Retail India Restricted, Trent, and RPG.

Black and Gathering are practically alert. Consider The Pantaloons Retail India Ltd's. expectations; the organization has formulated a total methodology and guesses that it won't recruit any new chiefs from outside India in the following two years.

7.Conclusion

The size of the coordinated retail market in 2011 has been approximated by different associations in various ways. These forecasts all settle on a certain something: the coordinated retail business in India will be very huge in 2011. Notwithstanding the activities of retailers and buyer requests, the condition of the retail business is generally impacted by outer factors including government rules, arrangements, and land costs. The opportunities for expanding retail efficiency and diminishing expenses is projected to decline as the retail area creates and rivalry rises. Thus, it's basic for traders to lay out a novel situation in the market in view of values, connections, or mastery.

Moreover, esteem is a consequence of value, quality, and administration, yet can likewise be improved by customizing and giving an essential encounter, consequently it is fundamental to remember that these systems are not rigorously free of each other.

Reference:

Arora, J. (2013) "Prospect of E-Retailing in India" published by IOSR Journal of Computer Engineering, 8727Volume 10, Issue 3 (Mar. - Apr. 2013), PP 11-15

"Retail reality."

"Retailing in India Unshackling the chain stores".

India again tops global retail index.

Hariharan.G. (2008), "Profile and perception of retail consumer



AN IN-DEPTH ANALYSIS OF CRYPTO CURRENCY

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ABSTRACT

Crypto currency is one of the fine examples of generation innovation in virtual global that revolutionize virtual change markets via way of means of developing a free-flowing buying and selling machine without fees. It is making headways into the globe’s conventional economic systems. Different sectors and traders are accepting and acknowledging crypto as a trade to the conventional monetary system. According to UNCTAD’s Technology and Innovation Report 2021, India is the best outperformer amongst growing nations while come to use, undertake and adapt frontier technology than their in step with capita GDPs. In 2021-22 budgets, India introduced to release its very own virtual currency, main a brand new technology with inside the Indian virtual market. The gift bankruptcy describes the crypto currency system. Its attractiveness popularity in one-of-a-kind nations. The bankruptcy introduces crypto currency with its crucial significance and drawbacks.

Keywords:

Crypto currency, Bitcoin, Blockchain

INTRODUCTION

Taken into consideration as one in every of the largest innovations of era with inside the present day world, that has attracted a variety of public attention, is the phenomenon of crypto currencies. Crypto currency is a decentralized virtual cash that’s paintings on blockchain era (What Is Crypto currency? 2022). As in step with ur Rehman et al. (2019) Crypto currencies have to meet the 3 primary traits of cash i.e. they have to be capable of be (1) exchanged, (2) measured, and (3) valued. The crypto currency marketplace has advanced distinctly specifically after the Bitcoin changed into added to the general public in January 2009 (Farell, 2015). Of hundreds of crypto currencies like Litecoin, Ripple, Peercoin, NuBits etc, Bitcoin experience the marketplace dominance considering its inception.

TABLE 1: DIFFERENCE BETWEEN FIAT MONEY AND CRYPTOCURRENCY

BASIS	FIAT MONEY	CRYPTOCURRENCY
Legality	Yes	No
Tangibility	Yes	No



Unlimited Supply	Yes	No
Digital Exchange	No	Yes
Decentralized	No	Yes

TABLE 2: TOP 5 CRYPTOCURRENCY (AS ON 05TH APRIL 2022)

Rank	Cryptocurrency	Market Capitalization (in billions)
1	Bitcoin (BTC)	750
2	Ethereum (ETH)	338
3	Tether (USDT)	79
4	Binance Coin (BNB)	62
5	U.S. Dollar Coin (USD Coin)	53

CRYPTOCURRENCY SYSTEM

Most of Cryptocurrencies are primarily based totally on decentralized blockchain gadget are is a allotted and decentralized ledger generation spanning throughout peer to look networks (Nakamoto, 2008; Zhao, Fan, & Yan, 2016) and making sure immutability with the aid of using the use of complicated arithmetic of cryptographic functions (ur Rehman, 2019). It seeks to enhance safety and transparency with the aid of using permitting community individuals to proportion encrypted data.

The transaction information established through the community's consensus mechanism may be brought to present blocks and as soon as brought into the chain, the block can not be modified. Because all transactions inside a blockchain gadget are verified and recorded through consensus of the community nodes.

In the case of Bitcoin, the blockchain uses peer to see community and validates every transaction thru the consensus mechanism every time a transaction occurs. Transaction data this is accredited as valid below the community settlement could be saved with inside the block and a node that creates the block thru a method known as mining will get hold of bitcoins as compensation. Transactions among nameless community members are nonetheless dependable even without the want for a relied on 0.33 celebration or intermediaries.

ADVANTAGES OF CRYPTOCURRENCY

A cryptocurrency is virtual or digital foreign money this is blanketed with the aid of using cryptographic, making counterfeiting and double-spending almost impossible (Investopedia.com). Some of its blessings are noted below:

- 1) Fraud-proof:** All showed transactions are logged in a public ledger while cryptocurrency is formed. To keep the integrity of report keeping, all foreign money owners' identities are encrypted. You personal the foreign money on account that it's miles decentralized. It isn't always beneath neath the manager of the authorities or the bank.
- 2) Identity Theft:** The ledger guarantees that every one transaction between "virtual wallets" bring about a accurate stability calculation. Every transaction is double-checked to make certain that the cash used belong to the modern spender. A "transaction blockchain" is every other call for this public ledger. Through encryption and "clever contracts," blockchain era affords secure virtual



transactions which might be almost unhackable and freed from fraud. With this stage of security, blockchain era has the capability to have an effect on almost each factor of our lives.

3) Instant Settlement: It could be very smooth to settle fee thru cryptocurrencies and the motive is locate of blockchain. Fast cash switch with the aid of using overcoming institutional and territorial hurdles guarantees the benefit of use of it.

4) Accessible: Over billion humans have get right of entry to the Internet however do not have rights to apply to the conventional change systems. These people are nicely versed in cryptocurrency market

5) Reduced transaction cost: Decentralization with the aid of using permitting multiparty transaction verification, decreased transaction costs compared to standard cash switch channels.

6) Supply: The managed deliver allows in preserving the proper equilibrium and suitable intrinsic value.

DISADVANTAGES OF CRYPTOCURRENCY

1) Price Volatility: Cryptocurrencies are traded in open, online, and unregulated environments therefore, the equilibrium of deliver and call for continues converting constantly main to speedy movement (excessive or low) within side the charge value. The volatility in costs is the purpose why buyers could make or lose a variety of cash fast

2) Safety: The openness of cryptocurrencies on decentralized networks gives privateness troubles due to the fact neither the contributors nor the transaction histories ought to be absolutely exposed.

3) Parallel and Shadow Economy: Cryptocurrencies are commencing up the parallel and shadow economies (Qin et al., 2018; Naqvi, 2018). In parallel monetary systems, human beings opt to use cryptocurrencies over fiat currencies so that you can carry out numerous monetary transactions. Shadow financial system is absolutely hidden from government and all of the transactions and operations of cryptocurrencies run over the darkish internet. Since controlling the cryptocurrencies within side the darkish internet is sort of impossible, the shadow economies constitute a relative mission for governments to govern. Governments are taking measures to govern and alter the parallel economies however there may be insignificant development to date to govern the shadow economies

4) Usability: The present day surroundings broadly speaking blessings technical audiences with a radical expertise of the generation to hand and in addition such technical target market could be very limited. In addition, technically conscious contributors can try and control cryptocurrencies with the aid of using appearing algorithmic modifications within side the underlying systems.

5) Complex User Interface: Almost all of the cryptocurrencies offer complicated person interfaces compared to their conventional competitors consisting of banking establishments and forex exchanges making it hard for large phase of human beings to apply or apprehend it.

COUNTRIES AND CRYPTOCURRENCY

Other Countries

El Salvador have become the primary country that undertake the cryptocurrency (bitcoin) as its felony gentle mentioning that it's going to carry economic inclusion, investment, innovation and financial development. While nations like China, Algeria, Bangladesh, Egypt, Iraq, Morocco, Nepal, Qatar and Tunisia selected a entire ban on any of such virtual currencies arguing that



cryptocurrencies are getting used to funnel cash to unlawful reassets and argued that the upward thrust of crypto may want to destabilize their economic system (Fortune, 2022).

The majority of the alternative nations like Africa, Arabian Peninsula have determined to enact.

India

As in line with 2021, Global Crypto Adoption Index, India ranked 2d in cryptocurrency adoption (Kaur, 2022). Yet the course of reputation of cryptocurrencies turned into complete of ups and downs. And but it has now no longer been regarded formally with the aid of using the authorities of India.

Figure 1 depicts the timelines of principal incident in regards to cryptocurrencies' evolution in India.

Figure 1: A Timeline of Cryptocurrency Evolution in India

<p>2013-2016</p> <ol style="list-style-type: none"> 1. Cryptocurrencies brought and commenced attracting investors 2. Various Cryptocurrencies Exchange got here on line like Unocoin, Zebpay etc. 3. RBI denied to sponsored Cryptocurrencies
<p>2017</p> <ol style="list-style-type: none"> 4. The price of Bitcoin accelerated to the excessive of 20 instances of its price 5. RBI issued a Press Release with the aid of using pointing out that digital foreign money is an issue of speculation 6. Later this year, PIL turned into submitted in Supreme Court, one set asking to prohibit it whilst different requested for its regulations 7. It turned into referred to as as a Ponzi scheme 8. Government shaped a committee to observe troubles associated with it
<p>2018-2019</p> <ol style="list-style-type: none"> 9. RBI issued a round banning the change in cryptocurrencies via way of means of banks 10. In 2019, the Committee so endorsed ban on crypto
<p>2020-2021</p> <ol style="list-style-type: none"> 11. Supreme Court moves down the RBI in advance round prohibiting banks to deal in Crypto market 12. Supreme Court said that Cryptocurrencies are irregularly however now no longer illegal 13. Later, RBI Prohibited ban on non-public crypto permitting the sure exception with the underlying technology 14. RBI hinted in the direction of difficulty of its very own digital currencies
<p>2022</p> <ol style="list-style-type: none"> 15. Finance Minister Nirmala Sitharaman stated in her finances speech that digital belongings might be taxed at 30% fectively 16. She time-honored the exceptional boom in digital belongings transaction and therefore, it's far critical to convey it below the ambit of tax 17. RBI will introduce its virtual forex with the aid of using April this year



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**STUDY ON ENERGY CONSERVATION LEVEL (ECL) OF HOUSEHOLDS WITH
REFERENCE TO CERTAIN DEMOGRAPHIC FACTORS IN INDIA**

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Abstract

The aim of this study was to seek to understand and evaluate the association between the demographic factors selected for this study. The data used for this study were collected by survey method, primary and secondary data were used, descriptive and inferential statistical analyzes were performed to test the hypotheses. In this study three factors are identified viz. gender, age and marital status of the respondents. Three hypotheses were tested, and it was found that demographic factors play an important role in deciding the level of energy conservation. As per the data analysis it was found that there is strong association between energy conservation levels of participants with their gender, marital status and, according to the output of analysis energy conservation level is not associated with age of the respondents. Household energy conservation level is strongly associated with demographic factors and the results of this study shall benefit the policy makers in framing the right policy for the green environment with minimum usage of energy.

(Key words: Energy conservation, behavior, demographic, Sustainable Development, Policy)

1-INTRODUCTION-

Energy is at the heart of sustainable development goals of the UNO. The adoption of green energy is essential for human development in sustainable way. In this study attempt has been made to understand the human behavior as Energy is an essential requirement for the economic development of any country, as human development index is directly related to the use and accessibility of energy to all. Electricity consumption in the last decade increasing at 3.8% per annum, and is continuing in a rapid upward trajectory. Around 59 % of electricity is generated from burning of coal, this leads to rise in risk of climate change, environmental degradation and rise in temperature. The country has large coal reserves, imports more than 15% of its coal supply, depends on imported oil for more than 75% of its oil demand, has limited reserves of natural gas, while 30% of its total supply must be imported and faces chronic energy shortages. India's energy availability situation will be problematic due to unplanned consumption and extravagant usage. Energy efficiency holds negative cost measures that hold considerable potential for abatement of green house gas emissions and analysis of consumer level is necessary for policy framework (Abreu J, 2008). The study of energy conservation is necessary because it is necessary to study the effects of socio-economic variables, because household energy consumption is closely related to socio-demographic variables while the energy consumption of households is closely related to socio-demographic variables (Abrahamse and Steg, 2009, Allcot H. 2011). Human development index



and energy consumption are correlated, now it's the challenged in front of policy makers to have sustainable development and to improve on HDI.

2-REVIEW OF LITERATURE-

Semenik, R., Belk, R., & Painter, J. (1982) The present study attempts to go beyond previous research by using a richer set of non-demographic predictors in the context of gas mileage. A multivariate analysis of predictors suggests that a better understanding of conservative and underserved groups can be achieved with a broader set of predictors.

Karlin, B., Davis, N., Sanguinetti, A., et.al. (2014) This study shows that protective behaviors can cluster along different dimensions, and a better understanding of these differences could lead to improved interventions. This article explores this idea through a systematic literature review and analysis of survey data.

Bhattacharjee, S., & Reichard, G. (2011). This study identifies the social and economic factors that influence household energy consumption. The possible causes of changes in residential energy consumption have been investigated in previous studies that represent the views of researchers who have only looked at specific issues.

Sardianou, E. (2007). This paper develops an empirical model to investigate the main determinants of energy efficiency patterns in Greek households using cross-sectional data. The empirical analysis uses the household energy saving selection model, which uses discrete variables and the corresponding latent advantage variables as dependent variables.

Midden, C. J., & Ritsema, B. S. (1983). The possible causes of changes in residential energy consumption have been investigated in previous studies that represent the views of researchers who have only looked at specific issues.

Curtis, F. A., et.al. (1984) this study assessed the effect of behavioral, social and economic factors on household energy conservation measures. A household interview survey in Regina, Saskatchewan found that respondents believed there was an energy problem, although there was no correlation with energy efficiency measures.

Suryawanshi, P. B., Jumle, A. G. (2016) in this paper, the researchers tried to study the influence of various social and economic factors on the level of energy conservation.

Wijaya, M. E., & Tezuka, T. (2013) the association between energy consumption and its determinants was assessed using multivariate data analysis. The results show that in Bandung, family size, time at home, education level, household appliances, and lighting have a significant positive impact on monthly electricity bills.

Wyatt, P. (2013) this paper critically examines the results of the first phase of work to develop a national energy efficiency data framework for the household sector, focusing on the causes of household energy consumption, including the physical nature of the household and the impact of



energy efficiency measures.

Yun, G. Y., & Steemers, K. (2011) In this context, this paper explores the importance of behavioral, physical and socio-economic parameters of cooling energy to improve the energy efficiency of residential buildings. Explain that these factors have important direct and indirect effects on energy consumption

Shakeel, M., & Ahmed, A. (2021) This study looks at the connection between energy utilization, genuine GDP and commodities, consequently, the effect of energy saving money on the journey for practical development of total national output regarding climate in the gathering of five South Asian nations.

Blasch, J., Boogen, N., et.al. (2018) to understand the energy saving potential of their homes, people need clear information about energy and money; they also need mental skills to apply this information regarding how to save the energy. It was found that saving behavior is depend on mental state of the individual.

Eluwa, S. E., & Siong, H. C. (2013) in this article, saving energy in the home is studied and effective strategies are discussed for policy makers. The results showed that psychological factors were more associated with energy-saving behaviors than socio-demographic factors.

3-OBJECTIVE AND METHODOLOGY-

Following were the objectives of this study-

- a) To evaluate association between energy conservation level- ECL with the gender of the respondents
- b) To evaluate association between energy conservation level - ECL with the marital status of the respondents
- c) To evaluate association between energy conservation level - ECL with the age of the respondents

Type of Study-

This is quantitative survey-based study, its descriptive in nature.

The area of study is Ahmednagar district in Maharashtra state of India. "It is predominately -Rural district"

Sampling-

Population- 45 Lacs, Taluka-14- and 1316-gram panchayats as per census 2011

Sample units- respondents from the households selected from this area,

Method- Quota sampling. Sample size- 567

Data collection-

Methods to collect data-Survey method, "Structure and semi structured questionnaire"

"Secondary data –Preferred authentic sources only"



“Data Analysis Techniques – Chi square test of independence”, Use of SPSS-23 -Statistical Software for data analysis

TABLE NO. 01-DEMOGRAPHIC DETAILS OF RESPONDENTS

		Total
Gender	Male	488
	Female	079
Marital Status	Married	495
	Unmarried	072
Age	18-29	107
	30-39	195
	40-49	175
	50-59	066
	Above 60 yrs	024
	Total	567

Source: primary data

Energy conservation level (ECL) was calculated based on behavior of respondents like use of solar water heater, habit of putting off lights, fans, removing mobile charger from socket, using energy efficiency bulbs like LED, CFL etc the ECL-levels are categorized as high, medium and low

HYPOTHESIS –

H1-There is statistically significant association between energy conservation level and the Gender

H2-There is statistically significant association between energy conservation level and the marital status

H3-There is statistically significant association between energy conservation level and the Age

4-DATA ANALYSIS AND INTERPRETATIONS-

In this study ECL is energy conservation level, we are finding association between demographic factors and the ECL. Level significance is 0.05. The formula for calculating a Chi-square statistic is:



$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

H1-“There is statistically significant association between energy conservation level and the Gender”

TABLE-1

	Low	Moderate	High	Row total
Male	102 (97.26) [0.23]	271 (266.81) [0.07]	115 (123.94) [0.64]	488
Female	11 (15.74) [1.43]	39 (43.19) [0.41]	29 (20.06) [3.98]	79
Column Totals	113	310	144	567 (Grand Total)

Source-Primary data

The chi-square statistic is 6.7586. The p-value is 0.034071. The table value of Chi square for 2df and p=0.05 is 5.99 and calculated value is 6.7586 which is higher and it's in rejection region and so that the null hypothesis is rejected.

Interpretation-The result is significant at p < 0.05. A chi-square test of independence was performed to examine the relation between gender and the ECL. The relation between these variables was significant, $X^2 (2, N = 567) = 6.7586, p = 0.034071$. Female more likely than male displayed high energy conservation behavior in the present study.

H2-“There is statistically significant association between energy conservation level and the marital status”

Table-2

	Low	Moderate	High	Row Totals
Married	105 (96.46) [0.76]	265 (264.62) [0.00]	114 (122.92) [0.65]	484
Unmarried	8 (16.54) [4.41]	45 (45.38) [0.00]	30 (21.08) [3.78]	83
Column Totals	113	310	144	567 (Grand Total)

Source: primary data

The chi-square statistic is 9.5931. The p-value is 0.008258.



The result is significant at $p < 0.05$. The table value of Chi square for 2df and $p=0.05$ is 5.99 and calculated value is 9.5931 which is very high and it's in rejection region and so that null hypothesis is rejected.

Interpretation-The result is significant at $p < 0.05$. A chi-square test of independence was performed to examine the relation between marital status and the ECL. The relation between these variables was significant, $X^2(2, N = 567) = 9.5931, p = 0.008258$. Unmarried people more likely than married people displayed high energy conservation behavior in the present study.

H3-“There is statistically significant association between energy conservation level and the Age”

	Low	Moderate	High	Row Totals
18-29	12 (21.32) [4.08]	62 (58.50) [0.21]	33 (27.17) [1.25]	107
30-39	40 (38.86) [0.03]	101 (106.61) [0.30]	54 (49.52) [0.40]	195
40-49	43 (34.88) [1.89]	93 (95.68) [0.08]	39 (44.44) [0.67]	175
50-59	12 (13.15) [0.10]	41 (36.08) [0.67]	13 (16.76) [0.84]	66
above60	6 (4.78) [0.31]	13 (13.12) [0.00]	5 (6.10) [0.20]	24
Column Totals	113	310	144	567 (Grand Total)

Source: primary data

The chi-square statistic is 11.0255. The p-value is 0.20026.

The result is not significant at $p > 0.05$.

The chi-square statistic is 11.0255. The p-value is 0.008258.

The table value of Chi square at 8df and $p=0.05$ is 15.51 and calculated value is 11.0255 which is coming under acceptance region and so that result is “fail to reject” null hypothesis

Interpretation-The result is not significant at $p > 0.05$. A chi-square test of independence was performed to examine the relation between the age and the ECL. The relation between these variables was not significant, $X^2(8, N = 567) = 11.0255, p = 0.20026$. There is statistically no significant association between ECL and the Age. But from the data we can observed that younger people are more likely to display the high energy conservation behavior in the present study, than senior citizen above 60 years.

From the output of hypothesis testing, it was found that Gender and Marital Status are strongly associated with the ECL. While age is not significantly associated with ECL.

5-CONCLUSION –



This research focused on understating the association between the ECL and demographic factors like, gender, age and marital status. Women are found to be more energy efficient than men and like to conserve energy in their homes due to their natural cutting behavior. Single people are more energy efficient than married people, possibly because married people have various different responsibilities. This empirical study shall help us in understating the need for promotion of energy saving behavior, from this we can observe that young people are likely to save more energy compare to senior citizen. We can predict that only these young minds can save us from danger of climate change and associated issues in future. The policy makers can plan energy conservation and efficiency measures as per result of this study. Further study can be organized by taking attitude and psychological factors for the study.

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**STUDY ON ENERGY CONSERVATION LEVEL (ECL) OF HOUSEHOLDS WITH
REFERENCE TO CERTAIN DEMOGRAPHIC FACTORS IN INDIA**

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Abstract

The aim of this study was to seek to understand and evaluate the association between the demographic factors selected for this study. The data used for this study were collected by survey method, primary and secondary data were used, descriptive and inferential statistical analyzes were performed to test the hypotheses. In this study three factors are identified viz. gender, age and marital status of the respondents. Three hypotheses were tested, and it was found that demographic factors play an important role in deciding the level of energy conservation. As per the data analysis it was found that there is strong association between energy conservation levels of participants with their gender, marital status and, according to the output of analysis energy conservation level is not associated with age of the respondents. Household energy conservation level is strongly associated with demographic factors and the results of this study shall benefit the policy makers in framing the right policy for the green environment with minimum usage of energy.

(Key words: Energy conservation, behavior, demographic, Sustainable Development, Policy)

1-INTRODUCTION-

Energy is at the heart of sustainable development goals of the UNO. The adoption of green energy is essential for human development in sustainable way. In this study attempt has been made to understand the human behavior as Energy is an essential requirement for the economic development of any country, as human development index is directly related to the use and accessibility of energy to all. Electricity consumption in the last decade increasing at 3.8% per annum, and is continuing in a rapid upward trajectory. Around 59 % of electricity is generated from burning of coal, this leads to rise in risk of climate change, environmental degradation and rise in temperature. The country has large coal reserves, imports more than 15% of its coal supply, depends on imported oil for more than 75% of its oil demand, has limited reserves of natural gas, while 30% of its total supply must be imported and faces chronic energy shortages. India's energy availability situation will be problematic due to unplanned consumption and extravagant usage. Energy efficiency holds negative cost measures that hold considerable potential for abatement of green house gas emissions and analysis of consumer level is necessary for policy framework (Abreu J, 2008). The study of energy conservation is necessary because it is necessary to study the effects of socio-economic variables, because household energy consumption is closely related to socio-demographic variables while the energy consumption of households is closely related to socio-demographic variables (Abrahamse and Steg, 2009, Allcot H. 2011). Human development index



and energy consumption are correlated, now it's the challenged in front of policy makers to have sustainable development and to improve on HDI.

2-REVIEW OF LITERATURE-

Semenik, R., Belk, R., & Painter, J. (1982) The present study attempts to go beyond previous research by using a richer set of non-demographic predictors in the context of gas mileage. A multivariate analysis of predictors suggests that a better understanding of conservative and underserved groups can be achieved with a broader set of predictors.

Karlin, B., Davis, N., Sanguinetti, A., et.al. (2014) This study shows that protective behaviors can cluster along different dimensions, and a better understanding of these differences could lead to improved interventions. This article explores this idea through a systematic literature review and analysis of survey data.

Bhattacharjee, S., & Reichard, G. (2011). This study identifies the social and economic factors that influence household energy consumption. The possible causes of changes in residential energy consumption have been investigated in previous studies that represent the views of researchers who have only looked at specific issues.

Sardianou, E. (2007). This paper develops an empirical model to investigate the main determinants of energy efficiency patterns in Greek households using cross-sectional data. The empirical analysis uses the household energy saving selection model, which uses discrete variables and the corresponding latent advantage variables as dependent variables.

Midden, C. J., & Ritsema, B. S. (1983). The possible causes of changes in residential energy consumption have been investigated in previous studies that represent the views of researchers who have only looked at specific issues.

Curtis, F. A., et.al. (1984) this study assessed the effect of behavioral, social and economic factors on household energy conservation measures. A household interview survey in Regina, Saskatchewan found that respondents believed there was an energy problem, although there was no correlation with energy efficiency measures.

Suryawanshi, P. B., Jumle, A. G. (2016) in this paper, the researchers tried to study the influence of various social and economic factors on the level of energy conservation.

Wijaya, M. E., & Tezuka, T. (2013) the association between energy consumption and its determinants was assessed using multivariate data analysis. The results show that in Bandung, family size, time at home, education level, household appliances, and lighting have a significant positive impact on monthly electricity bills.

Wyatt, P. (2013) this paper critically examines the results of the first phase of work to develop a national energy efficiency data framework for the household sector, focusing on the causes of household energy consumption, including the physical nature of the household and the impact of



energy efficiency measures.

Yun, G. Y., & Steemers, K. (2011) In this context, this paper explores the importance of behavioral, physical and socio-economic parameters of cooling energy to improve the energy efficiency of residential buildings. Explain that these factors have important direct and indirect effects on energy consumption

Shakeel, M., & Ahmed, A. (2021) This study looks at the connection between energy utilization, genuine GDP and commodities, consequently, the effect of energy saving money on the journey for practical development of total national output regarding climate in the gathering of five South Asian nations.

Blasch, J., Boogen, N., et.al. (2018) to understand the energy saving potential of their homes, people need clear information about energy and money; they also need mental skills to apply this information regarding how to save the energy. It was found that saving behavior is depend on mental state of the individual.

Eluwa, S. E., & Siong, H. C. (2013) in this article, saving energy in the home is studied and effective strategies are discussed for policy makers. The results showed that psychological factors were more associated with energy-saving behaviors than socio-demographic factors.

3-OBJECTIVE AND METHODOLOGY-

Following were the objectives of this study-

- a) To evaluate association between energy conservation level- ECL with the gender of the respondents
- b) To evaluate association between energy conservation level - ECL with the marital status of the respondents
- c) To evaluate association between energy conservation level - ECL with the age of the respondents

Type of Study-

This is quantitative survey-based study, its descriptive in nature.

The area of study is Ahmednagar district in Maharashtra state of India. "It is predominately -Rural district"

Sampling-

Population- 45 Lacs, Taluka-14- and 1316-gram panchayats as per census 2011

Sample units- respondents from the households selected from this area,

Method- Quota sampling. Sample size- 567

Data collection-

Methods to collect data-Survey method, "Structure and semi structured questionnaire"

"Secondary data –Preferred authentic sources only"



“Data Analysis Techniques – Chi square test of independence”, Use of SPSS-23 -Statistical Software for data analysis

TABLE NO. 01-DEMOGRAPHIC DETAILS OF RESPONDENTS

		Total
Gender	Male	488
	Female	079
Marital Status	Married	495
	Unmarried	072
Age	18-29	107
	30-39	195
	40-49	175
	50-59	066
	Above 60 yrs	024
	Total	567

Source: primary data

Energy conservation level (ECL) was calculated based on behavior of respondents like use of solar water heater, habit of putting off lights, fans, removing mobile charger from socket, using energy efficiency bulbs like LED, CFL etc the ECL-levels are categorized as high, medium and low

HYPOTHESIS –

H1-There is statistically significant association between energy conservation level and the Gender

H2-There is statistically significant association between energy conservation level and the marital status

H3-There is statistically significant association between energy conservation level and the Age

4-DATA ANALYSIS AND INTERPRETATIONS-

In this study ECL is energy conservation level, we are finding association between demographic factors and the ECL. Level significance is 0.05. The formula for calculating a Chi-square statistic is:



$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

H1-“There is statistically significant association between energy conservation level and the Gender”

TABLE-1

	Low	Moderate	High	Row total
Male	102 (97.26) [0.23]	271 (266.81) [0.07]	115 (123.94) [0.64]	488
Female	11 (15.74) [1.43]	39 (43.19) [0.41]	29 (20.06) [3.98]	79
Column Totals	113	310	144	567 (Grand Total)

Source-Primary data

The chi-square statistic is 6.7586. The p-value is 0.034071. The table value of Chi square for 2df and p=0.05 is 5.99 and calculated value is 6.7586 which is higher and it's in rejection region and so that the null hypothesis is rejected.

Interpretation-The result is significant at p < 0.05. A chi-square test of independence was performed to examine the relation between gender and the ECL. The relation between these variables was significant, $X^2(2, N = 567) = 6.7586, p = 0.034071$. Female more likely than male displayed high energy conservation behavior in the present study.

H2-“There is statistically significant association between energy conservation level and the marital status”

Table-2

	Low	Moderate	High	Row Totals
Married	105 (96.46) [0.76]	265 (264.62) [0.00]	114 (122.92) [0.65]	484
Unmarried	8 (16.54) [4.41]	45 (45.38) [0.00]	30 (21.08) [3.78]	83
Column Totals	113	310	144	567 (Grand Total)

Source: primary data

The chi-square statistic is 9.5931. The p-value is 0.008258.



The result is significant at $p < 0.05$. The table value of Chi square for 2df and $p=0.05$ is 5.99 and calculated value is 9.5931 which is very high and it's in rejection region and so that null hypothesis is rejected.

Interpretation-The result is significant at $p < 0.05$. A chi-square test of independence was performed to examine the relation between marital status and the ECL. The relation between these variables was significant, $X^2(2, N = 567) = 9.5931, p = 0.008258$. Unmarried people more likely than married people displayed high energy conservation behavior in the present study.

H3-“There is statistically significant association between energy conservation level and the Age”

	Low	Moderate	High	Row Totals
18-29	12 (21.32) [4.08]	62 (58.50) [0.21]	33 (27.17) [1.25]	107
30-39	40 (38.86) [0.03]	101 (106.61) [0.30]	54 (49.52) [0.40]	195
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above60	6 (4.78) [0.31]	13 (13.12) [0.00]	5 (6.10) [0.20]	24
Column Totals	113	310	144	567 (Grand Total)

Source: primary data

The chi-square statistic is 11.0255. The p-value is 0.20026.

The result is not significant at $p > 0.05$.

The chi-square statistic is 11.0255. The p-value is 0.008258.

The table value of Chi square at 8df and $p=0.05$ is 15.51 and calculated value is 11.0255 which is coming under acceptance region and so that result is “fail to reject” null hypothesis

Interpretation-The result is not significant at $p > 0.05$. A chi-square test of independence was performed to examine the relation between the age and the ECL. The relation between these variables was not significant, $X^2(8, N = 567) = 11.0255, p = 0.20026$. There is statistically no significant association between ECL and the Age. But from the data we can observed that younger people are more likely to display the high energy conservation behavior in the present study, than senior citizen above 60 years.

From the output of hypothesis testing, it was found that Gender and Marital Status are strongly associated with the ECL. While age is not significantly associated with ECL.

5-CONCLUSION –



This research focused on understating the association between the ECL and demographic factors like, gender, age and marital status. Women are found to be more energy efficient than men and like to conserve energy in their homes due to their natural cutting behavior. Single people are more energy efficient than married people, possibly because married people have various different responsibilities. This empirical study shall help us in understating the need for promotion of energy saving behavior, from this we can observe that young people are likely to save more energy compare to senior citizen. We can predict that only these young minds can save us from danger of climate change and associated issues in future. The policy makers can plan energy conservation and efficiency measures as per result of this study. Further study can be organized by taking attitude and psychological factors for the study.

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Vol. IX, Issue I(XVIII) Jan-June : 2022

ISSN - 2277-7067



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MONTHLY ELECTRIC POWER PREDICTION USING REGRESSION ANALYSIS

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ABSTRACT:

Accurate electric power consumption forecasting plays key role in the decision-making, planning, executing and over all energy management. This paper presents a regression-based, model for accurate electric power consumption prediction by select industries in Ahmednagar city in Maharashtra state. The proposed model includes data cleaning, data smoothing and final data after preprocessing fed into regression-based model to predict industrial electric power consumption. The context features like calendar data, weather data, company data, and historical consumption of electricity are used as input for the regression-based model. In the conclusion, part accuracy of the proposed model is discussed as research.

KEYWORDS: Load Forecasting, Linear Regression, Energy Management

1 INTRODUCTION

For the developing country, load forecasting is most concern task in electric energy generation, transmission and distribution. The primary purpose of load forecasting is decision on power market and overall energy management. The main challenge is to choose an effective & easy technique. Many factors have become dominant for energy management (Gupta et al. 2017). Load forecasting classification shown in Table1.

Table 1. Classification of different Load Forecasting

Load Forecasting	Duration	Purpose
Very Short Term	Minute to an Hour	Used in energy management system
Short Term	Few Hour to Few week	Economic load dispatch for reliable study
Medium Term	Few week to Few months	To determine peak load
Long Term	1 Year to 20 year	Economic growth and planning of power system

Above table 1 elaborate the different types of load forecasting with their duration and purpose (Pandya et al.2018).

2 REGRESSION BASED METHOD:

It alsoreferred as trend analysis or time-series analysis. Regression method based on the historical data to predict future as it is simplest method(Singh et al. 2020).

This model can be employtoconstruct correlation between load (electric) and variables (external)such as;

Demand Data (Historical consumption of electricity in kWh.)



Calendar Data: (Month,Year,Season,etc.)

Weather Data: (Rainfall, Humidity ,Temperature, etc.)

Industry Data: Industry Type, Types of electricity connection(HT/LT), Per unit electricity Price(Firsova 2018).

With above data it will be simple to make association between input and output variable of model. Also to implement as well as handle easily(Singh et al. 2020).

Linear Regression(LR)

The description of Linear Regression is to relate the independent and dependent variable. In other words, Linear Regression will calculate the Y value from X value.

Where, Y is Dependent variable and X is independent variable (Islam et al.2018).

The standard Linear regression equation (1) is as follows,

$$Y = a+bX \quad (1)$$

Where, a= intercept of line

b= slope of line

This presents a simple straight line called regression line. This line reduces a squared deviation which was observed readings of Y (Kore et al.2017).

Performance Measures

For the performance measures, there are mainly two metrics are adopted for the validation: the mean absolute percentage of error called MAPE. The metric MAPE is a widely accepted measure for forecasting accuracy and the accuracy represents in percentage form(Zhanget al. 2018).

3 PROPOSED MODEL:

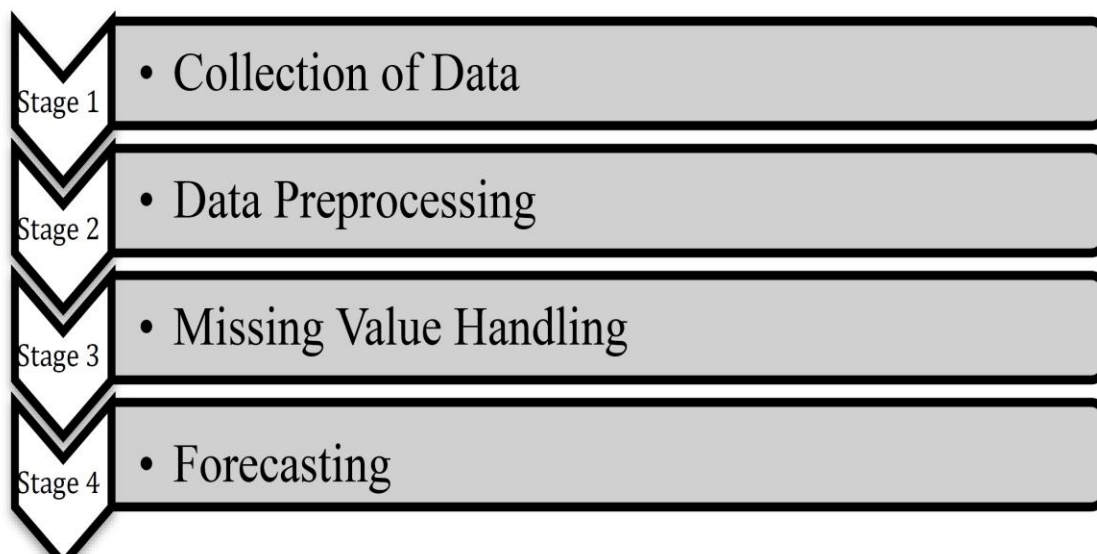


Figure 1. Industrial Electric Power Consumption Prediction Model

Stage 1: Collection of Data



Stage 1 is the core of model that is “Data Collection” and for the current research proper data have been collected from MIDC Ahmednagar city , Maharashtra for the timeline of January 2011 to December 2018. Mainly two types of data collection as follows,

1.1 Usage of Electricity Data:

The original document file consist of detail information like generation of power, consumption of power, loss of power, etc.for MIDC Ahmednagar city , Maharashtra.For the model these three parameters are transformed into three important variables,

- ✓ Total Power Generation,
- ✓ Total Power Consumption
- ✓ Total Powerloss(Pandya et al. 2018).

1.2 Weather Data:

The secondly important Weather Data collected from online resources for January 2018 to December 2018. The weather related parameters are transformed into three important variables,

- ✓ Humidity in Fraction
- ✓ High Temperature in Celsius
- ✓ Low Temperature in Celsius

Stage 2: Preprocessing of Data

The pre-processing of actual data collected from stage 1by converting into monthly average or in otherwords Mean value. And based on all above data processing stage CSV(Comma Separated Values) file was created for ultimate use.

Stage 3: Missing Value Handling

For the data mining data plays significant role. The data mining process improves data quality and better effectiveness.Due to few missing values, the real world data may be incomplete. The missing value analysis and Mean-Mode methods were applied(Voronkov 2014).

Stage 4: Prediction

The stage 4 is the key of whole research. After stage 2pre-processing andstage 3 missing values handling, dataset is ready for prediction. Various data mining methods are used for prediction purpose, and the proposed model implement regression based prediction method for forecasting industrial electric power consumption (Goel 2016).

4 MODEL IMPLEMENTATION

Multiple Linear Regression(MLR):

Multiple Linear Regression is an expansion of regression method (simple linear regression). MLR can predict the value of one variable (target/ dependentvariable)derived from the value of two variablesor more than two variables(input/ independent variables).

The standard multiple regression equation (2) is as follows,

$$Y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{3i} + \dots + \beta_n x_{ni} + \epsilon_i(2)$$

Where Y_i =Dependent variable,

x_i =Independent variable,



β_i =Regression coefficient of x_i

ϵ_i =Random error.

The predicted response for the estimating model coefficients is as follows in equation (3)

$$\hat{y}_i = b_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{3i} + \dots + b_nx_{ni} \quad (3)$$

Based on above equation, multiple regression model results are as follows,

Table 2. Average of monthly electricity data (demand data in KW) from January 2011 to December 2018

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DemandDat	176	148	162	194	235	244	253	241	223	190	155	163
a	4	4	0	5	1	3	6	8	1	9	2	4

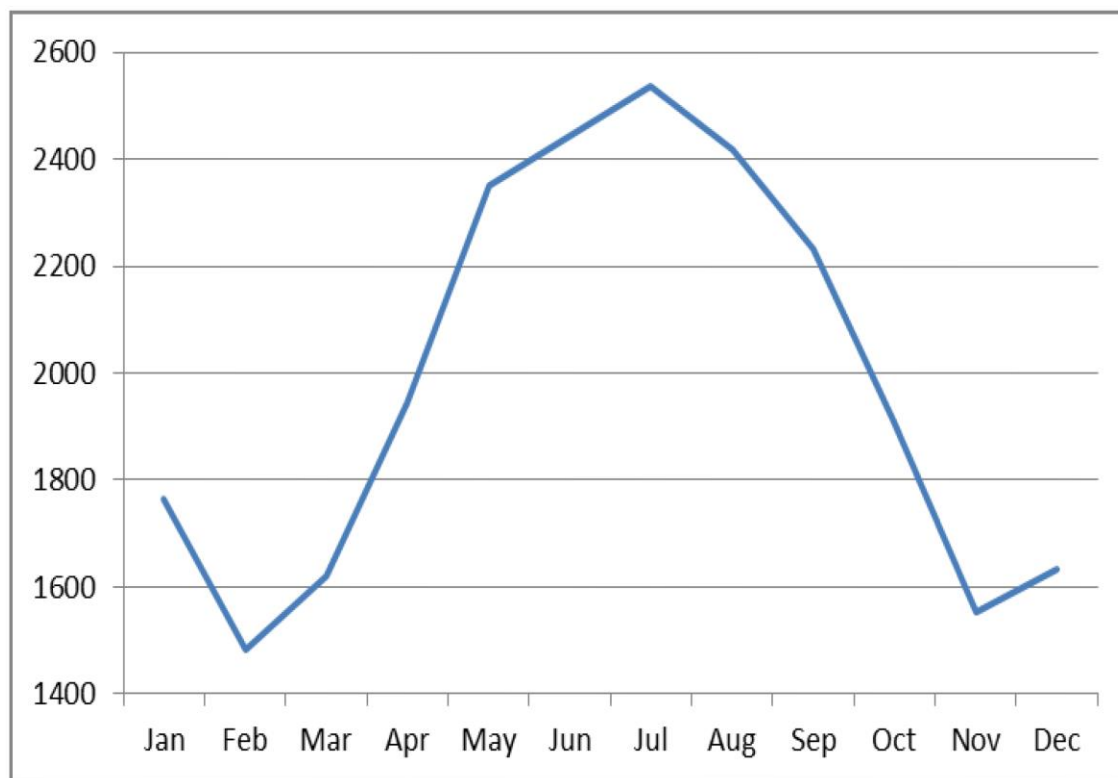


Figure 2. Plotting of average monthly electricity data (demand data in KW) from January 2011 to December 2018.

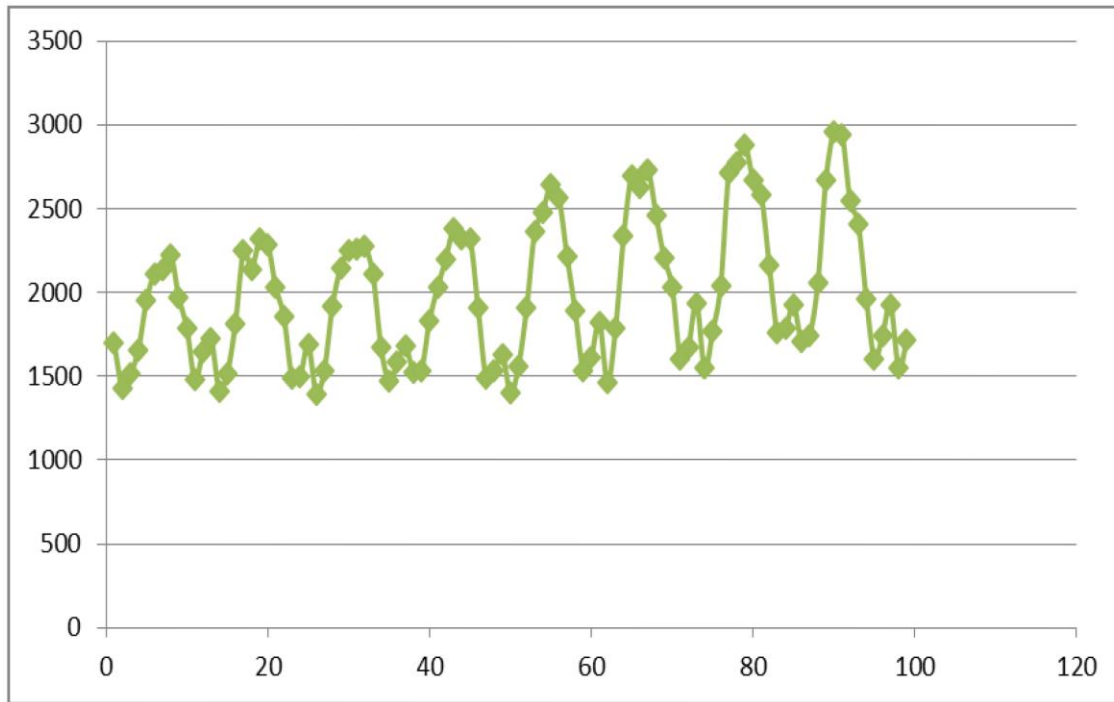


Figure 3. Electricity Demand Irregularity from January 2011 to December 2018

Equation (4) shows that how to calculate the power consumption

$$\text{Power_Consumption} = -1.6027 + 1.0186 * \text{Power_Generation} + -1.0272 * \text{Power_Loss} + 0.0579 * \text{LowestTemperature(Celcius)} \quad (4)$$

Table 3. Multiple Linear Regression Errors and Coefficient

Sr. No.	Multiple Linear Regression MLR Errors	Error Values
1	Correlation Coefficient	0.9984
2	Mean Absolute Error (Average Absolute Error)	0.2621
3	Root Mean Square Error(RMSE) Standard Deviation of Prediction Errors.	0.7657
4	Relative Absolute Error	2.2025%
5	Root Relative Squared Error	5.3963%

5 RESULT AND CONCLUSION

It is evident that the proposed regression based model would be accurate model to forecast industrial electric power consumption using Regression based predictive model for Ahmednagar city in Maharashtra state. There isn't any standard rule to prove the best model. However most suitable and appropriate the current proposed model has lower error. The Mean Absolute Error (Average Absolute Error) value is 0.2621. The RMSE Root Mean Square Error is 0.7657 also



called standard deviation of prediction errors. Relative Absolute Error is 2.2025 % and Root Relative Squared Error is 5.3963 %. Research result proves that error rate has been reduced. More accuracy advanced deep learning algorithm would be implemented in this regards for the future perspective.

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AN IN-DEPTH ANALYSIS OF CRYPTO CURRENCY

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ABSTRACT

Crypto currency is one of the fine examples of generation innovation in virtual global that revolutionize virtual change markets via way of means of developing a free-flowing buying and selling machine without fees. It is making headways into the globe’s conventional economic systems. Different sectors and traders are accepting and acknowledging crypto as a trade to the conventional monetary system. According to UNCTAD’s Technology and Innovation Report 2021, India is the best outperformer amongst growing nations while come to use, undertake and adapt frontier technology than their in step with capita GDPs. In 2021-22 budgets, India introduced to release its very own virtual currency, main a brand new technology with inside the Indian virtual market. The gift bankruptcy describes the crypto currency system. Its attractiveness popularity in one-of-a-kind nations. The bankruptcy introduces crypto currency with its crucial significance and drawbacks.

Keywords:

Crypto currency, Bitcoin, Blockchain

INTRODUCTION

Taken into consideration as one in every of the largest innovations of era with inside the present day world, that has attracted a variety of public attention, is the phenomenon of crypto currencies. Crypto currency is a decentralized virtual cash that’s paintings on blockchain era (What Is Crypto currency? 2022). As in step with ur Rehman et al. (2019) Crypto currencies have to meet the 3 primary traits of cash i.e. they have to be capable of be (1) exchanged, (2) measured, and (3) valued. The crypto currency marketplace has advanced distinctly specifically after the Bitcoin changed into added to the general public in January 2009 (Farell, 2015). Of hundreds of crypto currencies like Litecoin, Ripple, Peercoin, NuBits etc, Bitcoin experience the marketplace dominance considering its inception.

TABLE 1: DIFFERENCE BETWEEN FIAT MONEY AND CRYPTOCURRENCY

BASIS	FIAT MONEY	CRYPTOCURRENCY
Legality	Yes	No
Tangibility	Yes	No



Unlimited Supply	Yes	No
Digital Exchange	No	Yes
Decentralized	No	Yes

TABLE 2: TOP 5 CRYPTOCURRENCY (AS ON 05TH APRIL 2022)

Rank	Cryptocurrency	Market Capitalization (in billions)
1	Bitcoin (BTC)	750
2	Ethereum (ETH)	338
3	Tether (USDT)	79
4	Binance Coin (BNB)	62
5	U.S. Dollar Coin (USD Coin)	53

CRYPTOCURRENCY SYSTEM

Most of Cryptocurrencies are primarily based totally on decentralized blockchain gadget are is a allotted and decentralized ledger generation spanning throughout peer to look networks (Nakamoto, 2008; Zhao, Fan, & Yan, 2016) and making sure immutability with the aid of using the use of complicated arithmetic of cryptographic functions (ur Rehman, 2019). It seeks to enhance safety and transparency with the aid of using permitting community individuals to proportion encrypted data.

The transaction information established through the community's consensus mechanism may be brought to present blocks and as soon as brought into the chain, the block can not be modified. Because all transactions inside a blockchain gadget are verified and recorded through consensus of the community nodes.

In the case of Bitcoin, the blockchain uses peer to see community and validates every transaction thru the consensus mechanism every time a transaction occurs. Transaction data this is accredited as valid below the community settlement could be saved with inside the block and a node that creates the block thru a method known as mining will get hold of bitcoins as compensation. Transactions among nameless community members are nonetheless dependable even without the want for a relied on 0.33 celebration or intermediaries.

ADVANTAGES OF CRYPTOCURRENCY

A cryptocurrency is virtual or digital foreign money this is blanketed with the aid of using cryptographic, making counterfeiting and double-spending almost impossible (Investopedia.com). Some of its blessings are noted below:

- 1) Fraud-proof:** All showed transactions are logged in a public ledger while cryptocurrency is formed. To keep the integrity of report keeping, all foreign money owners' identities are encrypted. You personal the foreign money on account that it's miles decentralized. It isn't always beneath neath the manager of the authorities or the bank.
- 2) Identity Theft:** The ledger guarantees that every one transaction between "virtual wallets" bring about a accurate stability calculation. Every transaction is double-checked to make certain that the cash used belong to the modern spender. A "transaction blockchain" is every other call for this public ledger. Through encryption and "clever contracts," blockchain era affords secure virtual



transactions which might be almost unhackable and freed from fraud. With this stage of security, blockchain era has the capability to have an effect on almost each factor of our lives.

3) Instant Settlement: It could be very smooth to settle fee thru cryptocurrencies and the motive is locate of blockchain. Fast cash switch with the aid of using overcoming institutional and territorial hurdles guarantees the benefit of use of it.

4) Accessible: Over billion humans have get right of entry to the Internet however do not have rights to apply to the conventional change systems. These people are nicely versed in cryptocurrency market

5) Reduced transaction cost: Decentralization with the aid of using permitting multiparty transaction verification, decreased transaction costs compared to standard cash switch channels.

6) Supply: The managed deliver allows in preserving the proper equilibrium and suitable intrinsic value.

DISADVANTAGES OF CRYPTOCURRENCY

1) Price Volatility: Cryptocurrencies are traded in open, online, and unregulated environments therefore, the equilibrium of deliver and call for continues converting constantly main to speedy movement (excessive or low) within side the charge value. The volatility in costs is the purpose why buyers could make or lose a variety of cash fast

2) Safety: The openness of cryptocurrencies on decentralized networks gives privateness troubles due to the fact neither the contributors nor the transaction histories ought to be absolutely exposed.

3) Parallel and Shadow Economy: Cryptocurrencies are commencing up the parallel and shadow economies (Qin et al., 2018; Naqvi, 2018). In parallel monetary systems, human beings opt to use cryptocurrencies over fiat currencies so that you can carry out numerous monetary transactions. Shadow financial system is absolutely hidden from government and all of the transactions and operations of cryptocurrencies run over the darkish internet. Since controlling the cryptocurrencies within side the darkish internet is sort of impossible, the shadow economies constitute a relative mission for governments to govern. Governments are taking measures to govern and alter the parallel economies however there may be insignificant development to date to govern the shadow economies

4) Usability: The present day surroundings broadly speaking blessings technical audiences with a radical expertise of the generation to hand and in addition such technical target market could be very limited. In addition, technically conscious contributors can try and control cryptocurrencies with the aid of using appearing algorithmic modifications within side the underlying systems.

5) Complex User Interface: Almost all of the cryptocurrencies offer complicated person interfaces compared to their conventional competitors consisting of banking establishments and forex exchanges making it hard for large phase of human beings to apply or apprehend it.

COUNTRIES AND CRYPTOCURRENCY

Other Countries

El Salvador have become the primary country that undertake the cryptocurrency (bitcoin) as its felony gentle mentioning that it's going to carry economic inclusion, investment, innovation and financial development. While nations like China, Algeria, Bangladesh, Egypt, Iraq, Morocco, Nepal, Qatar and Tunisia selected a entire ban on any of such virtual currencies arguing that



cryptocurrencies are getting used to funnel cash to unlawful reassets and argued that the upward thrust of crypto may want to destabilize their economic system (Fortune, 2022).

The majority of the alternative nations like Africa, Arabian Peninsula have determined to enact.

India

As in line with 2021, Global Crypto Adoption Index, India ranked 2d in cryptocurrency adoption (Kaur, 2022). Yet the course of reputation of cryptocurrencies turned into complete of ups and downs. And but it has now no longer been regarded formally with the aid of using the authorities of India.

Figure 1 depicts the timelines of principal incident in regards to cryptocurrencies' evolution in India.

Figure 1: A Timeline of Cryptocurrency Evolution in India

<p>2013-2016</p> <ol style="list-style-type: none"> 1. Cryptocurrencies brought and commenced attracting investors 2. Various Cryptocurrencies Exchange got here on line like Unocoin, Zebpay etc. 3. RBI denied to sponsored Cryptocurrencies
<p>2017</p> <ol style="list-style-type: none"> 4. The price of Bitcoin accelerated to the excessive of 20 instances of its price 5. RBI issued a Press Release with the aid of using pointing out that digital foreign money is an issue of speculation 6. Later this year, PIL turned into submitted in Supreme Court, one set asking to prohibit it whilst different requested for its regulations 7. It turned into referred to as as a Ponzi scheme 8. Government shaped a committee to observe troubles associated with it
<p>2018-2019</p> <ol style="list-style-type: none"> 9. RBI issued a round banning the change in cryptocurrencies via way of means of banks 10. In 2019, the Committee so endorsed ban on crypto
<p>2020-2021</p> <ol style="list-style-type: none"> 11. Supreme Court moves down the RBI in advance round prohibiting banks to deal in Crypto market 12. Supreme Court said that Cryptocurrencies are irregularly however now no longer illegal 13. Later, RBI Prohibited ban on non-public crypto permitting the sure exception with the underlying technology 14. RBI hinted in the direction of difficulty of its very own digital currencies
<p>2022</p> <ol style="list-style-type: none"> 15. Finance Minister Nirmala Sitharaman stated in her finances speech that digital belongings might be taxed at 30% fectively 16. She time-honored the exceptional boom in digital belongings transaction and therefore, it's far critical to convey it below the ambit of tax 17. RBI will introduce its virtual forex with the aid of using April this year



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DIGITAL MARKETING: THE FUTURE OF MARKETING

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ABSTRACT

Digital marketing is largely about influencing the audience online with mediums of content to increase a brand's impact over the audience. The time people spend online gives digital marketing the ability to create strategies that influence consumer behavior. The right strategy is to turn the audience into sales revenue. Digital marketing has become a form of business. With more and more businesses choosing to create an online product image and reach audiences around the world, online technology is also expanding. Websites, blogs, marketing campaigns, SEO strategies, etc. delve deeper into the metrics of technology that influences one's online presence. As a result, it takes well-trained professionals to build a public image of the product. This article reviews few important dimensions of digital marketing.

Keywords: *Digital marketing, Internet marketing, Social media, Online marketing*

Introduction

Access to the Internet is a normal part of life. It has enhanced the use of computers, cell phones, and laptops leading to a dramatic shift in the growth of digital channels both in terms of volume and power. Whether it is filtering for information on Google, social media, or shopping, India has transformed this approach into a huge full-fledged market. And this market has succeeded in creating Digital Marketing as a major source of online business delivery. Digital Marketing is growing at an astonishing rate of 25-30% in India every year. And if the statistics are to be believed, India has reached a peak of 500 million internet users by the end of 2018. India is also proud of the world's largest Facebook population. High-speed digital streaming, social media channels, online portals, etc. has led to the growth of digital marketing in an unprecedented way. Word-of-mouth marketing, door-to-door advertising, radio broadcasts, TV commercials - Indian firms always rely on traditional marketing methods, until the internet took place. Sales tools have changed from people to gadgets. It was easy to get into a large section of the audience with minimal effort. And as the number of mobile and computer users continues to grow, digital marketing may extend its wings far and wide.



The first examples of internet connection were demonstrated with the launch of Michael Aldrich's online shopping program. In the years that followed, Thomson Holidays UK was launched, and then India MART B2B in 1996. But finally it was in 2007 when the launch of Flipkart, an e-commerce marketing website, drastically changed the marketing landscape of India. What followed was an increase in the number of people taking cell phones, home delivery, online shopping, and online advertising as a way to market products. And over the years Digital Marketing industry in India has succeeded in bringing a large percentage of online business through its promising ability to create a global network and prosper even small businesses internationally. According to the International Journal of Advanced Research Foundation, India is experiencing a period of positive growth in digital marketing from 2013 and this trend continues through 2020.

An average Indian spends about 4-5 hours a day scanning emails, social media, and browsers. A growing market for gadgets such as smartphones, tablets, laptops, etc. significantly increased the speed of use and entered the market to reach a wider set of audiences. Online content influences people's lives for a long time. Expressing ideas through photos, videos, texts, etc. it leaves a solid foundation for human minds to translate into their lives. Digital marketing is primarily about influencing online audiences through content channels to maximize product impact on audiences. The time people spend online empowers digital marketers to create strategies that influence consumer behavior. The right strategy is to turn the audience into sales revenue.

From about 70 million online shoppers in 2016 and over 100 million in 2017, India has seen a huge increase in online population. Since the launch of Digital India in 2015 as a step towards improving internet infrastructure and digital empowerment, there has been a full growth of the start-ups, services and more to connect people around the world. It has led to an increase in active internet users, mobile communications, social media traffic and more.

Digital marketing has become a form of business. As more and more businesses choose to create an online product image and reach audiences around the world, online technology is also growing. Websites, blogs, marketing campaigns, SEO strategies, etc. delve deeper into the metrics of technology that influences one's online presence. As a result, it takes well-trained professionals to build a public image of the product. Over the past decade, digital marketing agencies and professionals with a deep understanding of the field have emerged to meet the needs. With the right skills, thinking skills and a high level of knowledge of what will work for an online business - these experts are the flag bearers of digital marketing.

Digital marketing is a major umbrella in which the technical, as well as non-technical capabilities of creating a wave of online fame, are integrated under it. The industry has created various job roles so that people can look for work and showcase their skills. Required professionals from the field of web design, web development, social media consultants, product consultants, content writers, graphic designers, artists, etc. come together and work together to create a visual representation of ideas that are easy to plant in the minds of the audience. As the industry grows, the demand for art professionals in this field is increasing exponentially creating more jobs in India and making India a hub for IT jobs.

The return on investment for businesses through digital forums has exceeded that from real-life forums. Companies today are switching to digital-enabled configurations to take full advantage of the best digital marketing time that India is seeing. About 70-80% of people are committed to online shopping, and e-commerce websites like Flipkart, Amazon, Myntra, etc. are making waves



with their influence on the market. And all in a world that still has about 2 / 3rd of people without access to the internet or cell phones. As internet access for more people grows, India will witness a change in digital speed that will make India one of the world's leading markets with the highest numbers of internet users. Online podcasts, web news, entertainment, sports, business, public awareness and work in India are heavily dependent on digital forums for revenue generation, information sharing and the country's progress, Digital Marketing becomes a promising industry with rapid job growth, growing influences, and widespread jobs.

Review of Literature

A number of research papers and articles provide a detailed insight on Internet Marketing. The findings from the literature are presented below:-

Online marketing is defined as 'achieving marketing objectives through digital technology' (Chaffey et al., 2009). Digital marketing is the use of technology to assist marketing activities in order to improve customer experience by tailoring their needs (Chaffey, 2013). In developed countries, companies have recognized the importance of digital marketing. For businesses to thrive they must meet online and traditional methods of meeting customer needs accurately (Shankar et al., 2011). The introduction of new technologies creates new business opportunities so that marketers can manage their websites and achieve their business goals (Kiani, 1998). Online advertising is a powerful marketing vehicle for brand building and increased traffic for companies to achieve success (Song, 2001). Expectations about generating results and measuring the success of advertising revenue spent, digital marketing saves significantly on measuring ROI in advertising (Pepelnjak, 2008).

Today, traditional advertising and marketing strategies have given way to digital advertising space. In addition, it is so powerful that it can help revitalize the economy and can create great opportunities for governments to function effectively (Munshi, 2012). Singapore firms have evaluated the effectiveness of digital marketing tools as effective and useful in achieving results (Teo, 2005). More importantly, the growth of digital marketing has been the result of rapid technological advances and market fluctuations (Mort, Sullivan, Drennan, Judy, 2002).

In order for digital marketing to bring about business results, digital content such as accessibility, navigation and speed are defined as important aspects of marketing (Kantila, 2004). Another tried and tested tool for digital marketing is the use of oral WOM on social media and making the site popular (Trusov, 2009). In addition, WOM is linked to the creation of new members and an increase in website traffic which also increases visibility in marketing.

The social media platform with an additional standard example of Facebook has opened up opportunities for businesses to connect with millions of people through products and services and open up new marketing opportunities in the market. This is only possible if managers are fully capable of using communication strategies to engage customers and improve their knowledge (Mangold, 2009). A marketing professional should really understand online marketing campaigns and programs and understand how to do it effectively with performance measurement indicators. As market forces around the world change in terms of access to new viewers in social media and usage, it is important that strategic integration strategies are adopted into the organisation's marketing communications system (Rohm & Hanna, 2011).

Blogs as a digital marketing tool have successfully created the effect of increasing sales revenue, especially in products where customers can read reviews and write comments about personal information. For businesses, online reviews have worked very well as part of their strategic



marketing strategy (Zhang, 2013). Internet service tools have a greater impact than traditional means of communication (Helm et al. 2013). As part of the study, it is proven that users experience an increase in confidence and happiness as they adapt to social media which is a motivating sign for businesses and marketing professionals (Arnott, 2013). Web experience affects consumers' psychological process and improves their online shopping decision (Cetinã et al., 2012).

The Internet is a powerful tool for businesses (Yannopoulos, 2011). Marketing managers who fail to apply the importance of the internet to their business marketing plan will be at risk because the internet changes product, pricing, distribution and promotional strategy.

Areas under domain of digital marketing

Following are some of the major areas under the domain of digital marketing:

1. Search Engine Optimization (SEO)
2. Search Engine Marketing (SEM)
3. Content Creation
4. Social Media Marketing (SMM)
5. Digital Display Advertising
6. Mobile Marketing
7. Interactive Marketing
8. Viral Marketing
9. Email Marketing
10. Affiliate Marketing
11. Online Public Relations (Online PR)
12. Digital Media Planning and Buying
13. Web Analytics

Conclusion

Any marketing that uses electronics and can be used by marketing professionals to convey promotional messages and measure its impact on the customer journey is digital marketing. In fact, digital marketing usually refers to marketing campaigns from the computer, phone, tablet, or other device. It can take many forms, including online video, display ads, search engine marketing, paid social media and social media posts. Digital marketing is often compared to “traditional marketing” such as magazine ads, billboards, and direct mail. Ironically, television is often linked to mainstream marketing. Digital marketing should be one of the main focus areas of almost any business marketing strategy as a whole. There has never been a way to stay in touch with your customers, and nothing else offers the level of personalized digital data can provide. The more one embrace digital marketing opportunities, the more one will be able to see the growth potential of the company.

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ONLINE AND OFFLINE LEARNING: A COMPARATIVE ANALYSIS

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Abstract

After the Covid-19 epidemic, people around the world were forced to change their way of life, including students. With the help of advanced technology, we are seeing the growth of online learning. Many educational institutions have moved their foundation from offline classes to online classes to virtual classes. Compared to offline learning and physical classes, online learning and education is a flexible teaching method as it gives both teachers and students easy access to learning in the comfort of home. Above all, online learning is very beneficial for students who are unable to attend physical classes due to various difficulties: distance, physical disability, etc. Offline learning means traditional education that allows students to interact face-to-face with teachers and peer groups. Although online teaching and learning is considered the future of education, it cannot replace offline education in all its forms. Compared to online learning, offline learning is not hampered by any technical issues. Both online and offline education has its own set of advantages and disadvantages. This article will discuss one of the hottest topics these days: Online learning compared to Offline learning. The analysis is done on the basis of secondary data.

Keywords: Online learning, Offline learning, Comparative analysis, Pros and cons

Introduction

After the Covid-19 epidemic, people around the world were forced to change their way of life, including students. With the help of advanced technology, we are seeing the growth of online learning. Many educational institutions have moved their foundation from offline classes to online classes to virtual classes. With the sudden change from a real classroom to a digital environment, some people are wondering which is the best mode of learning - online or offline? Even before the Covid-19 problem hit the world, there was a high growth and acceptance of tangible technology. Students have been studying in many online classes, but there has been a great need for online and virtual learning since the epidemic began.

People all over the world, including students, have been forced to change their habits because of the Covid-19 epidemic. We are seeing an increase in e-learning due to advanced technology. In order to accommodate the classes, many educational institutions have moved from offline reality classes into virtual classes. Advanced technology was growing rapidly and was adopted even before the Covid-19 issue reached the world. Students have been studying in various online classes prior to the epidemic, but there has been a significant increase in the need for online learning since then.

Both online and offline education has its own set of advantages and disadvantages. This article will discuss one of the hottest topics these days: Online learning compared to Offline learning. The analysis is done on the basis of secondary data.

Adel (2022) has briefly described the two forms of learning as under:

Online learning

Online education is the way in which education is delivered as a result of technological innovations. In fact, online education has evolved into a flexible teaching method where students can easily access learning materials from the comfort of their own homes. In addition, online education offers a good option for students who can enroll in traditional classes, as well as allowing them to learn at their own pace.

Students can learn self-control and time management skills through online education, which also gives them access to the never-ending provision of educational resources. Students can easily determine their learning speed if they have the right equipment and access to a stable internet connection.

Offline learning

Offline education is a common education program and early learning method that allows students to interact with their peers and teachers in a face-to-face environment on a regular basis. Although online education is expected to be the future of education, it will not be able to replace the whole traditional education environment. Advances of technology have little impact on offline education, and provide a good opportunity for students to build and stick to a consistent schedule.

Offline classes encourage students to collaborate on projects with other students and help them learn new skills. Students feel embarrassed about online education as they only interact with other students by chatting online rather than face-to-face.

Additionally, offline education allows teachers to monitor their students' responses and behavior and respond as needed. As a result, no matter how advanced online education is, offline education will continue to play an important role in student growth.

Review of Literature

Valentino et al. (2021) have stated that there are many learning media outlets during the Covid-19 pandemic, some using online and offline media. Online media has variety, some are in the form of videos, photos or writing, but there are also many reading media that cover all reading media. Examples are the internet for youtube media, and readers of youtube media will be able to watch reading material over and over because videos can be downloaded. The method used in the study is the literature review method, a method that can be helpful in this study because it may discover new problems in future research. The issue raised in this study is the need to know the relevant media and to compare online and offline media during the new normal era after the COVID-19 epidemic. This study generates data that can prove that the relevant media is in a relatively new era.

Pei and Wu (2019) have written that with the increasing use of technology in education, online learning has become a common teaching method. How effective online learning can be in undergraduate medical education is still unknown. The purpose of this article is to examine whether online learning compared to offline learning can improve the learning outcomes of medical graduate students. There is no evidence that offline learning works best. And compared to offline learning, online learning has the potential to improve the knowledge and skills of

undergraduate students, therefore, it can be considered as a potential alternative to undergraduate medical teaching.

Huang et al. (2021) have stated that the COVID-19 epidemic has highlighted the need for new ways to maintain effective education in times of crisis and uncertainty. This study first introduced the Online-Merge-Offline (OMO) learning method, a learning method that meets the new needs of students and teachers in the post-COVID-19 era. OMO Learning uses a diverse infrastructure that includes Open Education Practices and real-time learning spaces, both online and offline. The study then discussed the initial results of a pilot test that investigates the study of OMO in China for three months from three perspectives: space design requirements, technical considerations, and teaching considerations. High-quality, two-phase research focused on content analysis and multidisciplinary research was conducted in the context of English language learning with 30 teachers and students. The findings showed that, although both teachers and students were positive about OMO learning, they stated that a broad set of key and effective skills were needed — including the use of online platforms, communication skills, classroom management, and effective use of resources. In addition, the findings indicated that extra effort should be paid to building classrooms, such as infrastructure, to effectively support OMO learning. This study is an example of a new way forward for the future of education to ensure sustainable education in this difficult and uncertain world.

Wiyono et al. (2021) have written that the outbreak of the Covid-19 virus has transformed health interactions across all sectors, including in the education and learning sectors. Most student communication processes are done online. However, just how effective an internet connection is not known. Therefore, this study aims to describe the communication strategies used by the teacher and compare the effectiveness of online and offline strategies in dealing with students. The study was conducted in Batu City, with samples of 57 elementary school teachers taken using a random sample collection method. The data collection strategy used a questionnaire and was analyzed using descriptive statistics, t tests, and variance analyzes. The results showed that offline communication methods were considered more effective than online communication methods. There is no difference in the effectiveness of gender communication strategies, level of education, position, and duration of teacher work. There are differences in the timing of strategies in terms of the level of education and the duration of the teacher's work.

Zhu et al. (2022) have stated that learning performance is an important indicator of online learning, related to the quality of online education and student performance. Previous research has found that student performance in learning is related to learning and stimulating educational emotions, but the role of non-intellectual factors such as academic emotions has received little attention in technical research. To close this gap, this study examined the mediating impact of positive learning attitudes on promoting online learning for college students and the performance of online learning, as well as differences in mediation outcomes under different learning styles (i.e., online and offline learning). Data from 1088 college students participating in online and offline courses in China was used. This study adopted a correlation analysis and multiple mediation analysis to analyze the median impact of online and offline students and multi-group comparisons. This research not only helps to understand academic sentiments, motivation for learning and learning performance, but also provides important enlightenment for online learning performance management in promoting an open curriculum formation.

Najib and Mursidi (2021) have stated that their study aims to determine the effectiveness of offline learning and online learning through analysis of two variables. The subjects in this study were FKIP PGRI Banyuwangi University graduates from the history program. The study shows how Quasi Experimental Design has two groups, both online and offline, can fully function to control external variables that may affect the test. The number of people in this study by students of the Faculty of Teacher Training and Education were 132 students. Based on the two-way ANOVA test results, a significant result of $0.056 > 0.05$, can be concluded that there is no difference in the effectiveness of learning based on learning programs in the teaching and learning environment at PGRI Banyuwangi University.

Comparative analysis

Teachers can simply teach their students in virtual classes when it comes to online classes. As long as they have access to the internet, students can quickly access learning resources from anywhere. Teachers can use a variety of online learning materials, such as films, audio, animation, white visual boards, visual conference rooms, and live chat with students, in their online classrooms.

Offline classes, on the other hand, provide students with a hands-on learning environment within the boundaries of the real classroom. It allows students to communicate directly with their instructors and actively participate in lively discussions. Students can also engage in recreational

activities such as drawing and physical education, which help them to develop their mental and physical skills.

There are some things to consider when choosing whether learning online or offline is best, such as:

Accessibility

One of the most exciting features of online classes is that they can be accessed anywhere in the world. Students can access learning materials in the comfort of their homes by simply going anywhere. Applications such as Zoom and the Microsoft Team have made it possible for students to attend lectures anywhere. In addition, students do not have to pay for transportation. As a result, online classes offer a unique benefit of spatial flexibility.

On the other hand, offline classes require students to go to their educational institution. Teaching often takes place in a stable setting, such as a classroom. Some students may have to travel long distances to attend their educational institution, which may be challenging. Not to mention that students will have to pay a fare.

Time Management

Students taking online classes face great time management challenges. Online students are often distracted by various activities and do not have a formal program. Students may not have a good schedule and may be prone to procrastination because online classes offer the benefit of self-study. In addition, students are obliged to stay busy in their online classes for long periods of time, which may lead them to browse the Internet for distractions or check their social media profiles.

In the event of offline classes, students should follow a strict curriculum provided by the instructors. In addition, due to the use of shared learning, students are expected to complete their work and projects on time. In addition, children are less disturbed within the physical classroom, and they learn to do their assigned tasks according to a set schedule.

Flexibility

The great advantage of online classes is their flexibility. It gives students the freedom to establish their own level of learning without feeling rushed. Students can go to classes whenever they are ready because they have access to recorded videos and online resources. It also allows students to take their time to digest content and complete their work or research at their own pace.

When it comes to offline education, there is an element of resilience. Because there are no pre-recorded films or notes readily available to students, they are expected to arrive on time for their lessons or sessions. Therefore, students should adhere to a well-planned and robust program established by their institution.

Student-teacher interaction

Apart from the common belief that there is little interaction between students and teachers in online education, there is much interaction between students and teachers. Students can contact their teachers anytime and anywhere using online classes. Two-way communication also takes place in online classes, which has a huge impact on learning. In online classes, student-teacher interactions may be more consistent.

In the case of offline classes, there is face-to-face contact, especially since teaching takes place simultaneously. Students and professors have open lines of communication, allowing for debates and discussions. It also allows students to get quick answers to their questions and answers. To engage students, teachers adapt different learning styles.

Practical Reading

Online education is a complete theory and takes place online. This makes it difficult for students to participate in practical aspects of learning, which are an important part of education. Students must be actively involved in subjects such as chemistry, physics, biology, arts, and sports in order to perform live tests or to actively participate in this activity.

Unlike online classes, offline classes offer an inspiring setting that combines both learning and working aspects. This contributes to the development of students' mind and skills. Practical learning enables you to read and adapt quickly to daily obstacles and settings, and to better understand the lessons.

Technical problems

Problems with technology are always present in online classrooms. Online classes include the use of appropriate electronic devices such as webcams, microphones, headphones, and PCs, as well as a reliable internet connection. In addition, technical problems such as slow internet connection or lack of adequate technical infrastructure may prevent uninterrupted learning. It can be a challenge for students to attend live lessons or to download videos or notes online.

Technology problems are rarely a threat to offline classes. With the exception of any courses that involve presentations or computers, students and teachers do not need to be extremely

knowledgeable in technology, and because much learning happens in the classroom, technical problems are not a major concern.

Conclusion

The current context of the Covid-19 epidemic has put online learning in limelight instead of offline classrooms. Simply put, online learning has become the new normal. However, we must keep in mind that online learning cannot completely replace offline learning as both online and offline learning has its own benefits and problems. In online learning, students have access to resources for teachers and researchers from all over the world as long as they have the necessary equipment and effective internet connection. Online education gives teachers the opportunity to incorporate many online learning tools such as audio, video, white visual boards, animations, live chats, and virtual conference rooms to facilitate the learning process. Compared to offline learning and physical classes, online learning and education is a flexible teaching method as it gives both teachers and students easy access to learning in the comfort of home. Above all, online learning is very beneficial for students who are unable to attend physical classes due to various difficulties: distance, physical disability, etc. In addition, online learning gives students self-discipline and helps them to improve their time management skills. In addition, this process allows students to learn at their own pace. Offline learning means traditional education that allows students to interact face-to-face with teachers and peer groups. Although online teaching and learning is considered the future of education, it cannot replace offline education in all its forms. Compared to online learning, offline learning is not hampered by any technical issues. A regular offline class also helps students develop their interpersonal and interpersonal skills as they have to work in the same class with peers.

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COVID-19 PANDEMIC IMPACT ON HIGHER EDUCATION**Dr. A. P. Unde**

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Abstract

The spread of the Covid-19 epidemic has severely affected all aspects of human life, including education. We have done unprecedented experiments in education. In many educational institutions around the world, campuses have been shut down and teaching has spread online. International performance has dropped dramatically. In India, more than 30 crore students stopped to move schools / colleges and all educational activities came to halt. Despite all these challenges, the Higher Education Institutions (HEIs) have responded well and were able to ensure continuous teaching - learning, research and community assistance with specific tools and strategies during the pandemic. This article highlights the major effects of Covid-19 on Indian HEIs. Other steps taken by the HEIs and education authorities of India to provide uninterrupted educational resources during the pandemic are discussed. As a result of the Covid-19 epidemic, many new ways of learning, new ideas, new ways are emerging and the same may continue as we move forward tomorrow. So, some of the Covid-19 post styles might allow to think of new ways to teach higher education. Some effective suggestions are identified for educational activities.

Keywords: COVID-19, Higher Education, Online Education, Lockdown

Introduction

On March 11, 2020, the World Health Organization (WHO) declared Covid-19 a pandemic. Covid-19 has affected more than 4.5 million people worldwide (WHO). In India, the first affected case of Covid-19 was discovered on January 30, 2020 in the state of Kerala and the victims had a history of migration from Wuhan, China. In India, the first death was reported on March 12, 2020 and the country held the Janta Curfew date on March 22, 2020. Thereafter, the first phase of the closure was announced by the Prime Minister on March 25, 2020 for 21 days. To monitor the effects of the virus, the Indian government has been extending its door-to-door closures of various categories from April 30 to 30 June 2020. At all stages of from Lockdown 1.0 to Lockdown 5.0, educational institutions across the country had never had an opportunity to begin with teaching activities. Therefore, the Covid-19 epidemic had an impact especially in the field of education. According to According to a UNESCO report, Covid-19 affected about 68% of the total the number of students in the world according to data taken during 1st week of June 2020. The Covid-19 outbreak has had an impact about 1.2 billion students and youth worldwide closures of schools and universities. Several other countries also implemented closures that affect millions of additional students. In India, more than 30 crore students were affected by various restrictions and the national closure of Covid-19. Many governments around the world temporarily shut down educational institutions to control the spread of the Covid-19 epidemic. This global closure has had a huge impact on international students. Governments around the world worked hard to reduce the impact of the closure of educational institutions, especially in high-risk and disadvantaged communities, and to improve the quality of education for all who use a variety of digital learning methods. As per the report by the Ministry of Human Resources Development (MHRD), the Government of India, there are 993 universities, 39931 colleges and 10725 private institutions which constitute the Indian higher education system (Kumar, 2020). Although the country has been getting used to the new education system through the online mode, it is still a barrier to achieving success as only 45 crore people from the country have no access to internet / e-learning. People living in rural areas are still severely deprived of technology and therefore disrupt the cause of online education. The Covid-19 epidemic has taught the whole community how need is a mother of innovation by allowing educational

institutions to access online learning and introduce a real learning culture. The epidemic has advanced the education sector through innovation and development (Jena, 2020).

This paper reviews the impact of COVID-19 on Indian higher education through secondary sources of data.

Review of Literature

Dutta (2020) has written that as a result of the Novel Coronavirus (COVID-19), in all higher education institutions, including universities, private institutions, and colleges, a total of almost 10 million study hours have been compromised, which would be extremely difficult to compensate. The University Grants Commission in its advice has instructed all institutions to continue with online classes as much as possible and to use the available ICT tools for use in academic discussions. Many institutions have used social media to spread information. The current problem has transformed the entire structure of higher education through the use of videoconferencing based on online learning as there is no other option but to compensate for the lost educational activities.

Rashid and Yadav (2020) have written that the outbreak of COVID-19 has caused the global economy to collapse and has had a profound effect on the higher education system. The sudden closure of campuses as a way to distance themselves from the public to prevent the spread of publicity has shifted face-to-face classes to online learning programs. This has focused on using eLearning tools and effective student interaction platforms that can limit the accessibility and accessibility of most students. The epidemic has highlighted the shortcomings of the current higher education system and the need for additional teacher training in digital technology to adapt to the rapidly changing global education environment. In the post-epidemic situation, the use of eLearning and physical education may be an important part of the higher education system. Institutions of higher learning and universities are required to develop post-epidemic education and research strategies to ensure student learning outcomes and quality of education.

Sahoo et al. (2021) in their research work confirm the effects of Covid-19 in higher education institutions in India. It analyzes the effects of the epidemic on the teaching and learning program in the various states of India and its impact on higher education. Systematic and informative surveys and library analysis are used to collect data, analyzed in this study. Collected data is analyzed with a measurable tool of chi sq. at the 95 per cent confidence level. The respondents

for this study are 1100 teachers from various states of India. Tests and analysis reveal that outbreaks have significant effects on the institutions of higher learning in India.

Tarkar (2020) has stated that the COVID-19 epidemic has devastated the entire world. It originated in China and is now widespread. COVID-19 is an epidemic of health problems affecting the country's economic growth. The COVID-19 epidemic has caused disruptions in normal daily life. Countries are taking various measures to control the spread of COVID-19. To improve public distribution, the Indian government has announced a national closure. As a result of the epidemic, all schools, colleges and universities are closed. This disrupts the entire education system. Policymakers face many challenges in formulating policy related to the education system. Teaching happens from offline to online. As a result of these changes in teaching methods, students, teachers, and parents face numerous challenges. The current paper discusses the various effects of COVID-19 education system.

Kantipudi et al. (2021) have written that the global epidemic due to the new coronavirus Covid-19 plays an important role in higher education programs. Some of the key impacts are disrupting terminal exam completion, syllabus completion, the start of a new academic year and job losses. The Covid-19 epidemic has affected educating institutions and stakeholders, distance learning also poses a new challenge to the global economy. This article focuses on the challenges of higher education during the Covid-19 epidemic and offers solutions for further education. In particular, this is intended to explain the high impact education in India thanks to Covid-19 and suggests ways to advance the goals of the Indian higher education system. Based on detailed research it is suggested that online learning programs should be provided to all citizens. In addition, providing education and training on online learning resources for both students and teachers can provide the potential for creating a world-class education system even after Covid-19.

Impact of Covid-19 on higher education

1. Disruption of all educational activities

The Covid-19 explosion forced the door to close on all fronts which includes education. Institutions were closed with stoppage of academic activities also created more challenges for participants. Therefore, various activities such as admission, exams, entry exams, competitive exams conducted by different boards / schools / colleges / universities got postponed. Many tertiary entrance exams have been canceled which has posed a serious challenge to the life of a

college student. The biggest challenge was to continue teaching the learning process where students, and staff could no longer be physically present on campus. The obvious institutional solution was to rely on online teaching. In a relatively short period of time, however, HEIs have been able to support students through online channels. Covid-19 has accelerated the adoption of digital technology to deliver education. It was encouraging that all teachers and students showed professional competence. HEIs have begun the process of orientation programs, admission meetings and counseling classes with the help of various e-conferencing tools like Google Meet, Skype, YouTube live, Facebook live, WebEx etc. providing student support services. This step was taken to create an active virtual teaching and learning environment among students through online activities. Teachers and students promoted the use of electronic media sharing information through WhatsApp, Google Drive, Telegram, Twitter etc. They have been sharing important documents with team members and creating a local online repository as well. Students were advised to send scanned copies of the assignments to the institution via email. Institutions have also begun receiving reports on internships and projects via email during the closure of Covid-19.

2. Impact on academic and professional development

If we take the negative side, it has made it impossible for researchers to travel and work with others in the country and abroad. Some collaborative research work or project work is made difficult to complete. Some science laboratory tests / research work could not be performed. On the positive side, scholars find plenty of time to develop their theoretical research work. Scholars became acquainted with the technology methods as well develop their research. Webinars and conferences was a common way to share expertise in between students and scholars around the world with similar stories. They could find more time to concentrate in professional development through research and improve knowledge by sharing ideas through webinars and e-conferences. They could improve their technical skills and can find scope for publishing articles journals, publishing books in this free time.

3. Impact on educational assessment

Most external tests have been postponed and almost every internal examination has been canceled. Test cancellation has major impact on student learning. Most institutions have conducted internal assessments using a variety of digital tools. But absence of external testing,

will have a direct impact on the future of education and employment for such students. This uncertainty has caused concern among students as adhere to the same grade / class on the outside promotion. Similarly, many students from final / board exams will suffer as much as the time when they get their certificates, it may be too late apply for the next academic year in other countries due to lockdown.

4. Impact on employment

Many could not get chance to write job tests as they were canceled which created negative impact on students of higher education. Some of the Indians who had got job offers abroad lost them as those were cancelled. In India, there is no employment in Government. Recent graduates are under pressure fearing retrenchment of services provided by companies due to the nature of the epidemic. Many students lost their jobs in India and overseas. Pass out students may not get their job outside of India because of various limitations created by Covid-19. All these facts mean an increase in the level of unemployment due to this epidemic. With growing unemployment situation, interest in education may gradually decreases as people struggle for food rather than education.

Conclusion

This study revealed the different effects of Covid-19 on higher education in India. The recent epidemic has created an opportunity for change in teaching methods as well the introduction of practical education at all levels of education. Since we do not know when the pandemic will be completely eradicated, we should move towards the internet / visuals education as a solution for the current problem. UGC as well MHRD has put-up many online forums repositories, e-books and other online teaching / learning materials. A combination of traditional technologies (radio, TV, home phones) with mobile / web technology can be developed to gain better accessibility and flexibility in education. This will include developing a service platform to meet the required number of educational needs of students. All service providers need to be encouraged to provide appropriate access to educational forums for disadvantaged groups. Visual education is the preferred learning method in this difficult time due to the Covid-19 outbreak. Post Covid-19 education seems to be the most widely accepted online / virtual education that could possibly be the same education system.

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RURAL MARKET CONSUMERS AND GENDER DIFFERENCES RELATED TO FMCG SHOPPING BEHAVIOR IN INDIA

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Abstract-

The purpose of this empirical study was to understand rural market and to identify any differences exists while buying FMCG goods, in Indian market. The study aims at identifying the trends in buying behavior of customers staying in rural geographic region on Ahmednagar district in India. Researcher focuses on capturing difference in male female buying behavior, when buying FMCG goods, when preferring payment method and importance to nearby shop or some other place, and preferences given to best value of product or the quality of product. In depth review of latest available literature was done for finding the pattern of research objectives focused on rural marketing opportunities. It was known for its huge market potential and unique characteristics that make them different from urban market. Its quantitative survey-based study, aimed at finding difference between male and female perceptions, buying preferences and habits.

The rural marketplace has unique feature, it is made from customers with exclusive flavor and preferences. The socioeconomic and cultural heritage is playing critical role. In this paper researcher thoroughly studied rural customers purchasing behavior, four hypotheses were tested for understanding the rural consumer behavior with reference to gender difference. (Keywords: Rural market, buying, behavior, gender, urban market, brands, advertisement)

1-Introduction-

Is there any gender difference while buying FMCG product, what are the factors considered by rural consumers while buying their daily needs, if customers want to repurchase same products what are the reasons, which factors are acting in the final decision. Which factors induce particular behavior in the consumer? To understand this phenomenon, one structured questionnaire was prepared and the survey was conducted. One focus group discussion was held to collect data related to consumer buying habits and it was studied with reference to their gender differences. The study is devoted to finding of different deciding factors of rural consumer is making while taking a decision to purchase. In Ahmednagar district agriculture is the major source of income. The industrial growth is limited, purchasing power is low. With such problems the migration is on the rise, from villages to the big cities like Mumbai, Pune, Nashik and Aurangabad. Agriculture is seasonal and productivity is very low. But some encouraging findings of the McKinsey report (2007) about size of rural market, it has huge potential and its under growth stage. Rural market is having its strengths in numbers still appx 69 percent population of India live in rural geography. The rise in smartphones and affordable data result in internet users to cross 650 million by 2023, as per survey by mobile marketing association.

2-Review of Literature

How rural market is different from urban market? do they have unique needs, wants and how is their buying behavior, with all these questions researcher collected and studied articles as follows. For the study of rural consumer behavior “analytical Hierarchy Process technique” utilized (Jha, M. , 2013, Premapriya, M. S, 2016). Awareness with possibility of selecting the best alternative from available brands and then take purchase decision, that is also depends upon collective decision of family Gracia, A (2012) et.al., found that social influence has positive effect on willingness to pay by the female while its having negative influence male buyers for local food auction it means that male buying behavior is less influenced by online social influence than female buyers.

Mortimer, G., & Clarke, P. (2011). "Article on super market consumers" found that there is gender difference while preferring type of super Market, preferences etc are depends upon demographic factors. It was found that a female consumer prefers super market shopping to nearby shop.

This article by Parayitam, S, (2020) was focused on “behavior” and found that purchasing decision was largely depend upon “perceived quality” (Azhagan, D. 2020), FMCG is the fourth major sector in India.

The purpose of the study (Butu, A, et. al. 2020) was to investigate these behavioral changes during covid 19 pandemic. Siddiqui, M. S.(2021), this study was to investigate factors affecting rural consumer behavior, how websites can influence purchasing habits of rural consumers was considered here and how they can improve consumer’s shopping experience? Was the focus of this research they have applied qualitative methodology Singh, P.,(2021) In case of any market consumer education, lifestyle, and consumer empowerment plays very important role, it was found that the highest dimensionof the consumer empowerment index is depends upon the level of education of customers, Simanjuntak, M. (2021).

Abir, T., (2021) This survey-based research regarding online consumer behavior, was carried out in Bangladesh, it was found that during covid-19 pandemic web-based shopping activities were increased in Pakistan Afridi, F. E. (2021)

Pandey, R (2021) focused on the factors affecting the purchasing habits of "hybrid rice seed farmers" in selected districts of Bihar, he examined the rural buyers buying behavior. It was understood that behavior rural customer is different from urban customers; the difference is due to their specific needs, habits and literacy levels, which differ in most respects from those of urban consumers. The rural market requires extra efforts to ensure timely delivery, user training and the full range of pre-sale services as per Mahto, R.K. (2020).

Hassan, A. (2015). In this article on tv (TV) commercial is taken into consideration one of the easiest medium to steer the acquisition selection of customers. It has impact at the beginning level for selection of brand because of the tv commercials, additionally comparison was done to find impact of TV commercials on adult males and females

Sulekha B. (2013) has carried out research in Haryana, particularly this paper attempts to discover the important thing influencing elements of rural customer shopping behavior. Factor analysis was used to study sixteen organizations, observed the influencing factors of purchasing behavior of rural customers in Haryana, Ghai, Sneha (2012) found noticeable modification within the financial gain pattern and life style of rural people.

Kalotra, A (2013) found that, markets in urban area are saturated, MNCs are also targeting rural markets. Petra Tikku (2016) tried to study the “issues and challenges” of rural markets. In spite of much scope for business development very less attention has been paid for the development of rural marketing concept. Further, Devaraju, (2017) found that rural markets offer huge opportunities for enhancing businesses. Under developed market, people, infrastructure, communication, transport and many more factors have contributed to the unbalanced growth of rural markets.

Panicker and Warriar, (2015) revealed that companies can make profits in rural markets if they keep well-organized supply chain network and if it can be customized to rural needs then we can attract and keep rural customers.

S. Kumar, (2016) tried to find the best marketing strategies for rural markets in India, rural consumers want products which are long lasting of good quality. Kumar K et al. (2011) found that the rural customers and income levels are not sufficient. Sivanesan, (2014) found that rural inhabitants never accept to reduce their expenses on marriages, pilgrimages etc Ahmed B, (2011) found that Rural consumers do not want to experiment with new products, they are very brand loyal they do not change easily, they have made aware of the influence that have been undergoing in the society and community. Today's rural consumers in families have to be vigilant on the market forces who try to pass on products with inferior quality. Based on study of literature researcher formulated four hypothesis, those are based on research questions pertain to the gender differences while buying consumer goods in rural market

3-Objective and Research Methodology-

The objectives of this study,

- a. To study consumer buying behavior of male and female w r t FMCG products
- b. To identify any pattern while buying in rural market
- c. To understand rural market situation for FMCG goods
- d. To understand the preference for online and offline shopping in rural market

It is a Quantitative research and Type of study- Descriptive and exploratory

The availability of relevant data is limited on this particular area, we need to get latest and accurate data directly from the market. Here FMCG means fast moving consumer goods, it includes shampoo, cooking oil, soaps, toothpaste and grocery items used on daily basis. Its descriptive and exploratory kind of research as data collected and analyzed systematically using statistical tools, and researcher wants to get an insight in study of consumer behavior

Sampling Method- Convenient sampling

Sample unit- Experts/ knowledgeable individuals in villages

Population Rural part of District- 38 Lacs

Talukas- 14

Average number of Villages per taluka-10

Total villages =140

Sample size = 79

Type of sampling –Non probability, sampling technique- convenient sampling here researcher selects only those respondents convenient as per constraints of resources,

Methods to collect data-Survey and focus group discussions

"Primary data- Structure and Unstructured Interviews"

Survey method and FGDs

View from leader of that region

Informal Discussions with groups of villagers

"Secondary data –Preferred authentic sources only"

“Ahmednagar district collector’s official data”

Data Analysis Techniques – Chi square test will be used since its non parametric test, it's used to find association between categorical variables. Use of SPSS-18 / Statistical Software

Hypothesis:

1. “There is relationship between gender and type of payment”
2. “There is relationship between gender and the preference of buying”
3. “There is relationship between gender and reason of repurchasing FMCG”
4. “There is relationship between gender and type of shopping”

Based on objectives to research work it was decided, to have four hypothesis which are focuses on study of type of payments methods, preferences while buying and importance given to product's value for money, quality or availability in shop, type of shopping if its offline or online. The statements made to analyze rural consumer buying behavior with reference to gender of shopper, consumer attitude preferences, emotions also plays role in determining the buying behavior. It is essential to understand the consumer for customer retention and branding strategies. In view of rising online shopping activities, is it preferable by the rural market was studied in this research work

4-Data analysis and Interpretation-

Hypothesis-1

H0- There is no relationship between gender and type of payment

H1- There is relationship between gender and type of payment

Table no-1- case summary

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * Payment	79	100.0%	0	0.0%	79	100.0%

Table no-2- cross tabulation

Gender * Payment Crosstabulation						
			Payment			Total
			cash	credit	online	
Gender of respondent	male	Count	21	26	16	63
		% within Gender	33.3%	41.3%	25.4%	100.0%
		% within Payment	80.8%	70.3%	100.0%	79.7%

		% of Total	26.6%	32.9%	20.3%	79.7%
	female	Count	5	11	0	16
		% within Gender	31.3%	68.8%	0.0%	100.0%
		% within Payment	19.2%	29.7%	0.0%	20.3%
		% of Total	6.3%	13.9%	0.0%	20.3%
Total		Count	26	37	16	79
		% within Gender	32.9%	46.8%	20.3%	100.0%
		% within Payment	100.0%	100.0%	100.0%	100.0%
		% of Total	32.9%	46.8%	20.3%	100.0%

Test- Chi square test - Table no-3

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.138 ^a	2	.046
Likelihood Ratio	9.125	2	.010
Linear-by-Linear Association	1.328	1	.249
N of Valid Cases	79		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.24.

Source- primary data

A chi-square test of independence was performed to examine the relation between gender and type of payment. The relation between these variables was significant, $\chi^2 (2, N = 79) = 6.138$, $p < .05$, reject the null hypothesis; it means that gender and type of payment preferred while buying FMCG are associated. Male gender likes to buy goods by using online payment system; credit system is the most proffered way of payment followed by cash and last is online payment type for both the gender.

Hypothesis-2

H0: “There is no relationship between gender and preference of buying”

H2: “There is relationship between gender and preference of buying”

Test- Chi square test - Table no-4

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
gender of respondent *	79	100.0%	0	.0%	79	100.0%
Prefer to buy from						

Table no-5-cross tabulation

gender of respondent * Prefer to buy from Cross tabulation					
		Prefer to buy from			Total
		nearby shop	shop in town		
gender of respondent	male	Count	36	27	63
		% within gender of respondent	57.1%	42.9%	100.0%
		% within Prefer to buy from	70.6%	96.4%	79.7%
	female	Count	15	1	16
		% within gender of respondent	93.8%	6.3%	100.0%
		% within Prefer to buy from	29.4%	3.6%	20.3%
Total		Count	51	28	79
		% within gender of respondent	64.6%	35.4%	100.0%
		% within Prefer to buy from	100.0%	100.0%	100.0%

Table no-6- chi square

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.473 ^a	1	.006		
Continuity Correction ^b	5.959	1	.015		
Likelihood Ratio	9.195	1	.002		
Fisher's Exact Test				.007	.004
Linear-by-Linear Association	7.378	1	.007		
N of Valid Cases	79				
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.67.					
b. Computed only for a 2x2 table					

Source- primary data

A chi-square test of independence was performed to examine the relation between gender and purchase preferences. The relation between these variables was significant, $\chi^2 (1, N = 79) = 7.47, p < .05$, reject null hypothesis; it means gender and purchase preference of FMCG are associated.

Female gender likes to buy from nearby shop as compared to male gender.

Hypothesis-3

H0-There is no relationship in gender and the reason of repurchasing FMCG

H3- There is relationship in gender and reason of repurchasing FMCG

Table no-7- cross tabulation

gender of respondent * Reason of repurchase Crosstabulation						
		Reason of repurchase				
			good result	value of money	easily available	Total
gender of respondent	male	Count	15	39	9	63
		% within gender of respondent	23.8%	61.9%	14.3%	100.0%
	female	Count	7	3	6	16
		% within gender of respondent	43.8%	18.8%	37.5%	100.0%
Total		Count	22	42	15	79
		% within gender of respondent	27.8%	53.2%	19.0%	100.0%

Table no-8

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.913 ^a	2	.007
Likelihood Ratio	10.288	2	.006
Linear-by-Linear Association	.029	1	.864
N of Valid Cases	79		
a. 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.04.			

Source- primary data

A chi-square test of independence was performed to examine the relation between gender and the repurchase behavior. The relation between these variables was significant, $\chi^2 (2, N = 79) = 9.913, p < .05$, reject null hypothesis; it means gender and repurchase behavior of FMCG are associated. Female gender likes to buy from products with good results. Male likes to buy products with good value for money.

Hypothesis-4

H0- “There is no relationship between gender and type of shopping”

H1- “There is relationship between gender and type of shopping”

Table no-9

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
gender of respondent * type of shopping	79	100.0%	0	0.0%	79	100.0%

Table no-10-cross tabulation

gender of respondent * type of shopping Crosstabulation					
			type of shopping		Total
			offline	online	
gender of respondent	male	Count	61	2	63
		% within gender of respondent	96.8%	3.2%	100.0%
		% within type of shopping	80.3%	66.7%	79.7%
		% of Total	77.2%	2.5%	79.7%
	female	Count	15	1	16
		% within gender of respondent	93.8%	6.3%	100.0%
		% within type of shopping	19.7%	33.3%	20.3%
		% of Total	19.0%	1.3%	20.3%
Total	Count	76	3	79	
	% within gender of respondent	96.2%	3.8%	100.0%	
	% within type of shopping	100.0%	100.0%	100.0%	
	% of Total	96.2%	3.8%	100.0%	

Table no-11- Chi square test

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.330 ^a	1	.565		
Likelihood Ratio	.293	1	.589		
Fisher's Exact Test				.498	.498
Linear-by-Linear Association	.326	1	.568		

N of Valid Cases	79			
a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .61.				
b. Computed only for a 2x2 table				

A chi-square test of independence was performed to examine the relation between gender and the type of shopping. The relation between these variables was not significant, $\chi^2 (2, N = 79) = 0.330, p > .05$, fail to reject the null hypothesis; it means that based on available data gender and type of shopping of FMCG are not associated or related. But majority of around 96.2% respondents prefer offline mode of shopping for FMCG products

5-Findings and Discussions-

From the results of hypothesis testing, we can say that, here is association between gender and the type of payment viz. cash, credit or online. There is association in gender and the preference of buying viz. nearby shop or shop in town. There is association in gender and reason of repurchasing FMCG viz. value for money, good results or easily available rural consumer prefers to shop in nearby shops instead of super market or mall, they like credit facility and the shops should be nearby. In this study 5% level of significance was considered, from hypothesis no one it was found that, there is strong relation between gender and the type of payment, in this case credit given by the seller to customer is the most preferred type of payment as it is practice followed by retailers to give credit to the regular customers, next preferable method was cash and last was online payment, it was also preferred only by male buyers in rural market. Cash is the most popular way of payment. From second hypothesis about gender difference and shops preferred to buy FMCG goods, the relationship was significant and it was found that male consumers like to buy from town or super market than female consumers as they like to buy from nearby shops. As shopping experience is different male consumers like to check on various brands and variety in super markets. From hypothesis no three it was found that male likes and demand value for money in their purchase while female like to have good quality product and they prefers utility value of purchase, also they like to have products easily available. As per hypothesis no four it was about gender difference and type of shopping, it was found that the relationship was not significant at 5% level of significance but from cross tabulation we can infer that offline shopping type is the most preferred way of purchasing in rural markets.

6-Conclusion -

Gender difference exists in buying behavior, so that marketers must be aware of preferences of gender. In growing economies like India, it's necessary to focus on rural marketplace as it has huge potential and segment is available for exploration. This study shall help marketers for formulating marketing mix strategic decisions, based on gender differences for rural markets; it was found that the versatile market like India. Based on empirical study it was observed that female gender from rural market place is very price conscious, they prefers credits to cash type of payments, they essentially like to visit store or shop for purchasing, they prefers good quality products with trust of brand. But in case of male gender they prefer value for money, expect something more from the purchasing activity. In rural

markets affordability and availability are the most essential factors while buying consumer goods, so that companies targeting these markets must have different strategy.

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Identification of Data Mining techniques for Assessment of Student Performance

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Abstract: -Assessment of student performance is the most important activity for identifying actual performance of students for their future career. Data mining techniques play very important roles for managing and assessing such data. There are different data mining techniques available such as Classification, Clustering, Naive Bayesian, Decision tree, Association rules, Pattern Matching and many more. For working with educational data in Educational Data Mining (EDM) many of these techniques are get used. This research paper will focus on comparative analysis of such data mining techniques which will give more good output for student performance assessment.

Keywords: Assessment, Data mining Techniques, EDM, Educational Data, Performance etc.

I. Introduction

Data mining is a process which get used to take out the useful data from actual data , very large volume of unorganized raw data or available data. Data mining uses different algorithms with various available data mining techniques as classification, clustering, regression, association, decision tree, pattern matching and many other. All these algorithms are helpful at specific task of output. In this process of mining useful data is extracted from the data set. When such a process takes place with educational data that is data related to students, courses , performances, assessment and prediction conditions using such different data mining techniques and related algorithms, it is data mining in education or educational data mining. A large amount of educational data is collected by different educational institutes including schools, colleges universities etc. But most of the times this data remain unutilized for proper decision making especially for performance evaluation and assessment with respect to conditional variables. This paper will focus on identification of data mining algorithms for assessment of student performance and comparative analysis within them to get the best solution.

II. Literature Review

Various authors have worked on the area of performance analysis in education using different data mining techniques. They have suggested different techniques and algorithms, which can be used for this activity as per the attribute selection for performance calculation and analysis. This Literature Review refers such information as a base of this research paper

Devika Radhakrishnan, Shubhangi Neware has been prepared the data with the help of learning management system. using decision tree specifier c5.0 (classification, decision tree)[4]. Anoopkumar M, A. M. J. Md. Zubair Rahman explained about classifiers and their evaluation on the basis of their result and performance for different classifiers as Navie Bayesian, Random Forest, Multilayer perception and analysis against J48 and use of WEKA tool for calculation., performance prediction[8]. Sirwan M. Aziz1, Ardalan H. Awlla focused on c 4.5, c5.0, J48, Navie Bayecian etc. classifier to identify more accuracy in identified data.They have used WEKA tool for data preparation and different student attributes for performance prediction. They have applied with different techniques such as Navie Bayesian technique with ID3 algorithm. It has used 10 folds pass validation and identified more correct accuracy for C .5(J4.8) [1][17]. Trilok Chand Sharma has identified classification data relevance by processing data to solve large amount of problems in various data

mining techniques. With an open access tools which directly communicates with each tool or for implementation calling java code [16].

Shilpa Serasiya elaborated about class association rules about prediction and classification problems. Also mentioned use of WEKA tool for appropriate result [15]. Sathyadevan S . expressed that different data mining algorithms ,automatically detect from available data and find the best approach especially from Decision Tree approach for correct data representation and visualization .The major focus is on comparison of different these techniques[14].

There are many such references available specifically for prediction conditions and use of different data mining algorithms. This paper throws light on it also in following sections.

III. Different Data Mining Algorithms

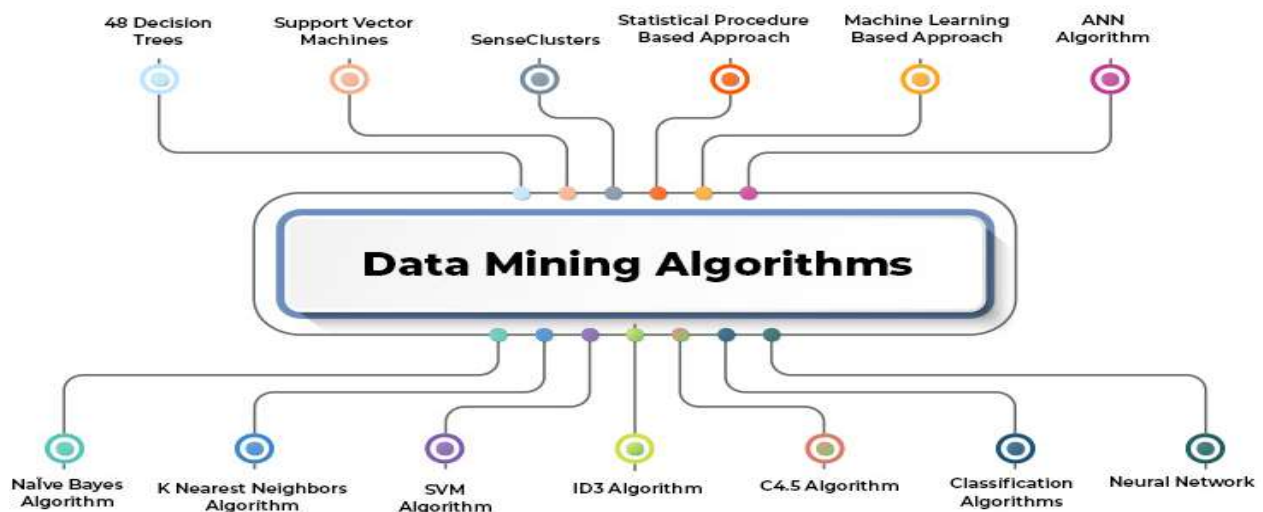


Fig1: Data Mining Algorithms –Types
Ref: Secondary Data

Above diagram shows different data mining algorithms .These different algorithms related to various data mining techniques. Every algorithm is having its own importance and criteria of working. The short explanation of above mentioned algorithms is as follows,

Let us have a look at some of mostly used data mining algorithms:

C4.5 Algorithm

To generate the decision based on single variate or many variate samples of data this C4.5 algorithm is used. The base of this algorithm is the rule set of decision tree. Here C4.5 increases the scalability with multi-threading concept [13].

The k-means Algorithm

The k-means algorithm partitions all n objects into k clusters so that each cluster has maximum intra cluster similarity and minimum inter cluster similarity which is measured by center of gravity of a cluster [2]. This is the simplest method to dividing given data set into many clusters as per user requirement.

Naive Bayes Algorithm

Naive Bayes Algorithm is a logical approach which updates the probability of hypotheses when new evidences are available. Hence this approach helps to answer for non frequent occurring questions [3]. The use of this algorithm is mainly in the situations where the dimensionality of inputs is high; classifier can easily calculate the next possible output and new raw data can be added dynamically for better futuristic classifier identification.

Support Vector Machines (SVM) Algorithm

SVMs are mainly related to known set of data as supervised learning and mainly applicable for classification and regression techniques. SVM is also called as Maximum Margin Classifiers. SVM is based on the Structural risk Minimization (SRM). SVM map input vector to a higher dimensional space where a maximal separating hyper plane is constructed. An assumption is made that as the margin or distance between these parallel hyper planes, it will result into better the generalization error of the classifier [5].

The Apriori Algorithm

This is an association rule type algorithm that finds the large item sets for a given dataset. This algorithm is based on large item-set property where a subset of any large item-set must be large. It is very useful to generate the candidate item sets of definite size and then scan the dataset for counting them if they are large item set. It is mainly required to identify widely most repetitively occurring item sets from a transaction data set which further gives association rules [2].

ID3 Algorithm (Iterative Dichotomiser)

This algorithm creates a tree with multiway conditions and try to find solution for each node .This is the feature as per category which provides the largest output information for it. the categorical feature that will yield the largest information gain for categorical targets. As trees can grow to their maximum size , they are usually applied to improve the ability of the tree to generalise to unseen data [18].

J48 algorithm

To get the most correct results , the best machine learning algorithm is the J48.It examine categories of data regularly and continuously.

There are many algorithms on statistical criteria are available such as CART (Classification and Regression Trees),C4.5,etc [19].

IV. Research Objective

As this research paper is a part of research study related with assessment of secondary students performance with respect to combination of educational and non-educational characteristics, the objectives of this research papers specified as,

1. To understand identify need of Data mining algorithms for prediction and assessment of Student Performance which mentions use of different technologies.
2. To identify the algorithms to be helpful at different activities in performance assessment.

Education sector and specifically secondary education gives a vast amount of data of students, teachers, parents for different attributes and characteristics for prediction and assessment. This is applicable to student data with different combinations of many such characteristics. There is need of specific techniques and algorithms to complete this activity. As in the sections above , we have taken an overview of different such data mining algorithms related to its techniques and are helpful for getting the important and useful data by its various processes.

Here we can check out the actual need of these algorithms for assessment of student performance with reference to much such previous work based on performance requirement of data mining algorithms.

V. Research methodology and Finding

We need to use observational research method to satisfy the above mentioned Research objective, details of references mentioned in Literature Review and Need of Algorithm sections. The observation and study of these related reference articles shows that data mining techniques and related algorithms are required to use for prediction of data from educational industry.

Hence we can specifically identify that multiple such requirement as a part of the comparative analysis of these different algorithms as for which type of assessment and performance evaluation criteria in students, which techniques will be most suitable one.

This research study in the form of Comparative study and identification of required algorithms for specific purpose of evaluation are mentioned below,

1. Predicting student's academic performance is possible with data mining techniques. K- means clustering is better in comparison with others because it can understand for the large amount of data easily [12].
2. Educational environment basically need performance prediction and it should be based on different factors which should include non educational characters as personal, social, psychological etc. Also some educational characters as Students passing and failing average and percentage , their appearance in exam everything can be calculated from use of K-Means clustering algorithm and for more accuracy Navie Bayesian techniques can be used [9].
3. It is actually very difficult to study predominantly for different stakeholders of education industry as school management, faculty, students as well as parents. For making analysis on the student data use of Decision Tree, Naive Bayes, Random Forest, PART and Bayes Network has proposed [10].
4. As our aim is to identify behavioral issues also from non educational characteristics for proper performance assessment we can use Random Forest technique and for more detailing we also can use Bayesian Network for predicting student performance and detecting undesirable student behavior using Social Network Analysis [7].

Assessment of performance is the most important issue and it also can get worked out with proper collection and classification of data with accurate decision making conditions. This is possible with these different data mining algorithms as k-means, c 4.5, ID3, Navie Bayesian. Hence here we consider Observation Mechanism from available literature and references.

CONCLUSION

Different data mining algorithms are useful for accessing accurate data from database. Assessment of educational data is very important for proper performance evaluation of students. There are many observations indicating student performance prediction at different levels with different attributes is possible with the help of these techniques and algorithms of data mining for educational data. Specifically classification, clustering techniques with proper pattern recognition and decision making is possible. The algorithms which are in fever of the above mentioned conditions are decision tree algorithms like c4.5, J48, k-means and navie Bayesian etc. and the use of WEKA tool is also associated with all such data mining

techniques, algorithms. Specifically j48 gives enhance classification and decision making conditions on the basis of different variable outputs and k-means as a clustering type proper grouping and analysis of data.

FUTURE WORK

This work refers to the review and conclusion that for prediction of students performance in educational data different data mining algorithms can get used. But it is very much essential to identify proper combination various educational and non-educational attributes for correct assessment. This is future requirement and enhancement with the help of these data mining algorithms and tools specifically available for it.

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A STUDY TO FIND THE ASSOCIATION BETWEEN TECHNOLOGY PLATFORMS AND EDUCATIONAL SOFTWARE DEVELOPMENT COSTS

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ABSTRACT

The information and Communication Technology (ICT) has changed rapidly over the past two decades. Internet and related technology changed the communication and learning habits of society and Most software developers don't use a specific development approach and aren't aware how to incorporate the appropriate measurements into the process to enhance and decrease defect, time, and rework in the lifecycle.

CMSs and other open frameworks deal with the creation, storage, modification, retrieval and display of data or content. In this paper, researcher conducts a literature review to study such technologies that can reduce the educational software development costs by reducing development time, efforts, resources etc. Researcher also collects the primary data from 300 respondents from software development field and by using Chi-Square Test tried to find whether there is any association between technology platforms (Web Technologies and Frameworks) used for software development and Costing (Cheaper and Expensive).

Keywords: Framework, Content Management System, Drupal, Joomla and WordPress, Web Content Management

1. INTRODUCTION

We are in the information age and it is very important to store and retrieve information in the most convenient way. Information can be organized by hosting the website. The problem faced by institutions is to keep their website content up to date. The internet offers a range of options for presenting information. Documents are available in different forms such as XML, HTML and text documents. Multimedia data such as audio data mp3 and image such as jpg, gif and video data MPEG also plays a vital role in libraries. Lot of documents is in different formats and is published online by different group of people. Content management systems were created to precisely help support this complex task. Without much of technical knowledge Content Management systems like Drupal, allows in creating and managing website easily.[10] CMS (Content Management System) is a computer program that allows users to create, organize, and alter digital content without requiring specialist technical skills.

EDUCATIONAL SOFTWARE

Now a days it is mandatory for each of the educational institutions to have their website, along with this website to match with this digital era institution has other software such as library management system , Digital Library, Leave Management System , Online Examination System, Online Admission System, Office administration system etc.

2. WHAT IS CMS?

HTML, CSS, PHP, ASP, JavaScript, and other languages are used to create web applications. Each language has its own set of characteristics that can lead to a variety of issues and restrictions, such as unacceptable code, a higher chance of loss of data, and difficulty updating, all of which can raise development and maintenance costs. In order to satisfy the changing problems and requirements in the software development business, several platforms for software development are being introduced.

For every organisation, institution, or even a person, content is perhaps the most valuable and helpful asset, but maintaining the correct content in the right form is tough. In today's digital world, the majority of information seekers rely heavily on the internet for digital content, resulting in a demand for content production, development, and organisation. The CMS can be used to create social networking websites, portfolios, forums, static websites, ecommerce websites, and blogs, among other things. There are several different content management systems, each with its own set of functionality. A content management system (CMS) enables anyone with little or no technical skills to create, change, update, and publish webpage content. [12]

A CMS system's functionality vary, but they typically include web-based publication, format management, revision control, indexing, searching, and retrieval [12]. Enterprise content management (ECM) and website content management are two common uses for CMS (WCM). CMS is primarily used to lower the cost of data administration.

3. CONTENT MANAGEMENT SOFTWARE USEFUL IN EDUCATIONAL SOFTWARE DEVELOPMENT:

- i) **Drupal:** Drupal is the most well-known open source CMS, having been created by Dries Buytaert in 1999. Drupal is a free programme that enables an individual or a large community to effortlessly publish, manage, and organize a wide range of material on a website with an almost limitless number of customization options. Drupal.org is an open source web platform that has been developed and distributed. The Drupal features module supports content management systems, collaborative authoring platforms, forums, newsletters, file uploads, and a variety of other features.[10]
- ii) **Joomla:** Joomla is a content management system (CMS) for creating web content that is free and open-source. It's based on the model-view-controller web application framework, which can be utilized without the CMS. Joomla is based in PHP, using object-oriented programming (OOP) tools and algorithms design patterns, and contains capabilities such as page caching, RSS feeds, printable copies of pages, newsfeed flashes, blogs, polls, search, and language internationalization support. [4]
- iii) **Word Press:** WordPress is a PHP-based content management system (CMS) that works with either a MySQL or MariaDB database. A modular architecture and a template system, referred to as Themes in WordPress, are among the features. WordPress began as a blog-publishing platform, but it has now expanded to include more traditional mailing lists and forums, as well as library collections, membership sites, learning management systems (LMS), and online commerce. [3]
- iv) **Plone:** Plone is a content management system (CMS) based on the Zope application server that is free and open source. Plone is marketed as an enterprise content management system (CMS) that is often used for intranets and as component of a company's web presence. The US Federal Bureau of Investigation, the Brazilian Government, the United Nations, the City of Bern (Switzerland), the New South Wales Government (Australia), and the European Environment Agency are among the high-profile public sector users. Plone's proponents point to the platform's safety track record and ease of use as reasons to use it.[8]
- v) **Expression Engine:** Expression Engine, also known as "EE," is a number of co content management system created by Ellis Lab, an American software business. It's a flexible web platform with three license levels: Freelancing, Non-Commercial, and Commercial. [11]

We can use these Content management software to develop educational software to reduce development time, effort, resources i.e. indirectly the software development cost.

Use of CMS to Develop Academic Library in Educational Field:

The library is the king's palace, and the librarian is the governor who regulates and governs content management. Content is detailed information in the virtual environment at hybridized library movement in digital world, and it can include text, graphics, photographs, sounds, movies, and data, among other things. The greater problem for librarians and information scientists is managing this granular data in a dynamic digital context. The ancient adage "garbage in, trash out" applies to traditional content management technologies. The content management system is how content is managed throughout the whole content management life cycle, from production to dissemination. It is a tool that allows a wide range of technical and non-technical company employees to create, edit, manage, and finally publicly release a range of content (like as text, graphics, video, and documents, among other things) while adhering to a centralized set of rules, processes, and workflows that focus on ensuring coherent, electronic content. When it comes to implementing a content management system in a library, a content management strategy is required. Martin White's book "The Content Management Handbook" outlines the aspects of content management strategy as a road map for framing the strategy. [11]

Drupal is a robust Content Management System (CMS) that is well-suited to meeting the needs of a scholar in any university or institute with relative ease and little complication. In many libraries, software engineers do this task, while librarians assist with data collection and organization. However, in order to create effective as well as efficient Libraries portal, library professionals should be involved from the beginning of content planning to the end of hosting it on a server. This not only allows us to learn the ins and outs of such library portal, but it also allows us to obtain the capacity to apply ICT to academic libraries on our own, which is extremely important in this day and age. [5]

When using joomla CMS, library personnel do not need to have advanced IT abilities. It has a lot of highly specialized features, and it required some technical assistance in this situation, such as MYSQL backups, local host installation folders, and PHP coding. The authors also proposed that librarians should continuously update their offerings on joomla websites.

In libraries and information centers, online content management is a relatively new notion. Every company now tries to keep a website up to date, whether for intranet or the Internet. The majority of public and private university libraries utilized drupal WCMS 9 (36.0 percent) and customized 9 (36.0 percent), followed by joomla 4 (16.0 percent), and word press 3

(36.0 percent) (12.0 percent). In some nations, libraries do not have enough IT experts to manage their CMS; for example, just 11 (44.0 percent) libraries have an IT specialist, while the remaining 14 (56.0 percent) libraries do not. Libraries in such regions of the world should benefit from a web content management system, as well as IT-skilled librarians to manage web content and update their websites on a regular basis. In developing countries, library authorities must be trained and educated on how to use a web content management system to market themselves and their libraries, and employees should indeed be trained and educated on how to use a web content management system to market themselves and their libraries. [12]

CMS provides for the management of all components of a website, making web creation highly adaptable and easier to deploy. CMS had already allows developers to launch websites much more quickly, whereas making a website have used available web technologies takes a long time. The majority of CMSs are search engine optimized, so users don't have to bother about optimizing their websites for Google page rankings. [9].

4. RESEARCH DESIGN

OBJECTIVE OF THIS RESEARCH IS:

- To identify the **extent of cost parameters** that involved in educational software development.

HYPOTHESIS

A literature review was conducted in order to formulate a hypothesis. Earlier scientific findings were also examined, and specialists' assistance was sought. The hypothesis was then written down as follows:

H1: There is no association between technology platforms and Costing.

The research design is as follows

TYPES OF DATA:

This study uses a combination of primary and secondary data. The core information was gathered from 300 software developers. Questionnaires are used to acquire main information. The total number of questionnaires in the sample is 300. Purposive Sampling was utilized by the researcher in this case: One of the most prevalent sampling procedures, purposeful sampling, divides participants into groups based on pre-determined factors relevant to a specific research issue. Sample sizes are determined by the time and resources available, as well as the study's objectives, and may or may not be fixed data gathering procedures.

To test the questionnaire, a pilot survey of 25 people was conducted. The pilot survey's problems were corrected, and the final version of the questionnaire was written.

The questionnaire drafted for Software Development Organizations consists of 16 questions. From these 16 questions 2 important questions for this research are as given below

1. **From the following which are the Web technologies that can affect (makes cheaper or expensive) the estimated cost of educational software (by affecting its development time, effort, resource, size etc.)?**

Sr. No	Web Technologies	Cheaper	Expensive
1.	Word press		
2.	Joomla		
3.	Drupal		
4.	Moodle		
5.	Plone		

2. **From the following which are the Frameworks that can affect (makes cheaper or expensive) the estimated cost of educational software (by affecting its development time, effort, resource, size etc.)?**

Sr. No.	Frameworks	Cheaper	Expensive
1.	Scrum		
2.	Agile System Development		
3.	Ruby on rails		

The acquired data was first categorized, and then displayed in tables; in reality, classification and tabulation go hand in hand. As a result, tabulation is based on categorization. Because tabulation places categorized data in rows and columns, it is a mechanistic function of classification. Tabulation is the act of presenting data in an appropriate format, whereas classification is the process of statistical analysis.

Graphical / Diagrammatic Representation of Data:

MS-Excel, SPSS, and other tools are used to evaluate the data acquired from original data. The results of the analysis are provided in two ways:

- a) Graphical Presentation

b) Quantification

5. ANALYSIS OF RESPONSE:

6.1. Web Technologies that Can Be Used to Reduce the Estimated Cost of Educational Software

There are various web technologies that can reduce the development time, efforts, resource and many more which can directly affect on estimated cost. Data collected to find the awareness of respondents about such technologies that can be use to reduce the estimated cost of educational software is presented in TABLE1

Web Technologies	No. of Responses		Percent of Cases
	Responses	Percent	
WordPress	211	34.0%	70.3%
Joomla	212	34.2%	70.7%
Drupal	153	24.7%	51.0%
Moodle	22	3.5%	7.3%
Plone	6	1.0%	2.0%
Other	16	2.6%	5.3%
Total	620	100.0%	206.7%

Table.1. Web technologies that can be used to reduce the estimated cost of educational software

Table.1 shows that 70.7 percent of respondents believe Joomla can help decrease the cost of development of educational software, 70.3 percent believe WordPress can actually decrease the cost of development of educational software, 51.0 percent believe Drupal can minimize the development cost, and very few believe other technological advances can start reducing the development cost.

JQuery, Visual Design, MVC, Windows Azure, and .NET were also highlighted by some responders as ways to cut costs. This analysis is highly important to this study since it reveals that Joomla, WordPress, and Drupal are web technologies that can minimize the cost of development of educational software, which is one of the research's objectives.

The data in table1 is shown graphically using pie chart and presented in Figure1.

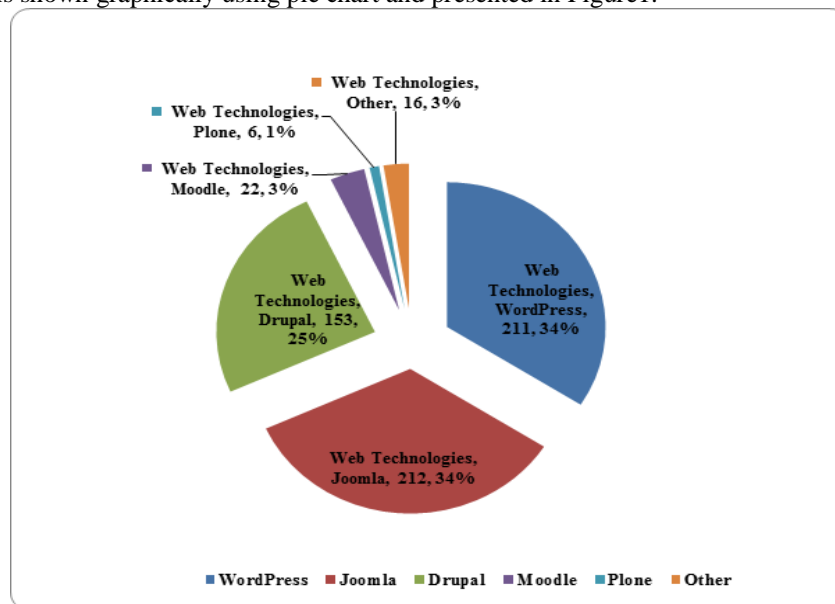


Figure1: Web Technologies

6.2. Standard Frameworks And Libraries That We Can Be Used To Reduce The Estimated Cost For Software Project

There are various Standard Frameworks and Libraries that can reduce the development time, efforts, resource and many more which can directly affect on estimated cost.

TABLE 2 shows the data received from respondents in order to identify Standard Frameworks and Libraries that can be used to lower the anticipated cost of educational software.

Standard Frameworks and	No. of Responses	Percent of Cases
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Libraries	Responses	Percent	
SCRUM	191	42.0%	63.7%
Agile System Development	216	47.5%	72.0%
Ruby on Rails	38	8.4%	12.7%
Other	10	2.2%	3.3%
Total	455	100.0%	151.7%

Table.2. Standard Frameworks and Libraries that we can be use to reduce the estimated cost for software project

Table.2 shows that 72.0 percent of respondents believe Agile System Development can lower the cost of developing educational software; 63.7 percent believe SCRUM can lower the cost of developing educational software; and 12.7 percent believe Ruby on Rails can lower the cost of developing educational software. Some respondents also said that framework and open - sourced technologies, such as Codeigniter and Windows Azure, can help minimise development costs, while one respondent added that most educational software is robust in nature, thus agile technique is not required most of the time. If projects are complex and having several recursive changes needed then the agile system can be helpful to reduce development costs as are open sources too.

According to the objective of this research, which is to identify the ways to reduce the development cost of educational software, this analysis is very important in this research because it shows that Agile System Development, SCRUM and Ruby on Rails can reduce the development cost of educational software.

The data in **Table.2** is shown graphically using Pie Chart and presented in Figure2.

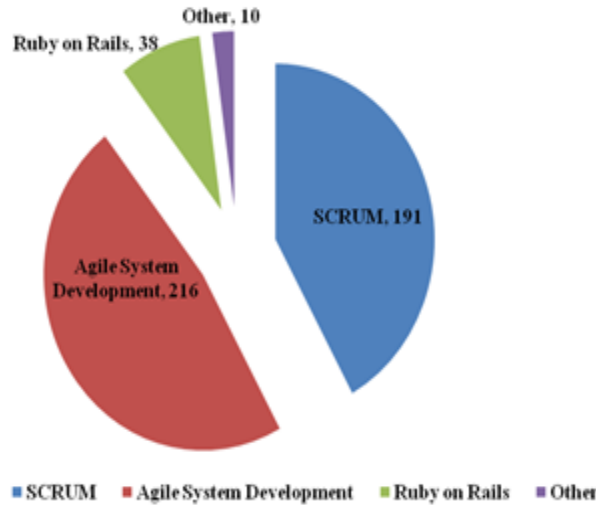


Fig.2: Standard Frameworks and Libraries

6. HYPOTHESIS TESTING

Chi square test for independence of attributes:

The Chi-Square test on independence is used to see if 2 independent (categorical) variables have a significant relationship. One nominal variable's frequency is compared to distinct values of the second nominal variable. An R*C contingency table, in which R is just the row and C is just the column, can be used to present the data.

Hypothesis - There is no association between technology platforms (Web Technologies and Frameworks) and Costing (Cheaper and Expensive).

Chi-Square Test

Frequencies

	Observed N	Expected N	Residual
Cheaper	179	150.0	29.0
Expensive	121	150.0	-29.0
Total	300		

Table 3. Web Technology

	Observed N	Expected N	Residual
0	152	150.0	2.0
1	148	150.0	-2.0
Total	300		

Table 4. Frameworks

	web technology	frameworks
Chi-Square	11.213 ^a	.053 ^a
Degrees of freedom	1	1
Asymp. Sig.	.001	.817

Table 5. Test Statistics

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 150.0.

At 1 degree of freedom, the chi square value of 11.21 (Degrees - of - freedom =1, N=300), value of significance of 0.001 (p 0.05), is significant, indicating that the expected and actual frequencies differ significantly. As a result, the premise that there is no relationship between technological platforms (Web Technologies) and cost can be dismissed (Cheaper and Expensive). As a result, technology platforms (Web Technologies) and cost are linked (Cheaper and Expensive)

At 1 degree of freedom, the chi - square test value of 0.053 (Degree of freedom =1, N=300), value of significance of 0.81 (p> 0.05), is not significant, indicating that there is no significant difference between the expected and observed frequencies. As a result, we can't rule out the possibility that technology platforms (frameworks) and costing are unrelated (Cheaper and Expensive). As a result, there is no link between costing and technology platforms (frameworks) (Cheaper and Expensive)

7. CONCLUSION

This analysis in this research reveals that Agile System Development, SCRUM, and Ruby on Rails can minimize the cost of development of educational software, which is in line with the research's goal of identifying solutions to minimize the cost of development of educational software. The Chi-Square Test, which was used to analyses the data, revealed that there is a link between software platforms (Web Technologies) and costing (lower and higher), but that there is no link between software platforms (frameworks) and costing (Cheaper and Expensive). Some respondents responded that they are unaware of new frameworks for application development and that training is required. Frameworks and open - source software technologies, as well as Codeigniter and Windows Azure, were highlighted by some respondents as ways to cut software development costs. It demonstrates that technological platforms (Web Applications and Frameworks) and cost are linked (Cheaper and Expensive).

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A STUDY OF THE DIGITAL RESPONSE BY RETAILERS IN THE PANDEMIC THROUGH LITERATURE REVIEW.

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Abstract:

COVID-19, the epicenter of the century, has had a profound effect on the entire industry, and on our health in an unprecedented way. The closure announced by the government to monitor the spread of the disease has halted many businesses on a large scale. As a result, US GDP for 2Q2020 (Apr-Jun) decreased by 9%, while UK GDP contracted by 20% (GDP Growth - Second Quarter 2020, OECD, 2020). Such setbacks have never been heard of in the last decade. Against this backdrop, it will be interesting to see how businesses have performed on this issue, what steps they have taken to deal with natural storms, and what technologies they have chosen to survive. A vicious cycle that leads to economic downturns has begun to emerge. Retail is one of the most important sectors of the economy. This paper proposes a strategy to combat the risk or robustness of the digital retail business.

Keywords: COVID-19, Retail, Response, Digitalization

DOI Number: 10.14704/nq.2022.20.10.NQ55468

NeuroQuantology 2022; 20(10): 4897-4904

Introduction

COVID-19, the epicenter of the century, has had a profound effect on the entire industry, and on our health in an unprecedented way. The vicious cycle that leads to economic hardship has begun to grow. Reduced consumption-reduced prices - providing less work-reducing spending - lower consumption - all blocks look good. Against this backdrop, it will be interesting to see how businesses have performed on this issue, what steps they have taken to deal with natural storms, and what technology they have chosen to survive. Retail is one of the most important sectors of the economy. This paper proposes a disaster management strategy for the digital business. In this regard, the paper reviews some recent research in this area. The review focused on the idea of using digital technologies used to combat problems such as Covid-19 to achieve

economic stability. The sector focus is on the retail industry. Another important study planned was an evaluation of the effectiveness of various digital technologies in order to sustain the economic performance of retail companies.

Literature review

Research related to digitalization and marketing in various sectors leading to economic sustainability was conducted to incorporate those related to improving efficiency, creating competitive advantage, reshaping value, restructuring, redefining, integration and integration, cost effectiveness, performance flexibility, and customer focus.

A number of studies in the recent past have focused on the transformation based on digitalization in the Retail sector (Aithal and Aithal, 2019; Dyk and Belle, 2019; Esch et al., 2019; Hänninen et al.,



2019;KaplanandTewes, 2019;Kutnjak et al., 2019; Sachs, 2019; Vojvodić, 2019; WeberandSchütte, 2019; JainandWerth, 2019; Iftikhar et al., 2019; Gajjar, 2020; Lagorio and Pinto, 2020; Gawankar et al., 2020; Jin and Shin, 2020).

A study by Hanninen et al. (2019), states that sales undergo a significant transformation as markets based on multiple segments, such as Amazon, Alibaba, eBay, JD.com, and Rakuten, evaluate active retailers. From thriving brick and mortar stores and the development of shopping malls throughout the 1900s, retailhasgradually become digitized as various markets join online and offline to create customized customer information. Researchers are developing a framework for how multi-dimensional markets integrate their pre- and post-stage activities to create a customizable, useful, and fast-paced shopping experience.

In their study, Koncar et al. (2020), see that retail will change over the next decade. The most compelling reason for this is the digital integration that is dramatically changing the service industry. The digital impact is a common change in retailer's business strategy. The issue and the purpose of this test is to distinguish strong digital marketing strategies that are likely to be successful in the market. New advanced technologies and devices enable retailers to interact directly with consumers, improve shopping experience, and track customers at each location in the shopping cycle. Improved conversions change sales by changing vendor applications. Retailers who successfully use digital strategy get a chance at another market game, people who do not focus on the new risk of losing competition and time. Digital creation involves innovation and a new business idea. As a result of the experiment, digital strategic proposals will be introduced to change the trading business strategy in the modern digital age.

In their study, Barsch et al. (2019), believe that competitors and customers put Local Ownership Stores (LOOROs) under pressure to make digital. Local Shopping Platforms (LSP), unquestionably utilizes LOORO's local quality and proves to be a promising vehicle that enables LOOROs to overcome their complex digital challenges. In this study, by examining 27 LSPs in Germany, Switzerland, and the U.S., the authors classified LSPs as neighbors of e-commercial institutions and determined the use of based typology. In addition, the authors examined how LSPs respond to local LOORO preferences. Despite its obvious role as corporate management institutions and low-level business choice in the LOORO web-based business, research results show that LSPs are currently inadvertently circulating administratively enabled regions that assist the Internet channel, while ignoring LOORO's capabilities of regional managers and neighboring stores such as Point of Sale (PoS).

In a study by Ohlin (2019), the researcher asserts that, with the increasing level of digital integration into the retail space, retail office owners need to adapt their operating system to suit modern times. Web-based business and other advanced tools have transformed the retail business and sitting retailers must be accountable for moving forward in order to stay relevant. Although previous experiments have examined the concept of digital devices in sales or the general impact of improved change in the environment, theory aims to examine the impact of improved change in the vendor's action plan. To assess the impact of digital transformation on the retail office owner app, a single content analysis is directed at Company X, an active retailer operating in Sweden. Business Model Canvas has been used as a tool to visualize the current operating system of the organization and to make recommendations for Company X applications. All the considered scenarios increased participation with external



partners and the creation of new client channels. The research results add to the existing knowledge of changes in vendor systems. This researcher agrees with the conclusions of the previous study that there is an impact of improved change in sales. It suggests new research on the impact of a vendor strategy. The test is similar to the way in which a business model framework can be used as a comparison unit when evaluating strategic options.

In Stark's book (2020), the author presents a study of Digital Transformation from the perspective of a retail store. Existing frameworks are displayed. Many new solutions based on digital technology have been unveiled. Some resulting questions are usually answered. CEO response and input are summarized. The resulting customer survey is being tested, highlighting the need to investigate Digital Transformation in more depth.

Thus, large volumes are available based on the theme "digitalization-led transformation in the field of Retail". In addition, a large number of studies are available based on the topic "economic crisis due to the Covid-19 epidemic" (Hertatiet al., 2020; Kraus et al., 2020; Ritzen et al., 2020; Murugeswari, 2020; Fishedick et al., 2020; Redeker, 2020; Bardt, 2020).

Effectiveness of digital technology

A study by Ferreira et al., (2020), suggests that digital technology has transformed the retail industry. The digital revolution has changed the style, which works together in all industries, from education to health. In this case, the retail industry is not different. It is always influenced by the advancement of digital technology, which adds significant disruptive changes to the competitive environment. Sales are increasingly online as multilateral markets bring together offline markets and create a better consumer shopping experience. In this unique environment, customers are hoping to find hi-tech shopping malls. Entrepreneurs look for

benefits, such as, creating and maximizing new market opportunities by banking with technology tools, creating new operating models, developing and improving their processes in a customer-centered way. The study provides trends in trends in key technologies used and adds potential for future retail trends.

A study by Krymov et al., (2019), argues that digital technology has dramatically changed modern retail industries. The study looks at key issues related to the business transformation model and related product distribution processes based on the knowledge and digital capabilities of the business. Pre-development and the introduction of digital information and technology in the retail space were specifically linked to network distribution. The elements of a digital business that change the sales process and new business processes are brought under the framework: digital creation, personalization, comfortable payments, comfortable and fast delivery. The skills are based on digital principles that enable an integrated product distribution model where the customer chooses the purchase of a comfortable and reliable channel against the convenience and convenience. Components of all forms of economic activity are associated with a new evolutionary trend marked by a deeper familiarity with digital technology and data across all fields of public service. At the same time, the list of key drivers has been enhanced by factors such as business processes for digitalization, as well as the yield of new products that reveal corporate operational status and readiness for structural changes. Thus seeking modern technology just as their use becomes strategic indicators for business leaders. Many business executives understand that business success often depends on their strong adaptation to market needs and the application of new technologies to the company's day-to-day operations. Research has



determined the tendency to devise a new way of dealing with a range of product offerings: multi-channel trading and individual performance. The article contains the presentation of marketing tools to make current store information and product distribution more accessible, to allow for flexible variations in product distribution chains depending on the changes required. The hierarchical values of large corporations are introduced into the system: digitalization, personalization, comfortable and fast delivery, and payments.

A study by Borisova et al., (2020), argues that digital innovation has affected retail organizations. Increasing competition encourages the search for tools to influence consumer decisions. The tightness of client requirements, their tendencies, and the means of communication with providers are a popular area for the continued development of organizations. The digital business climate is influenced by the use of computer systems in organizational activities and the formation of interaction with partners. There is a need to create new programs based on digital technology. Organizations that use these programs evaluate the productivity of their business. Development seeks to maintain a balance of innovation in current performance tests and to ensure the protection of market positions. In addition, there is research speculation about the impact of innovation on the organization's activities in its market performance. Diagnosis is made from the leaders of the Russian retail market. The technology tested in the organization has been categorized, and the business aspects of the business have been evaluated, and the main test of the organization's scientific authority on the variables affecting the presentation of technology has been researched.

In another study, Dannenberg et al., (2020), noted that the German food market expanded

during the corona crisis. COVID-19 has created a huge increase in online commerce. This article explores the impact of the epidemic on online grocery stores in Germany. The authors followed and modified Geels' research methodology (2002 and 2012), and looked at how and why online grocery sales increased during corona pandemic. A special highlight is the expansion of the rural area. Research shows the general rise in grocery trading and the unprecedented high collisions in online grocery trading and differentiates driving and limiting features.

A study by Dong et al, (2017) suggests that digital technology has transformed the service sector including marketing. Factories are increasingly relying on digital technologies, for example, big data, cloud computing, e-commerce, digital tracking, and digital platforms that change business operations and models, and market forces. The Bank of Canada analyzed firms in transportation, wholesale, and retail, to obtain information on the adoption of digital technologies. The findings show that firms are increasing investment in digital technology, often in order to increase efficiency and improve consumer knowledge.

Challenges and Prospects

The future of retail is improving. The transition from traditional physical to digital is inevitable (Ellis-Chadwick, 2018). For a long time, communities have gathered in shopping malls, markets, cities, and shopping malls to promote their products and businesses. However, the development of digital technology, software development, and global internet adoption have changed the way we shop. The impact of this change in consumer behavior has a significant impact on many types of retail outlets, with the same number of organizations repairing the environment, and closing down their actual stores for sale using digital channels. Where the Internet was a highly



secretive workplace used mainly by tech-savvy 30-something, the highest paid boys living in the United States, in less than 25 years the web became a regular trading channel, where half the population could reach. Research is investigating how this store development started, how online shopping has improved, what marketers are striking and the failure of the internet, and what this might mean for the fate of cities and urban areas. Does that mean that visible stores will disappear? Probably not. However, reselling is reshaping quickly and businesses that will thrive in the future will be those with digital products and trading multiple channels.

The Shnorr test (2020), provides an integrated test of digital marketing. The study created the process of testing the necessary delivery of different development by entering the marketplace. The survey demonstrates the importance of critical testing of digital marketing. The author introduces basic research into advanced digital technology in the Russian region. A digital development test has been performed.

McKinsey and the Company, in their report (2020), circulated the proposals for a portion of UK stores due to new developments. They focus on two areas of support - total income and staff transformation. The UK Retail site is at the forefront of development due to three factors - one, with the most significant web-based acquisition rate, two, retail genre has dropped by almost 200 points since 2013, and three, part of a major private sector employer representing ~ 14% of shares in the market. Therefore, innovation is a key foundation for UK retailers to stay fit and productive: the futures trading experience will be driven by visual design and changing consumer preferences while allowing retailers to redesign the operating model and financial issues. By 2030, the test anticipates a new invention (both through channel movement and computer use) that affects 33%

of UK retail shares. To address this, retailers should reconsider all functions and procedures, and similarly make informed decisions about the angle at which they acquire new technologies in all areas that change their reliance on the retail activity. At the same time, this level of progress likewise gives UK retailers the opportunity to lead new work models. All in all, a new 'reboot' design can boost UK retailers' genes by 280–600 basis points. Achieving this will require vendors defining a strategy and setting up a 'control tower' in order to avoid sending more independent and outgoing pilots. Their decisions about innovation will be incorporated with those closest to consumer offerings, functional models, people, and, for larger retailers, their impact and responsibility towards a much wider network.

Analysis and Conclusion

There are various digital technologies in operation in the retail sector. The technology influences customer experience, helps predict demand, effectively manages inventory and delivery models. Few studies have found that digital technology has transformed businesses significantly and had a positive impact on business during the corona crisis. Very likely the potential for further technology distribution will determine the field study and organizations that adopt this technology will emerge as winners (McKinsey & Co., 2020). Several studies have focused on the impact of digital technology in the retail sector. All of these technologies can be used to combat a problem like Corona is a retail industry. These courses point to a bright future for the digital marketing industry. There will be some challenges, however, that need to be addressed. To support this theoretical claim, further research can be conducted based on baseline data from the data examining their actual response to the epidemic.



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**AN EXAMINATION OF INVESTORS' PREFERENCE FOR MUTUAL FUND AS AN
INVESTMENT OPTION**

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ABSTRACT:

Mutual funds give a platform for investors who do not want to take a big risk with their hard-earned money as an investment alternative. The mutual fund industry in India is rapidly growing, and it has established itself as an important part of the Indian financial system, notably in terms of directing and mobilizing millions of people's money into stocks and debt securities investments. The preferences of investors influence the decision to invest in a mutual fund; thus, the study's major purpose is to establish which investors favour mutual funds as an investment option. The study's sample consisted of 500 investors from Ahmednagar city of Maharashtra.

KEYWORDS:

Mutual Fund, Investors, Ahmednagar City, Investment

INTRODUCTION

An investment is a valued thing purchased for income or financial appreciation. Savings are established to prepare for an unexpected event, whereas investments are designed to achieve a specific aim. Individual choices influence the sorts of investments that are available, which are divided into asset classes based on risk and return characteristics. Due to severe inflation, only a few traditional investment avenues give large returns, and the real return from these avenues is extremely low. Previously, bank fixed deposits, savings accounts, and PPF were the main investment options. However, investors understand that traditional investment strategies are insufficient to beat inflation, and that diversification is essential to meet one's numerous life objectives.

OVERVIEW OF MUTUAL FUNDS IN INDIA

As a result of the government's industrial and financial sector reform goal, many new financial instruments have arisen. These mutual fund products have shown to be the most catalytic in the Indian capital market. Small investors, salaried employees, and individuals who are scared by the stock market's intricacies yet wish to reap the benefits of stock market investing might choose a mutual fund. The importance and interest of investors in Indian mutual funds is growing as a result of increased money mobilization and the growing number of schemes and investors in



the company. To meet the expectations of millions of account holders, mutual funds must act as successful institutional investors. The mutual fund market has grown significantly as a result of the high level of precision used in the design and marketing of a variety of mutual fund products.

Mutual funds must behave like successful institutional investors in order to meet the expectations of millions of account holders. Increased precision in the design and marketing of a wide range of mutual fund products has resulted in significant growth in the mutual fund business.

The Indian financial industry provides a wide range of possibilities for investors. Despite the fact that it is not the greatest or deepest market, it has inspired a boom in the mutual fund industry, which today provides reasonable options for ordinary people to invest their money. In reaction to the increased liberalization of economic policies, captive markets and the financial services industry, including merchant banking, leasing, and venture capital, have exploded.

PRESENT SCENARIO OF MUTUAL FUNDS

In the current environment, mutual funds are the most active investing option among all other options. One option is to invest in mutual funds, which will give them exposure to a variety of asset classes based on their preferences based on factors such as their age, financial situation, risk tolerance, and return expectations. Mutual funds provide liquidity, competent management, tax advantages, and higher returns to investors in order to help them achieve their financial goals. They also give units to investors according on the amount of money they contribute, and mutual fund investors are referred to as unit holders.

STATEMENT OF PROBLEM

Only a few traditional investment routes provide a high return, and due to significant inflation, the real return from these avenues is also quite low. However, investors are realising that investing in these traditional avenues isn't enough to overcome inflation. Thus, mutual funds are a rapidly growing sector in India, and they are the most vibrant investment outlet among all other accessible possibilities, providing liquidity, competent management, tax exemption, and higher returns in accordance with investors' needs to accomplish their financial goals.

OBJECTIVES OF THE STUDY

- ✓ To investigate the many investing options available to investors.
- ✓ The purpose of this survey is to find out how much people know about mutual funds and how they can help them invest.
- ✓ To determine the rationale for investing in mutual funds
- ✓ To determine the amount of investor satisfaction with mutual fund investments

SCOPE OF THE STUDY

The study's goal is to learn about investors' preferences, motivations, and degree of awareness when it comes to mutual fund investing. This research aids the general public in comprehending the importance and concept of mutual funds as an investment vehicle, and it will aid in the development of new programmes tailored to the needs of customers.



RESEARCH DESIGN

RESEARCH METHODOLOGY:

This chapter discusses the study's research methodology. It contains a full overview of the study's research methodology.

POPULATION:

The study's population is concentrated in Ahmednagar City. The population provided primary data.

SAMPLE AREA:

The research was carried out in Ahmednagar City. The samples were obtained from a variety of people within Ahmednagar.

SAMPLING TECHNIQUE:

In this investigation, simple random sampling was chosen as the sample method. A total of 500 people were chosen to participate in this study.

SAMPLE SIZE:

Based on a basic random sampling technique, the sample size was limited to 500 samples within Ahmednagar City for this study.

TOOLS FOR DATA COLLECTION:

The questionnaire method was used to obtain data. The research objectives were used to create the questionnaire. Secondary data came from a variety of places, including journals, articles, research papers, and websites.

TOOLS FOR DATA ANALYSIS:

The data was analyzed using both descriptive and inferential statistics.

REVIEW OF LITERATURE

In their study entitled Investors Preference towards Mutual Funds Investments in Chennai City, **S. Rajkumar and Dr. D. Venkatramaraju (2014)**. The purpose of this study was to see if investors choose mutual funds based on liquidity rather than the level of safety they provide. The study also found that while socio-economic parameters such as age, gender, education, income, and savings of investors have a negative impact on their perception of mutual funds, the age of investors and their saving habits are associated.

Rekha Sharma (2015) gave a presentation on mutual fund investors' attitudes regarding Investment Avenue. This research attempted to uncover the primary motivation for retail investors to invest in mutual fund schemes, as well as the sorts of mutual fund schemes in which they prefer to invest. Investors participate in mutual fund schemes for strong returns, safety, and tax benefits, according to the study's findings. It also demonstrates that for better results, people choose growth and balanced programmes.



ANALYSIS AND INTERPRETATION

INVESTMENT ALTERNATIVES PREFERRED BY RESPONDENTS

The distribution of investment alternatives favoured by respondents is shown in the table below.

Table

Investment Alternatives	No. of Respondents	Percentage
Savings Bank	50	10.00%
Fixed Deposit	105	21.00%
Shares / Debentures	48	9.6%
Gold / Silver	52	10.4%
Postal Savings	38	7.6%
Real Estate	26	5.2%
Mutual Funds	93	18.6%
Insurance	88	17.6%
Total	500	100.00%

According to the table, fixed deposits are favoured by 21% of respondents, with mutual funds coming in second (18.6%). Shares and debentures, savings banks, and insurance, on the other hand, are preferred by 37.2% of respondents. Other investment options, such as postal savings (7.6%), gold and silver (10.4%), and real estate (5.2%), are far less popular as avenues.

AWARENESS OF RESPONDENTS TOWARDS MUTUAL FUNDS

The distribution of respondents' awareness levels about mutual fund investment is depicted in the table below.

Table

Awareness	No. of Respondents	Percentage
Aware	440	88.00%
Unaware	60	12.00%
Total	500	100.00%

According to the table, 88% of 500 respondents are aware of mutual fund investing, while 12% are clueless.

REASONS FOR INVESTMENT IN MUTUAL FUNDS

The motivations for investing in mutual funds are depicted in the table below.

Table

Reasons For Investment	No. of Respondents	Percentage
Low Cost	24	12.90%
Tax Exemption	21	11.29%
Safety	22	11.83%
High Return	38	20.43%
Convenient	10	5.38%
Retirement Benefits	18	9.68%



Diversification of Risk	7	3.76%
Liquidity	5	2.69%
Others	41	22.04%
Total	186	100

According to the table, 12.90% of respondents invest in mutual funds for low costs, 11.29% for tax advantages, 11.83% for safety, 20.43% for high returns, 15.06% for convenience and also retirement benefits, 6.45% for risk diversification and liquidity, and 22.04% for other reasons. As seen in the chart above, the majority of respondents participate in mutual funds because of the high rate of return, with the greatest percentage (20.43%).

SATISFACTION LEVEL OF INVESTORS TOWARDS MUTUAL FUND INVESTMENT

The Weighted Average was used to determine the amount of investor satisfaction with mutual fund investments.

Table

Satisfaction of Investors	Weighted Average	Rank
Provides investment as per convenience	2.96	5
Systematic Withdrawal	3.11	4
Provision of online facility	4.11	1
Provides flexible mutual fund option	3.38	3
Satisfied with minimum amount of investment	2.84	6
Open for sale or redemption	3.89	2

As seen in the table above, the majorities of respondents are extremely satisfied with the availability of online services and open for sale or redemption services, with weighted averages of 4.11 and 3.89, respectively.

FINDINGS

- ✓ Fixed deposits are favoured by 21% of respondents, while mutual funds are favoured by 18.6% of respondents.
- ✓ It has been discovered that 88% of respondents are aware, while only 12% are not. This indicates that the vast majority of respondents are well-informed about mutual funds.
- ✓ With the greatest percentages of 20.43% and 12.90%, it is deduced that the majority of respondents participate in mutual funds because of large returns.
- ✓ The majority of responders are really pleased with the online facility as well as the open for sale or redemption facility.

SUGGESTIONS



- ✓ The mutual fund business should focus on raising investor awareness through various activities such as talk shows, seminars, advertising, and direct connection with investors.
- ✓ Most laypeople lack the necessary understanding to invest in mutual funds. As a result, they rely on mutual fund managers, who are professionals in managing profitable portfolios. They should have a clear understanding of when to invest and in which securities to invest, as well as how to mobilize the investor's savings to get the most out of them.
- ✓ The mutual fund sector should concentrate on addressing the issue by offering consistent returns and focusing on portfolio management.
- ✓ By constructing a strong image and focusing on offering sufficient returns compared to other investment avenues, the mutual fund business should focus on creating a positive perception in the eyes of investors.
- ✓ The mutual fund industry should likewise work on clearly describing the funds' performance and functions to investors, emphasizing the importance of transparency.

CONCLUSION

Based on the comments, it can be inferred that while the mutual funds sector is rapidly expanding, many investors are still unfamiliar with mutual funds and their purposes. Various demographic parameters such as educational attainment, occupation, and annual income have a substantial impact on investor awareness. In terms of safety, the study found that mutual funds are the most popular investment option, followed by fixed deposits. The study also indicated that the main reasons for investing in mutual funds are high returns and cheap costs, and that the majority of investors are satisfied with their mutual fund investments. The respondents also express a desire to put their money in mutual funds in the future. As a result of the research, it can be determined that each investor has their unique mutual fund investment objectives.

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APPLICATION OF LOGISTICS MANAGEMENT IN INTEGRATED SUPPLY CHAIN MANAGEMENT SYSTEM

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Abstract

Logistics management is an important aspect of supply chain management, and supply chain management is an effective management method. Logistics is a physical activity that transports materials from producers to consumers in exchange for a monetary value. A supply chain management system's logistics management is a unified planning logistics system. It features supply chain aspects as well as integration benefits. It also improved the agility of the logistics system, allowing businesses to operate more efficiently and generate more profit. The essential principles of supply chain management and logistics management are explained in this article, followed by an analysis of logistics management in a supply chain management system. This paper presents the basic concepts of supply chain and logistics management, analyses the supply chain management system, and highlights the issues that need to be addressed.

Key words: Supply chain management, logistics management, inventory control, warehousing

Introduction

The concept of Supply Chain Management (Supply Chain Management, SCM) emerges at an extremely dynamic in the 1980s, whenever the integration of logistics by the enterprise internal logistics activity across the border from enterprise collaboration across different enterprises. Some with significant management experience and advanced logistics management levels of world-class organizations are required to properly understand and first put forward the concept of supply chain management. These companies revealed during their enterprise development strategy research that, in the face of increasingly fierce market competition, it is difficult to gain an advantage solely through a business or a product; rather, the enterprise must form long-term and strong alliances with raw material suppliers, product distributors, and third-party logistics services, resulting in the joint construction of a high-efficiency and low-cost supply chain, allowing them to remain calm in the face of market competition and win.

Concept of Logistics Management

There is a contrast between narrow and broad logistics management. Materials procurement, transportation, warehousing, and distribution activities are all part of special logistics management, which is a type of logistics activity that occurs between businesses. Generalized logistics management encompasses the material transformation process in the manufacturing process; as a result of this, supply chain management is frequently mistaken for logistics management. Although there are parallels between logistics and supply chain management, there are distinctions in the scope of management, management perspective, and the interaction between the business and a significant. As can be seen, supply chain management is the result of logistics management, logistics management is an important content of supply chain management, and supply chain management efficiency is highly dependent on procurement, transportation, warehousing, and distribution logistics operation links, as well as management and operation conditions. As a nutshell, logistics management is the basis and cornerstone of supply chain management, and it plays an important role in overall efficiency.

Classification of Logistics Management

Purchasing logistics and logistics, distribution logistics, factory return logistics, and waste recycling logistics are all examples of manufacturing logistics.

Logistics of purchasing: Carry raw materials and spare components into the production from suppliers, including recycling containers, and use returned logistics on a regular basis.

The logistics of the plant Inventory, storage, and delivery: The logistics of the plant Inventory, storage, and delivery should all be done with the purchased raw materials and pieces. Transport the commodities (products) to the logistics Centre, factory, or another factory warehouse. This product inventory, storage, dispatch, and there is a series of products flow called plant logistics, logistics in plant is also included in the logistics Centre and the factory warehouse

The logistics of distribution: Distribution logistics is the process of moving items from a factory, logistics development, or other warehousing units into the hands of wholesalers, retailers, or transportation consumers. Outside transportation and distribution units are used to send items to warehouses as part of distribution operations.

Logistics of the return: Return goods transportation, acceptance, and filing.

Logistics for waste recycling: Trash packing containers, packaging materials, and other waste transit acceptance, storage, and output for transportation packing, distribution processing, and so on.

Six Development Stages of Logistics

1. The first step is the beginning of the logistical process. Separately, the logistics communicate with each other based on distinct functions and places. Storage and transportation will be done in accordance with the needs of the manufacturing and sales departments.
2. Individual management is the second step. The advent of logistics cost consciousness, which is currently handled solely by the department or shipping department in an effort to cut costs.
3. Comprehensive Management is the third stage. Comprehensive management began to be established as a separate company logistics management department. Take steps to address difficulties involving the best possible mix of diverse logistics functions. Logistics is predicated on production and sales.
4. Logistics stage is the fourth stage. The logistics stage has an impact on production and sales. For the production department, difficulties at the product design stage should be considered from a logistics standpoint. Require logistical efficiency, universal packaging specifications, and respect for production planning flexibility; for the sales department, a planned order, the number of units in the order, and delivery time, among other things, should be required. The pursuit of "the third profit source" enterprise
5. The whole system period is the fifth stage. It is a new logistics that has entered a new era of tiny batch and numerous variants delivery. The corporation needs to reach an agreement. This stage has more members, based on production and sales employees, in order to run the main leadership of the chairman of the committee system. Setting up this system, logistics will become the content of production and sales, and the logistics department will only need to set up the logistics system utilizing logistics knowledge and information.
6. The sixth stage is the time of production, marketing, and logistical integration. Compare the various conditions of goods sale, delivery, out of stock, inventory, and stock status with the sales strategy and production plan as a first step. Compare current inventory to a baseline inventory (stock plan), then repeat the process on a regular basis. Determine the discrepancy between the plan and the actual situation and propose solutions. Based on the production and sales plans, we revised the production and purchasing plans, as well as the logistics plan. This revision is appropriate for various periods and sales, as well as the revision of the enterprise's overall production and logistics operation, which we refer to as the establishment of logistics information integration as the system's core. This revision is appropriate for various periods and sales, as well as the revision of the enterprise's overall production and logistics operation, which we refer to as the establishment of logistics information integration as the system's core.

Concept of Supply Chain Management

The basic idea of supply chain management is to combine suppliers, manufacturers, distributors, retailers, and customers effectively into an organic whole to produce goods and transport the appropriate quantity of goods to the right place at the right time while keeping the system under the target of minimum cost.

Principles of Supply Chain Management

The analysis of the relationship shows that no matter what type of supply chain it is, there are two basic things in common: the first is that cooperation among supply chain members should be positive in order to provide benefits to partners through information sharing, planning, and joint business; the second is that the cooperative way of members has positive significance in order to eliminate the supply chain risk sharing bottleneck and achieve cooperation interests.

1. The supply chain is a one-way process; each link in the chain is not divided from the others, but is connected as a whole.
2. Supply chain management is the total strategic management of the process; if merely relying on a portion of the link information, the plan may fail due to information limits or distortion.
3. Different inventory views on different links, in logistics supply chain management, don't take measures to maintain inventory production and sales, it's considered the supply chain mechanism's balance.
4. Management of supply chains adopt new management approaches, such as: instead of using interface methods, use the overall comprehensive method: remove the weakest chain to achieve overall balance; To avoid signal amplification, employ a simpler supply chain strategy: the economic cybernetics method is utilized to establish control and so on.

Supply chain management is more common in Europe, and it is linked to logistics knowledge. The concept of comprehensiveness is constantly emphasized in the European concept of logistics, with less emphasis on the concept of separation. Britain is in the lead in this area, having adopted the new concept of integrated logistics, which focuses on the overall strategic aim rather than a particular advanced link.

The Fourth Party Logistics

According to the content of the business definition, the fourth party logistics provider is a supply chain integrator with different resources, capabilities, and technology integration and management than the company's internal and complementary service providers, providing a complete set of supply chain solutions. In recent years, there has been development and testing of fourth-party logistics on the international level. The basic content of the fourth party logistics management are as follows:

Execute: consider a variety of supply chain functions and operations. 4pl begins to assume responsibility for a variety of supply chain tasks and operations. Manufacturing, purchasing, inventory management, supply chain information technology, demand forecasting, network management, customer service management, and administrative management are all part of its transportation scope of work, which extends far beyond traditional third-party logistics management and warehouse operations. Despite the fact that a firm can outsource all supply chain activities to 4pl, it is more common for 4pl to be involved in the supply chain function and some important aspects of the process.

Implementation, process integration, system integration, and operation: A fourth-party logistics service offers a new business plan to assist customers with implementation, including business process optimization, system integration between client companies and service suppliers, and business operations transfer to the 4pl project operation team. Because the "people" component is typically the key to success or failure in the business to the management of 4 pl., the project implementation process should pay more attention to organisational change. The main goal is to avoid a well-designed strategy becoming an ineffective process implementation, limiting the scheme's efficacy and affecting the project's projected outcomes.

Change: Change efforts concentrate on enhancing the supply chain of a specific function using new technologies to realize the strengthening of multiple functions of the supply chain. Sales and operations planning, distribution management, purchasing strategy, and customer service are just a few examples. At this level, supply chain management technology plays a critical role in the scheme's success or failure. To develop the best solution, integrate and optimize supply chain activities and processes, leading and advanced technology is integrated with strategic thinking, process reengineering, and organization change management.

Reengineering: The process of collaboration in the supply chain, as well as the redesign of the supply chain. Reengineering is the highest level of the fourth-party logistics solution. It is through each link programme and the operation of the coordinated, it is through the numerous participants working together to make real meaningful improvement in the supply chain process. The reengineering process is based on traditional supply chain management consulting skills, which are used to develop the company's business plan and supply chain coordination strategy. At the same time, the technology used in the process acts as a catalyst, allowing it to integrate and optimize the internal supply chain as well as the cross-section of a supply chain's performance.

Characteristics of the Fourth Party Logistics

1. A high level of information- Professional service providers provide the fourth-party logistics information system, which has a greater information level.
2. Broad- The scope of business for fourth-party logistics far exceeds that of third-party logistics, and includes supply chain structure determination, supplier evaluation and selection, production planning, inventory and distribution management, marketing management, and product creation.
3. The importance of fourth-party logistics technology outsourcing is highlighted- The third party logistics outsourcing is primarily a tangible logistics business, while the fourth party logistics outsourcing is primarily invisible technology.
4. The fourth-party logistics company's quality demand for its staff is quite high- Because the fourth-party logistics company is a technological services consulting firm, the employees must possess not only a broad range of modern management skills and knowledge, but also a strong ability to anticipate and adapt to changes in the environment.

The value of the fourth party logistics

Fourth-party logistics combine the ability of a group of service providers, such as third-party logistics, information technology suppliers, contract logistics providers, call centres, telecom value-added service providers, and others, with the ability of the customer and the fourth-party logistics' resistance. In brief, fourth-party logistics meets demand for today's vast and complicated supply chain solutions by delivering comprehensive supply chain solutions.

The application of logistics management under supply chain management applied in the logistics supply chain management of inevitability

Many factors limit the development of the logistics system, including customer and environmental conditions in various consumption areas, shipping, logistics costs, inventory control, and so forth. Supply chain management is a type of unified planning of logistics system that has the features of supply chain management and integration advantages. It is used in logistics supply chain management. Supply chain management improves the process ability of rapid restructuring, promotes the agility of the logistics system, and eliminates unvalued the supply chain logistics system provides a basic guarantee to further reduce the cost and fine operation with the idea of business process reengineering. The supply chain is viewed as a whole, and cooperation and coordination are key aspects of supply chain management. In this context, the logistics system must be flawless, and its general coordination must be reinforced, so that items can be transported on time and customers' needs can be met quickly. To ensure the success of a supply chain prerequisite, procurement of commodities cannot be stalled on the road. To improve collaborative supply chains, supply chain logistics systems must achieve a high degree of harmonization.

Logistics management focuses on the function of internal enterprise integration, whereas supply chain management considers all node enterprises in the supply chain as a whole and stresses enterprise integration and connection. Supply chain management is the consultation mechanism, while logistics management is the planning mechanism. It is an open system that involves the coordination of exchanging demand and inventory information in order to decrease or remove buffer stock between supply chain participants. Supply chain management is more than just a logical extension of logistics. It is not enough to recognize the importance of internal integration in supply chain management, which focuses on the optimization of "flow" in organizations. As a result, the logistics supply chain has not only optimized the traditional logistics system, but has also advanced the logistics system to a higher degree of development, broadened the logistics of the branched chain, and improved the supply chain management effect.

The characteristics of logistics management under the supply chain management system:

Integrity is a distinguishing feature of logistics management, which is an important aspect of supply chain management. In the process of supply chain management, information is very important; information is transferred step by step between enterprises, and deviation information is passed along the direction step by step; it is difficult to avoid information distortion, and the information utilization ratio decreases. Furthermore, the logistics management concept's general environment is devoid of comprehensive planning; each company in the chain is mainly concerned with its own resources, and there is little communication and cooperation between them. This frequently results in increased inventory on the one hand, but when market demand can no longer be satisfied, corporate inventory costs skyrocket, and opportunities are lost due to inadequate logistics between businesses. It is the strategic cooperation relationship between each link in the supply chain management system, with the interests of consistency, the exchange of information is not limited by time and space, the flow of information increased, achieving the network transmission way of information, and the parties increased in the degree of information sharing, avoiding information distortion.

In addition, supply chain management, as part of the logistics management system, contains the following characteristics.

1. Improve the logistics system's ability to react quickly- The Internet is a technology support for supply chain management, allowing its members to collect and process information in real time, reducing the cost of the supply chain logistics system while also providing basic security in order to actualize its agility and fine operation.
2. To increase the logistics system's seamless connectivity-Without the seamless integration of logistics systems, customer demand will not be met on time, tangible and intangible costs will rise due to materials purchases midway up, and so on, lowering the value of the supply chain.
3. Enhance the percentage of client satisfaction-With a supply chain management system in place, businesses can immediately understand current and potential client unique requirements, allowing them to adjust their actions in response to market demand and supply. So that businesses can provide goods or services to clients faster and more cost-effectively than their competitors, while significantly boosting service quality and customer happiness.
4. The expansion of the logistical service mode-With the advancement of current information technology and logistics technology, the logistics service mode is becoming increasingly flexible and diverse. In order to meet the demands of worldwide operations, third-party logistics companies specializing in logistics services and joint inventory management of distribution centres arose among various countries in international logistics.

Functions of the logistics management under supply chain management system

Inventory control. It is beneficial to the entire supply chain coordination and operation by using inventory management to shorten the cycle of orders, transportation, and payment, accelerate inventory turnover, and decrease and eliminate shortage situations.

The managing of orders. Orders to the supplier process were issued, mostly for order supplier management, contract management, and order management. Through supply chain management, enterprise distribution of documents available on the entire supply network planning, and issue purchase orders to automatically supply chain, through contract management in supply and demand both sides establish a long-term relationship, by checking the order quantity order form and submitting it to the supplier, and paying for the goods that have been received.

Distribution planning. The management process for goods and materials entering the distribution centre consists of numerous areas, including distribution, physical inventory management, transportation demand management team management, labour management, and so on.

The administration of the warehouse. In addition to the feeding, acceptance, coding, and storage of receiving items, warehouse management also involves the purchase and selling agents, transportation, distribution processing, and inventory control, and so on for outbound goods.

Relationship between the supply chain management and logistics

Logistics is a vital aspect of the supply chain, and it runs the length of it, connecting each link and forming the links that bind businesses together. In the process of developing a supply chain logistics plan, the following issues must be considered: to segment clients and calculate the appropriate customer care levels for various sorts of customers, such as ordering cycle, mode of transportation, and so on; Each product category, which is categorized based on product sales, can employ a variety of techniques. Order entry, order execution, and delivery jobs account for a large portion of logistics activities, so we need to make the entire supply chain logistics process more efficient through technology and management, particularly for the interface between member enterprises, where integrating can eliminate redundant workflow and improve logistics efficiency. Each member firm should limit the negative effects of unknown elements by enhancing cooperative relations and employing current management methods and techniques to accomplish accurate forecast and information exchange.

Conclusion:

The logistics supply chain management environment has gained widespread acceptance, with examples including Wal-Mart sales distribution system planning and Nestle's VMI programme in Taiwan. Logistics under the supply chain management environment is more practical and productive. Enterprises can design a new enterprise management mode using logistics in a supply chain management environment, which overcomes the flaws of traditional logistics, is more adaptable to enterprise expansion, and can lower costs and increase profits.

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