

NEW HORIZONS IN BUSINESS: UNDERSTANDING EMERGING TRENDS AND OPPORTUNITIES



Chief Editor
Dr. M. Thamarai Kannan

NEW HORIZONS IN BUSINESS: UNDERSTANDING EMERGING TRENDS AND OPPORTUNITIES

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President Message



Thiru. R. Sivakumar
President

A little progress each day adds up to big results. The secret for success in college is remembering that the idea of success is relative; Because we all have different priorities, goals, and values. The word SMART denotes Specific, Measurable, Achievable, Relevant and Time-bound. I am happy with the smartness bound by PG and Research Department of Commerce which aims to through vision about Innovation and creativity in trade, commerce and industry among students. The department constantly remains in touch with corporate to understand the needs of the industry and bridge the gap between academic and industry.

The department has rightly organised the International Conference on “Creativity and Innovation – Enhance Business Growth and Succession”. Creativity is inevitable in every industry and occupation, and companies are actively looking for innovative people who can effectively communicate their ideas to promote greater productivity in business. However, fostering imaginative thinking often starts with a business’s corporate culture and its approach toward innovation, collaboration, and recognition. The Sustainability in **business refers to the effect of companies to hold its position in the ever-changing environment or society.** A sustainable business strategy aims to have impact on the transformation of business to the present competitive world. Hence, this conference will help the students to know the innovations, current trends and its impact in business to meet sustainability.

I Congratulate the initiations taken by the PG and Research Department of Commerce for their team work and sparkling efforts charmed by faculties and students’ friends.

“Determination is the power that sees us through all our frustrations and Obstacles. It helps in building our willpower which is the very basis of success.” – A.P.J. Abdul Kalam

Thiru.R.Sivakumar
President, Erode Vidya Sangam &
Sri Vasavi College, Erode

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Secretary Message



Thiru. N. Sadasivam
Secretary

The future is increasingly linked to the challenges of the global community. The 21st century student need to work for international companies and hence they will have to manage employees from other cultures, collaborate with people all over the world and solve global problems. From my opinion - Strong Accounting Knowledge, Business Interest, General Knowledge, Excel work, Communication, Fluency, Critical Thinking with Process and Time Management are the best skills that a commerce student must develop. We also have to develop two most important tenets of Indian culture namely Human Values and Holism. Human values refer to moral, spiritual and ethical values while Holism means oneness or unity. Indian culture is very rich and diverse and teaches us to be tolerant to others.

The title of the International Conference on Creativity and Innovation have always been a sure pathway to business success. Stimulating creativity and exploring new ideas and digital business strategies increase the organization's productivity. Developing a suitable marketing strategy accordingly considering the latest innovations creativity to achieve success in the business is the need of the hour.

Sustainability in industry 4.0 is the **current focal point of industrial experts and researchers**. It provides the technology required for companies to overcome environmental challenges like global warming and climate change while simultaneously promoting industrial growth and efficiency. Keeping all these factors in view, the conference has been coined with the title to reach both businessmen and customers as a whole. I am proud that I am Commerce Alumnus of our college.

“Education is discovering your full potential and flourishing that potential for the benefit of the humanity.” – Amit Ray

Thiru.N.Sadasivam
Secretary, Sri Vasavi College, Erode.

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Principal Message



Dr. P. Sivaprakasam
Principal (i/c)

Sri Vasavi College, sponsored by Erode Vidya Sangam, is entering the fifty-four year of its fruitful service in education. Our institution was approved as a co-educational institution in the year 1997-98. Our college is affiliated under Bharathiar University, Coimbatore. The course level objectives and outcomes are specified in the Syllabus of each Course. The College is offering 21 Under Graduation programs of which 13 are science programs and 8 are Arts programs. The College also offers 4 Science program and 3Arts programs in post-Graduation. Our college also offers 13 M.Phil and Ph.D Research Programs under Various disciplines. The program outcome of the college consists in moulding students and incorporating various attributes viz., knowledge, research analysis, skill, attitude, communication skill, ethics, team work and make them competent to contribute to the welfare of the society.

As the Principal of the college, I feel honoured and privileged to be part of an educational institution where every stakeholder is a learner and every day is an opportunity to learn new & developing concept. We look at ourselves as a community of learners, where everyone learns.

At the outset, the PG and Research Department of Commerce have rightly chosen their conference topic which is of almost important for the business world and society. The team has rightly designed the sub themes on Creativity, Innovation, Environment and Sustainability. I wish them all a grand success!!

Try not to become a man of success. Rather become a man of value. – Albert Einstein

Dr. P. Sivaprakasam
Principal (i/c), Sri Vasavi College, Erode.

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Head of the Department Message



Dr. M. ThamaraiKannan

Head and Associate Professor of Commerce

The Department of Commerce was established with B. Com Programme in the year 1969-70 and M. Com programme during 1975-76 with the specification as the first Post Graduate Programme of our college. Our department offers full-time and part-time research programme leading to M.Phil and Ph.D. in Commerce from 1975 onwards. The Department has produced 257 M.Phil., and 83 Ph.D., graduates so far. There are ten regular faculty members qualified with doctoral degree in the field of commerce.

Of addition seven faculty members have also qualified with NET/SET. Our department maintains library and Knowledge Resource Centre with 1075 books and e-resource centre for research purpose. The department is funded by UGC in the year 2008-09 and offers Career Oriented Certificate Course in Office Management, through which a separate lab with 30 computers were established. Further, the department has produced meritorious alumni to the society positioning as Educationalist, Entrepreneurs, Chartered Accountants, Bank Administrators, Professors, Teachers, Consultants and Government administrators and employees. I feel proud to say that I am one among them as Commerce Alumnus of our college.

About the International Conference, I am very much delighted to thank our faculty members for their endless efforts taken. The title speaks about the current fostering and nourishing impact of business needs for sustainable growth and development of the society. The topics focus on creativity with New products, Target market, International market with cost reduction; Innovative aspects on Information and technology, Entrepreneurial Traits, Trends and Transmission, Problems in adoption, Cultural Effects; Environment issues on challenges, Identifying Opportunities, Industrial processes, Environmental barriers & Legal issues; Sustainability progress towards development practices, industry 4.0, Environmental and biological Protection, Pollution control and Proper mechanism. We hope this conference will help the young and energetic minds to revamp a better future!!!

The difference between a successful person and others is not a lack of strength, not a lack of knowledge, but rather a lack in will. – Vince Lombardi

Dr. M. ThamaraiKannan

Head and Associate Professor of Commerce,
Sri Vasavi College, Erode

About the Chief Editor

Dr. M. ThamaraiKannan is an accomplished and experienced educator, researcher, and author with 30 years of teaching experience in higher education. In 2004, he earned his Ph.D. in marketing and has since made significant contributions to the field.

He has guided 50 M.Phil and 21 Ph.D. scholars, demonstrating his commitment to mentoring the next generation of researchers. He has also published 43 articles in National and International journals, showcasing his expertise and knowledge in the field.

Since 2017, Dr. ThamaraiKannan has served as the Head of PG and Research Department of Commerce at Sri Vasavi College in Erode, Tamil Nadu. As a result of his dedication to teaching, he has inspired and educated countless students. Dr. ThamaraiKannan has also published 7 books in the last five years, solidifying his status as a highly accomplished author and a leading voice in the field of marketing.

He has been honoured with numerous awards throughout his career, including the Silver Medal for meritorious service in NCC, the Life Saver Award by NCC Organization, and the Rajiv Gandhi Gold Medal Award for Individual Achievement and National Development from the Global Economic Progress & Research Association (GEPRA) in August 2013. He was also awarded the Man of Achievement Award for the year 2015 by the Rotary Club of Bhavani for his exemplary service and contribution to the community.

Furthermore, he has significantly contributed to promoting diversity and inclusivity in education by raising the NCC Girls wing in the College. He has also secured funding for two projects by the University Grant Commission worth Rs. 200000 lakhs and above, which showcases his expertise in grant writing.

Dr. M. ThamaraiKannan is a respected and accomplished educator, researcher, and author with a proven track record of success. His wealth of experience and knowledge make him an invaluable asset to any academic institution or research organization.

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A STUDY ON CUSTOMER ENGAGEMENT IN SOCIAL COMMERCE

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ABSTRACT

The purpose of the study to examine A study on customer engagement in social commerce. The primary data is collected from the regular and frequent users of Face book, Snapchat and Instagram users those who have completed the age of 18. A survey-based empirical study with 378 respondents will be conducted with the help of Virtual Snowball sampling techniques. The structural equation model is used to test the model's hypotheses. Therefore, this study developed a research model based on customer engagement in social commerce. This study is to analyses the engagement behaviour on online brand communities and the influence they have on the customers' attitude towards a brand which further develops the purchase intention of the customer. The findings of the survey report age, educational qualification, Occupation and level of customer attitude towards Customer Engagement in social commerce are associated hold good. From the analysis, it is concluded the there is a close relationship between age and educational qualification of the respondents and the level of Customer Attitude towards Customer Engagement in social commerce. The study highlights the significant relationship between the socioeconomic background and factors of these study variables.

Keywords: Customer engagement, Customer attitude, buying Behaviour, Social Commerce.

1. INTRODUCTION

The rising popularity of social networking in recent years has changed way of buying behavior (J chen, 2015). Social commerce is a new form of e-commerce that applies the features of Web 2.0 technologies to design a customer-oriented business. Customer have become able to establish contacts more quickly through new forms of interactivity by social platforms (Hennig-Thurau 2010). It enables customers to generate contents for the purpose of sharing information about their shopping experiences and conduct social interactions in purchase processes. Consumers can purchase goods directly from some social commerce sites. They connect customers with each other and encourage them to review, rate, recommend, share and then promote their purchase intention (Hajli, 2015). Customer engagement behaviours on social media have the potential to strengthen relationships between firms and customers (Ajiboye 2019). customer engagement on social media defined as “the extent to which the organization’s important customers are active in using social media tools” (Guesalaga 2016). Purchase intention is a component of consumer cognitive behavior on how a person intends to buy a specific product or service (Ling et al., 2010). Compared with fan pages and virtual communities of social commerce, the direct purchase mode is much closer to situations requiring consumers to make purchase decisions, thereby actual behaviors or intentions during purchase processes can be more easily detected (Chao Liu 2018). With the immense popularity

of social media platforms there is a drastic shift from conventional Word of mouth to electronic word of mouth. Customers have become able to establish contacts more quickly through new forms of interactivity by social platforms (Hennig-Thurau 2010). They connect customers with each other and encourage them to review, rate, recommend, share and then promote their purchase intention (Hajli, 2015). Cheung and Thadani (2012) found that 91% of users said they would like to refer to online reviews, blogs, and other forms of user-generated content before purchasing new products or services, while 46% of users indicated that these contents impacted their decisions. The purpose of the study to analyse a study on customer engagement in social commerce.

2. LITERATURE REVIEW

To examine A study on customer engagement in social commerce, number of studies were conducted by researchers throughout the world. Based on that huge number of relevant studies were reviewed to get clear understanding about the selected topic to carry on the research in better manner.

social media helps to develop online communities and motivate the community members (Alghrabort, R.S., 2020). A successful social marketing is based on a thorough understanding of customer (Thogersen, J., 2007). Integrated marketing communication tool that provide consumers with greater value in the form of real information from actual customers (Yadav, M., & Rahman, Z. 2018). Social commerce information sharing activities improve trust in sharing commerce platforms and reduce perceived privacy risk, which can improve decision-making and purchase intent significantly. In social commerce platforms in emerging markets, trust and perceived privacy risk are important determinants of purchase intention, with people who have more trust and less perceived privacy risk having more intention to buy (Bugshan, H., & Attar, R. W. 2020). Facebook has become a marketing channel to reach targeted people and getting reviews, feedbacks, and comments (DAS, S., 2008). Therefore, customers are increasingly using social media to tell their peers about the knowledge, information, and experiences they have regarding a good or service (Hajli, N. 2015). Likes on social media sites have the potential to influence users' purchase decisions and recommendation decisions on a linked e-commerce site. One-click social cues, such as like (on Facebook) or love (on Instagram), are one of the most common information cues on social commerce sites. It's more likely to purchase and suggest a product on the connected e-commerce site when you have more Facebook likes. A small number of Facebook likes does not imply enough power to influence users' decisions (Bhattacharyya, S., & Bose, I. 2020). This is highlighting the fact that education plays a very little role in social commerce (DAS, S., 2008). Facebook was the most popular social network, with an 83 percent penetration rate. In students between the age group of 21yrs – 31yrs was mostly involved and buying intention on social media (Chen, C. C., 2018). The social scene online was dominated by youngsters and that this trend was increasing social satisfaction among its users. Another important factor was a user's income, which increased as people's income increased, as did their internet spending (Khan, A. S., 2016). After reviewing the above literature, the research gap for the current study was found. In comparison to other studies, the study carried out in India is one of the very few of that focused on customer participation in social commerce. Based on that, the gap was filled by the researchers by conducting the study to examine A study on customer engagement in social commerce. Hence, the researchers tested the significant impact of customer attitude and customer engagement in social commerce.

3. OBJECTIVES OF THE STUDY

- To study the demographic and socio-economic profile of the respondents.

- To study the customer engagement behaviour in social commerce.

4. METHODOLOGY

The survey method is being used to gain valuable insights into A study on customers engagement in social commerce. The proposed research relied based on primary data. The primary data is gathered from regular and frequent Facebook users, as well as other social commerce users and who are over the age of 18. A survey technique was used to collect data and obtained 378 respondents will be conducted with the combination of virtual snowball sampling techniques. A well-designed questionnaire is used to obtain the primary data. The questionnaire issued through Facebook, Instagram and Snapchat users. The questionnaire is framed with 3 sections. The structured questionnaire including dichotomous, multiple choice and semantic differential questions. The first section of the questionnaire is framed to obtain the socio-economic background of Social Commerce platform users, the second and third section of questionnaire is designed in Linker’s 5-point scale used for gathering customer engagement and purchase intention behaviour. The Cronbach’s alpha test will be used to test validity and reliability of the questionnaire. The collected data is analysed by using statistical package for social sciences (IBM SPSS 20). The following statistical tools is used in the proposed research is Descriptive statistics, Chi-Square test, Karl Pearson’s Co-efficient of Correlation, ANOVA, and Structure Equation Modelling (SEM). As shown in Table1, the sample characteristics revel that although the 32.53% were male and 67.46% were female. The ages of the social commerce users were as follows: 26.19% were between 18 and 30 years, 30.68% were between 31 and 40 years, 23.54% were between 41 and 50 years, 19.57% were above 50 Years. Regarding the educational level, 7.93%of the respondents had finished School level, 11.90% had finished Diploma, 16.13% had finished UG level, 46.56% held a PG level, 17.46% held a Professional Degree. The annual incomes of the respondents were as follows: 31.48% had a Below 10000, 27.77% had between 10000-20000, 15.07% had between 20000-30000, 10.05% had between 30000-40000, 15.60% had Above 40000. Time spending in social media as follows: 26.98% had Less than 1 hr, 37.56% had 1 – 3 hr, 20.10% had 3 – 4 hrs in a day, 15.34% had More than 4hrs.

Table 1. Demographic Profile of Respondents

Sample Characteristics	No of respondents	Percentage%
Gender		
Male	123	32.53%
Female	255	67.46%
Age		
18 - 30 years	99	26.19%
31 – 40 years	116	30.68%
41 – 50 Years	89	23.54%
50 years Above	74	19.57%
Educational Background		
School level	30	7.93%
Diploma	45	11.90%
UG Level	61	16.13%
PG Level	176	46.56%
Professionalist	66	17.46%

Monthly Income		
Below 10000	119	31.48%
10000 – 20000	105	27.77%
20000 – 30000	57	15.07%
30000 – 40000	38	10.05%
Above 40000	59	15.60%
Time spending in social media		
Less than 1 hr	102	26.98%
1 – 3 hrs	142	37.56%
3 – 4 hrs	76	20.10%
More than 4hrs	58	15.34%

5. DATA ANALYSIS AND INTERPRETATION

5.1 AGE

In order to find the relationship between the age of the respondents and their level of Customer Attitude towards Customer Engagement in social commerce, a chi-square test was employed and the result of test is shown in the following table.

Null Hypothesis (H₀): There is no significant relationship between age and level of Customer Attitude towards Customer Engagement in social commerce.

Alternative Hypothesis (H₁): There is a significant relationship between age and level of Customer Attitude towards Customer Engagement in social commerce.

Table 2.
AGE AND LEVEL OF CUSTOMER ATTITUDE TOWARDS CUSTOMER ENGAGEMENT IN SOCIAL COMMERCE (CHI-SQUARE TEST)

Factor	Calculated χ^2 Value	Table Value	D.F.	Remarks
Age	119.861	12.812	4	Significant at 1% level

It is examined from the above table that the calculated chi-square value is greater than the table value and the result is significant at 1% level. Hence, the null hypothesis (H₀) is rejected and the alternative hypothesis (H₁) is accepted. The hypothesis, “Age of the respondents and the level of Customer Attitude towards Customer Engagement in social commerce” are associated, holds good. From the analysis, it is concluded the there is a close relationship between age of the respondents and the level of Customer Attitude towards Customer Engagement in social commerce.

5.2 EDUCATION QUALIFICATION

In order to find the relationship between the educational qualification of the respondents and their level of customer attitude towards Customer Engagement in social commerce, a chi-square test was employed and result of test is shown in the following table.

Null Hypothesis (H₀): There is no significant relationship between educational qualification and level of Customer Attitude towards Customer Engagement in social commerce.

Alternative Hypothesis (H₁): There is a significant relationship between educational qualification and level of Customer Attitude towards Customer Engagement in social commerce.

Table 3.
EDUCATIONAL QUALIFICATION AND LEVEL OF CUSTOMER ATTITUDE TOWARDS CUSTOMER ENGAGEMENT IN SOCIAL COMMERCE (CHI-SQUARE TEST)

Factor	Calculated c^2 Value	Table Value	D.F.	Remarks
Educational Qualification	85.768	18.090	6	Significant at 1% level

It is observed from the above table that chi-square value is greater than the table value and the result is significant at 1% level. The result showed that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. The hypothesis, “Education Qualification of the respondents and level of Customer Attitude towards Customer Engagement in social commerce.” are associated that holds good. From the analysis, it is concluded that there is a close relationship between educational qualification of the respondents and their level of customer attitude towards customer engagement in social commerce.

5.3 OCCUPATION

In order to find the relationship between Occupation and Level of Customer Attitude towards Customer Engagement in social commerce, a Chi-square test was used to test the hypothesis and the result of the test is given below.

Null Hypothesis (H_0): There is no significant relationship between Occupation and Level of Customer Attitude towards Customer Engagement in social commerce.

Alternative Hypothesis (H_1): There is a significant relationship between Occupation and Level of Customer Attitude towards Customer Engagement in social commerce.

Table 4.
ASSOCIATION BETWEEN OCCUPATION AND LEVEL OF CUSTOMER ATTITUDE TOWARDS CUSTOMER ENGAGEMENT IN SOCIAL COMMERCE (CHI-SQUARE TEST)

Factor	Calculated c^2 Value	Table Value	D.F.	Remarks
Occupation	284.01	24.217	10	Significant at 1% level

It could be divulged from the above table that the calculation Chi-square value is greater than the table value and the result is significant at 1% level. Hence, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. The hypothesis, “Occupation and Level of Customer Attitude towards Customer Engagement in social commerce” are associated hold good. From the analysis, it is identified that there is a close relationship between the Occupation and Level of Customer Attitude towards Customer Engagement in social commerce.

6. CONCLUSION

Online shopping is becoming more popular day by day with the increase in the usage of World Wide Web. Understanding customers need for online selling has become challenge for marketers. The result found that all kind of people engaged maximum in social commerce platforms. Specially understanding the consumers attitudes and engagement in social commerce, making improvement in the factors that influence consumers to shop online and working on factors that affect consumers to shop online will

help marketers to gain the competitive edge over others. The online shoppers at whole the districts are satisfied with the online shopping process. They are benefited with facilities like convenience, less procedure, timely delivery, product offers, low cost etc

REFERENCES

1. Ajiboye, T., Harvey, J., & Resnick, S. (2019). Customer engagement behaviour on social media platforms: A systematic literature review. *Journal of Customer Behaviour*, 18(3), 239-256.
2. Algharabat, R. S., & Rana, N. P. (2020). Social commerce in emerging markets and its impact on online community engagement. *Information Systems Frontiers*, 1-22.
3. Bhattacharyya, S., & Bose, I. (2020). S-commerce: Influence of Facebook likes on purchases and recommendations on a linked e-commerce site. *Decision Support Systems*, 138, 113383.
4. Bugshan, H., & Attar, R. W. (2020). Social commerce information sharing and their impact on consumers. *Technological Forecasting and Social Change*, 153, 119875.
5. Chen, C. C., Hsiao, K. L., & Wu, S. J. (2018). Purchase intention in social commerce: An empirical examination of perceived value and social awareness. *Library Hi Tech*.
6. Chen, J., & Shen, X. L. (2015). Consumers' decisions in social commerce context: An empirical investigation. *Decision Support Systems*, 79, 55-64.
7. Cheung, C. M. K., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, 54(1), 461-470.
8. DAS, S., MONDAL, S. R., SAHOO, K. K., NAYYAR, A., & MUSUNURU, K. (2018). Study on impact of socioeconomic makeup of Facebook users on purchasing behavior. *Revista Espacios*, 39(33).
9. Guesalaga, R. (2016). The use of social media in sales: Individual and organizational antecedents, and the role of customer engagement in social media. *Industrial Marketing Management*, 54, 71-79. <https://doi.org/10.1016/j.indmarman.2015.12.002>.
10. Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International journal of information management*, 35(2), 183-191.
11. Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International Journal of Information Management*, 35(2), 183-191.
12. Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. *International Journal of Information Management*, 35(2), 183-191.
13. Hennig-Thurau, T., Malthouse, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010). The impact of new media on customer relationships. *Journal of service research*, 13(3), 311-330.
14. Hennig-Thurau, T., Malthouse, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A., & Skiera, B. (2010). The impact of new media on customer relationships. *Journal of service research*, 13(3), 311-330.
15. Khan, A. S., Rahman, A., & Qazi, L. T. (2016). The relationship between internet usage, socioeconomic status, subjective health and social status. *Business & Economic Review*, 8(SE), 67-82.
16. Ling, K. C., Chai, L. T., & Piew, T. H. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International business research*, 3(3), 63.
17. Thogersen, J. (2007). Social marketing of alternative transportation modes. In *Threats from car traffic to the quality of urban life*. Emerald Group Publishing Limited.
18. Yadav, M., & Rahman, Z. (2018). The influence of social media marketing activities on customer loyalty: A study of e-commerce industry. *Benchmarking: An International Journal*.

Supply Chain Management (SCM): How It Works and Why It Is Important?

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Abstract

In supply chain management, network design and planning take an important place, and design decisions should be viable enough to create a supply chain that operates efficiently under today's complex and uncertain business environments. In an uncertain decision environment, the decision-maker confronts the challenge of accurately predicting the impact of possible actions on supply chain behavior. Uncertainties complicate the assessment of investment decisions and affect the performance of production chains. To avoid such problems, a flexible supply chain network has to be established. It is necessary to handle and treat the inherent uncertainties to cope with imprecise nature of flexible supply chains. To identify the most effective strategies in a specific design or operational scenario, identification and management of the sources of uncertainties should be incorporated into the decision-making processes. Considering this fact, this chapter covers the main sources of uncertainty in biomass-based production chains and the methods and modeling techniques to incorporate these uncertainties in the decision-making process.

Keywords: *Integration, Cloud Based Commerce, Cognitive Enabled, Trouble Shooting*

What Is Supply Chain Management (SCM)?

Supply chain management is the management of the flow of goods and services and includes all processes that transform raw materials into final products. It involves the active streamlining of a business's supply-side activities to maximize customer value and gain a competitive advantage in the marketplace.

How Supply Chain Management (SCM) Works?

Supply chain management (SCM) represents an effort by suppliers to develop and implement supply chains that are as efficient and economical as possible. Supply chains cover everything from production to product development to the information systems needed to direct these undertakings.

Typically, SCM attempts to centrally control or link the production, shipment, and distribution of a product. By managing the supply chain, companies can cut excess costs and deliver products to the consumer faster. This is done by keeping tighter control of internal inventories, internal production, distribution, sales, and the inventories of company vendors.

SCM is based on the idea that nearly every product that comes to market results from the efforts of various organizations that make up a supply chain. Although supply chains have existed for ages, most companies have only recently paid attention to them as a value-add to their operations.

Parts of SCM

The supply chain manager tries to minimize shortages and keep costs down. The job is not only about logistics and purchasing inventory. According to Salary.com, supply chain

managers “oversee and manage overall supply chain and logistic operations to maximize efficiency and minimize the cost of organization's supply chain.”¹

Productivity and efficiency improvements can go straight to the bottom line of a company. Good supply chain management keeps companies out of the headlines and away from expensive recalls and lawsuits. In SCM, the supply chain manager coordinates the logistics of all aspects of the supply chain which consists of the following five parts.

Planning

To get the best results from SCM, the process usually begins with planning to match supply with customer and manufacturing demands. Firms must predict what their future needs will be and act accordingly. This relates to raw materials needed during each stage of manufacturing, equipment capacity and limitations, and staffing needs along the SCM process. Large entities often rely on ERP system modules to aggregate information and compile plans.

Sourcing

Efficient SCM processes rely very heavily on strong relationships with suppliers. Sourcing entails working with vendors to supply the raw materials needed throughout the manufacturing process. A company may be able to plan and work with a supplier to source goods in advance. However, different industries will have different sourcing requirements. In general, SCM sourcing includes ensuring:

- The raw materials meet the manufacturing specification needed for the production of goods.
- The prices paid for the goods are in line with market expectations.
- The vendor has the flexibility to deliver emergency materials due to unforeseen events.
- The vendor has a proven record of delivering goods on time and in good quality.

Supply chain management is especially critical when manufacturers are working with perishable goods. When sourcing goods, firms should be mindful of lead time and how well a supplier can comply with those needs.

Manufacturing

At the heart of the supply chain management process, the company transforms raw materials by using machinery, labor, or other external forces to make something new. This final product is the ultimate goal of the manufacturing process, though it is not the final stage of supply chain management.

The manufacturing process may be further divided into sub-tasks such as assembly, testing, inspection, or packaging. During the manufacturing process, a firm must be mindful of waste or other controllable factors that may cause deviations from original plans. For example, if a company is using more raw materials than planned and sourced for due to a lack of employee training, the firm must rectify the issue or revisit the earlier stages in SCM.

Delivering

Once products are made and sales are finalized, a company must get the products into the hands of its customers. The distribution process is often seen as a brand image contributor, as up until this point, the customer has not yet interacted with the product. In strong SCM

processes, a company has robust logistic capabilities and delivery channels to ensure timely, safe, and inexpensive delivery of products.

This includes having a backup or diversified distribution methods should one method of transportation temporarily be unusable. For example, how might a company's delivery process be impacted by record snowfall in distribution center areas?

Returning

The supply chain management process concludes with support for the product and customer returns. Its bad enough that a customer needs to return a product, and its even worse if its due to an error on the company's part. This return process is often called reverse logistics, and the company must ensure it has the capabilities to receive returned products and correctly assign refunds for returns received. Whether a company is performing a product recall or a customer is simply not satisfied with the product, the transaction with the customer must be remedied.

Many consider customer returns as an interaction between the customer and the company. However, a very important part of customer returns is the intercompany communication to identify defective products, expired products, or non-conforming goods. Without addressing the underlying cause of a customer return, the supply chain management process will have failed, and future returns will likely persist.

SCM vs. Supply Chains

A supply chain is the network of individuals, companies, resources, activities, and technologies used to make and sell a product or service. A supply chain starts with the delivery of raw materials from a supplier to a manufacturer and ends with the delivery of the finished product or service to the end consumer.

SCM oversees each touchpoint of a company's product or service, from initial creation to the final sale. With so many places along the supply chain that can add value through efficiencies or lose value through increased expenses, proper SCM can increase revenues, decrease costs, and impact a company's bottom line.

Types of Supply Chain Models

Supply chain management does not look the same for all companies. Each business has its own goals, constraints, and strengths that shape what its SCM process looks like. In general, there are often six different primary models a company can adopt to guide its supply chain management processes.

- **Continuous Flow Model:** One of the more traditional supply chain methods, this model is often best for mature industries. The continuous flow model relies on a manufacturer producing the same good over and over and expecting customer demand will little variation.
- **Agile Model:** This model is best for companies with unpredictable demand or customer-order products. This model prioritizes flexibility, as a company may have a specific need at any given moment and must be prepared to pivot accordingly.
- **Fast Model:** This model emphasizes the quick turnover of a product with a short life cycle. Using a fast chain model, a company strives to capitalize on a trend, quickly produce goods, and ensure the product is fully sold before the trend ends.

- **Flexible Model:** The flexible model works best for companies impacted by seasonality. Some companies may have much higher demand requirements during peak season and low volume requirements in others. A flexible model of supply chain management makes sure production can easily be ramped up or wound down.
- **Efficient Model:** For companies competing in industries with very tight profit margins, a company may strive to get an advantage by making their supply chain management process the most efficient. This includes utilizing equipment and machinery in the most ideal ways in addition to managing inventory and processing orders most efficiently.
- **Custom Model:** If any model above doesn't suit a company's needs, it can always turn towards a custom model. This is often the case for highly specialized industries with high technical requirements such as an automobile manufacturer.

Key features of effective supply chain management

The supply chain is the most obvious “face” of the business for customers and consumers. The better and more effective a company’s supply chain management is, the better it protects its business reputation and long-term sustainability.

IDC’s Simon Ellis in *The Path to a Thinking Supply Chain*¹ defines what is supply chain management by identifying the five “Cs” of the effective supply chain management of the future:

- **Connected:** Being able to access unstructured data from social media, structured data from the Internet of Things (IoT) and more traditional data sets available through traditional ERP and B2B integration tools.
- **Collaborative:** Improving collaboration with suppliers increasingly means the use of cloud-based commerce networks to enable multi-enterprise collaboration and engagement.
- **Cyber-aware:** The supply chain must harden its systems and protect them from cyber-intrusions and hacks, which should be an enterprise-wide concern.
- **Cognitively enabled:** The AI platform becomes the modern supply chain's control tower by collating, coordinating and conducting decisions and actions across the chain. Most of the supply chain is automated and self-learning.
- **Comprehensive:** Analytics capabilities must be scaled with data in real time. Insights will be comprehensive and fast. Latency is unacceptable in the supply chain of the future.

Why Is Supply Chain Management Important?

Modern supply chains help improve living standards by enabling consumers to buy essential products at lower costs. This is because an effective supply chain streamlines the process of getting products to market, and ultimately to consumers.

Some key reasons why supply chain management is important to include:

- **Basic life necessities.** Through supply chain management, individuals access necessities such as food and clothing, as well as life-saving medicines and health care products.
- **Power and light.** People use electrical energy for homes and businesses for light, heat, and air conditioning. The energy supply chain involves the transformation of raw materials into usable energy and uses supply chain management principles to bring energy resources to consumers.
- **Infrastructure.** Interstate highway systems, railroads, ports, and airports facilitate the exchange of goods between businesses and consumers.
- **Jobs.** Supply chain management plays a critical role in job creation. Supply chain professionals work in areas such as transportation, warehousing, inventory management, packaging and logistics information.

Role of Supply Chain Management

Supply chain management sets the foundation for economic growth by enabling the exchange of goods between businesses and consumers. The important role of supply chain management and its impact on economic growth is possible because of the entities involved in the supply chain, which include the following:

- **Materials processors.** This includes companies that process raw materials, such as metal, rubber, and wood, from natural resources.
- **Manufacturers/producers.** These are the companies that create the products available for sale, turning raw materials into products for consumer use. Not all supply chains produce physical products. For example, in the energy sector, energy producers use raw materials, such as coal, to produce a form of energy for consumption.
- **Vendors.** Also known as sellers, vendors sell products to the next link in the supply chain. Manufacturers can also be vendors.
- **Warehouses.** Once the products are sold, they need to be stored. Warehouses are often located in major hubs where those involved in the next link in the supply chain can acquire them and ship them to distribution centers.
- **Transportation companies.** Examples of transportation companies include freighter, container ship and trucking companies. At this point in the supply chain, the products arrive at another site with one purpose: to distribute the product to retailers.
- **Distribution centers.** Distribution centers are regional facilities that house the products to be redistributed to retailers, wholesalers, and, sometimes, directly to consumers. A distribution center can include refrigeration facilities to preserve perishable products.
- **Retailers.** At the tail end of the supply chain are the retailers who sell products directly to consumers in shopping centers, stores, and online.

In considering what supply chain management is and why it is important, it is useful to highlight other business functions that impact or are affected by the supply chain.

- **Product development.** This is the process of introducing and bringing products to the market. It can also involve updating or renewing an existing product. Product development hinges on the materials available to make a product and the ingenuity of individuals to design, engineer and determine the purpose and function of a product.
- **Marketing.** It is often said that a good product sells itself. In reality, organizations must try to stimulate demand for their goods. This is where marketing comes in. Marketing strategies include advertising and promotion, packaging, pricing, product placement, distribution, and target audience selection.
- **Operations.** A key aim of operations managers is to ensure the inner workings of a business run efficiently to maximize productivity and reduce costs.

- **Distribution.** This function is often considered part of the marketing mix. It describes the process of making products available to end-users in business and consumer markets, whether through direct or indirect distributors.
- **Finance.** This area works with departments like sales to set revenue goals, acquire money or capital and decide how to spend and invest.
- **Customer service.** This function plays a critical role in how an organization is perceived by its customers. The aim of customer service is to serve customers throughout the buying life cycle, from providing information that may help customers make informed decisions to supporting customer inquiries and troubleshooting customer problems.

References

- Association for Operations Management, 2012. APICS Dictionary. [online] Association for Operations Management. Available at: <http://www.apics-sd.org/education/apics_quickreference.aspx>
- Ayers, J.B., 2001. Handbook of Supply Chain Management. Boca Raton: The St. Lucie Press/APICS Series.
- Butilc, D., Crişan, E., Salanţă, I. and Ilieş, L., 2011. The adoption/adaption of the „supply chain” concept in romanian. The Annals of the University of Oradea, TOM XX 2nd issue december, pp.657-668.
- Căescu, Ş.C. and Dumitru, I., 2011. Particularities of the competitive environment in the business-to-business field. Management & Marketing, 6 (2), pp. 273-284.
- Habib, M., 2010. Supply chain management: theory and its future perspectives. International Journal of Business, Management and Social Sciences, 1 (1), pp. 79-87.
- Handfield, R. B. and Nichols, E. L., 2003. Introduction to Supply Chain Management. 2nd edition. Upper Saddle River: Prentice Hall.
- Hugos, M.H., 2006. Essentials of Supply Chain Management. 2nd edition. Hoboken: John Willey & Sons.
- Logistics & Supply Chain Management Society, 2012. SCM Dictionary. [online] Logistics & Supply Chain Management Society. Available at: <<http://lscms.org/scm-dictionary/>> [
- Lupşe, V. and Cosma, O., 2006. ERP extension - Supply Chain Management (SCM). Informatică Economică, 38 (2), pp.120-123.
- Mentzer, J.T., DeWitt, W., Keebler, J.S., Min, S., Nix, N.W., Smith, C.D. and Zacharia, Z.G., 2001. Defining Supply Chain Management. Journal of Business Logistics, 22 (2), pp. 1-25.
- Sweeney, E., 2007. Perspectives on Supply Chain Management and Logistics. Dublin: Blackhall Publishing.
- Waller. D.L., 2003. Operations management: a supply chain approach. 2nd edition. London: Thomson Learning.
- Waters, D., 2008. Supply Chain Risk Management: Vulnerability and Resilience in Logistics. London: Kogan Page.
- Wisner, J., Tan, K.C. and Leong, G.K., 2012. Principles of Supply Chain Management: A Balanced Approach. 3rd edition. Mason: South-Western Cengage Learning.

The Role of Information Technology in the Business Sector

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Abstract:

The business sector produces products and services for profit. Information technology describes any technology used to create, process and disseminate information that is critical to business performance. Information technology is important to the business sector as a management tool to optimize the processing of information to produce goods and services for profit. No matter the size of your enterprise, technology has both tangible and intangible benefits that will help you make money and produce the results your customer's demand. Technological infrastructure affects the culture, efficiency and relationships of a business. It also affects the security of confidential information and trade advantages. The information revolution is sweeping through economy. No company can escape its effects. Dramatic reductions in the cost of obtaining, processing, and transmitting information are changing the way we do business.

Keywords: business sector, information technology, competitive advantage, business relationships

1. Introduction

With information technology (IT) going mobile, thanks to the deployment of faster and more reliable broadband networks, we are experiencing yet another technology driven transition. Technology (-based) businesses can be referred to as businesses that engage in technology related products, processes and services. They may be low-, medium- or high technology. One area of the economy which has seen significant growth is that focused on new technology-based products and services and the high-technology sectors are perceived as major sources of future economic prosperity and employment growth. However, IT includes the management information systems (computers, hardware, software, networks) used to automate and support business tasks and decision-making. IT is used to automate simple, routine tasks such as word processing and advanced processes such as production, scheduling and logistics. In this manner, information technology enables businesses to operate efficiently and profitably. Technological advances in the past few decades have greatly increased the competitive nature of the economic business world. Companies have used software, computers and the Internet to transform their businesses from local places of business to national and global market competitors. Many companies have responded to these changes by automating their business processes and capturing industry-related information and using it to their advantage. Technology has also forced businesses to remain flexible, adapting their operations to newer and better technological advances.

Business owners once had very few tools at their disposal: little more than a basic adding machine and paper records. Today's business owners can complete their duties much more effectively than their predecessors with an array of technological tools at their disposal. By using these techtools, companies and employees enjoy a number of business-related benefits. We know that the business sector produces products and services for profit. Information technology describes any technology used to create, process and disseminate information that is critical to business performance. Information technology is important to the business sector as a management tool to optimize the processing of information to produce goods and services for profit. Automation improvements achieved by deploying information technology usually decrease the number of personnel required. Economies of scale gained through the deployment of information technology reduce the overall cost for businesses to produce products and

services. This has an overwhelmingly positive effect on the financial goals of a business. Quality assurance entails systematic testing to ensure that a business is producing quality goods and services for its customers. Rigorous quality standards help business outputs meet the required specifications. Quality assurance can be used within processes such as marketing, customer support and accounting, as well as product testing. The effective and efficient processing of information related to achieving quality assurance goals is key to the delivery of quality goods and services to business customers. Investments in information technology can help make a firm's operational processes substantially more efficient, and its managerial processes much more effective. By making such improvements to its business processes a firm may be able to:

1. Dramatically cut cost
2. Improve the quality and customer service
3. Develop innovative products for new markets

Investments in information systems technology can result in the development of new products, services, and processes. This can:

1. Create new business opportunities
2. Enable a firm to enter new markets
3. Enable a firm to enter into new market segments of existing markets

2. The Role of Information Technology

2.1 Importance of Information Technology in business relationships

The social interaction of a business relationship can be discussed in terms of how often people from the companies meet, or how well the parties know each other. It is argued that depending on the extent of the use of information technology for different exchanges, the impact on the social interaction patterns that are carried out without information technology may be influenced. One argument that could be raised in the theorizing on the effect of use of information technology in business relationships is that the number of meetings, or need for meetings will decrease, as the use of the technology handles a great deal of information exchanges, i.e. replaces some of the personal exchange of information. The question is if the need for personal meetings decreases when the levels of information technology use increase. That would suggest increased efficiency of meetings, as the use of information technology then replaces other means of interaction for some types of exchanges. On the other hand, the use of information technology may require additional meetings, if the technology is difficult use or the purpose of its employment is another than making the information exchange more efficient by decreasing the need for meetings. The reasons why the use of information technology in business relationships would decrease or increase the need for personal meetings can only be speculated on.

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employment is another than making the information exchange more efficient by decreasing the need for meetings. The reasons why the use of information technology in business relationships would decrease or increase the need for personal meetings can only be speculated on.

This paper analyses the extent to which the need for personal meetings has decreased or increased in the investigated business relationships as a result of the use of information technology, as well as to the extent which such a change is related to levels of lower and higher of information technology. If the use of information technology affects the need for personal meetings, and that effect is related to when the use is lower or higher, it is interesting to analyze why and how the need for personal meetings is affected by the use of information technology. Now, most organizations in all sectors of industry, commerce and government are fundamentally dependent on their information technologies. The information revolution is sweeping through our economy. No company can escape its effects. Dramatic reduction in the cost of achieving, processing, and transmitting information is changing the mode by which we do business. This article moves towards the explaining and distinguishing impact IT has on internal and corporate strategies in small and medium enterprises. The information revolution is sweeping through information is changing the mode by which we do business. Many companies in most our economy; no company can escape its effects. Dramatic reduction in the cost of achieving, processing, and transmitting industries have little choice but to implement some form of information technology in order to remain both innovative and on the cutting edge of competitive advantage.

2.2 View of Information Technology's Relationship to Business

There are two basic concepts or principles that can be effectively executed and applied within an organization to help the organization succeed when it comes to Information Technology [1].

- Link Information Technology Solutions to Overall Business Strategy
- Keep IT Simple

Maintaining focus on the overall goals and mission of an organization while looking at Information Technology enables management to make appropriate investments, reduce cost, and provide value. We recommend a top-down approach and have found the seven layer OSI (OpenSystems Interconnection) Model an excellent tool to help think about Information Technology needs. OSI is an international standard to help implementers, developers, technicians, and service providers ensure software and hardware properly work with one another and communication can occur within the network and with endusers. We found the same approach can be used when thinking about your Information Technology needs. By looking at the “big picture”, it is possible to align your business processes and Information Technology needs with the overall strategy and goals of your organisation. Strategy, Goals, Mission and Culture drive Business Processes. Business Processes determine necessary tasks (who, what, why, where and how). The tasks define the Information Technology requirements (software and hardware) to be investigated, decided upon, and implemented.

The challenge occurs when discussing the tasks and Information Technology requirements. The communication channel tends to break down. This is known by many as the “IT Divide”. Both sides have their own jargon, abbreviations, and unique experiences. Neither is able to explain, in terms understandable by the other, the necessary requirements, limitations, gaps, and potential solutions that are an acceptable fit. Executives, Managers and Technologists each go their own way out of frustration withone another. And the alignment of business processes and strategy with Information Technology goes by the wayside. Information Technology success comes from having a common understanding. Everyone on the team needs to take a look at the total picture and approach the solution with the same view and goal. If this occurs it is possible to align business processes and Information Technology needs with the overall strategy and goals of an organization. The result is motivated employees, satisfied customers, and reduced costs.

2.3 Keep “IT” Simple

We have found many organizations have a tendency to complicate their Information Technology environment. It is our belief that Information Technology should not and does not need to be complicated. We believe organizations should focus on keeping “IT” simple. By simplifying and consolidating an organization’s Information Technology there is [2]:

- Reduced or lowered costs,
- Improved efficiency and increased consistency,
- Easier overall administration,
- Ability to respond quicker to change, and
- Better use resources (hardware, software and people).

Some Keep “IT” Simple” recommendations are:

- Standardize on hardware and software,
- Develop and follow policies and procedures,
- Document your network infrastructure,
- Purchase and use proven products from well known and reliable vendors,
- Select and integrate application systems prudently, and
- Limit business workstation use to business use only.

It is our experience that the more complex the environment, the more complicated it becomes as well as inflexible. This results in additional time and effort needed to maintain and/or change the environment increasing operational and maintenance costs.

3. Reengineering Business Processes

One of the most popular competitive strategies today is business process reengineering (BPR), most often simply called reengineering. Reengineering is the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in cost, quality, speed, and service. BPR combines a strategy of promoting business innovation with a strategy of making major improvements to business processes so that a company can become a much stronger and more successful competitor in the marketplace.

3.1 How To Implement Business Process Reengineering In Your Business?

The following steps (Davenport, 1992) can help BPR realize its core principles of customer satisfaction, reduced costs of business and increased competitiveness [3]. Business vision and objectives: Any BPR activity needs to begin with a clearly defined and measurable objectives. Whether the goal is reducing costs, improving quality of product, or increasing efficiency, the framework for what needs to be achieved has to be decided upon at the outset, in line with the company’s vision and mission. **Identification and slacking processes:** Once a clear goal is in mind, all processes need to be studied and those seen as ‘slacking’ or that can be improved need to be identified.

4. Framework For Competitive Analysis

According to Michael Porter, a firm can survive and succeed in the long run if it successfully develops strategies to confront five competitive forces that shape the structure of competition in its industry. These include:

- 1) Rivalry of competitors within its industry
- 2) Threat of new entrants
- 3) Threat of substitutes
- 4) Bargaining power of customers

5) Bargaining power of suppliers

Porter advanced the idea that competition in any industry is rooted in its principal economic structure, so that it is more than a superficial game of moves and countermoves among participating firms. This approach is reflected in the framework he proposed to explain; i.e. the dynamics of competition in an industry.

A Variety Of Competitive Strategies Can Be Developed To Help A Firm Confront These Competitive Forces. As IT impacts the products, services, or operations of a business, it may change the relationship between an industry and its suppliers. For example, the use of complex production line systems by the auto industry is forcing robots producers to become much more quality conscious. When industries become much more dependent upon IT, the bargaining power of the IT supplier will become an important force for a firm to consider planning strategy. It also changes the level of sophistication of some industries' suppliers. IT also affects the buyer bargaining power of industries, such as new products, services, and distribution channels. For example, buyers in the banking industry can now choose products and services from several channels. The buyerindustry relationship has been fundamentally changed by

Automated teller machine (ATMs), point-of-sale terminals (POSs), and electronic home banking.

Table 2: Variety Of Competitive Strategies Variety of Competitive Strategies

1. Cost Leadership Strategy
Become a low cost producer of products and services - Find ways to help suppliers or customers reduce their costs - Increase the costs of competitors.
2. Differentiation Strategy
Develop ways to differentiate products and services from competitors - Reduce the differentiation advantages of competitors.
3. Innovation Strategy
Find new ways of doing business : a) develop new products & services b) enter new markets or marketing segments. c) establish new business alliances d) find new ways of producing products/services e) find new ways of distributing products/services
4. Growth Strategies
Significantly expand the company=s capacity to produce goods and services - Expand into global markets - Diversify into new products and services - Integrate into related products and services.
5. Alliance Strategies
Establish new business linkages and alliances with customers, suppliers, competitors, consultants and other companies (mergers, acquisitions, joint ventures, forming virtual companies, etc.).

On the other hand, IT affects the rate of new entry into industries by raising the barrier to delay competitor entry by providing new service or product features that appeal to customers. For example, in the banking industry, IT-based access to banking services has seriously eroded the traditional entry barriers enjoyed by many branch offices. In the distribution industry, IT has created new entry barriers by requiring investment in extensive computer and telecommunication networks that are used to control

costs in large-scale multiplication distribution facilities. In effect, IT has created a new scale- economy barrier which the new entrant must overcome in order to price competitively and still be profitable.

Finally, IT changes industry structure by affecting the rivalry bases among intra-industry competitors. By introducing a new competitive weapon into various settings, IT sparks outbreaks of firm warfare. For example, recently, ICICI bank has introduced TV banking and i-zone to serve the customers as a new weapon to improve the bank's position in its competitive environment [6].

5.Conclusion

Information technology can change the way businesses compete. For this reason, you should view information systems strategically, that is, as vital competitive networks, as a means of organizational renewal, and as a necessary investment in technologies that help an enterprise achieve its strategic objectives.

The evidence also suggests that turning investment in ICT into higher productivity is not straightforward. It typically requires complementary investments and changes, e.g. in human capital, organizational change and innovation. Moreover, ICT-related changes are part of a process of search and experimentation, where some firms succeed and grow and others fail and disappear. Countries with a business environment that enables this process of creative destruction may be better able to seize benefits from ICT than countries where such changes are more difficult and slower to occur. As a result, small businesses are investing in information and communication technologies to expand information systems applications to support their business strategy and thereby establish a competitive advantage based on the unique capability created in their markets. Consequently, alignment between an organization's business strategy and its information systems strategy positively affects business performance.

References

1. Entrepreneurial Insights. (n.d.). Business competitive: Business Process Reengineering (BPR). Retrieved from <http://www.entrepreneurialinsights.com/business-competitive-business-process-reengineering-bpr/>
2. Entrepreneurial Insights. (n.d.). Business competitive: Business Process Reengineering (BPR). Retrieved from <http://www.entrepreneurialinsights.com/business-competitive-business-process-reengineering-bpr/>
3. Taylor, R. S. (2007). Information behavior in virtual environments: A cluster analysis. *Information Research*, 12(4), paper 314. Retrieved from <http://www.informationr.net/ir/12-4/paper314.html>

AN EFFECT OF FINANCIAL LEVERAGE ON PROFITABILITY OF LISTED TEXTILE COMPANIES IN INDIA

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ABSTRACT

Financial Leverage might be used to evaluate the firm's debt equity mix. It was referring to the change in capital structure produced by a rise or reduction in the debt-to-equity ratio. And also, it was created when a company includes debt as a percentage of the cash used to finance an operation. Since the researcher realized the need of the investigation with respect to the impact of financial leverage on profitability in textile companies. The study's population consisted of 20 listed textile firms in India, but only 8 were chosen since data for other companies had not been accessible. The obtained data for the ten-year period from 2012 to 2021 were studied using different statistical methods. As a result, the study suggested that financial leverage had an impact on the profitability of the chosen textile companies.

Keywords: Financial Leverage, Profitability, Textile Companies, Capital Structure

1. INTRODUCTION

Financial decisions are an essential component of financial management in any type of business. A proper financial intention must take into account the financial mix, total amount of capital, and cost of capital. Capital structure is an important consideration for administration because it influences the debt equity mix of the company, which affects stakeholders' risk and returns. As a result, determining the debt-equity mix is critical in determining the firm earnings and the market value of its share capital. Leverage might be used to evaluate the firm's debt equity mix (Zelalem, 2020). So that, financial leverage refers to the change in capital structure produced by a rise or reduction in the debt-to-equity ratio. Financial leverage is created when a company includes debt as a percentage of the cash used to finance an operation (Ojo, 2012). Leverage might be defined as the fraction of a company's fixed costs that subjects it to stress. Financial leverage, as a measure of financial risk, refers to long-term. As a result, deeply leveraged enterprises have greater leverage in their capital structure. It also indicates the percentage of capital, stockholders and creditors who have invested. Fixed financing costs on the firm's assets are used to finance the company. Higher financial leverage implies greater risks and, as such consequence, an increased capital cost for the business (Kithandi, 2019). Hence, the study examined the impact of financial leverage on the profitability of textile companies in India.

2. REVIEW OF LITERATURE

The influence of financial leverage on the financial performance of three chosen Nigerian pharmaceutical businesses during a period (2001–2012). This study used three financial leverage factors as independent variables: debt ratio, debt-equity ratio, and interest coverage ratio to determine their influence on financial performance. Descriptive statistics, Pearson correlation, and regressions were used in this investigation. According to the findings of the study, debt ratio and debt-equity ratio have a negative association with Return on Assets,

however interest coverage ratio has a positive link with Return on Assets in the Nigerian pharmaceutical business. The research also found that none of the independent factors have a substantial impact on the financial performance of the companies studied (Enekwe et al., 2014). The impact of financial leverage on commercial bank performance in Kenya from 2010 to 2016 was investigated using listed commercial banks on the Nairobi Securities Exchange. The results revealed that higher levels of financial leverage had a negative impact on return on equity, but higher levels of interest coverage and debt equity had a favourable impact on return on equity (Oketch et al., 2018). The study determined the association between financial leverage and cement industry's financial performance. The findings demonstrated that return on assets and profits per share had a considerable influence on the cement industry's financial leverage. The research discussed the importance of financial performance and demonstrated that the cement industry had strong financial performance based on outcomes. It is a good thing to take on debt since it helps to boost financial performance, but it is also important to carefully consider the investments made in the sector (Mohy-Ud-Din & Ul Haq, 2018). This study analysed the link between financial leverage and financial performance of Nigerian enterprises from 2000 to 2015, utilised data from 80 non-financial firms listed on the Nigerian Stock Exchange. The study's findings found that profits per share is significantly and negatively connected to the debt-to-equity ratio and total debt to total asset measures of financial leverage; however, return on equity is insignificantly associated to financial leverage. The empirical research indicated that the impact of financial leverage differed across various performance indicators of Nigerian enterprises (Kenn-Ndubuisi & Nweke, 2019).

The purpose of this study was to investigate the link between leverage and financial performance of non-financial enterprises listed on the Ghana Stock Exchange (GSE) from 2008 to 2017. The descriptive and inferential data analysis approaches were used for the investigation. A somewhat favourable relationship between leverage and the businesses' ROE and ROCE was also discovered. As a result, the study showed that there was a statistically unfavourable relationship between leverage and business financial performance (Musah & Kong, 2019). The research investigated the relationship between financial leverage and financial performance of institutions in Nigeria, with specific reference to selected Deposit Money Banks in Nigeria, from 2005 to 2017, using debt-equity ratio, debt ratio as indicators for financial leverage and return on equity (ROE) as a proxy for profitability performance, and size of the institution as control variables. The data also showed that the association between ROE and debt ratio is negative but negligible, but the relationship between size, proxied by total assets of the selected banks, is considerably positive (Onuora, 2019). The purpose of this study was to examine the impact of Financing and Working Capital Policy on the Financial Performance of Micro, Small, and Medium Enterprises in Donggala. This study's population consisted of 1,752 SMEs, with 326 SMEs being examined. Using multiple linear regression as the analytical tool, this study discovered that financing policy and working capital factors had a positive and substantial influence on the financial performance of SMEs (Rajindra, 2016). The influence of financial leverage on financial performance in a developing nation and a sample of 48 businesses listed on the Dhaka Stock Exchange were analysed using multiple linear regression. The research revealed that financial leverage (DER and DAR) had a beneficial influence on financial performance which was evaluated by ROE and EPS (Dey et al., 2018).

The influence of financial leverage on the profitability of 58 Vietnam stock exchange-listed real estate enterprises was studied using regression and correlation analysis. Financial leverage had no effect on return on sales and return on capital employed, but had a negative impact on return on assets and a favourable impact on return on equity, as per the findings. As

a result, it was demonstrated that leverage had a major influence on profitability (Nguyen et al., 2019). The capital structure and performance of eight oil and gas enterprises listed on the Nigerian exchange group were assessed using multiple regression analysis. According to the findings, capital structure had a statistically significant influence on performance. Furthermore, the study suggested that creditors should not be hesitant to lend to enterprises, particularly oil and gas industry, because they play a significant role in the economy (Bingilar & Kpolode, 2021). As shown in the reviews of the aforementioned, numerous writers investigated the influence of leverage on the profitability of various organisations, but few of them studied the listed textile companies in India. As a result, the researcher realized the need of the investigation with respect to the impact of financial leverage on profitability in textile companies.

3. OBJECTIVE OF THE STUDY

- To measure the impact of financial leverage on profitability of listed textile companies in India

4. HYPOTHESIS OF THE STUDY

H₁: "Financial leverage has a significant influence on profitability"

5. SELECTED VARIABLES

Variables	Measurements
Dependent Variables	
Return on Asset (ROA) (Enekwe et al., 2014)	Profit before tax / Total Asset
Return on Equity (ROE) (Dey et al., 2018)	Profit after tax / Net Sales
Independent Variables	
Debt Equity Ratio (DER) (Onuora, 2019)	Total Liabilities/ Shareholders' Funds or Total Equity

6. CONCEPTUAL FRAMEWORK



Figure 1 Conceptual Framework

7. RESEARCH METHODOLOGY

The analytical aspect was considered for the goal of the investigation. The study's population consisted of 20 listed textile firms in India, but only 8 were chosen since data for other companies had not been accessible. The essential data was acquired from the money control as well as the respective company's websites. The obtained data for the ten-year period from 2012 to 2021 were studied using different statistical approaches such as descriptive, correlation, and multiple regression analysis using SPSS software.

8. DATA ANALYSIS

The results of descriptive, correlation, and multiple regression analysis of listed textile firms in India are:

8.1. DESCRIPTIVE ANALYSIS

Variables	N	Range	Minimum	Maximum	Mean	Std. Deviation
ROE	80	235.75	-196.35	39.40	2.3863	30.41001
ROA	80	49.48	-32.46	17.02	1.7209	7.95458
DER	80	17.67	-5.78	11.89	1.4899	2.14102

Profitability as measured by ROE had a minimum of -196.35, a maximum of 39.40, mean values of 2.3863, and a maximum standard deviation of 30.41001. The low for profitability as assessed by ROA was -32.46, with a high of 17.02, mean values of 1.7209, and a moderate standard deviation of 7.95458. Financial leverage as determined by DER reached a minimum of -5.78 and a maximum of 11.89, with mean values of 1.4899 and a standard deviation of 2.14102 (Table-2).

8.2. CORRELATION ANALYSIS

Variables	ROE	ROA	DER
ROE	1		
ROA	.616**	1	
DER	-.472**	-.015	1

** . Correlation is significant at the 0.01 level (2-tailed).

According to the correlation analysis (Table 2), DER has a negative correlation (-.472) with ROE.

8.3. MULTIPLE REGRESSION ANALYSIS

The regression equation of selected dependent and independent variables are as below:

$$ROE = \alpha + \beta_1 DER + \varepsilon_1$$

$$ROA = \alpha + \beta_1 DER + \varepsilon_2$$

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
ROE	.472 ^a	.223	.213	26.97886	1.311
ROA	.015 ^a	.000	-.013	8.00446	1.166

a. Predictors: (Constant), DER

b. Dependent Variable: ROE, ROA

According to the R-squared, the regressors DER account for 22.3 percent of the variance in ROE, while the remaining 77.7 percent is driven by other factors not considered in

the research. However, the DER did not cause any fluctuation in ROA. The Durbin Watson test was performed to identify autocorrelation from regression models 1 and 2, and all Durbin Watson values are less than 2, showing that there are no autocorrelation issues in the study (Table-3).

Model		Sum of Squares	df	Mean Square	F	Sig.
ROE	Regression	16283.721	1	16283.721	22.372	.000 ^b
	Residual	56772.983	78	727.859		
	Total	73056.704	79			
ROA	Regression	1.179	1	1.179	.018	.892 ^b
	Residual	4997.571	78	64.071		
	Total	4998.750	79			
a. Dependent Variable: ROE, ROA						
b. Predictors: (Constant), DER						

There is a substantial link between the variables DER and ROE which is explained by the F value and significance value of 0.001. However, there is no statistically significant link between the variables DER and ROA. This is demonstrated by the F value and significance value of .892, both of which are more than 0.05. As a result, it has been demonstrated that the framed hypothesis of financial leverage has a considerable impact on profitability (Table-4).

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
ROE	(Constant)	12.377	3.682		3.361	.001
	DER	-6.706	1.418	-.472	-4.730	.000
ROA	(Constant)	1.806	1.093		1.653	.102
	DER	-.057	.421	-.015	-.136	.892
a. Dependent Variable: ROE, ROA						

There is a substantial negative association between ROE and DER as indicated by $r = -6.706$ and a non-significant association between ROA and DER as indicated by $r = -0.57$. This is also demonstrated by the significance level of DER being 0.892 (89.2 percent), which is greater than 0.05. The data also showed that if all factors are held constant, ROE would be an autonomous value of 12.377. A unit rise in DER would result in a unit fall in ROE of -.472. The data also showed that DER had a bigger influence on ROE than ROA, whereas DER had no effect on ROA (Table-5).

9. CONCLUSION

The study's goal was to examine the impact of financial leverage on the profitability of BSE-listed textile firms. The correlation analysis revealed that there is a relationship between the debt equity ratio and the return on equity. The regression findings showed that there is a substantial impact of debt equity ratio on return on equity, however there is no significant influence of DER on return on asset. As a result, the study suggested that financial leverage had an impact on the profitability of the chosen textile enterprises. The debt equity ratio is used as a proxy to quantify financial leverage in this study. Other researchers could increase the

variables and the duration of years in the textile sector, which would generate more consistent outcomes.

REFERENCES

- Bingilar, P. F., & Kpolode, O. P. (2021). Capital structure and financial performance of oil and gas companies listed on Nigeria exchange group. *International Journal of Business and Management Invention (IJBMI)*, 10(8), 42–54. <https://doi.org/10.35629/8028-1008014254>
- Dey, R. K., Hossain, S. Z., & Rahman, R. A. (2018). Effect of corporate financial leverage on financial performance: A study on publicly traded manufacturing companies in Bangladesh. *Asian Social Science*, 14(12), 124–133.
- Enekwe, C. I., Agu, C. I., & Nnagbogu, E. K. (2014). The effect of financial leverage on financial performance: Evidence of quoted pharmaceutical companies in Nigeria. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 5(3), 17–25.
- Kenn-Ndubuisi, J. I., & Nweke, C. J. (2019). Financial leverage and firm financial performance in Nigeria: A panel data analysis approach. *Global Journal of Management and Business Research: C Finance*, 19(4), 13–19. <https://journalofbusiness.org/index.php/GJMBR/article/view/2758>
- Kithandi, C. K. (2019). *Financial leverage and financial performance of the energy and petroleum sector companies listed in the Nairobi securities exchange* (pp. 1–60) [MBA Dissertation].
- Mohy-Ud-Din, K., & Ul Haq, H. (2018). An investigation of financial leverage by financial performance. *Research Journal of Finance and Accounting*, 9(13), 54–59.
- Musah, M., & Kong, Y. (2019). Leverage and financial performance: the correlational approach. *International Journal for Innovative Research in Multidisciplinary Field*, 5(4), 1–8.
- Nguyen, V. C., Nguyen, T. N. L., Tran, T. T. P., & Nghiem, T. T. (2019). The impact of financial leverage on the profitability of real estate companies: A study from Vietnam stock exchange. *Management Science Letters*, 9, 2315–2326. <https://doi.org/10.5267/j.msl.2019.7.023>
- Ojo, A. S. (2012). The effect of financial leverage on corporate performance of some selected companies in Nigeria. *Canadian Social Science*, 8(1), 85–91.
- Oketch, J., Namusonge, G., & Sakwa, M. (2018). Effect of financial leverage on performance of listed commercial banks in Kenya. *International Journal of Social Sciences and Information Technology*, IV(II), 2760–2766.
- Onuora, O. G. (2019). Financial leverage and profitability performance of financial institutions in Nigeria. *Global Journal of Education, Humanities and Management Sciences*, 1(2), 203–207.
- Rajindra. (2016). Financial leverage and SMEs performance: Empirical evidence from Donggala district, Indonesia. *Mediterranean Journal of Social Sciences*, 7(6), 87–96.
- Zelalem, D. (2020). The impact of financial leverage on the performance of commercial banks: Evidence from selected commercial banks in Ethiopia. *International Journal of Accounting, Finance and Risk Management*, 5(1), 62–68. <https://doi.org/10.11648/j.ijafm.20200501.16>

AN OVERVIEW OF DIGITAL MARKETING

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ABSTRACT

Increased technology and newer trends forced companies to change their marketing strategies. Email became a popular marketing tool in the early days of digital marketing. Digital marketing involves marketing to consumers through any number of digital channels, including websites, mobile devices, and social media platforms. This form of marketing is different from internet marketing, which is exclusively done on websites. Digital marketing is a broad field, including attracting customers via email, content marketing, search platforms, social media, and more. One of the biggest challenges digital marketers face is how to set themselves apart in a world that is oversaturated with digital marketing ads. Digital marketing comes with various challenges, including implicit bias. The company used digital ads because it knew these people made up a large segment of its late-night business. McDonald's encouraged them to download the Restaurant Finder app, targeting them with ads placed at automated teller machines (ATMs), gas stations, and websites that its customers commonly frequented. The research and practice of digital marketing is improving with the advancement of technology. The advancement in technology foster multifaceted opportunities and at the same time poses unprecedented challenges for the marketers. Marketers make use of Digital portfolio as a platform to promote a professional brand by defining the product in a manner.

Keywords: Website Marketing, Pay-per-click, Google Ads, Facebook Ads

INTRODUCTION

Today's era of Internet has opened a gate of vast variety of opportunities for businesses. Using social networks, one cannot only share a private picture of one's birthday but also earn customers for one's business and reach them conveniently. The speed and ease with which the digital media transmits information and help boost a business is amazing. Digital Marketing is the term used for the targeted, measurable, and interactive marketing of products or services using digital technologies to reach the viewers, turn them into customers, and retain them. Communication is bidirectional. The customer also can ask queries or make suggestions about the business products and services. Medium of communication is mostly through social media websites, chat, and Email. There is always a fast way to develop an online campaign and carry out changes along its development. With digital tools, campaigning is easier. The content is available for general public. It is then made to reach the specific audience by employing search engine techniques. It is best for reaching global audience. It is easier to measure the effectiveness of a campaign through analytics.

TYPES OF DIGITAL MARKETING CHANNELS

Marketing was traditionally done through print (newspapers and magazines) and broadcast ads (TV and radio). These are channels that still exist today. Digital marketing channels have evolved and continue to do so. The following are eight of the most common avenues that companies can take to boost their marketing efforts. Keep in mind that some companies may use multiple channels in their efforts.

Website Marketing

A website is the centerpiece of all digital marketing activities. It is a very powerful channel on its own, but it's also the medium needed to execute a variety of online marketing campaigns. A website should represent a brand, product, and service in a clear and memorable way. It should be fast, mobile-friendly, and easy to use.

Pay-Per-Click Advertising

Pay-per-click advertising enables marketers to reach Internet users on a number of digital platforms through paid ads. Marketers can set up PPC campaigns on Google, Bing, LinkedIn, Twitter, Interest, or Facebook and show their ads to people searching for terms related to the products or services. These campaigns can segment users based on their demographic characteristics (such as by age or gender), or even target their particular interests or location. The most popular platforms are Google Ads and Facebook Ads.

Content Marketing

The goal of content marketing is to reach potential customers through the use of content. Content is usually published on a website and then promoted through social media, email marketing, search engine optimization, or even pay-per-click campaigns. The tools of content marketing include blogs, eBooks, online courses, info graphics, podcasts, and webinars.

Email Marketing

Email marketing is still one of the most effective digital marketing channels. Many people confuse email marketing with spam email messages, but that's not what email marketing is all about. This type of marketing allows companies to get in touch with potential customers and anyone interested in their brands. Many digital marketers use all other digital marketing channels to add leads to their email lists and then, through email marketing, they create customer acquisition funnels to turn those leads into customers.

Social Media Marketing

The primary goal of a social media marketing campaign is brand awareness and establishing social trust. As you go deeper into social media marketing, you can use it to get leads or even as a direct marketing or sales channel. Promoted posts and tweets are two examples of social media marketing.

Affiliate Marketing

Affiliate marketing is one of the oldest forms of marketing, and the internet has brought new life to this old standby. With affiliate marketing, influencers promote other people's products and get a commission every time a sale is made or a lead is introduced. Many well-known companies like Amazon have affiliate programs that pay out millions of dollars per month to websites that sell their products.

Video Marketing

YouTube is one of the most popular search engines in the world. A lot of users are turning to YouTube before making a buying decision, to learn something, read a review, or just relax.

There are several video marketing platforms, including Facebook Videos, Instagram, and even TikTok to use to run a video marketing campaign. Companies find the most success with video by integrating it with SEO, content marketing, and broader social media marketing campaigns.

SMS Messaging

Companies and nonprofit organizations also use SMS or text messages to send information about their latest promotions or give opportunities to willing customers. Political candidates running for office also use SMS message campaigns to spread positive information about their own platforms. As technology has advanced, many text-to-give campaigns also allow customers to directly pay or give via a simple text message.

BENEFITS OF DIGITAL MARKETING

- You can focus your efforts on only the prospects most likely to purchase your product or service.
- It's more cost-effective than outbound marketing methods.
- Digital marketing evens the playing field within your industry and allows you to compete with bigger brands.
- Digital marketing is measurable.
- It's easier to adapt and change a digital marketing strategy.
- Digital marketing can improve your conversion rate and the quality of your leads.

STRATEGIES OF DIGITAL MARKETING

- **Identify Marketing Goals** — The first step in this process involves identifying specific goals, such as driving sales, generating leads, building brand recognition or increasing subscribers.
- **Solidify Sales Process** — To maximize the benefits of digital marketing, it is necessary to understand the digital sales process and exactly how customers will make digital purchases.
- **Isolate Target Customers** — Creating a strong target demographic with refined buyer personas helps isolate the ideal customers to purchase business goods or services.
- **Choose Marketing Channels** — Armed with target demographic and buyer personas, it is important to identify the best digital marketing channels to reach those ideal customers.
- **Set Clear Benchmarks** — In order to evaluate a digital marketing strategy, it is advisable to establish clear benchmarks for success and measure progress along the way.
- **Make Necessary Adjustments** — After creating and implementing a digital marketing strategy, it is important to monitor progress toward goals and adjust as needed.

An effective digital marketing strategy must take into the account the individual needs and goals of the business in question. Accordingly, a digital marketing strategy that works for a small “mom-and-pop” store is likely inappropriate for a global brand. The good news is that digital marketing offers a wide range of methods, channels and strategies. So, businesses of just about any size and in just about any industry can leverage digital marketing to great effect.

CHALLENGES OF DIGITAL MARKETING

- Digital marketing poses special challenges for its purveyors. Digital channels proliferate rapidly, and digital marketers have to keep up with how these channels work, how they're used by receivers, and how to use these channels to effectively market their products or services.
- It's becoming more difficult to capture receivers' attention because receivers are increasingly inundated with competing ads. Digital marketers also find it challenging to analyze the vast troves of data they capture and then exploit this information in new marketing efforts.
- The challenge of capturing and using data effectively highlights that digital marketing requires an approach to marketing based on a deep understanding of consumer behavior. For example, it may require a company to analyze new forms of consumer behavior, such as using website heat maps to learn more about the customer journey.

OPPORTUNITIES OF DIGITAL MARKETING

- International Business Opportunities
- Changing corporate working style
- Help to grow the businesses

CONCLUSION

The research and practice of digital marketing is improving with the advancement of technology. The advancement in technology fosters multifaceted opportunities and at the same time poses unprecedented challenges for the marketers. Marketers make use of digital portfolio as a platform to promote a professional brand by defining the product in a manner that adds credibility. Research highlight that B2B buyers dislike cold emails and calls, hence, Digital marketing allows enough provisions for finding the right people through its streamlined search engine and connections. In the present era, buyers expect knowledge that offers potential solution to their product related problems. The strong visibility of the organization or the brand through digital marketing allows the consumers to develop perceived knowledge about the brand. By the spread of word of mouth and getting recommendation from their connections assist the user in making active decisions about purchasing.

REFERENCES

1. Dabbagh, N and Kitsantas, A. (2012) Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education*, 15(1), pp.3-8.
2. Deymers, J. (2016) The Top 10 Benefits of Content Marketing [online]. Available from: <http://www.inc.com/jayson-demers/the-top-10-benefits-of-content-marketing.html> [Accessed on 8 April 2016].
3. Doherty, R; Wrigley, C; Matthews, J.H and Bucolo, S. (2015) Climbing the design ladder: Step by step. *Industrial Distribution*, 7(2), pp.60-82.
4. Ellis, K. (2014) Television's transition to the internet: Disability accessibility and broadband-based TV in Australia. *Media International Australia, Incorporating Culture & Policy*, 15(3), pp.53-62.
5. Evans, D. (2012) Research and Markets; Social Media Marketing: An hour a day. *Marketing Weekly News*, 30(6), pp.271-284.
6. Heymann-Reder, D. (2012) *Social Media Marketing*. New York: Addison-Wesley Verlag.
7. Jarboe, G. (2011) Research and Markets; YouTube and Video Marketing: An Hour a Day. *Marketing Weekly News*, 10(3), pp.12-35.
8. Kent, M.L and Taylor, M. (2003) Maximizing media relations: A Web site checklist. *Public Relations Quarterly*, 48(1), pp.14-17.

ONLINE DIGITAL MARKETING: A HIGH-LEVEL CUSTOMER SATISFACTION TOWARDS ONLINE SHOPPING IN ERODE TOWN

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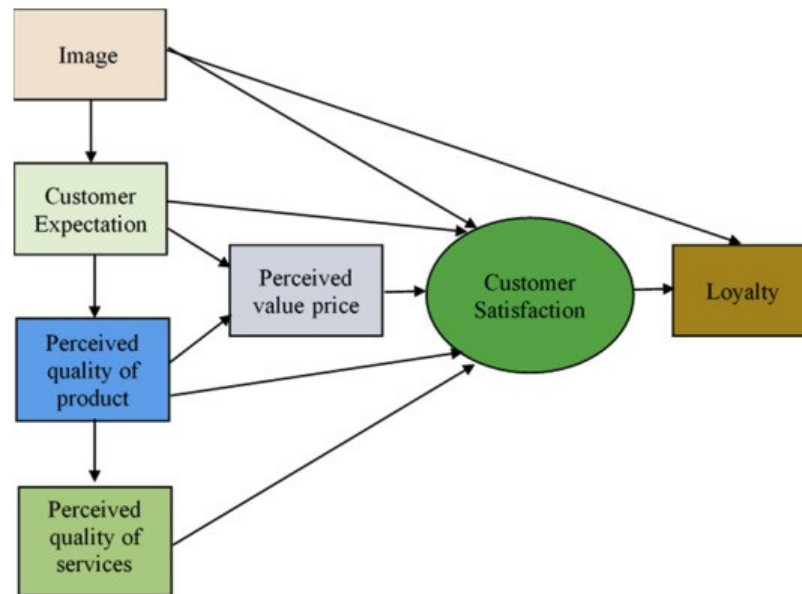
Abstract

A demand for information updates has arisen due to the significant change from traditional to online shopping. Computer networks that connect countries worldwide and unite them into a global village, facilitating trade, have made these breakthroughs feasible. The internet has grown to be a crucial part of everyone's everyday life over the past several years. As a consequence, people's character and manner of life have changed. Setting up an internet connection is the responsibility of Internet Service Providers. Executives in charge of marketing are accountable for boosting organic growth at their respective organizations. This curriculum will position business to fulfill the expectations of customers and stand out from the other businesses in e-commerce industry by assisting in developing and implementing an integrated marketing strategy. The frameworks, ideas, and tools need to support profitable development by taking a more inventive approach to the formulation and implementation of marketing strategies, and this will be the case regardless of the e-commerce. The main objectives of the study are to evaluate consumer satisfaction with online purchasing and customer service and to outline how satisfied customers are with their online buying experience.

Keywords: *Digital marketing, Customer satisfaction and online shopping*

Introduction

The emergence of online digital marketing has fundamentally altered how companies connect with and interact with their consumers. Researchers want to know how satisfied customers were with online digital marketing activities and what variables could have influenced that contentment. Customers who had engaged with online digital marketing were surveyed, and researchers examined the results to identify patterns and trends. According to the findings of our survey, customers are generally happy with their interactions with online digital marketing. However, a number of important variables, such as the marketing message's relevancy, the quality of the customer experience, and the degree of personalization on offer, may have a big influence on that satisfaction. Our research has significant outcomes for business trying to optimize the results of their online digital marketing campaigns. Online digital marketing has emerged as a crucial tool for companies looking to connect with and interact with consumers in recent years. The range of channels and strategies accessible, from email marketing and social media advertising to search engine optimization and content marketing, has allowed business to engage with consumers in ways that weren't before conceivable. There is a need to better understand the levels of customer's happiness with online digital marketing and the elements that affect that satisfaction, notwithstanding its potential advantages. By better knowing their customer wants and expectations, business may tailor their online digital marketing campaigns.



Ajzen (1991), intentions are seen as a reflection of how far a person is willing to go to complete a task and how many times they have attempted to do so. According to study done on TPB, perceived behavioural control and subjective norm the sum of other people's views in their local vicinity were shown to have the most effects on Thai consumers' inclination to make online purchases (Orapin, 2009). Due to the fact that these two factors have the potential to affect customers' purchase intentions, online shopping behaviour, and ultimately their behaviours. It is also vital to do research on buying intentions as an alternative to actual purchasing behaviour. Despite this, research has revealed that online customers' actual behaviour is closely related to their purchase intention. (2008) He, Lu et al. The fact that a person's desire to buy does not always translate into a purchase is crucial to remember. According to technology acceptance mode, consumer perceptions of usability and comfort of use affect choice when online behavioural intentions become entrenched. (Jones & Kim 2009). The Technology Acceptance Model demonstrates how consumer views of the technology's usability and convenience of use affected their intentions to engage in online behaviour. (TAM) (Hu, Lu, et al., 2009) An online website has to comprehend customers' purchasing behaviours in order to establish and maintain a strong relationship with them. Future studies should examine how purchase intention and actual online purchasing are related, Jamil and Mat's (2011).

Online Digital Marketing - An Overview

Consumers' purchasing experiences have been changed by the internet, which has fast spread to include the whole planet. Many businesses have started using internet shopping to reduce the price of their products in fiercely competitive markets with the aim of reducing marketing expenses. Businesses use the Internet to connect, transport, and distribute products and information. Before making a purchase, shoppers use the Internet in a variety of ways, including comparing product features, costs, warranties, and delivery alternatives. The online marketing sector will reportedly keep expanding in the years to come, according to several analysts. Businesses have a rare chance to reach out to both present and potential customers more efficiently thanks to the Internet. Despite the fact that the bulk of online sales are made between businesses, people in the business-to-consumer sector. The previous several years have seen rapid growth in this sector. Due to the fast growth of these enterprises, more and more investors and organizations are focusing on the E-Commerce industry. When it comes to internet use among Asian countries, Indian citizens rank third. Internet marketers that are

attempting to promote their items would also gain from this. The world has shrunk to the size of a palm thanks to technology used by e-commerce businesses for international product purchases. Customers have a variety of alternatives when it comes to making purchases online, which they may use to benefit from the tools and services provided by online sellers.

Statement of the problem

Shopping online is still a relatively new phenomenon in the realm of e-commerce; it is clearly the way of the future for consumer spending throughout the globe. The vast majority of business units make their goods and services available over the internet. The number of young people who are interested in making purchases online is increasing every day. The young have a slightly different perspective on internet shopping; they regard it as a new trend that helps save time, is easy to access, provides variety, and is more interesting than traditional shopping methods. When shopping online initially became popular, many automatically assumed that it was not secure, that the products were of low quality, and that they could not be trusted. However, throughout the course of time, people's perspectives have altered, and it is now showing signs of being beneficial among young people. Businesses now have a unique opportunity to communicate with their customers as a result of the growing prevalence of the internet and Smartphone use, as well as the growing adoption of online payment methods. Young women and men alike are getting caught up in the online shopping craze because, in contrast to the past, when they had to devote a significant amount of time to shopping, they are now able to look through a number of websites, locate the best deal, and place an order within a few minutes while sitting in the comfort of their own homes.

Research Objectives

1. To evaluate consumer satisfaction with online purchasing and customer service
2. To outline how satisfied customers are with their online buying experience

Methodology

The study is descriptive in nature, and its goal is to evaluate consumer satisfaction with online shopping and gauge the importance of these factors. A research was conducted and utilizing a questionnaire with relevant questions on online shopping to gain first-hand knowledge. In order to acquire the data for this investigation, a simple random strategy was used. The study's data have undergone quantitative analysis. Due to the fact that respondents were given access to all reasonable answers, all of the questions had closed-ended answers. These questions are also easy to use, reduce interviewer and respondent bias, and simplify coding and tabulation (Collis & Hussey, 2009). Most of the research is descriptive. Each concern is given a Likert scale rating out of five. To better understand how customers behave while making purchases online, a descriptive study employing a survey and a questionnaire has been carried out (Google form). The sample size is composed of 100 respondents.

Findings, Discussion and Results

Satisfaction towards online shopping

An online marketing has to understand the buying habits of its customers to have a successful connection with them. According to Jamil and Mat, further research should look at how purchase intention and internet shopping are related Kim and Hong (2010). Because of India's extensive Internet use, e-commerce has the potential to thrive there. Certain decisions are regarded as an applied discipline in the study of consumer behaviour since they have a significant influence on consumers' expectations and behaviour. This information may be used by online shoppers to create fresh marketing strategies that may convert prospects into paying

customers. The two most popular methods of bringing it to light are from the societal and micro viewpoints. Jamil and Mat (2011).

Table 1

Factors	Mean	Std. Deviation	Mean Rank
Good packaging	4.29	1.201	5.61
Low Price	3.73	0.887	4.86
Loyalty	3.35	0.702	4.15
Original Brand	3.07	1.059	3.79
Payment mode	2.55	1.386	5.69
Policy on cancellation or return	2.64	1.147	3.07
Product description	3.12	1.072	3.67

Pricing strategies, availability of branded items, packaging, security and privacy, payment method, product description, and the quality of the goods and services offered during online shopping are all combined under the heading of product quality. The way a complaint is resolved, loyalty to this online store, the speed of delivery, appropriate communication, and the cancellation or return policy are all examples of the quality of services. E-Services offered by internet retailers are taken into consideration. The website's constant updating and the web portal's user-friendliness Payment method (5.69), followed by quality package (5.61).

Implications of the Study

Our study's findings have significant ramifications for business looking to get the most out of their online digital marketing campaigns. First and foremost, it's crucial to make sure that marketing messages are relevant and tailored to the wants and requirements of the consumer. Second, companies should make an effort to provide customers with a great experience, which includes making sure that customer care is available and helpful. Businesses had to think about providing customization alternatives, such the capability to opt-in or opt-out of certain marketing initiatives, the capacity to supply feedback, and the ability to have customers' wishes honored.

Conclusion

Millions of people use the internet now for a variety of purposes, including communication, research, entertainment, and most recently buying and selling products and services. In fact, one of the most common online pleasures is shopping. E-commerce purchases are rising among those with better incomes and more education. Because of security concerns, many are resistant to make online purchases. The technological challenges involved in making an online purchase, on the other hand, discourage people from making a transition. Kim and Hong (2010) Focusing on creating trustworthy connections between suppliers and customers is what online shops should do. The data suggests that online purchasing is becoming more and more popular among younger people. E-commerce purchases are rising among those with better incomes and more education. Because of security concerns, many are reluctant to make online purchases. The technological challenges involved in making an online purchase, on the other hand, discourage people from making a transition. Thus, it may be said that the level of satisfaction is higher than usual. Important information on customer satisfaction with online

digital marketing is provided by the study. Our results underline how crucial relevance, excellence, and customization are in enhancing customer satisfaction with online digital marketing initiatives. Businesses may enhance their online digital marketing activities and better satisfy the requirements and expectations of their consumers by taking these variables into account.

References

- Goswami, A., Borthakur, M., & Rahman, S. (2013). Customer satisfaction towards online shopping with special reference to teenage group of Jorhat town. *Paripex - Indian Journal of Research*, 3(4), 239-241.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice.Hall.
- Pant, A. (2014). An online shopping changes the traditional path of consumer purchasing. *International Journal of Business and Management Invention*, 3(3), 39-42.
- S, C. T., & Gurleen, K. (2012). Consumers perception towards online shopping-the case of Punjab. *International Journal of Management & Information Technology*, 1(1), 1-6.
- Dolatabadi, M., Moshrefjavadi, M., Nourbakhsh, A., Poursaedi, A., & Asadollahi, A. (2012). An analysis of factors affecting on online shopping behavior of consumers. *International Journal of Marketing Studies*, 4(5), 4.
- He, D., Lu, Y., & Zhou, D. (2008). An empirical study of consumers' purchase intentions in C2C electronic commerce. *Journal of Electronic Commerce Research*, 13(3), 287-292.
- Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Sharma, S., & Mittal, S. (2009). Prospects of e-commerce in India. *Asian Journal of Management and Research*, 3(2), 396-408.
- Vanitha, R., & Prakash, M. (2016). A study of common problems faced by customers in online shopping with special reference to Coimbatore city. *International Journal of Current Research and Modern Education*, 1(1), 651-656.
- Veerakumar, T. (2016). Research on quality factors influencing online shopping. *International Journal of Engineering Research and Modern Education*, 1(2), 1-5.

WEIGHING UP THE EVIDENCE: IMPACT OF CAPITAL STRUCTURE ON FINANCIAL PERFORMANCE

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Abstract

The capital structure is a combination of debt and equity that will be expressed in the balance sheet and influences the cash flow, risks, and returns, thus simultaneously influencing the firm's performance and value. Hence, capital structure decision is crucial decision taken by financial managers and decision-makers. The major objective of corporate financial managers is to create capital with minimum cost in order to increase shareholders' wealth. Thus, an appropriate mix of capital structure is an essential tool to fix with a minimum cost of capital by having maximum profitability. Therefore, the researchers aimed to investigate the impact of capital structure on the financial performance of selected fertiliser manufacturing companies listed on the Bombay Stock Exchange in India. Twenty companies have been selected, and ten years of data have been collected through respective companies' websites. The collected data were analysed through descriptive statistics, correlation and multiple regression analysis. The study identified that, though there is a significant positive correlation between TDTAR and ROCE and a significant negative correlation between TDTAR with ROA, there is no significant influence of capital structure on financial performance.

Keywords: Capital Structure, Fertilizer, Financial Performance

1. INTRODUCTION

In developing countries like India, manufacturing firms play an important role in the growth and development of the economy by taking place in international and global competition by extending their market access globally. For those extensions as well as for smooth flow of business, they require finance. Thus, finance in the form of capital structure is the first and foremost need for any business; no business can exist without finance. The capital structure which includes internal sources like reserves and surplus and retained earnings and external sources like long term borrowing such as debentures, bonds, securities etc. and also shares (Bandyopadhyay & Barua, 2016). The capital structure is a combination of debt and equity that will be expressed in their balance sheet and influences the cash flow, risks, and returns, thus simultaneously influencing the firm's performance and value. The capital structure decision is a crucial decision taken by financial managers and decision-makers (Kruglova, 2021); (Bhutto et al., 2021) because the major objective of corporate financial managers is to create capital with minimum cost in order to increase shareholders wealth. Thus, an appropriate capital structure mix is an essential tool to fix with a minimum cost of capital having maximum profitability (Akani & Chukwemeka, 2021). Hence the researchers intended to investigate the impact of capital structure in this study.

In agricultural production, fertiliser plays a vital role by providing nutrition to the soil and increasing productivity. Thus, for the benefit of farmers, the government provides various subsidies for the fertiliser company for availing quality products with minimum cost (Jaganmohan, 2021). As the fertiliser manufacturing companies in India are supporting the government, directly and indirectly, it is necessary to analyse their capital structure and its impact on financial performance. Hence, the researchers examined the relationship between

capital structure and financial performance and analysed the impact of capital structure on the financial performance of fertiliser manufacturing companies in India.

2. REVIEW OF LITERATURE

In order to study the impact of capital structure on financial performance, various studies have been carried on by numerous researchers throughout the world. From that, a few studies were reviewed for a better understanding of the study area. Ebaid (2009) analysed the impact of capital structure choice on firm performance by applying multiple regression analysis and highlighted that capital structure had no significant impact on the performance of firms that were listed on the Egyptian Stock Exchange. Salim and Yadav (2012) examined the relationship between capital structure and firm performance of Malaysian listed firms by applying regression analysis, which indicated that capital structure had a significant positive relationship with Tobin's Q but a significant negative relationship with return on equity and return on asset. Vatavu (2015) conducted a study to check the impact of capital structure on financial performance using cross-sectional regression. He concluded that capital structure had a significant impact on the financial performance of Romanian listed companies. Abdullah and Tursoy (2019) explored the relationship between capital structure and firm performance using panel regression analysis, resulting in a significant positive relationship between capital structure and firm performance of non-financial firms listed in Germany. Bhutto et al., (2021) analysed the effect of capital structure on the financial performance of listed manufacturing firms of Pakistan using partial least square-structure equation modelling. The result indicated that capital structure had a statistically significant positive effect on financial performance. Ayo and Muba (2021) investigated the influence of capital structure on the performance of firms listed in Tanzania using a panel regression model. They reported that the capital structure significantly influenced firms' performance. Gwa (2021) observed the impact of capital structure on the profitability of manufacturing firms in Nigeria using multiple regression analyses. The results showed a positive effect of capital structure on the profitability of firms. Saka and Fatogun (2021) studied Nigerian manufacturing companies' capital structure and value using the panel regression technique, and the result indicated that capital structure had no significant impact on firms' performance. The research gap for the present study was identified after reviewing the above literature. All those studies were conducted in foreign countries, not applying to the Indian context. Further, no study was conducted to analyse the impact of capital structure on the financial performance of the fertiliser industry in India. Hence the gap was identified, and the researchers carried on the research to explore that area to investigate the impact of capital structure on the financial performance of listed fertiliser manufacturing companies in India by using correlation and regression analysis techniques.

3. OBJECTIVES OF THE STUDY

- To identify the relationship between capital structure and financial performance of selected firms
- To investigate the impact of capital structure on financial performance of the selected firms

4. HYPOTHESES OF THE STUDY

H₁: Significant relationship exists between capital structure and financial performance of selected firms

H₂: Significant impact of capital structure on RONW of the selected firms

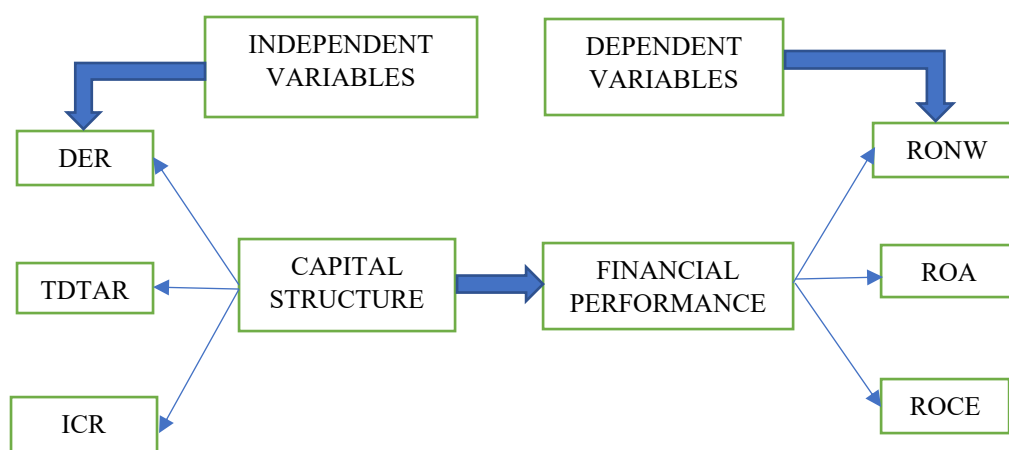
H₃: Significant impact of capital structure on ROA of the selected firms

H₄: Significant impact of capital structure on ROCE of the selected firms

5. METHODOLOGY

The study is analytical in nature and uses secondary data for analysis. There are a total of twenty companies listed on the Bombay Stock Exchange under the fertiliser manufacturing sector, and all these companies have been selected for the study. The ten-year data range from 2011-2012 to 2020-2021 were gathered from respective companies' websites and analysed by applying descriptive statistics, correlation analysis and multiple regression analysis. The capital structure was measured using proxies like Debt Equity Ratio (DER), Total Debt to Total Assets Ratio (TDTAR) and Interest Coverage Ratio (ICR). The financial performance proxies were Return on Net Worth (RONW), Return on Assets (ROA) and Return on Capital Employed (ROCE). To analyse the relationship between capital structure and financial performance and to explore the impact of capital structure on financial performance, the following variables were used:

Figure – 1
Conceptual Framework



6. RESEARCH VARIABLES

Table-1
Research Variables

	Variables	Measurements
Dependent Variables	RONW (Bhutto et al., 2021)	Profit after tax – Preference dividend / Equity shareholder's funds *100
	ROA (Bhutto et al., 2021)	Net profit after tax – Interest / Total assets * 100
	ROCE (Ayo & Muba, 2021)	Earnings before interest and tax / Capital employed
Independent Variables	DER (Kruglova, 2021)	Total long-term debt / Equity shareholder's fund
	TDTAR (Gwa, 2021)	Total debt / Total assets
	ICR (Kruglova, 2021)	Earnings before interest and tax / Interest charges

7. RESULT AND DISCUSSION

7.1 Descriptive Statistics

Table - 2
Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
DER	20	-2	4	.88	1.405
TDTAR	20	0	1	.34	.198
ICR	20	0	28	6.80	8.546
RONW	20	-54	100	5.41	29.177
ROA	20	-6	18	3.36	5.276
ROCE	20	4	127	17.56	26.632

DER has a mean value of 0.88, which is close to the ideal ratio of 1. It is considered as good, and the firms are balanced with long-term debt and equity mix. TDTAR has a mean value of .34, which is less than 0.4 and depicts the healthy position of firms. ICR has a mean value of 6.80, which is closer to the ideal ratio of 7. This made the companies pay their interest on time. RONW has a mean value of 5.41, which is below the ideal ratio of 10. This indicates that the companies did not utilise owners' funds effectively. The mean value of ROA (3.36) highlighted that the companies effectively invest in assets and earn more profit. Due to higher EBIT, the firms have a higher mean value (17.56) of ROCE. During the study period among the selected firms, there is a moderate deviation of DER (1.405), ICR (8.546) and ROA (5.276). The TDTAR has a lower deviation (.198), RONW (29.177) and ROCE (26.632) have a higher deviation.

7.2 Correlation Analysis

The correlation analysis is employed to test the relationship between capital structure and financial performance of selected firms:

Table – 3
Correlations

Variables	DER	TDTAR	ICR	RONW	ROA	ROCE
DER	1					
TDTAR	.021	1				
ICR	-.244	-.647**	1			
RONW	-.061	-.381	.197	1		
ROA	-.065	-.564**	.415	.940**	1	
ROCE	-.362	.479*	-.236	-.194	-.252	1
** <i>. Correlation is significant at the 0.01 level (2-tailed).</i>						
* <i>. Correlation is significant at the 0.05 level (2-tailed).</i>						

TDTAR has a statistically significant negative correlation with ICR and ROA at 0.01 level of significance as its correlation coefficients were -.647 and -.564. TDTAR has a statistically significant positive correlation with ROCE at 0.05 level of significance as its correlation coefficient is .479. DER and ICR do not have any statistically significant relationship with other selected variables. The results indicate that an increase in TDTAR will affect the ROA negatively and positively ROCE. Thus, the results proclaim that capital structure has a statistically significant relationship with the financial performance of selected fertiliser manufacturing companies. This reaffirms to acceptance of the hypothesis (H₁).

7.3 Multiple Regression Analysis

In order to investigate the impact of capital structure on financial performance of selected fertilizer manufacturing companies, the following regression models have been used by the researchers and analysed with the help of SPSS 26.0 package:

$$RONW = \alpha + \beta_1 DER + \beta_2 TDTAR + \beta_3 ICR + \varepsilon$$

$$ROA = \alpha + \beta_1 DER + \beta_2 TDTAR + \beta_3 ICR + \varepsilon$$

$$ROCE = \alpha + \beta_1 DER + \beta_2 TDTAR + \beta_3 ICR + \varepsilon$$

Where,

$\alpha = \text{Constant}; \beta_1, \beta_2, \beta_3 = \text{Regression Coefficients}; \varepsilon = \text{Error};$

Table - 4
Model Summary

Model	Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	RONW	.394 ^a	.155	-.004	29.228
2	ROA	.569 ^a	.324	.197	4.728
3	ROCE	.607 ^a	.368	.250	23.064

a. Predictors: (Constant), ICR, DER, TDTAR

The coefficient of determination (R^2) values of all three models (0.155, 0.324, 0.368) indicates 15.5% of the variation in RONW, 32.4% of the variation in ROA and 36.8% of the variation in ROCE are explained by DER, TDTAR and ICR. The remaining 84.5% of the variation in RONW, 67.6% of the variation in ROA and 63.2% of the variation in ROCE would be explained by some other variables which are not described in this analysis.

Table – 5
ANOVA^a

Model	Dependent Variable		Sum of Squares	Df	Mean Square	F	Sig.	Statistical Inference
1	RONW	Regression	2506.16	3	835.38	.978	.428 ^b	Not Significant
		Residual	13668.40	16	854.27			
		Total	16174.57	19				
2	ROA	Regression	171.19	3	57.06	2.553	.092 ^b	Not Significant
		Residual	357.68	16	22.35			
		Total	528.87	19				
3	ROCE	Regression	4964.09	3	1654.69	3.111	.056 ^b	Not Significant
		Residual	8511.41	16	531.96			
		Total						

Total 13475.51 19

a. *Dependent Variable: RONW, ROA, ROCE*

b. *Predictors: (Constant), ICR, DER, TDTAR*

As the p-values (0.428, 0.092 and 0.056) of all models are > 0.05, it is reported that DER, TDTAR and ICR simultaneously do not have a statistically significant effect on RONW, ROA and ROCE. This insists us to reject H₂, H₃ and H₄.

Table – 6

Coefficients ^a							
Dependent Variable	Independent Variable	B	t	Sig.	Statistical Inference	Tol.	VIF
RONW	(Constant)	32.237	1.382	.186			
	DER	-1.649	-.329	.746	Not Significant	.908	1.101
	TDTAR	-66.916	-1.481	.158	Not Significant	.561	1.782
	ICR	-.397	-.367	.718	Not Significant	.528	1.894
ROA	(Constant)	7.843	2.079	.054			
	DER	-.135	-.167	.870	Not Significant	.908	1.101
	TDTAR	-13.767	-1.884	.078	Not Significant	.561	1.782
	ICR	.044	.254	.803	Not Significant	.528	1.894
ROCE	(Constant)	2.712	.147	.885			
	DER	-7.149	-1.809	.089	Not Significant	.908	1.101
	TDTAR	63.653	1.785	.093	Not Significant	.561	1.782
	ICR	-.067	-.078	.938	Not Significant	.528	1.894
<i>a. Dependent Variable: RONW, ROA, ROCE</i>							

As the p-value of DER, TDTAR and ICR in all models are > 0.05, they are not useful in explaining any of the dependent variables (RONW, ROA and ROCE). As all three independent variables' VIF values are < 5 and the common cut off value of tolerance value is 0.10, the regression model did not face a multicollinearity problem (Supriati et al., 2018).

Overall, these results concluded that capital structure did not significantly influence the financial performance of selected companies.

Based on the above results the estimated regression equations have been framed:

$$Y (\text{RONW}) = 32.237 - 1.649 \text{ DER} - 66.916 \text{ TDTAR} - 0.397 \text{ ICR}$$

$$Y (\text{ROA}) = 7.843 - 0.135 \text{ DER} - 13.767 \text{ TDTAR} + 0.044 \text{ ICR}$$

$$Y (\text{ROCE}) = 2.712 - 7.149 \text{ DER} + 63.653 \text{ TDTAR} - 0.067 \text{ ICR}$$

8. CONCLUSION

A company has to frame its capital structure at an optimum level to increase its profitability, which will automatically influence its performance. Fertiliser companies playing a vital role in the development of agricultural industry which is need of an hour for every country. Thus, this paper investigated the relationship between capital structure and financial performance and explored the impact of capital structure on the financial performance of fertiliser manufacturing companies listed on the Bombay Stock Exchange in India. The researchers utilised statistical tools like descriptive statistics, correlation and multiple regression analysis to examine the impact of capital structure on financial performance. The correlation result has shown that there was a significant positive correlation between TDTAR and ROCE. TDTAR had a significant negative correlation with ICR and ROA.

Hence, the study concluded that capital structure had a significant relationship with financial performance. These results were supported by (Kruglova, 2021) and opposed by (Ayo & Muba, 2021). The regression results showed that capital structure did not significantly impact financial performance. This result was supported by findings of (Ebaid, 2009; Akani & Chukwuemeka, 2021; Saka & Fatogun, 2021), but it was disagreed by (Abor, 2005; Salim & Yadav, 2012; Vatavu, 2015; Abdullah & Tursoy, 2019; Bhutto et al., 2021; Ayo & Muba, 2021). Therefore, the selected fertiliser manufacturing companies' performance was not influenced by capital structure, but they might have been influenced by some other indicators which were not included in the study. These findings will be helpful for financial managers in making necessary changes in companies' financial policies. Hence, the study suggested that companies use equity inspite of debt to improve their performance.

9. LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

The study has limitations, such as the study used only the fertiliser manufacturing companies listed on the Bombay Stock Exchange, and only ten years of data have been analysed due to constraints in the availability of data. Hence the findings will be applicable only for fertiliser manufacturing companies, but they might not be applicable to other industries. Furthermore, the study explored only the capital structure. Thus, future researchers may carry on their research by analysing other factors such as liquidity and determinants of profitability to examine their influence on the performance of selected fertiliser manufacturing companies in India. In further, they can select companies listed in the National Stock Exchange and do a comparative study between the industries to analyse the importance of capital structure on financial performance.

References

- Abdullah, H., & Tursoy, T. (2019). Capital structure and firm performance: evidence of Germany under IFRS adoption. *Review of Managerial Science*.
<https://doi.org/10.1007/s11846-019-00344-5>
- Akani, H. W., & Chukwuemeka, A. (2021). Capital Structure and Financial Performance of Small and Medium Enterprises in Nigeria | *European Journal of Accounting, Finance and Investment*. *Www.cirdjournal.com*, 7(8).
<https://www.cirdjournal.com/index.php/ejafi/article/view/43/42>
- Ayo, M., & Muba, S. (2021). An Assessment on the Influence of Capital Structure on

- Performance of the Listed Firms in Tanzania. *East African Journal of Business and Economics*, 4(1), 1–13. <https://doi.org/10.37284/eajbe.4.1.468>
- Bandyopadhyay, A., & Barua, N. M. (2016). Factors determining capital structure and corporate performance in India: Studying the business cycle effects. *The Quarterly Review of Economics and Finance*, 61, 160–172. <https://doi.org/10.1016/j.qref.2016.01.004>
- Berger, A. N., & Udell, E. (2006). Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. *Journal of Banking & Finance*, 30(4), 1065–1102. <https://doi.org/10.1016/j.jbankfin.2005.05.015>
- Bhutto, S., Soomro, H., Ghumro, A., Abdul, S., Khairpur, L., & Sindh, P. (2021). Does Capital Structure Effects Firm's Financial Performance? An Intervening Analysis of Dividend Policy Decisions among Listed Manufacturing Firms of Pakistan. *Indian Journal of Economics and Business*, 20(3). [http://www.ashwinanokha.com/resources/ijeb%20v20-3-53%20updated%20pdf%20\(1\).pdf](http://www.ashwinanokha.com/resources/ijeb%20v20-3-53%20updated%20pdf%20(1).pdf)
- Chadha, S., & Sharma, A. K. (2015). Capital Structure and Firm Performance: Empirical Evidence from India. *Vision: The Journal of Business Perspective*, 19(4), 295–302. <https://doi.org/10.1177/0972262915610852>
- Dawar, V. (2014). Agency theory, capital structure and firm performance: some Indian evidence. *Managerial Finance*, 40(12), 1190–1206. <https://doi.org/10.1108/mf-10-2013-0275>
- El-Sayed Ebaid, I. (2009). The impact of capital-structure choice on firm performance: empirical evidence from Egypt. *The Journal of Risk Finance*, 10(5), 477–487. <https://doi.org/10.1108/15265940911001385>
- Gwa, P. (2021). *Katsina-Ala Multidisciplinary Journal 3(1)* ©College of Education, Katsina-Ala Impact of Capital Structure on the Profitability of Manufacturing Firms in Nigeria. https://kamjournal.org/wp-content/uploads/2021/08/Microsoft-Word-Vol-3.-No-1.-final-copy.docx_6_19-28.pdf
- Jaganmohan, M. (2021, May 25). *Topic: Fertilizer industry in India*. Statista. <https://www.statista.com/topics/7488/fertilizer-industry-in-india/#dossierKeyfigures>
- Kruglova, V. (2021). *Impact of Capital Structure on the Value of Listed Russian Companies*. https://dspace.spbu.ru/bitstream/11701/32601/1/VKR_Kruglova_Valeria.pdf
- Le, T. P. V., & Phan, T. B. N. (2017). Capital structure and firm performance: Empirical evidence from a small transition country. *Research in International Business and Finance*, 42, 710–726. <https://doi.org/10.1016/j.ribaf.2017.07.012>
- Margaritis, D., & Psillaki, M. (2007). Capital Structure and Firm Efficiency. *Journal of Business Finance & Accounting*, 0(0), 1447–1469. <https://doi.org/10.1111/j.1468-5957.2007.02056.x>
- SAKA, K. A., & FATOGUN, O. I. (2014). *Capital Structure and Value of Nigerian Manufacturing Companies*. Tripaledu.com. <https://ojs.tripaledu.com/index.php/jefa/article/view/63/75>
- Supriati, D., Ramaditya, M., & Wardhana, N. (2019). Examining the Impact of Leverage and Liquidity on Corporate Performance (A Case Study on Food and Beverage Companies in Indonesia). *Proceedings of the 5th Annual International Conference on Accounting Research (AICAR 2018)*, 73. <https://doi.org/10.2991/aicar-18.2019.32>
- Vătavu, S. (2015). The Impact of Capital Structure on Financial Performance in Romanian Listed Companies. *Procedia Economics and Finance*, 32, 1314–1322. [https://doi.org/10.1016/s2212-5671\(15\)01508-7](https://doi.org/10.1016/s2212-5671(15)01508-7)

STUDY ON CUSTOMER PERCEPTION ON MOBILE BANKING SERVICE OF DBS BANK IN ERODE

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ABSTRACT

Measures of financial development such as the banking sector's assets and domestic credit to private sector have been found to be positively correlated with economic growth. The growth in international financial markets and a greater diversity of financial products have allowed the banks for wider access to funds from various sources. Mobile phones have become an essential communication tool for almost every individual worldwide to update with technologies. Mobile banking helps the customers to perform a lot of wide range of transactions through mobile phones. It facilitates to check details on issue of new cheque book, payment of bills, instruction to stop payment and other value-added services. Internet adoption among Indians has been increasing over the last one decade. It is also found from the analysis of DBS Bank that customers enjoying electronic banking services are still not satisfied with quality and efficiency of the services.

Key Words: *Mobile Banking, customer perception, Value added services, Proximity*

INTRODUCTION

The commercial banking sector plays an essential role in transmitting monetary policy impulses to the entire economic system of a country. The commercial banking sector's efficiency, development and security are vital for enhancing the economic growth of the country and improving the living standard of its citizens.

The banking system of India should not only be hassle free but also be able to meet new challenges posed by technology and any other external and internal factors. Without a sound banking system, India cannot have a healthy economy.

MOBILE BANKING

Mobile banking (also known as M-banking, SMS banking) is a term used for performing balance checks, account transactions, payments, etc. via a mobile device such as a mobile phone. Mobile banking today (2007) is most often performed via SMS or the mobile internet but can also use special programs called clients downloaded to the mobile device. Mobile banking is defined as, usage of banking and financial services with the help of mobile telecommunication devices. The scope of offered services may include facilities to conduct bank and stock market transactions, to administer accounts and to access customized information. Mobile banking may include promotions sent through SMS text messaging, MMS multimedia messaging, through downloaded apps using push notifications, through in-app or in-game marketing, through mobile web sites, or by using a mobile device to scan QR codes. Proximity systems and location based services can alert users based on geographic location or proximity to a service provider.

REVIEW OF LITERATURE

Cudjoe, Anim, and Nyanyofio (2015)¹ in their study examined the determinants of Mobile banking adoption among bank customers in Ghana, with specific emphasis on Access

Bank. He investigated 150 customers of access bank to find out the determinants of Mobile banking adoption in the Ghanaian banking industry. The results indicate that each factor measured had some level of significant effect on consumer intention to adopt and use Mobile banking services provided by Access Bank. Further perceived credibility and perceived financial cost were the major factors that formed a negative behavioral pattern towards Mobile banking of Ghanaians. It also found that perceived financial cost and perceived credibility have a stronger effect on consumer intention to use and adopt Mobile banking service than perceived ease of use and perceived usefulness.

Sandeep and Pradip (2015)² reported that almost all the banks in India provide mobile banking facilities to their customers and the mobile banking facilities offered by the banks are based on different types of platforms. There is a strong relationship between service qualities, perceived value with the customer satisfaction in mobile banking. There are several factors that determine the customer satisfaction of mobile banking in India and they are efficiency, security, cost effectiveness, fulfillment, problem handling and accuracy in results. The finding of this study stated that the reason for the high adoption rate of mobile banking among Indians is the cost effectiveness of using the services. All the banks provide free mobile banking services to their customers and the cost of GPRS enabled mobile phones is quite low. People do not need to pay huge amount of money to use the GPRS service in their mobile. All these things make the cost of using mobile banking service low.

Amiri Aghdaie and Faghani (2015)³ examined the relationship between mobile banking services and customer satisfaction in Iran by applying SERVQUAL model. The researchers used the customer satisfaction as the dependent variable and the five dimensions of service quality; namely, tangibles, reliability, responsiveness, assurance, and empathy, as the independent variables. Results showed that the four variables tangible (0.204), reliability (0.342), responsiveness (0.282), and empathy (0.345) had correlated with satisfaction significantly. However, the assurance factor had no significant relationship with customer satisfaction. The ANOVA test showed that there was a significant correlation between mobile banking services and customer satisfaction. The authors concluded that increase in service quality of the mobile banking could satisfy and develop customer satisfaction and ultimately retains valued customers.

Mohammad et al., (2016)⁴ considered six factors viz., perceived usefulness, subjective norm, perceived ease of use, perceived credibility, consumer awareness about mobile banking and perceived risk associated with mobile banking when analysing the factors influencing the adoption of mobile banking services in Bangladesh. For the research purpose, a questionnaire was constructed to collect data from 70 respondents by using random sampling method. The study pointed out that the above stated factors have a strong and positive effect on customers to accept mobile banking system. The findings of this study revealed that perceived usefulness, subjective norm, perceived ease of use, perceived credibility, consumer awareness and perceived risk about mobile banking were the factors affecting the behavioural intention of mobile users to adopt mobile banking services in Bangladesh. The study further reported that mobile banking customers are increasing because it is comfortable with the digital lifestyle in Bangladesh.

STATEMENT OF THE PROBLEM

The banks offering Value Added Services like bill payments, transfer of money, enquiring account balances, buying and selling of financial instruments such as securities, credit cards, mutual funds, ATM cum debit card, insurance policy, demat accounts and foreign

currency. Creation of all those facilities involves very huge investment. So its most important to increase the usage of Value Added Services among the customers to improve the operational efficiency and get maximum benefit from the investment made in these facilities. In order to increase the number of customers using these facilities, it is imperative to understand the customers awareness and preference for use of Value Added Services, the factors that influence the adoption of these facilities, problems encountered in using Value Added Services and customers' expectations.

OBJECTIVES OF THE STUDY

The following are the objectives of the study

1. To examine the customer perceptions about the Mobile-banking services In DBS Bank Ltd.

METHODOLOGY OF THE STUDY

PRIMARY DATA

The primary data were collected from the selected respondents who are using mobile banking services offered by DBS Bank Ltd. Field survey method was employed to collect the first hand information. For this purpose a well structured questionnaire was used as a tool for collecting the pertinent data from the 300 sample respondents.

SECONDARY DATA

Secondary data were also collected for the study from the Websites, books, leading journals and magazines.

SAMPLE DESIGN

300 account holders were selected for the study from urban and rural areas branches of DBS Bank using stratified random sampling.

Table 1

Factors	Calculated value	Df	p-value	S/NS	Remarks
Gender	13.115	4	.013**	S	Rejected
Age Group	29.54	16	.021**	S	Rejected
Location of Bank	19.145	4	.024**	S	Rejected
Monthly Income	73.56	16	.000**	S	Rejected

FINDINGS OF THE STUDY

- It is showed from the Analysis that the gender and perception of Mobile Banking services under strongly agree category was 21.9 percent in which 113 are male and 40 are female customers. Out of 108 customers, 21 are female who belongs to agree category and the remaining are male. The Analysis also reveals that 142 customers are male and 32 customers are female under neutral category which is 24.9%. Out of 137 customer s, 90 are male who belongs to disagree category and the remaining are female.

- It is Identified from the Analysis that the age and customer perception of Mobile Banking services under strongly agree category of 51-60 years is highest with the value of 30.8 % and the age group 61 and is the lowest with 5 customers.
- It is showed from the Analysis that the Location of bank and customer perception of Mobile Banking services under strongly agree category has 23.2 percent in which 85 are Urban area customers and 78 are Rural area customers. Out of 151 customers, 87 are Urban area customers who belongs to agree category and the remaining are Rural area customers. The Analysis also reveals that 93 customers are Urban area customers and 85 customers are Rural area customers who are under neutral category which accounts for the total of 25.4%. Out of 129 customers, 49 are Urban area customers who belongs to disagree category and the remaining are Rural area customers .
- It is indicated from the Analysis that monthly income and customer perception of Mobile Banking services from strongly agree category is highest with 32.8 per cent with monthly income less than Rs.15000 and the same is lowest among the respondents having family income between Rs.40,001-50000 with the count of seven.

Chi-Square Analysis

- It is found from the Analysis that the p-value is less than 0.05 ($p < 0.05$); and the results are significant. Hence, the hypothesis “there is no difference between gender customer perception about Mobile Banking service” is disproved. This implies that there is significant difference between gender and customer perception about Mobile Banking services.
- It is disclosed from the Analysis that the p-value is less than 0.05; and the results are significant. Hence, the hypothesis “there is no difference between age and customer perception of Mobile Banking services” is disproved. This shows that there is significant difference between age and customer perception of Mobile Banking services.
- It is found from the Analysis that the p-value is less than 0.05 ($p < 0.05$); and the results are significant. Hence, the hypothesis “there is no difference between location of bank and customer perception of Mobile Banking service” is disproved. This implies that there is significant difference between location of bank and customer perception of Mobile Banking service at 5% level.
- It is identified from the Analysis that the p-value is less than 0.01; and the results are significant. Hence, the hypothesis “there is no difference between monthly income of the customer and perception of Mobile Banking services” is dis-proved. This shows that there is the difference between monthly income and customer perception of Mobile Banking services .

SUGGESTIONS

TO THE CUSTOMERS OF DBS BANK

- 1) DBS customers should create awareness among rural people about the advantages of M-banking / internet banking services available in the bank. The M-banking / internet banking system should be enhanced to make the online enquiry and online payment much more easier to the customers of rural areas.
- 2) Most of the customers have not availed of the M-banking services because they do not trust the internet channel presuming it as complicated due to their lack of knowledge.

So DBS may set up a team of personnel to train the customers to get acquainted with internet channel.

CONCLUSION

Customers perception of and reactions to the developments of M-banking services are issues of concern by banking industry and LVB is no more an exception. A lot need to be done to create confidence in the minds of rural area customers about the benefits and security of the M-banking services which is the primary responsibility bankers and RBI. A special emphasis must be given by Lakshmi Villas Bank Ltd for the security which would promote customers in using Mobile-banking services to the largest extent. To induce the potential customers to try out mobile banking, Lakshmi Villas Bank Ltd has to follow better marketing structure and inform the customers the benefits of mobile banking effectively and efficiently to meet the requirement of global competition.

REFERENCES

- Cudjoe, A.G., Anim, P.A. and Nyanyofio, J.G.N.T. (2015). Determinants of Mobile banking Adoption in the Ghanaian Banking Industry: A Case of Access Bank Ghana Limited. *Journal of Computer and Communications*, 3, 1-19.
- Sandeep Bhalchandra Saoji and Pradip Kumar Goel (2015), "Understanding Customer Response and Customer Satisfaction of Mobile Banking in India", *International Journal of Advanced System and Social Engineering Research*, ISSN 2278 - 6031, Vol 3, Issue 1, 2013, pp1-5.
- Amiri Aghdaie S. F. Faghani F. (2015), "Mobile Banking Service Quality and Customer Satisfaction (Application of SERVQUAL Model)", *Int. J. Manag. Bus. Res.*, 2 (4), 351-361, autumn 2012 © IAU.
- Mohammad Masudul Hassan, Airin Rahman, Sharmin Afrin and Md.Gulam Rabbany(2016), "Factor Influencing the Adoption of Mobile Banking Services in Bangladesh: An Empirical Analysis", *International Research Journal of Marketing*, 2 (1), pp:9-20.

Study of India's Environmental Imperatives for Sustainable Development

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Abstract

The concept of sustainable development is still being developed and the definition of the term is constantly being revised, extended, and refunded, its main components are the economic, social, and environmental factors. Sustainable development is the concept of environmental protection for the sake of future generation. Sustainability is the process of change in which exploitation of resources, direction of investments orientation of technological changes, etc. Sustainable development is the preservation of the production possibilities of an economy to provide the same goods and services obtained from nature. Sustainable development involves disciplines such as ecology, biology, an opinion but imperative. For a better India to live in; we need good air, pure water, nutritious food, healthy environment and greenery ethics, economics, chemistry, physics, statistics, and engineering. Sustainability is not around us. Without sustainability environmental deterioration and economic decline will be feeding on each other leading to poverty, pollution, poor health, political upheaval and unrest. The environment is not to be seen as a stand-alone concern. We need to tackle the environmental degradation in a holistic manner in order to ensure both Economic and Environmental sustainability. Forests play an important role in environmental and economic sustainability. They provide numerous goods and services and maintain life support systems for life on earth. Some of these life support systems of major economic and environmental importance.

Keywords: Sustainable development, Environment and Development, Social Forestry, Green Economics of India.

1.1 Introduction

Sustainable development is playing important role to all societies, but critical for poor ones, which depends more heavily on natural resources such as soils, rivers, fisheries, and forests than do the richer nations. It is argued that environmental problems in developing countries are predominantly driven by poverty, while those of richer nations are driven by affluence and over consumption. This is the subject of the future, especially when considered in a long-term generation perspective. Sustainability is about the possibility that the things we value in the present will continue to exist in the future. Sustainable development is the concept of relationship between economic growth and the environment. This paper addresses some pertinent issues concerning economics of Sustainable development in the present context through literature.

1.2 Objectives of sustainable development

Economic objectives

- Growth
- Efficiency
- Stability
- Social objectives
 - Full employment

- Equity
- Security
- Education
- Health
- Participation
- Cultural identity
- Environmental objectives
 - Healthy environment for humans
 - Rational use of renewable natural resources
 - conservation of non-renewable natural resources

1.3 Review of literature

Fry (2017) expressed the view that universities had to compete in a global higher education market. E-learning initiatives will not only give universities a new channel of educational deployment, but also will also support strategic objectives by assisting asynchronous discussion consortiums and networked communities. The success of e-learning implementation depends on the institutional Structure that institutional leaders create within their institutions in preparation for the incorporation of any new technological innovations for improving the efficiency of their lecturers and the effectiveness of the pedagogical methods that lecturers use in disseminating educational material to learners. It is therefore necessary to explore HEI organizational structures that enable the adoption of e-learning. O'Connell reported that the students' from non-technical backgrounds or those who are more accustomed to traditional face to face learning environments, experience problems absorbing course material for e-learning, undergraduate students' who are perhaps more assertive and motivated should be given focused training on how they can take full advantage of e-learning environments. IT skills can prove problems of students' on distance learning courses and if the requirement for training is not addressed, students' will not experience the full benefits of the e-learning environment Furthermore, a lack of IT skills is one of the main reasons for students' non-participation in e-learning courses Whilst not looking to replace 'real' paper with technology based resource, it is the process of augmentation and enhancement with the 'traditional' resources to enable reflection, encapsulation, consolidation and extension of the written word.

Frank Greenagel (2018) suggests that the learning is often a gradual process that happens through a series of shaping activities, which are not always instructor-initiated. This is sometimes called tacit learning. The coaching process recognizes this, and so do many lab courses where we expect students' skills will develop over the semester without explicit focus on those skills. Learning communities work; there is a social as well as cognitive dimension to learning. Students' transform the information they get from instructors and texts into meaningful knowledge through conversations, arguments, lunches, discussion groups and other real- world activities. Garrison and Anderson , state that the dominant issue in education today is not to access more information. In fact, making sense of the quantity of material they are exposed to is a serious challenge for students'. The goal is to give students' the abilities and strategies required to manage this overwhelming breadth and depth of information. In working towards this goal, educators began to realize that the only long-term solution was to construct an educational environment in which students' would not only learn, but know where they would learn to learn. In this regard, the focus of education is shifting to the development of critical thinking and self-directed learning abilities that can serve the individual over a lifetime. The desired outcome of education, then, becomes the constructing of coherent knowledge structures that accommodate further learning, not the assimilation of specific bits of

information. Ultimately education must prepare students' to be continuous learners-once the rhetoric of high education but now the hallmark of the knowledge age.

Philip et al., (2019) in their analysis suggest possible technological innovation strategies in higher educational institutions in Africa. The study deals with management issues in the implementation of eLearning with particular reference to its usage in higher education abroad including Africa, and also suggests appropriate approaches for technological innovation of higher education in Africa. The major findings of the paper, which are based on three case studies, suggest that e-learning needs to be implemented within a strategically developed framework based on a clear and unified vision and a central educational rationale. The findings further highlight the importance of using a combination of strategies--top-down, bottom-up and inside- out--during the diffusion process to attain coherence, collegiality and ownership. The process of technological transformation is not a smooth translation process but one of dislocations, dilemmas and uncertainties and it is an art to effect change and sustainable technological transformation since people are central to this transformation process. Chris Curran has concluded that the e-learning strategies adopted by universities from the perspective of three common objectives are widening access to educational opportunity; enhancing the quality of learning and reducing the cost of higher education. The discussion is illustrated by drawing on case studies of universities in Europe and the United States. It is concluded that the most striking characteristic of the e-learning strategies adopted by universities is their diversity, and inherent characteristic of adaptability in use and flexibility in application. The implicit compatibility with institutional aims suggests that the e-learning strategies universities adopt reflect, rather than influence, institutional ethos and that by virtue of the capacity to adapt to different contexts, e-learning may be more adaptable – and ultimately less threatening – to academic more than some observers fear.

Rajan and Sundar (2020) observes that collaborative e-learning is an interactive process where users share the same information synchronously or asynchronously, though they are at different locations. E-mailing or file sharing is the least collaboration that could be done over the internet, intranet or extranet, and which may include a discussion by any other asynchronous mode. Synchronous collaborations using relevant groupware for webinars are real-time events, though they may be planned through e-mail. Conducting meetings, brainstorming sessions, holding technical symposia, webinars, and interactive e-learning programmes are some examples of synchronous collaborations. Collaborations are especially useful for individual tutoring and coaching. Often in the process of constant e-interactions learning takes place which may be an unintentional gain. Ezendu Ariwa and Rui Li [20] have reported that computer capabilities promise to improve both the quality and the extent of the learning experience, the project in this report also attempted to develop a learning community based upon computer technology. The main question in this report was whether it would be possible to obtain better learning quality and increased students' activity, and to what extent this would depend on different approaches to using technology in the learning process. The UK Govt in 2005 has promoted the strategy of pedagogical innovation, to increase the deployment of learning technologies and enable e-learning in a way that directly addresses business opportunities and imperatives. It provides for equivalent and enhanced learning and support experiences for all Leicester students'. It offers a framework that not only develops and extends the range of services and approaches already in place but also looks to deepen understanding and deployment of learning technologies in the University. Strategic aims and targets are outlined. The key players, components and issues to ensure successful and achievable implementation are laid out. An agreed start up budget is specified.

1.4 Global warming - climate change

We have to pay the ecological and human costs of globalizing agriculture as well as industry. It is a major signal that we need a shift from production oriented conventional modern agriculture to ecologically resilient agriculture. Besides these phenomena, the emission of green house gases through thermal plants, chemical industries units, nuclear arsenal, petrochemical units, leads to climate change. With countries habitual to periodic epidemics facing the menaces of bird flu fraught with disastrous consequences for human life.

Its spread in winter appears a trickle unusual. The recent surfacing of corona in worldwide, a disease so far confined to warmer tropical climate change which emerges critical to horizon. These are cases of global warming. Experts had been warning that global warming is fuelling the spread of epidemics in areas higher to unaffected. Large scale emission of carbon dioxide from industries is responsible for these climate devastations and the adversely affected 262 million people between 2010 and 2023 by these climatic disasters have been mostly the poor. Thus, globalization enthused conventional productivity oriented growth models with excessive consumerism and comfortable, life style, has led to climatic change through emission of green house gases, mainly carbon- dioxide which trap heat in atmosphere leading to large scale climatic disasters causing miserable life conditions for poor in developing world.

1.5 Poverty eradication and sustainable livelihoods

Poverty and a degraded environment are closely inter-related, especially where people depend for their livelihoods primarily on the natural resource base of their immediate environment. Restoring natural systems and improving natural resource management practices at the grassroots level are central to a strategy to eliminate poverty. The survival needs of the poor force them to continue to degrade an already degraded environment. Removal of poverty is therefore a prerequisite for the protection of the environment. Poverty magnifies the problem of hunger and malnutrition. The problem is further compounded by the inequitable access of the poor to the food that is available. It is therefore necessary to strengthen the public distribution System to overcome this inequity. Diversion of common and marginal lands to 'economically useful purposes' deprives the poor of a resource base which has traditionally met many of their sustenance needs. Market forces also lead to the elimination of crops that have traditionally been integral to the diet of the poor, thereby threatening food security and nutritional status.

1.6 Changing unsustainable patterns of consumption and production

With increasing purchasing power, wasteful consumption linked to market driven consumerism is stressing the resource base of developing countries further. It is important to counter this through education and public awareness. In several areas, desirable limits and standards for consumption need to be established and applied through appropriate mechanisms including education, incentives and legislation. Several traditional practices that are sustainable and environment friendly continue to be a regular part of the lives of people in developing countries. These need to be encouraged rather than replaced by more 'modern' but unsustainable practices and technologies. Development decisions regarding technology and infrastructure are a major determinant of consumption patterns. It is therefore important to evaluate and make development decisions which structurally lead to a more sustainable society. Technologies exist through which substantial reduction in consumption of resources is possible. Efforts to identify, evaluate, introduce and use these technologies must be made.

1.7 Protecting and managing the natural resource base of economic and social development

The integration of agriculture with land and water management, and with ecosystem conservation is essential for both environmental sustainability and agricultural production. An environmental perspective must guide the evaluation of all development projects, recognizing the role of natural resources in local livelihoods. This recognition must be informed by a comprehensive understanding of the perceptions and opinions of local people about their stakes in the resource base. To ensure the sustainability of the natural resource base, the recognition of all stakeholders in it and their roles in its protection and management is essential. There is need to establish well-defined and enforceable rights (including customary rights) and security of tenure, and to ensure equal access to land, water and other natural and biological resources. It should be ensured that this applies, in particular, to indigenous communities, women and other disadvantaged groups living in poverty. Water governance arrangements should protect ecosystems and preserve or restore the ecological integrity of all natural water bodies and their Catchments. This will maintain the wide range of ecological services that healthy ecosystems provide and the livelihoods that depend upon them. Biomass is, and will continue for a long time to be, a major source of fuel and energy, especially for the rural poor. Recognizing this fact, appropriate mechanisms must be evolved to make such consumption of biomass sustainable, through both resource management and the promotion of efficient and minimally polluting technologies, and technologies which will progressively reduce the pressures on biomass, which cause environmental degradation. The traditional approaches to natural resource management such as sacred groves and ponds, water harvesting and management systems, etc., should be revived by creating institutional mechanisms which recapture the ecological wisdom and the spirit of community management inherent in those systems.

1.8 Environment and development

The United Nations general assembly through its agenda 21 has provided a compressive picture of inter links related to environment and sustainable development. The agenda 21 suggests an action plan is to link national and international policies for revitalizing economic agro with sustainability. Combating poverty, improvement in demographic structure; change in consumption patterns health, human settlements, pollution control, energy management, treatment of industrial wastes, control of hazardous materials and after the input sustainability are vital requirements for overall sustainable development of nations.

- Changing consumption patterns: Less wasteful life styles sustainable consumption levels; informed consumer choices.
- Health: Pollution health risks, urban health, Basic needs; communicable diseases; vulnerable groups.
- Human settlements: shelter, land and settlement management, environmental infrastructure, energy and transport, human resources and capacity building, disaster prone areas.
- Urban water supplies: drinking water, sanitation, intercultural planning, monitoring
- Fresh water resources: integrated assessment, development and management, production of quality and resources, drinking water, sanitation, water for agriculture.
- Energy: Sustainable energy development and consumption, house hold, transport, industry.

1.9 India's green economy

Economics is going green. Its latest concept is sustainable development which can only be achieved if economic theory can be utilized to determine sustainable natural resources. Development can be sustainable if it has roots in its own people, culture, soil and heritage rather than the glamour of the others. Sustainability is not an option but imperative. For better a better world to live in; we need good air, pure water, nutritious food, healthy environment and greenery around us. Without sustainability environmental deterioration and economic decline will be feeding on each other leading poverty, pollution, poor health, political upheaval and unrest.

1.10 India's environmental ethics

Ecological economics accounts not only for the financial constraints on consumption, as in conventional economics, but also for the natural constraints implied by the limited ability of the environment to provide natural resources and to absorb the wastes of production and to absorb the wastes of production and consumption. Sustainable management of the economic and ecological system is one of the major focuses of ecological economics.

1.11 Conclusion

Social and Environmental stresses are the failures of institutions to manage and provide public goods to correct the spillovers. Getting socially preferred outcomes require institutions that can identify who bears the burden of social preferred outcomes require institutions that can identify who bears the burden of social and environmental neglect and who benefits and who balance these diverse interests within society. This perspective helps in understanding why technically sound policy advice is so seldom taken up. Thus, sustainable development is about enhancing human well being thorough time. So, is enjoying physical security and basic civil and political liberties. And so is it appreciating the natural environment, breathing fresh air, drinking clean water, living among an abundance of plant and animal varieties, and not irrevocably undermining the natural processes that produce and renew these features.

There is both a need and a scope for regional and global cooperation in sustainable development. Some of the areas of common concern are marine and riparian issues, transboundary environmental impacts, and management of bioresources, technology sharing and sharing of sustainable development experiences. Efforts must be made, especially by developing countries, to work towards synergizing experiences and raising shared regional concerns as a strong united front in international forums. Mechanisms must be put in place to facilitate such international exchange of domestic and global experiences in sustainable development. There must be mechanisms for monitoring the compliance of countries to their obligations under various environmental agreements. Currently there is a multiplicity of institutions with fragmented responsibilities. A better governance regime is required to ensure cooperation and compliance. Climate change and loss of biodiversity undermines sustainable development. However, there is no dichotomy between economic progress and protecting our environment by limiting climate change and loss of biodiversity. Indeed, the cost to mitigate climate change is less than the cost of inaction if one takes the ethical position of not discounting future generations, and delaying action can significantly increase costs. Efficient resource use (e.g., energy or water) saves money for businesses and households. Valuing and creating markets for ecosystem services can provide new economic opportunities. A green economy will be a source of future employment and innovation. Governments, the private

sector, voluntary and civil society at large all have key roles to play in the transition to a low-carbon economy, adaptation to climate change and a more sustainable use of ecosystems.

If we are to achieve our dream, the time to act at scale is now, given the inertia in the socio-economic system, and that the adverse effects of climate change and loss of biodiversity cannot be reversed for centuries or are irreversible (e.g., species loss). Failure to act will impoverish current and future generations.

References

- Ncube, L.; Ude, A.; Ogunmuyiwa, E.; Zulkifli, R.; Beas, I. An Overview of Plastic Waste Generation and Management in Food Packaging Industries. *Recycling* 2021, 6, 12. [Google Scholar] [CrossRef]
- Vanapalli, K.R.; Samal, B.; Dubey, B.K.; Bhattacharya, J. Emissions and environmental burdens associated with plastic solid waste management. In *Plastics to Energy*; William Andrew Publishing: Norwich, UK, 2019; pp. 313–342. [Google Scholar]
- Rajmohan, K.V.S.; Ramya, C.; Viswanathan, M.R.; Varjani, S. Plastic pollutants: Effective waste management for pollution control and abatement. *Curr. Opin. Environ. Sci. Health* 2019, 12, 72–84. [Google Scholar] [CrossRef]
- Saling, P.; Gyuzeleva, L.; Wittstock, K.; Wessolowski, V.; Griesshammer, R. Life cycle impact assessment of microplastics as one component of marine plastic debris. *Int. J. Life Cycle Assess.* 2020, 25, 2008–2026. [Google Scholar] [CrossRef]
- Babaremu, K.; Okoya, S.; Hughes, E.; Tijani, B.; Teidi, D.; Akpan, A.; Igwe, J.; Karera, S.; Oyinlola, M.; Akinlabi, E. Sustainable plastic waste management in a circular economy. *Heliyon* 2022, 8, e09984. [Google Scholar] [CrossRef] [PubMed]
- Verma, R.; Vinoda, K.S.; Papireddy, M.; Gowda, A.N.S. Toxic Pollutants from Plastic Waste—A Review. *Procedia Environ. Sci.* 2016, 35, 701–708. [Google Scholar] [CrossRef]
- Hahladakis, J.N.; Eleni, I. Closing the loop on plastic packaging materials: What is quality and how does it affect their circularity? *Sci. Total Environ.* 2018, 630, 1394–1400. [Google Scholar] [CrossRef] [PubMed]
- Koelmans, A.A.; Nor, N.H.M.; Hermesen, E.; Kooi, M.; Mintenig, S.M.; De France, J. Microplastics in freshwaters and drinking water: Critical review and assessment of data quality. *Water Res.* 2019, 155, 410–422. [Google Scholar] [CrossRef]

Digital Marketing of Mutual Funds: A Demographic Approach

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Abstract:

The technological innovations have blurred many obstacles in the way of business not only for the companies but also for the consumers in making their shopping experience much smoother. The advent of digital marketing in financial service industries has made it easier for the mutual fund firms to reach a larger investor base and also made it very handy for the prospective investors with regard to information availability. With this backdrop the main objective of this paper is to understand the role of Digital Marketing in Mutual Fund Investment Decisions of the investors and thereby identify the most important demographic factors which influence online investments.

Keywords: Digital Marketing, Consumer Behaviour, Mutual Fund Investments

1. Introduction:

The rapid technological advancements have geared up the digital space for almost all the industries and financial service industry is no exception to this. It is imperative for a mutual fund industry to go digital in order to gain edge over its competitors. With customer retention being the key of every business, it becomes very much necessary to give smooth and hassle free service by providing valuable information with just a click of a button. The mutual fund firms have to leverage the digital media marketing in promoting its financial products through content marketing on social media sites like face book, tweeter, Google plus etc in order to have real time marketing with reduced cost and time.

2. Review of Literature on Digital Marketing:

The significance of internet technology for marketing of products or services largely depends on the nature of business carried on by the organization and its target market. But in the recent times digital media is being preferred by almost all product and service categories especially the financial services. Even though online channel is not suitable to sell a particular product it is largely used to create awareness and brand building through third-party sites. Applications based on internet technology is considered to be the most important channel for marketing and distribution of products and services. "The term 'Internet Marketing' is used to refer to the external perspective of how the Internet can be used in conjunction with traditional media to acquire and deliver services to customers". Alternatively, e- marketing or electronic marketing can be used to refer to a broader perspective including digital media like e-mail, web etc.,. The e-marketers uses a wide range of access platforms like PCs, PDAs, mobile phones and interactive digital TV etc., and communications tools such as web sites, portals, search engines, blogs, e-mail, SMS etc., to communicate with its customers according to customers' preferences. Internet market differs significantly from traditional marketing and has identified 6I's of e- marketing mix namely Interactivity, Intelligence, Individualization, Integration, Industry restructuring and Independence of location as a strategic analysis tool to analyze the practical aspects like personalization, direct response and marketing research and also to

address the strategic issues of industry restructuring and integrated channel communications. It is said that increased levels of interactivity may allow consumers using an online shopping environment to gain greater control of their shopping experience.

Studies reveal that search engine optimization is gaining considerable attention as it is more concerned with its usage rather than the technology itself. Their study explored that search engines with their “favourite bars” are very significant in understanding the searching behaviour of a customer, particularly experiential searches. The marketer can improve the web design in order to coordinate text search and display ads and also enhance the visitation to the online store of the retailer as a result of search engine optimization. Social media like Facebook, YouTube, LinkedIn, Instagram and Twitter are considered as the most effective marketing tools and e-retailers are developing strategies to reach their target customers by focusing mainly on these social media tools. These tools are also helping consumers to reform their beliefs, attitudes, and perception through dynamic interactions. Due to the gaining importance of social media consumers are positively influenced and motivated by the presence of the large number of social groups and this shift in the digital revolution has brought in new dimensions and has led to greater reliance on opinion leaders, social interactions, reference groups in making a purchase decision.

3. Objectives of the Study:

1. To understand the role of Digital Marketing in Mutual Fund Investment Decisions.
2. To explore the Demographic Factors Influencing Online Mutual Fund Investments.

4. Research Methodology:

The detailed questionnaire on the Demographic Approach towards Digital Marketing of Mutual Funds was administered to a total of 100 respondents from the Dakshina Kannada district based on a convenience sampling method. Of the 100 responses only 94 were completely filled by the respondents. Statistical techniques such as ANOVA and descriptive analysis are used to analyze the responses.

5. Results and Analysis:

Table No: 1.1 Showing the Demographic Profile of the Respondents

Demographics		Respondents	Percentage (%)	Demographics		Respondents	Percentage (%)
Gender	Male	63	67.0	Occupation	Professional	11	11.7
	Female	31	33.0		Business	8	8.5
Age	Less than 20	5	5.3		Government Service	5	5.3
	20-30	50	53.2		Private Service	55	58.5
	30-40	26	27.7		Unemployed	7	7.4
	40-50	6	6.4		Retired	3	3.2
	50-60	6	6.4		Others	5	5.3
	Above 60	1	1.1	Educational Qualification	School Level	1	1.1
Marital Status	Single	58	61.7		PU Level	1	1.1
	Married	34	36.2		Graduate	30	31.9
	Divorced	1	1.1		Post Graduate	56	59.6
	Separated	1	1.1		Others	6	6.4
Monthly Income	Less than Rs. 20,000	26	27.7	Earning Members	1	15	16.0
	Rs. 20,000 - Rs. 40,000	33	35.1		2	50	53.2
	Rs. 40,000 - Rs. 60,000	19	20.2		3	20	21.3
	Rs. 60,000 - Rs. 80,000	3	3.2		4 and More	9	9.6
	Rs. 80,000 - Rs. 1,00,000	6	6.4				
	Above Rs. 1,00,000	7	7.4				

The responses of the respondents are analyzed based on descriptive techniques and also with the help of ANOVA to understand if the demographic profile of the respondents influences online mutual fund buying behaviour. The results and analysis of the tests are shown:

The following table 1.1 shows the demographics of the respondents from Dakshina Kannada district namely gender, age, marital status, income, occupation, qualification and the number of earning members in the family. The data showed that majority of the respondents are male i.e. 67% and females are only 33% of which nearly 62% are single and 36 are married. Majority of the responses are from young respondents within the age group of 20 yrs to 30 yrs i.e., 53% and 27% within the age bracket of 40 yrs. Almost 35% of the respondents earn up to Rs.40,000 p.m, 28% up to Rs.20,000 and 20% up to Rs.60,000. Majority of the respondents were post graduates employed under private sector having at least two earning members in the family.

a) ANOVA Test:

The ANOVA Test for the statements on Ease of Use, Online Trust, Information Efficiency, E-Reviews, Information Accuracy, Social Media Marketing, E-Mail Marketing, Mobile Apps, Blogs and Online Investment Decision as against demographic factors like Gender, Occupation, Marital Status, Educational Qualification and Income revealed a significant difference for statements mentioned in the table 1.2. It is clear from the result that there is significant impact of Occupation and Marital Status on Online Mutual Fund Investment.

Table No: 1.2 Showing Results of ANOVA Test

	F	Sig.
Marital Status		
Online user reviews on Mutual Fund help in taking quick and appropriate decisions	2.689	0.048
Income		
Websites of Mutual Funds do not provide accurate information and are inappropriate	3.059	0.014
I actively look out for mutual fund ads online	4.636	0.001
Occupation		
I consider investing in funds which I find in my e-mail	5.287	0.000
I go through Mutual Fund information available on Face book and other Social Networks	4.686	0.001
I will recommend people in my network to invest in Mutual Funds Online	2.635	0.030
Educational Qualification		
I go through Mutual Fund information available on Face book and other Social Networks	5.484	0.024
I will recommend people in my network to invest in Mutual Funds Online	10.07	0.003

Conclusion:

The advent of digital marketing has taken competition in mutual fund industry to a different level. So it becomes very much necessary for the marketer to understand the factors influencing the online investment behavior of the investors/ prospective investors when floating their schemes on digital space. The analysis of data has indicated that the Occupation and Marital Status of the respondents has a significant effect on Online Mutual Fund Investment Behaviour of the individual. So it becomes important for the marketer to keep in mind the demographic profile of the investor/ prospective investors before framing a digital marketing strategy in order to be successful.

References:

- Assaad, W., Gómez, J. M., & Ossietzky, C. Von. (2011). Social Network in marketing (Social Media Marketing) Opportunities and Risks. *International Journal of Managing Public Sector Information and Communication Technologies (IJMP ICT)*, 2(1), 13–22. <https://doi.org/10.5121/ijmpict.2011.2102>
- Ballantine, P. W. (2005). Effects of interactivity and product information on consumer satisfaction in an online retail setting. *International Journal of Retail & Distribution Management*, 33(6), 461–471. <https://doi.org/10.1108/09590550510600870>
- Chaffey, D., & Chadwick, F. E. (2006). *Internet Marketing Strategy, Implementation and Practice*. Prentice Hall.
- Kotzab, H., & Madlberger, M. (2006). European retailing in e-transition. *International Journal of Physical Distribution & Logistics Management*, 31(6), 440–462. <https://doi.org/10.1108/EUM0000000005590>
- Papatla, P., & Liu, F. (Oliver). (2009). Google or BizRate? How search engines and comparison sites affect unplanned choices of online retailers. *Journal of Business Research*, 62(11), 1039–1045. <https://doi.org/10.1016/j.jbusres.2008.10.018>
- Richardson, P. (2007). The impact of organic versus non-organic headlines on response rates to search ads. *Journal of Website Promotion*, 2(3–4), 43–62. <https://doi.org/10.1080/15533610802174938>
- Saravanakumar. M Sugantha Lakshmi.T. (2012). Social Media Marketing. *Life Science Journal*, 99(44), 4444–4451. <https://doi.org/10.7537/marslsj090412.670>
- Svennevig, M. (2004). The interactive viewer : Reality or myth ? *Interactive Marketing*, 6(2), 151–164.
- Thakor, M. V., Borsuk, W., & Kalamas, M. (2004). Hotlists and Web browsing behavior - An empirical investigation. *Journal of Business Research*, 57(7), 776–786. [https://doi.org/10.1016/S0148-2963\(02\)00361-2](https://doi.org/10.1016/S0148-2963(02)00361-2) Vol. 2: No. 2 July - December 2018

Digital Marketing and its Impact in Current Business Scenario

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Abstract

The world is shifting from analog to digital and marketing is no exception. As technology development is increasing, the use of digital marketing, social media marketing, search engine marketing is also increasing. Internet users are increasing rapidly and digital marketing has profited the most because it mainly depends on the internet. Consumer's buying behavior is changing and they are more inclined towards digital marketing rather than traditional marketing. The purpose of this review paper is to study the impact of digital marketing and how important it is for both consumers and marketers. This paper begins with an introduction of digital marketing and then it highlights the mediums of digital marketing, the difference between traditional and digital marketing, and the pros, cons, and importance of digital marketing in today's era.

Keywords—digital marketing, internet, online advertising, internet marketing

Introduction

Marketing refers to the steps that the company takes to promote the buying of any products or services. The company seeks customers or consumers for their products or services via the help of marketing. Digital Marketing refers to the marketing of any product or service in digital form. For example, marketing using smartphones, computers, laptops, tablets, or any other digital devices. Digital marketing is a form of direct marketing that links consumers with sellers electronically using interactive technologies like emails, websites, online forums and newsgroups, interactive television, mobile communications etcetera .

'Digital marketing' term was first coined in the 1990s. Digital marketing is also known as 'online marketing', 'internet marketing', or 'web marketing'. It is known as 'internet marketing' because with the rise of the internet there is also high growth of digital marketing. The major advantage of digital marketing is that marketers can sell their products or services 24 hours and 365 days, lower cost, efficiency gain, to motivate the customer for more purchase and improve customer services. It helps many-to-many communications because of its excessive degree of connectivity and is generally completed to sell services or products in a timely, relevant, non-public, and cost-powerful manner.

In 2005, there were around 1.1 billion internet users which consist of 16.6 percent of the population at that time. In 2020, the number of internet users is around 4.8 billion and the percentage population has increased to 62 percentage. And there is a direct connection between digital marketing and the internet. Countries like India and China have the highest number of internet users so they have a great opportunity.

The main objectives of this review paper are the following:

- Understand the various channels of digital marketing

- Comparison of traditional marketing and digital marketing
- Importance of digital marketing
- Advantages and disadvantages of digital marketing
- Challenges digital marketer face

Various channels of digital marketing

Digital marketing consists of various channels which are medium used by the marketer to promote their products or services. As an advertiser one, the main aim is to select the channel which is best for communication and give maximum return on investment (ROI). The list of important digital marketing channels are given below:

Social Media

In the current era, social media marketing is one of the most important media in digital marketing. It is the fastest-growing digital channel. Social media marketing is the process of gaining traffic or sites through social media sites. According to Neil Patel, "Social media marketing is the process of creating content that you have tailored to the context of each social media platform to drive user engagement and sharing". The number of internet users by population has increased from 16.6 to 62 percent in 15 years and social media marketing has benefited the most in that,



Fig. 1. Distribution of various social media platform

Fig. 1 displays over 200 social media platforms. Below is the list of important social media platforms.

Facebook: It is the number one social media platform. A company can promote their product and services on Facebook.

LinkedIn: Professionals write their profiles on LinkedIn and can share with others. The company also builds their profile and LinkedIn connects these two dots: companies and professionals.

Google+: It is Google's social network; users can easily connect based on their common interest and friendship.

Twitter: Its strategy is to increase brand awareness and sales, attract new followers, and lead and boost conversions.

Pinterest: It is a social media platform in which visual content is available and the user can share or store with others.

Email Marketing

When a message is sent through email about any product or service to any potential customer, it is known as email marketing. It is a simple digital marketing channel to understand. Email marketing is used to sell a product using discounts and event ads, increase brand awareness, and direct people to their business websites. In an email marketing campaign, the types of email that can be sent are blog subscription newsletters, the welcome email series, the seasonal campaign, the post-purchase drip, the cart abandonment campaign, follow-up email when a website visitor downloads something, holiday promotional to loyal members, the re-engagement campaign, etc. The biggest advantage of email marketing is that it is very cheap compared to other marketing mediums. It is generally used to build loyalty among existing customers rather than gaining new customers. The company can get a customer's attention by creating graphic and visual ads, linking product images to the website.

Affiliate Marketing

In affiliate marketing, the company rewards subsidiaries for every customer or visitor they bring to the company's website by their marketing efforts or strategy on behalf of the company. According to Pat Flynn's *Smart Passive Income*, "Affiliate marketing is the process of earning a commission by promoting other people's (or company's) products. You find a product you like, promote it to others, and earn a piece of the profit for each sale that you make". There are 4 different parties involved in affiliate marketing:

The Merchant: Sometimes it can be the seller, the brand, or retailer. This party produces a product to sell. It can be an individual or startup or big fortune company.

The Affiliate: This party is also known as a publisher. It also can be an individual or startup or big fortune company. They take a commission from the merchant for every service or product they sell. The affiliate brings customers to the merchant.

The Customer: The customer or consumer is an important part of the whole system. They go to affiliates and affiliates redirect them to merchants by taking his commission. Without a customer, the affiliate cannot earn a commission.

The Network: Network works as an intermediate between affiliate and merchant. Affiliates require a network to promote products or services.

Search Engine Marketing

A search engine is a web-based tool that helps the user to find the information they are looking for. Examples of a search engine are Google, Yahoo, Bing, Baidu, etc. Search engine marketing refers to any activity that increases a user's website rank in any search engine. There are two types of search engine marketing: search engine optimization (SEO) and paid search.

According to Neil Patel, Search engine optimization is the art of ranking high on a search engine in the unpaid section. It is also known as organic marketing or organic listing. In general, the higher the rank of the webpage in the search engine more visitors will visit that webpage. When it comes to SEO it consists of a search engine and searcher. And 67 percent of all searches happen on Google. So Google is the most important search engine in the world.

In paid search one need to pay to get a higher rank in search engine. In paid search, one will have the same kind of keywords as on their organic ad campaign. The majority of a paid search engine is run on a commercial search engine such as Google, Yahoo, Bing, etc. Paid search work on the pay-per-click model, in which marketers will only pay when someone clicks on their ad. The search engine algorithm will determine the rank of the advertiser's ad based on their bid and quality score. Many advertisers prefer paid search rather than SEO in short term due to its ability to give a faster result.

Online Display Advertising

In traditional marketing, there is a poster or billboard of any company on both sides of the road or an ad in a magazine/newspaper to promote their product or service. Online display advertising is a digital version of that. Today, a marketer can use online display advertising to achieve the same thing. There are different types of display advertising such as video ads, banner ads, interactive ads, and rich media, etc. Display advertising is great for catching the eye due to graphic ads.

An online display advertising marketer can target an audience based on website content, geography, gender, age, device type, etc. So the marketer can show a suitable ad to the relevant customer which helps in decreasing the budget and increasing sales.

Comparison between traditional and digital marketing

Traditional marketing is the most recognizable form of marketing. Most people are used to traditional marketing due to its longevity. Some examples of traditional marketing include tangible items like ads in a newspaper or magazine. It also includes a billboard, brochure, commercial on TV or radio, poster, etc. It is a non-digital way of marketing. Whereas digital marketing uses various digital channels to reach customers. Some comparisons are given below:

TABLE I. TRADITIONAL AND DIGITAL MARKETING COMPARISON

Traditional Marketing	Digital Marketing
Example of traditional marketing includes a poster, brochure, magazine, newspaper, broadcast, telephone	Example of digital marketing includes a website, social media platforms, affiliate marketing, email marketing, search engine optimization
With a traditional marketing approach, only limited or local customer can be targeted	With a digital marketing approach customer around the world can be targeted
Advertising campaign takes a long period to plan	Advertising campaign take a short period to plan
It is costly and time-consuming	Relatively cheap and faster
A physical relationship is shaped while conveying merchandise	No physical relationship is formed due to the digital nature of digital marketing
One campaign stays for a long time and change is expensive	A campaign can be changed very easily
For the promotion of product poster, paper, billboard many various types of material is used	No physical stuff is required because digital marketing is done on website, social media platforms, or through online videos

Due to the physical nature of traditional marketing, its cost is high	Digital marketing is cheaper compare to traditional marketing because it is done on websites and social media
For market analysis traditional marketing depends on surveys or experimentation, it is complex to analyze the result and does not provide accurate data	Facts and data available on various analytic tools make it very convenient to analyze the data and to interpret it
24/7 marketing is not possible	24/7 marketing all around the globe is possible
Only one-way communication can happen	Two-way communication can happ
No capacity to go viral	<i>Capacity to go viral</i>
Customer can feedback only during the working time	Customer can give feedback any time

Importance of digital marketing

Based on the above discussion summary of the importance of digital marketing that every marketer should follow is written below:

- Internet marketing is endlessly more moderate than any offline marketing techniques. It can reach a wider audience easily.
- In digital marketing results can be followed and monitored easily with the help of various tracking software. Rather than leading costly client research, organizations can rapidly see client reaction rates and measure the achievement of their promoting effort continuously, empowering them to design all the more adequately for the following one.
- Collecting feedback from customers is easy to compare to traditional marketing mediums such as TV, radio, or billboard. They can easily give feedback on any product using a website in online marketing which helps a businessman to redesign themselves in their specific domain.
- It helps in advancing a business through the online medium like web or portable subsequently arriving at a large number of clients in a second. Numerous little and huge organizations are following the methodologies of web-based showcasing to underwrite themselves globally.
- Digit advertisers screen things like what is being seen, how frequently and for how long, what substance works and doesn't work, and so forth. While the internet is maybe, the channel most firmly connected with digital marketing, others incorporate remote content informing, portable applications, advanced TV, and radio channels.
- Digital marketing is moderate, targetable, and quantifiable and thus organizations do it and advertisers love it.

Advantages Of Digital Marketing

Technology is changing rapidly and it also has affected consumer's buying behavior. Below is given some advantages digital marketing brings to the consumer:

- In the year 2020 consumers can access the internet any time from any place in the world. And due to the digital nature of digital marketing consumers can stay updated about any product or service 24/7 times.
- Due to the internet consumer can do various activities like going to the company's website, reading the information, buying products, etc. This has increased consumer's engagement and improved their experience.

- In traditional marketing, there is a little chance that consumers can be misinformed by salespeople, but in digital marketing, consumers get clear and accurate information about any product or service. And the internet gives exhaustive item data that clients can depend on and settle on a buy choice.
- Many different companies promote their product through digital marketing, so it becomes convenient to compare products of the different companies for the consumer. They don't need to visit various retail stores to compare products.
- Internet is available all day so there is no restriction on time and customers can buy the product any time.
- Due to the digital medium viewer can share information and characteristics about products or services with others.
- The organization shows the costs of items through digital channels and this makes costs extremely understood and straightforward for the consumer. The company also changes its prices on any holiday or festival to give a discount and is very transparent to the consumer.
- In traditional marketing first consumers watch advertisements through posters, TV, or any traditional way and visit a retail store to buy them. But in digital marketing when consumers see advertisements they can buy the product instantly through digital media.

Disadvantages of digital marketing

In today's era digital marketing has many advantages though it has a few disadvantages that are discussed below:

- A competitor can easily copy the digital marketing campaign of others. Brand names or logos can be utilized to swindle customers.
- If the internet connection is slow or there is some problem with websites, then websites may take too much time to open and the customer will not wait much and leave.
- In traditional marketing, customers can physically touch the products to verify but it is not possible in e-commerce.
- Though India is digitalizing, many customers still don't trust the online payment system or don't know.
- The absence of trust of the clients due to the enormous number of fakes concerning virtual advancements. Fair organizations might be influenced since their picture and the notoriety of value can endure harm.
- There are many cases when users ordered products through pay on delivery method with no intention of buying using a fake id. This shows a loophole of pay on the delivery method.
- Digital marketing is profoundly reliant on the internet/technology which can be inclined to mistakes.
- Digital marketing isn't yet grasped by all individuals: some customers, especially more established ones don't believe in a computerized climate, wanting to utilize the traditional strategies.

Challenges facing digital marketers

There are numerous advantages of using digital marketing for promoting products and services yet a digital marketer needs to face some challenges. The difficulties are as per the following:

- Consumers use different digital devices and various digital channels and those devices have various digital channels that lead to the proliferation of digital channels. And Marketers face difficulty in choosing medium and audience.

- Digital marketing is extremely cheap compare to traditional marketing and it covers every small business which leads to intense competition.
- Consumers leave behind a gigantic amount of data in digital channels every time they visit the channel. It's amazingly hard to understand such data, just as locate the correct data inside detonating information volumes that can assist you to make the right choices.

Conclusion

It can't be rejected that the world is quickly moving from simple to the digital world. Individuals are investing more in online content and companies that find it hard to digest this fact in their advertising strategy need to adjust quickly. The more time individuals spend on the internet every year, the more digital platform they use play an ever-developing function in their lives. The main aim of digital India is to promote digital medium. Because people can use digital platform any time anywhere from the world companies needs to change their marketing strategy from traditional to digital. On the off chance that the companies don't utilize the digital platform to advertise their product and services then they cannot compete with competitions and will eventually shut down.

When customers want to buy any product online, they can easily get product information and can compare with other products without visiting any retail store or shopping mall. It shows that consumers are more inclined towards online buying rather than visiting a retail store. As consumer's buying behavior is changing companies also need to change their advertising strategy and embrace digital platforms for marketing.

REFERENCES

- Yasmin, A., Tasneem, S., & Fatema, K. (2015). Effectiveness of digital marketing in the challenging age: An empirical study. *Journal of International Business Research and Marketing*, 1(5), 69-80.
- Bhagowati, D., & Dutta, D. M. (2018). A study on literature review for identifying the factors impacting digital marketing. *International Journal of Sales & Marketing Management Research and Development*, 8(3), 1-8.
- Act-On. (n.d.). Digital marketing: 7 essential channels. Retrieved from <https://act-on.com/blog/digital-marketing-7-essential-channels/>
- HubSpot. (n.d.). What is digital marketing? Retrieved from <https://blog.hubspot.com/marketing/what-is-digital-marketing#:~:text=Digital%20marketing%20encompasses%20all%20marketing,with%20current%20and%20prospective%20customers.>
- Patel, N. (n.d.). What is affiliate marketing? Retrieved from <https://neilpatel.com/what-is-affiliate-marketing/>
- Patel, N. (n.d.). What is SEO? Retrieved from <https://neilpatel.com/what-is-seo/>
- Patel, N. (n.d.). What is social media marketing? Retrieved from <https://neilpatel.com/what-is-social-media-marketing/>
- Internet World Stats. (n.d.). World internet usage and population statistics. Retrieved from <https://www.internetworldstats.com/stats.htm>
- Flynn, M. (2019). Affiliate marketing strategies: The ultimate guide to mastering affiliate marketing. Retrieved from <https://www.smartpassiveincome.com/guide/affiliate-marketing-strategies/>
- Ankita, P., & Naveen, K. (2020). Review of digital marketing with latest tools and its effect on business models. *International Journal for Research in Applied Science and*

- Engineering Technology, 8(5), 2321-9653. Retrieved from <https://www.ijraset.com/files/serve.php?FID=29098>
- Chandini, P. C., Divya, P. S., & Dincy, D. (2020). Digital marketing in the MSME sector of Kerala. Mahatma Gandhi University, Kottayam.
- Kotler, P., & Armstrong, G. (2009). Marketing: An introduction. Upper Saddle River, NJ: Pearson Prentice Hall.
- Kotler, P. (2000). Marketing management: The Millennium Edition. London: Prentice Hall International Inc.
- Todor, R. D. (2016). Blending traditional and digital marketing. Bulletin of the Transilvania University of Braşov, Series 5, Economic Sciences, 9(1), 51-56.
- Singh, S. N., Kumar, P., & Dubey, A. K. (2016). Digital marketing: Necessity & key strategies to succeed in current. International Electrotechnical Commission: Geneva, Switzerland, 14-19. [Abstract]. Retrieved from https://www.iec.edu.in/wp-content/uploads/2016/01/3_-Dr.S-N-Singh-et-al._DIGITAL-MARKETING-p.14-19.pdf.

FOCAL POINTS OF THE UNION BUDGET 2023-24

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Abstract

A very positive Budget and the Finance Minister has shown great responsibility by ensuring continuity in its focus on creating job, investing in education and skilling that will truly help leverage our demographic dividend, push the green growth agenda, incentivize manufacturing and ensure that the most marginalized communities feel included. More money in the hands of the middle class will have a cascading effect across the economy which needs this push as we continue to depend on domestic demand to beat the global uncertainty. The focus on use of Artificial Intelligence (AI), emerging technology, social entrepreneurship and R&D will empower the youth to play a more significant role as India confidently marches into inclusive prosperity. The government has laid down the road map and corporate India has to participate in full might to leverage this golden opportunity and make this India's decade.

1. Introduction

Generally, the budget before general elections is always a much-anticipated one with everyone hoping for big, bold moves. But most budgets tend to fall short on the surprise factor. This year's budget was no exception as it was mostly just a repackaging of old schemes with additional fund allocation. But salaried taxpayers were in for a surprise. They got the much needed tax break. Various tax relief measures were introduced under the new tax regime. It looks like the government wants taxpayers to switch to the new tax regime and phase out the old tax regime. All we can hope for is enough time to adopt the new regime and make the most of the old one while it lasts.

The increase in duty on cigarettes, which was missing for three years, made reappearance. Various measures were included to boost consumption in the economy, ease compliance burden, benefit MSMEs and the middle-class and simplify and streamline the tax system.

The Budget mentioned: Inclusive development, reaching the last mile, infrastructure and investment, unleashing the potential, green growth, youth power, financial sector as its seven priorities. The study decodes Budget 2023.

The Union Minister of Finance and Corporate Affairs Smt. Nirmala Sitharaman presented the Union Budget 2023-24 in Parliament. The highlights of the Budget are as follows:

2. PART A - HIGHLIGHTS OF THE BUDGET

- ❖ Per capita income has more than doubled to ₹1.97 lakh in around nine years.
- ❖ Indian economy has increased in size from being 10th to 5th largest in the world in the past nine years.
- ❖ EPFO membership has more than doubled to 27 crore.
- ❖ 7,400 crore digital payments of ₹126 lakh crore has taken place through UPI in 2022.
- ❖ 11.7 crore household toilets constructed under Swachh Bharat Mission.
- ❖ 9.6 crore LPG connections provided under Ujjwala.
- ❖ 220 crore covid vaccination of 102 crore persons.
- ❖ 47.8 crore PM Jan Dhan bank accounts.

- ❖ Insurance cover for 44.6 crore persons under PM Suraksha Bima and PM Jeevan Jyoti Yojana.
- ❖ Cash transfer of ₹2.2 lakh crore to over 11.4 crore farmers under PM Kisan Samman Nidhi.
- ❖ **Seven priorities of the budget ‘Saptarishi’** are inclusive development, reaching the last mile, infrastructure and investment, unleashing the potential, green growth, youth power and financial sector.
- ❖ **Atmanirbhar Clean Plant Program** with an outlay of ₹2200 crore to be launched to boost availability of disease-free, quality planting material for high value horticultural crops.
- ❖ 157 new nursing colleges to be established in co-location with the existing 157 medical colleges established since 2014.
 - ✓ Centre to recruit 38,800 teachers and support staff for the 740 Eklavya Model Residential Schools, serving 3.5 lakh tribal students over the next three years.
 - ✓ Outlay for **PM Awas Yojana** is being enhanced by 66% to over Rs. 79,000 crore.
 - ✓ Capital outlay of Rs. 2.40 lakh crore has been provided for the Railways, which is the highest ever outlay and about nine times the outlay made in 2013-14.
 - ✓ **Urban Infrastructure Development Fund (UIDF)** will be established through use of priority Sector Lending shortfall, which will be managed by the national Housing Bank, and will be used by public agencies to create urban infrastructure in Tier 2 and Tier 3 cities.
- ❖ **Entity DigiLocker** to be setup for use by MSMEs, large business and charitable trusts to store and share documents online securely.
- ❖ 100 labs to be setup for 5G services based application development to realize a new range of opportunities, business models, and employment potential.
 - ✓ 500 new ‘waste to wealth’ plants under **GOBARDhan** (Galvanizing Organic Bio-Agro Resources Dhan) scheme to be established for promoting circular economy at total investment of Rs 10,000 crore. 5 per cent compressed biogas mandate to be introduced for all organizations marketing natural and bio gas.
 - ✓ Centre to facilitate one crore farmers to adopt natural farming over the next three years. For this, 10,000 **Bio-Input Resource Centres** to be set-up, creating a national-level distributed micro-fertilizer and pesticide manufacturing network.
 - ✓ **Pradhan Mantri Kaushal Vikas Yojana 4.0**, to be launched to skill lakhs of youth within the next three years covering new age courses for Industry 4.0 like coding, AI, robotics, mechatronics, IOT, 3D printing, drones, and soft skills.
 - ✓ 30 **Skill India International Centres** to be set up across different States to skill youth for international opportunities.
 - ✓ Revamped credit guarantee scheme for MSMEs to take effect from 1st April 2023 through infusion of Rs 9,000 crore in the corpus. This scheme would enable additional collateral-free guaranteed credit of Rs 2 lakh crore and also reduce the cost of the credit by about 1 per cent.
 - ✓ **Central Processing Centre** to be setup for faster response to companies through centralized handling of various forms filed with field offices under the Companies Act.
 - ✓ The maximum deposit limit for Senior Citizen Savings Scheme to be enhanced from Rs 15 lakh to Rs 30 lakh.

- ✓ Targeted Fiscal Deficit to be below 4.5% by 2025-26.
 - ❖ **Agriculture Accelerator Fund** to be set-up to encourage agri-startups by young entrepreneurs in rural areas.
 - ❖ To make India a global hub for '*Shree Anna*', the Indian Institute of Millet Research, Hyderabad will be supported as the Centre of Excellence for sharing best practices, research and technologies at the international level.
 - ❖ ₹20 lakh crore agricultural credit targeted at animal husbandry, dairy and fisheries
 - ❖ A new **sub-scheme of PM Matsya Sampada Yojana** with targeted investment of ₹6,000 crore to be launched to further enable activities of fishermen, fish vendors, and micro & small enterprises, improve value chain efficiencies, and expand the market.
 - ❖ **Digital public infrastructure for agriculture** to be built as an open source, open standard and inter operable public good to enable inclusive farmer centric solutions and support for growth of agri-tech industry and start-ups.
 - ❖ Computerisation of 63,000 Primary Agricultural Credit Societies (PACS) with an investment of ₹2,516 crore initiated.
 - ❖ Massive decentralised storage capacity to be set up to help farmers store their produce and realize remunerative prices through sale at appropriate times.
 - ❖ **Sickle Cell Anaemia elimination mission** to be launched.
 - ❖ Joint public and Private Medical research to be encouraged via select ICMR labs for encouraging collaborative research and innovation.
 - ❖ New Programme to promote research in Pharmaceuticals to be launched.
-
- ✓ Rs. 10 lakh crore capital investment, a steep increase of 33% for third year in a row, to enhance growth potential and job creation, crowd-in private investments, and provide a cushion against global headwinds.
 - ✓ **Aspirational Blocks Programme covering 500 blocks** launched for saturation of essential government services across multiple domains such as health, nutrition, education, agriculture, water resources, financial inclusion, skill development, and basic infrastructure.
 - ✓ Rs. 15,000 crore for implementation of **Pradhan Mantri PVTG Development Mission** over the next three years under the Development Action Plan for the Scheduled Tribes.
 - ✓ Investment of Rs. 75,000 crore, including Rs. 15,000 crore from private sources, for one hundred critical transport infrastructure projects, for last and first mile connectivity for ports, coal, steel, fertilizer, and food grains sectors.
 - ✓ **New Infrastructure Finance Secretariat** established to enhance opportunities for private investment in infrastructure.
 - ✓ **District Institutes of Education and Training** to be developed as vibrant institutes of excellence for Teachers' Training.
 - ✓ A National **Digital Library for Children and Adolescents** to be set-up for facilitating availability of quality books across geographies, languages, genres and levels, and device agnostic accessibility.
 - ✓ Rs. 5,300 crore to be given as central assistance to Upper Bhadra Project to provide sustainable micro irrigation and filling up of surface tanks for drinking water.
 - ✓ '**Bharat Shared Repository of Inscriptions**' to be set up in a digital epigraphy museum, with digitization of one lakh ancient inscriptions in the first stage.
 - ✓ 'Effective Capital Expenditure' of Centre to be Rs. 13.7 lakh crore.

- ✓ Continuation of 50-year interest free loan to state governments for one more year to spur investment in infrastructure and to incentivize them for complementary policy actions.
 - ✓ Encouragement to states and cities to undertake urban planning reforms and actions to transform our cities into ‘sustainable cities of tomorrow’.
 - ✓ Transition from manhole to machine-hole mode by enabling all cities and towns to undertake 100 percent mechanical desludging of septic tanks and sewers.
 - ✓ **iGOT Karmayogi**, an integrated online training platform, launched to provide continuous learning opportunities for lakhs of government employees to upgrade their skills and facilitate people-centric approach.
 - ✓ More than 39,000 compliances reduced and more than 3,400 legal provisions decriminalized to enhance Ease Of Doing Business.
 - ✓ Jan Vishwas Bill to amend 42 Central Acts have been introduced to further trust-based governance.
 - ✓ Three centres of excellence for Artificial Intelligence to be set-up in top educational institutions to realise the vision of “**Make AI in India and Make AI work for India**”.
 - ✓ **National Data Governance Policy** to be brought out to unleash innovation and research by start-ups and academia.
 - ✓ One stop solution for reconciliation and updation of identity and address of individuals to be established using DigiLocker service and Aadhaar as foundational identity.
 - ✓ PAN will be used as the common identifier for all digital systems of specified government agencies to bring in Ease of Doing Business.
 - ✓ 95 per cent of the forfeited amount relating to bid or performance security, will be returned to MSME’s by government and government undertakings in cases the MSME’s failed to execute contracts during Covid period.
 - ✓ Result Based Financing to better allocate scarce resources for competing development needs.
 - ✓ **Phase-3 of the E-Courts project** to be launched with an outlay of Rs. 7,000 crore for efficient administration of justice.
-
- ❖ **R & D grant for Lab Grown Diamonds (LGD) sector** to encourage indigenous production of LGD seeds and machines and to reduce import dependency.
 - ❖ Annual production of 5 MMT under **Green Hydrogen Mission** to be targeted by 2030 to facilitate transition of the economy to low carbon intensity and to reduce dependence on fossil fuel imports.
 - ❖ ₹35000 crore outlay for energy security, energy transition and net zero objectives.
 - ❖ Battery energy storage systems to be promoted to steer the economy on the sustainable development path.
 - ❖ 20,700 crore outlay provided for renewable energy grid integration and evacuation from Ladakh.
 - ✓ “**PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth**” (**PM-PRANAM**) to be launched to incentivize States and Union Territories to promote alternative fertilizers and balanced use of chemical fertilizers.
 - ✓ ‘**Mangrove Initiative for Shoreline Habitats & Tangible Incomes**’, **MISHTI**, to be taken up for mangrove plantation along the coastline and on salt

pan lands, through convergence between MGNREGS, CAMPA Fund and other sources.

- ✓ **Green Credit Programme** to be notified under the Environment (Protection) Act to incentivize and mobilize additional resources for environmentally sustainable and responsive actions.
- ✓ **Amrit Dharohar scheme** to be implemented over the next three years to encourage optimal use of wetlands, enhance bio-diversity, carbon stock, eco-tourism opportunities and income generation for local communities.
- ✓ A **unified Skill India Digital platform** to be launched for enabling demand-based formal skilling, linking with employers including MSMEs, and facilitating access to entrepreneurship schemes.
- ✓ **Direct Benefit Transfer under a pan-India National Apprenticeship Promotion Scheme** to be rolled out to provide stipend support to 47 lakh youth in three years.
- ✓ At least 50 tourist destinations to be selected through challenge mode; to be developed as a complete package for domestic and foreign tourists.
- ✓ Sector specific skilling and entrepreneurship development to be dovetailed to achieve the objectives of the '**Dekho Apna Desh**' initiative.
- ✓ Tourism infrastructure and amenities to be facilitated in border villages through the **Vibrant Villages Programme**.
- ✓ States to be encouraged to set up a **Unity Mall** for promotion and sale of their own and also all others states' **ODOPs (One District, One Product)**, GI products and handicrafts.
- ✓ **National Financial Information Registry** to be set up to serve as the central repository of financial and ancillary information for facilitating efficient flow of credit, promoting financial inclusion, and fostering financial stability. A new legislative framework to be designed in consultation with RBI to govern this credit public infrastructure.
- ✓ Financial sector regulators to carry out a comprehensive review of existing regulations in consultation with public and regulated entities. Time limits to decide the applications under various regulations would also be laid down.
- ✓ To enhance business activities in GIFT IFSC, the following measures to be taken.
 - ✓ Delegating powers under the SEZ Act to IFSCA to avoid dual regulation.
 - ✓ Setting up a single window IT system for registration and approval from IFSCA, SEZ authorities, GSTN, RBI, SEBI and IRDAI.
 - ✓ Permitting acquisition financing by IFSC Banking Units of foreign bank.
 - ✓ Establishing a subsidiary of EXIM Bank for trade re-financing.
 - ✓ Amending IFSCA Act for statutory provisions for arbitration, ancillary services, and avoiding dual regulation under SEZ Act
 - ✓ Recognizing offshore derivative instruments as valid contracts.
 - ✓ Amendments proposed to the Banking Regulation Act, the Banking Companies Act and the Reserve of India Act to improve bank governance and enhance investors' protection.
 - ✓ Countries looking for digital continuity solutions would be facilitated for setting up of their Data Embassies in GIFT IFSC.
 - ✓ SEBI to be empowered to develop, regulate, maintain and enforce norms and standards for education in the National Institute of Securities Markets and to recognize award of degrees, diplomas and certificates.

- ✓ Integrated IT portal to be established to enable investors to easily reclaim the unclaimed shares and unpaid dividends from the Investor Education and Protection Fund Authority.
- ✓ To commemorate Azadi Ka Amrit Mahotsav, a one-time new small savings scheme, **Mahila Samman Savings Certificate** to be launched. It will offer deposit facility upto Rs 2 lakh in the name of women or girls for tenure of 2 years (up to March 2025) at fixed interest rate of 7.5 per cent with partial withdrawal option.
- ✓ The maximum deposit limit for Monthly Income Account Scheme to be enhanced from Rs 4.5 lakh to Rs 9 lakh for single account and from Rs 9 lakh to Rs 15 lakh for joint account.
- ✓ The entire fifty-year interest free loan to states to be spent on capital expenditure within 2023-24. Part of the loan is conditional on States increasing actual Capital expenditure and parts of outlay will be linked to States undertaking specific loans.
- ✓ Fiscal Deficit of 3.5% of GSDP allowed for States of which 0.5% is tied to Power sector reforms.

2.1 Revised Estimates 2022-23:

- The total receipts other than borrowings is Rs 24.3 lakh crore, of which the net tax receipts are Rs 20.9 lakh crore.
- The total expenditure is Rs 41.9 lakh crore, of which the capital expenditure is about Rs 7.3 lakh crore.
- The fiscal deficit is 6.4 per cent of GDP, adhering to the Budget Estimate.

2.2 Budget Estimates 2023-24:

- The total receipts other than borrowings is estimated at Rs 27.2 lakh crore and the total expenditure is estimated at Rs 45 lakh crore.
- The net tax receipts are estimated at Rs 23.3 lakh crore.
- The fiscal deficit is estimated to be 5.9 per cent of GDP.
- To finance the fiscal deficit in 2023-24, the net market borrowings from dated securities are estimated at Rs 11.8 lakh crore.
- The gross market borrowings are estimated at Rs 15.4 lakh crore.

3. PART – B DIRECT TAXES

- ❖ Direct Tax proposals aim to maintain **continuity** and **stability** of taxation, further **simplify and rationalise** various provisions to **reduce the compliance burden**, promote the **entrepreneurial spirit** and provide tax relief to citizens.
- ❖ Constant endeavour of the Income Tax Department to improve Tax Payers Services by making **compliance easy and smooth**.
- ❖ To further improve tax payer services, proposal to roll out a next-generation **Common IT Return Form** for tax payer convenience, along with plans to strengthen the grievance redressal mechanism.
- ❖ **Rebate limit** of Personal Income Tax to be **increased to Rs. 7 lakh** from the current Rs. 5 lakh in the new tax regime. Thus, persons in the new tax regime, with income up to Rs. 7 lakh to not pay any tax.

- ❖ Tax structure in new personal income tax regime, introduced in 2020 with six income slabs, to change by reducing the **number of slabs to five** and **increasing the tax exemption limit to Rs. 3 lakh**. Change to provide major relief to all tax payers in the new regime.

Table 1 New tax rates

Total Income (Rs)	Rate (per cent)
Up to 3,00,000	Nil
From 3,00,001 to 6,00,000	5
From 6,00,001 to 9,00,000	10
From 9,00,001 to 12,00,000	15
From 12,00,001 to 15,00,000	20
Above 15,00,000	30

- ❖ Proposal to **extend the benefit of standard deduction** of Rs. 50,000 to salaried individual, and deduction from family pension up to Rs. 15,000, in the new tax regime.
- ❖ **Highest surcharge rate to reduce** from 37 per cent to 25 per cent in the new tax regime. This to further result in reduction of the maximum personal income tax rate to 39 per cent.
- ❖ The limit for tax exemption on **leave encashment** on retirement of non-government salaried employees to increase to **Rs. 25 lakh**.
- ❖ The new income tax regime to be made the **default tax regime**. However, citizens will continue to have the option to avail the benefit of the old tax regime.
- ❖ **Enhanced limits for micro enterprises and certain professionals** for availing the benefit of presumptive taxation proposed. Increased limit to apply only in case the amount or aggregate of the amounts received during the year, in cash, does not exceed five per cent of the total gross receipts/turnover.
- ❖ Deduction for expenditure incurred on payments made to MSMEs to be allowed only when payment is actually made in order to support MSMEs in timely receipt of payments.
- ❖ **New co-operatives** that commence manufacturing activities till 31.3.2024 to get the **benefit of a lower tax rate** of 15 per cent, as presently available to new manufacturing companies.
- ❖ Opportunity provided to sugar co-operatives to claim payments made to sugarcane farmers for the period prior to assessment year 2016-17 as expenditure. This expected to provide them a relief of almost Rs. 10,000 crore.
- ❖ Provision of a **higher limit of Rs. 2 lakh per member** for cash deposits to and loans in cash by Primary Agricultural Co-operative Societies (PACS) and Primary Co-operative Agriculture and Rural Development Banks (PCARDBs).
- ❖ A **higher limit of Rs. 3 crore for TDS** on cash withdrawal to be provided to co-operative societies.
- ❖ **Date of incorporation** for income tax benefits to start-ups to be **extended** from 31.03.23 to 31.3.24.
- ❖ Proposal to provide the benefit of carry forward of losses on change of shareholding of start-ups from seven years of incorporation to ten years.
- ❖ Deduction from capital gains on investment in residential house under sections 54 and 54F to be capped at Rs. 10 crore for better targeting of tax concessions and exemptions.
- ❖ Proposal to **limit income tax exemption** from proceeds of **insurance policies with very high value**. Where aggregate of premium for life insurance policies (other than

ULIP) issued on or after 1st April, 2023 is above Rs. 5 lakh, income from only those policies with aggregate premium up to Rs. 5 lakh shall be exempt.

- ❖ Income of authorities, boards and commissions set up by statutes of the Union or State for the purpose of housing, development of cities, towns and villages, and regulating, or regulating and developing an activity or matter, proposed to be exempted from income tax.
- ❖ **Minimum threshold** of Rs. 10,000/- for **TDS to be removed** and taxability relating to online gaming to be clarified. Proposal to provide for TDS and taxability on net winnings at the time of withdrawal or at the end of the financial year.
- ❖ Conversion of gold into electronic gold receipt and vice versa not to be treated as capital gain.
- ❖ TDS rate to be reduced from 30 per cent to 20 per cent on taxable portion of EPF withdrawal in non-PAN cases.
- ❖ Income from Market Linked Debentures to be taxed.
- ❖ Deployment of about 100 Joint Commissioners for disposal of small appeals in order to reduce the pendency of appeals at Commissioner level.
- ❖ Increased selectivity in taking up appeal cases for scrutiny of returns already received this year.
- ❖ Period of **tax benefits** to funds relocating to **IFSC, GIFT City** extended till 31.03.2025.
- ❖ Certain acts of omission of liquidators under section 276A of the Income Tax Act to be **decriminalized** with effect from 1st April, 2023.
- ❖ Carry forward of losses on strategic disinvestment including that of IDBI Bank to be allowed.
- ❖ **Agniveer Fund** to be provided **EEE status**. The payment received from the Agniveer Corpus Fund by the Agniveers enrolled in Agnipath Scheme, 2022 proposed to be exempt from taxes. Deduction in the computation of total income is proposed to be allowed to the Agniveer on the contribution made by him or the Central Government to his Seva Nidhi account.

4. INDIRECT TAXES

- ❖ Number of basic customs duty rates on goods, other than textiles and agriculture, reduced to 13 from 21.
- ❖ **Minor changes in the basic custom duties, cesses and surcharges** on some items including toys, bicycles, automobiles and naphtha.
- ❖ Excise duty exempted on **GST-paid compressed bio gas** contained in blended compressed natural gas.
- ❖ Customs Duty on specified capital goods/machinery for manufacture of **lithium-ion cell for use in battery of electrically operated vehicle (EVs)** extended to 31.03.2024
- ❖ Customs duty exempted on vehicles, specified automobile parts/components, sub-systems and tyres when imported by notified testing agencies, for the purpose of testing and/ or certification, subject to conditions.
- ❖ Customs duty on **camera lens and its inputs/parts** for use in manufacture of camera module of cellular mobile phone **reduced to zero** and concessional duty on lithium-ion cells for batteries extended for another year.
- ❖ Basic customs duty reduced on **parts of open cells of TV panels** to 2.5 per cent.
- ❖ Basic customs duty on **electric kitchen chimney** increased to 15 per cent from 7.5 per cent.

- ❖ Basic customs duty on **heat coil for manufacture of electric kitchen** chimneys reduced to 15 per cent from 20 per cent.
- ❖ **Denatured ethyl alcohol** used in chemical industry exempted from basic customs duty.
- ❖ Basic customs duty reduced on **acid grade fluorspar** (containing by weight more than 97 per cent of calcium fluoride) to 2.5 per cent from 5 per cent.
- ❖ Basic customs duty on **crude glycerin** for use in manufacture of epichlorhydrin reduced to 2.5 per cent from 7.5 per cent.
- ❖ Duty reduced on key inputs for domestic manufacture of **shrimp feed**.
- ❖ Basic customs duty reduced on seeds used in the manufacture of **lab grown diamonds**.
- ❖ Duties on articles made from **dore and bars of gold and platinum** increased.
- ❖ Import duty on **silver dore, bars and articles** increased.
- ❖ Basic Customs Duty exemption on raw materials for manufacture of CRGO Steel, ferrous scrap and nickel cathode continued.
- ❖ Concessional BCD of 2.5 per cent on copper scrap is continued.
- ❖ Basic customs duty rate on **compounded rubber** increased to 25 per cent from 10 per cent or 30 per kg whichever is lower.
- ❖ National Calamity Contingent Duty (NCCD) on **specified cigarettes** revised upwards by about 16 per cent.

4.1 Legislative Changes in Customs Laws

- ❖ Customs Act, 1962 to be amended to specify a time limit of nine months from date of filing application for passing final order by Settlement Commission.
- ❖ Customs Tariff Act to be amended to clarify the intent and scope of provisions relating to Anti-Dumping Duty (ADD), Countervailing Duty (CVD), and Safeguard Measures.
- ❖ *CGST Act to be amended*
 - ✓ to raise the **minimum threshold of tax amount** for launching prosecution under GST from one crore to two crore;
 - ✓ to reduce the **compounding amount** from the present range of 50 to 150 per cent of tax amount to the range of 25 to 100 per cent;
 - ✓ **decriminalise certain offences**;
 - ✓ to **restrict filing of returns/statements** to a maximum period of three years from the due date of filing of the relevant return/statement; and
 - ✓ to enable unregistered suppliers and composition taxpayers to make intra-state supply of goods through E-Commerce Operators (ECOs).

5. Conclusion

Under Budget 2023 Highlights, real estate companies are expressing hope that under the upcoming budget, the government will also take steps on the availability of loans for them. If such steps are taken by the government, then the housing projects are going to gain a lot of momentum. Actually, the Finance Minister is going to present the general budget on February 2023. Experts of the real estate sector are of the view that during the upcoming budget, the government may announce tax relief for buying houses; this can bring huge profits to the customers as well as the real estate companies. It is expected that according to the Budget 2023 Highlights, the government will take great care of it. Under Budget 2023 India, experts and analysts of the equity market believe that the expectations of reforms and tax benefits from this new budget are stuck.

References

- ❖ <https://www.pwc.in/budget/union-budget-2023-24.html>
- ❖ <https://urbanaffairskerala.org/budget-2023/>

- ❖ pwc.in/budget/union-budget-2023-24.html
- ❖ <https://www.india.gov.in/spotlight/union-budget-2023-2024>
- ❖ <https://cleartax.in/s/budget-2023-highlights>

<https://urbanaffairskerala.org/budget-2023/>

IMPACT ON GOVERNMENT POLICY TOWARDS CAPITAL GOODS

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ABSTRACT

Countries can potentially choose to import from wide varieties that are available in different sources and this choice has a bearing on their growth rates. A distinction between imported and domestically produced capital goods. Capital goods exerts a significant effect on the growth rates of per capita incomes, particularly in developing countries. The Capital Goods sector is a critical element to boost manufacturing activity by providing critical inputs, that is, machinery and equipment. The sector also provides direct employment to ~1.4 million people, the sector provides indirect employment to ~7 million people and impacts users of capital goods estimated to be 50 times of the direct employment.

Keywords: Capital Goods, Import, Exports, Growth rate, Capital income.

INTRODUCTION

Capital goods are of primary importance of growth of manufacturing in India. In recent years, production of capital goods sector has not grown fast enough to match the pace of domestic demand leading to a growing dependence on imports. Further, in a globalise world, where manufacturer are increasingly multinational, not all Indian capital goods manufactures have been able to effectively tap the global opportunity. India's share of global capital goods exports remains much lower than several others leading countries, despite a well-developed domestic capital goods sector.

Capital goods consist of plant machinery, equipment and accessories required, either directly or indirectly, for manufacture or production of goods or for rendering services, including those required for replacement, modernization, technological up gradation and expansion of manufacturing facilities.

CAPITAL GOODS SECTOR

Capital goods

In economics, capital goods are tangible objects that are used in the production of other goods or commodities or during the providing of service. They can include things such as buildings, machinery, tools, computers and any other equipment that is used to make or do something else, which can then be sold to another party. The means of production might be owned by individuals, businesses, organizations or governments.

Investment Required

Capital goods require a substantial investment on the behalf of the producer, and their purchase is usually referred to as a capital expense. These goods are important to businesses because they use these items to make functional goods or customers with valuable service. As a result, they are sometimes referred to as producer's goods, production goods or means of production.

Capital Goods vs. Capital

The economic term "Capital Goods" should not be confused with the financial term "capital", which simply refers to money or wealth. Production goods generally are man-made and do not include natural resources such as land or minerals.

Policies towards Foreign Capital in India

The Government announced in 1991, a list of industries in which Foreign Direct Investment would be automatically allowed up to 51 percent (Foreign Equity). Capital goods and metallurgical sector to the entertainment, electronic, food processing and service sectors with significant export potential. Hotels

and tourist-related areas were also allowed foreign equity holdings by international trading companies of up to 51 percent.

A wide range of issues has negatively impacted the growth of capital goods production in India Issues affecting domestic demand creation:

The lack of positive bias towards domestic value addition in public procurement policies, difficult contract conditions, persistent import and use of second-hand machinery with no incentive for replacement, zero duty import under 'Project Imports' and delays in project implementation are the key factors limiting domestic demand.

Issues affecting exports:

Key challenges faced by Indian capital goods exporters are the inadequate availability of competitive short and long-term financing, non-tariff barriers in export markets denying market access and limited understanding of international market requirements especially by smaller players. India also needs to align its trade policy to the shift in India's export map towards developing regions.

Issues affecting technology depth:

Significant challenges and gaps exist in high-end, heavy-duty, high-productivity and high precision technologies across sub-sectors. Contributors to these gaps include low end user acceptance of new Indian technology, lack of skill availability, weak support infrastructure and low Indian participation in developing international standards.

Issues related to SMEs:

SMEs still face challenges in developing new products and processes due to their smaller scale and inadequate institutional mechanisms, limited access to capital and low awareness and compliance with international standards. In addition, there are several sub-sector specific challenges. Achieving high growth would need focused collective efforts by all concerned stakeholders - government, industry, end user segments alike; supported by an enabling policy for the capital goods industry.

Importance of capital goods

Capital goods are high investment products and play an important role in the economy. They act as an entry barrier for new companies that lack the necessary funds to acquire such equipment. If a business is unable to produce goods due to the lack of equipment, then it cannot compete in the market. Capital goods play a vital role in increasing the production of goods in the long term, or in other words, it increases the production capacity of goods and services. Capital goods play a vital role in increasing the production of goods in the long term, or in other words, it increases the production capacity of goods and services.

CONCLUSION

The Capital Goods sector is a very large and important sector and a key contributor to manufacturing activity in India. The growth of the sector has been lagging in recent years and the sector is facing a variety of issues and challenges. India's growing economy has offered domestic entrepreneurs and international players multiple opportunities to invest. The government of India has realised the significance of the manufacturing industry to the country's industrial development and is taking necessary steps to increase investment in this sector. A robust manufacturing sector is essential element of the Indian growth story.

REFERENCES

Schott, J. J. (2020). How trade policy affects capital goods industries. Peterson Institute for International Economics. <https://www.piie.com/blogs/trade-investment-policy-watch/how-trade-policy-affects-capital-goods-industries>

- Mirza, M. S., & Khan, M. S. (2020). The impact of government policies on capital goods industry in Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 14(1), 147-169.
- Kharbanda, V. P., & Sharma, A. (2015). Impact of government policies on capital goods industry in India. *IOSR Journal of Business and Management*, 17(11), 01-08.
- Galkina, T. (2018). The impact of government policies on the competitiveness of the capital goods sector in Russia. *Journal of International Studies*, 11(4), 98-112.
- Raza, S. A., Malik, A., & Batool, I. (2020). Impact of government policies on capital goods industry: Evidence from Pakistan. *Journal of Business Studies Quarterly*, 11(2), 1-18.

A Study on Working Capital Management and Data Regression Model Analysis of selected Automobile Industry in Chennai

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ABSTRACT

Chennai is a major city in automobile technology in India. The demand for vehicle production is high due to the large population of Chennai. Major automobile companies around the city of Chennai continue to manufacture and spare parts .so it is known as the "Detroit of India" of Chennai India is mass vehicle production. Chennai based four –wheelers make up 30% of India's automobile industry and 35% of its components Chennai was originally called the Detroit of Asia" but Thailand was later called the "Detroit of Asia". The report examines ASHOK LEYALND, TVS, MRF TYRES, RANE MADRAS and four companies manufacturing automobile vehicles in Chennai and its operational financial performance. The methodology adopted is using Ratio, Mean, SD, Regression, Anova, Coefficients. The present paper measures the financial performance of major selected automobile companies for the period of 10 years from 2012-2013 to 2020-2021 by using ratio analysis. The purpose of the study is to evaluate and compare the financial performance of selected four companies to rate their financial performances. It concludes are explored in the study of the ways in which the automobile company has lagged behind in economic production since the Covid- 19 and the measures to be taken the rectify this and the financial activates to be undertaken by them.

KEY WORDS: Detroit of Asia, Components, Spare Parts, Economic Sectors, de-licensing

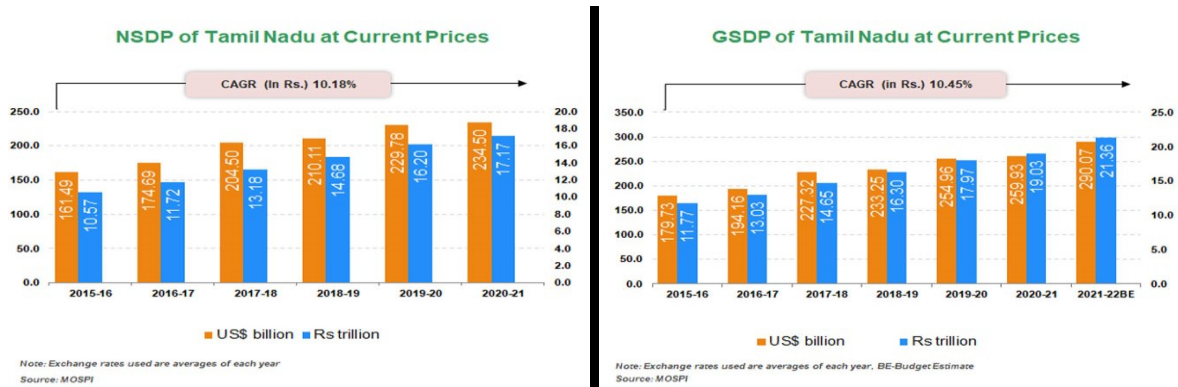
INTRODUCTION

The automobile industry is heavily involved in the design and development of motor vehicles. It is considered to be one of the largest major economic sectors in the world in terms of revenue from the automobile sector. The automobile industry is one of the most important industries in India. The automobile sector plays an important role in the major industries of the Indian economy. The industry has shown great progress since de-licensing and opening up of the sector to Foreign Direct Investment (FDI) in 1991-92. Financial Year 2021 had an annual automobile production of 22.65 million vehicles in India and a maximum production of 13 million vehicles was produced between April-October 2021. The automobile sector received cumulative equity FDI inflow of about US\$30.78 billion between April 2000 and September 2021 the rising investment.

Government of India the automobile sector is expected to attract US \$ 8 to 10 billion to domestic and foreign investors by January 2023. In January 2022 the automobile sector produced vehicles i.e. passenger vehicles produced three wheelers two wheelers produced 1,860,809 units. Automotive mission plan 2016-2026 is a mutual initiative by the government of India and Indian automotive industry to lay down the roadmap for development of the industry. Automobile exports reached 4.13 million vehicles in FY21, growing at a CAGR of 3.47% during FY16-FY21. Two wheelers (79.38%), passenger vehicles (9.79%) and three wheelers (9.52%) made up the majority of exports from India. Many initiatives of the Government of India and leading automobile companies in the Indian market are expected to make India the leading two-wheeler and four-wheeler vehicle in the world according to the 2020 Census. A cumulative investment of Rs. 12.5 trillion (US\$ 180 billion) in vehicle production and charging infrastructure would be required until 2030 to meet India's EV

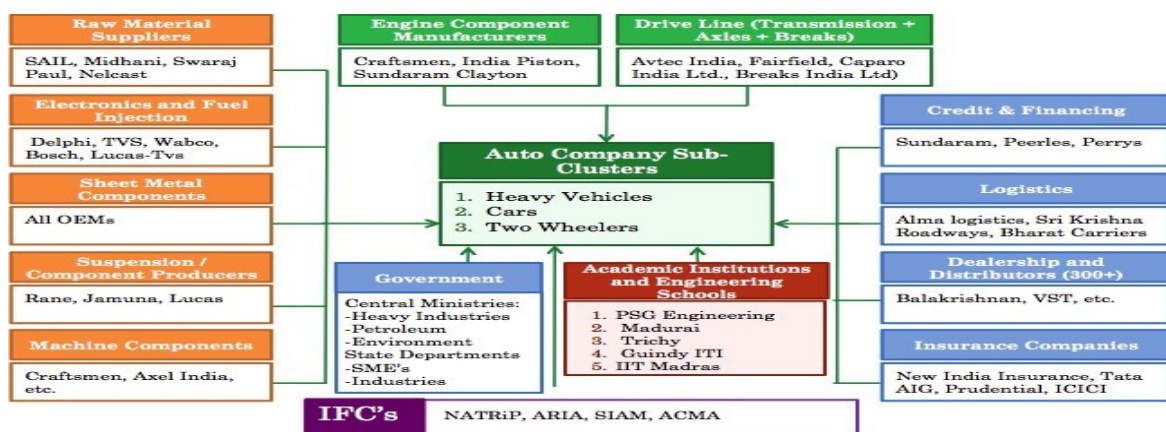
ambitions. Tamil Nadu is the fourth largest state of India .The industrial development & Economics Growth in tamilnadu .Between 2015-16 and 2020-21, Net State Domestic Product (GSDP) &Gross State Domestic Product (NSDP).

Chart-1.1
Industrial Development & Economics Growth in TamilNadu



The Indian automobile industry was first grew in 1898. But now the automobile industry in India produces 40 million passenger vehicles and cars and major automobile products. Presently Indian automobile industry is regarded as largest and second fastest growing industry after China in the world with annual production of over 3.9 million units. Although the Indian automobile sector is highly productive, it is facing major problems and problems in the economy. India's poor road conditions, high pollution, increasing accidents, political unrest and industrial and workers' rights are the many permanent obstacles in its path of development and a permanent solution to the problem's progress. The diagram below reveals the tamilnadu medium scale technique. This map Cleary shows us the presence of automobile industries supplier, their affiliates and their services.

Chart-1.2
Tamilnadu Auto Cluster Map



REVIEW OF LITERATURE

Nishi Sharma (2011) published a research paper titled “Financial Analysis of Indian Automobile Industry”, which aims at measuring the financial performance which involves

profitability, liquidity, efficiency, leverage position and assigning ranks to the selected companies. The research paper has involved eight companies for this purpose. The study has been done based on the data for ten years ranging from 2002- 2011. The ratio analysis, mean, standard deviation, minimum and maximum value has been used to analyse the data. The F-test and ANOVA is used to test the hypotheses framed for the study. The study reveals that the performance during the period was volatile and this nature should be reduced by the government by taking necessary steps like regulating petrol prices and interest rates forms the concluding remarks of the study.

Repalle Vinod (2014) published research paper titled, “Evaluation of Working Capital Management on Profitability of Indian Automobile Industries” which aimed at measuring the impact of working capital on financial performance. The study begins with the importance of the working capital for the effective functioning of business and the review of literature that supports the above view. The need for the study explains the various benefits that are to arise due to this study. The research paper aims at measuring the significance of liquidity, profitability and operational efficiency of selected automobile companies with reference to the working capital management of the companies. The ratio analysis was used to analyse the data. The study revealed that there was vital relationship between the working capital and the profitability of the firm.

Sheela Christina (2017) carried out the study on Financial Performance of Wheels India Limited-Chennai. The study deals with Analytical type of research design with the help of secondary data collection method. For this purpose the researcher took past five years data and also checked out for the validity and reliability before conducting the study. The researcher used the following financial tool namely ratio analysis, comparative balance sheet and DuPont analysis and also statistical tools such as trend analysis and correlation. Profitability ratios indicate there is a decrease in the profit level, utilization of fixed assets and working capital in the last financial year. Thus the company can take necessary steps to improve sales and profit. Finally, the study reveals that the financial performance is satisfactory.

Sujeet Kumar Yadav , Mridula Sahay (2020) examined “ A Study on Automobile Industry Growth in India and Its Impact on Air Pollution” The introduction of the study The average growth rate of GDP of India from 1947 to 1991 has been of order 2.5 to 3%. This slow rate was due to protectionism policy followed by the government of India. The study has used multiple sources and a linear correlation technique. The Automobile industry is the major contributor to the growth of the Indian economy but increase in the number of vehicles has also created enormous pressure on environment that resulted in air pollution. Air pollution causes many health problems like: respiratory and cardiovascular diseases. The research paper has given the levels particulate matter such as PM 2.5 and PM10, also the concentration of dangerous carcinogenic like Sulphur Dioxide (SO₂) and Nitrogen Dioxide (NO₂) have reached alarming proportions. This study concluded that on growth of automobile industry in India and its impact on Air pollution

STATEMENT OF THE PROBLEM

Evaluating financial analysis in the automobile industry is an important part of understanding the strengths and weaknesses of throwing risks and rewards and identifying what changes need to be made. Find out how to earn more revenue through the automobile industry and explore them. The purpose of measuring financial analysis is not to know how the business is performing but to enable it to perform better. As the global demand for automobiles increases today, management needs to take appropriate steps to reduce production costs and generate

additional revenue through investment. The main objective of the project is to reduce the cost of production and achieve higher returns on the following methods.

- The automobile company should handle various efforts to increase sales revenue and thereby increase the profitability of the company.
- Increasing the production of value added products
- Continuing to reduce the value levels of this and the raw materials
- Implementing plans for them in detail with a view to improving the emerging market.
- Create a good reputation with the customer by providing an adequate sales network and providing after sales services.
- The purpose of financial analysis is to examine the past and current financial data so that a company's performance and financial position can be measured and evaluated and future risks and potential can be estimated.

SCOPE OF THE STUDY

This present study is concerned with the financial performance of selected automobile companies. Financial Performance measures whether the company's strategy and its implementation and execution are effectively contributing towards Profitability, Liquidity, Efficiency and Solvency etc., to prove the financial position during last 10 years in Indian Automobile Industry. So that the business can be carried out smoothly ensuring success, growth and bottom line improvement.

OBJECTIVES OF THE STUDY

- i) To know the financial performance evaluation of automobile industry
- ii) To give suggestion on the basis of profitably, Liquidity, solvency, analysis.
- iii) To analyses the solvency, liquidity, profitability position of the selected Auto mobile companies in Chennai.

RESEARCH METHODOLOGY

Research Methodology is a way to systematically solve the research problem. The research design utilized in this study is descriptive and analytical. The nature of the study relates to analyzing the financial performance.

Sources of Data

The proposed study is entirely based on secondary data. The data has been compiled from annual reports of the selected automotive companies in Chennai, Text Books, Reference Books, Journals, Articles, Magazines and from the Internet. The necessary data has been collected from money control.com, equity master and Society of Indian Automobile Manufactures (SIAM).

Sampling Design

The population for this study is the automotive companies in Chennai. Among the top ten companies, the four companies Ashok Leyland Limited, TVS Motors Limited, MRF Tyres Limited and Rane Madras Limited which have their registered office and manufacturing units in Chennai were selected as samples for the study.

Data Source

Data has been taken from the year 2012 to 2021. It has been collected from the moneycontrol.com the Annual Reports of the Companies.

Tools for analysis

The data are analyzed using Descriptive Statistics, one way Anova, Multiple Regressions, coefficient have been applied for the analysis of data. The Statistical Package for Social Sciences (SPSS – Version 20) is also used for analysis.

Ratio Used for Analysis of Data

Financial Ratios provide a quick and relatively simple means of examining the financial condition of a business. Ratios can be very helpful when comparing the financial health of different businesses. The financial performance of Automobile industries can be measured by a number of indicators. In this study, the predictive variables are the financial ratios of Indian Automobile Industry, which are defined in the following

RATIOS

- Debt Equity Ratio
- Fixed Assets Ratio
- Current ratio
- Liquidity ratio
- Return on total assets Ratio

A) Debt Equity ratio

This ratio is ascertained to determine the long-term solvency position of a company. Debt equity ratio is also called ‘external-internal equity ratio’.

Formula

$$\text{Debt Equity Ratio} = \frac{\text{Total long - term debt}}{\text{Shareholders' funds}}$$

B) Fixed Assets Ratio

The ratio establishes the relationship between fixed assets and long-term funds. The objective of calculating this ratio is to ascertain the proportion of long-term funds invested in fixed assets.

Formula

$$\text{Fixed Assets Ratio} = \frac{\text{Net Fixed Assets}}{\text{Long - term funds}}$$

C) Current Ratio

The ratio of current assets to current liabilities is called “Current Ratio.” In order to measure the short-term liquidity or solvency of a concern, comparison of current assets and current liabilities is inevitable. Current ratio indicates the ability of a concern to meet its obligations as and when they are due for payment.

Formula

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

D) Liquidity ratio

This ratio is also called “Quick” or “Acid Test” ratio. It is calculated by comparing the quick assets with current liabilities. Quick assets or liquid assets refer to the assets which are quickly convertible into cash. Current assets other than stock and prepaid expenses are considered as quick assets.

Formula

$$\text{Liquidity ratio} = \frac{\text{Liquid Assets}}{\text{Current liabilities}}$$

Liquid assets = Current assets – Inventories

E) Return on Total Assets Ratio

Return on total assets ratio is computed to know the ‘productivity of the total assets’. It is used to find out how effectively the funds pooled together have been used.

Formula

$$\text{Return on Total Assets Ratio} = \frac{\text{EBIT}}{\text{Total assets}}$$

Data Regression Model Analysis

Seven variables have been used in this study to analyze the capital structure of the selected companies. The only dependent variable of the study is Debt Equity Ratio (Capital Structure or Leverage) and independent variables were as follow:

Table 1.1
Descriptive Statistics

Automobile Companies	Ashok Leyland		Tvs		Mrf		Ranemadars		N
	MEAN	SD	MEAN	SD	MEAN	SD	MEAN	SD	
Debt equity ratio	0.275	0.164	0.436	0.128	0.168	0.074	1.064	0.388	10
Fixed assets ratio	5.664	6.150	3.616	1.665	6.072	4.058	3.736	1.192	10
Current ratio	0.625	0.162	0.631	0.080	0.824	0.392	0.914	0.132	10
Liquidity ratio	0.249	0.210	0.139	0.415	0.350	1.021	0.316	0.358	10
Return on total assets ratio	4.307	4.227	7.54	1.852	8.67	3.88	2.801	4.106	10

Multiple Regressions – Capital Structure (Ashok Leyland)

In multiple regression analysis, the dependent variable is the Capital Structure (Debt Equity Ratio) and the Independent variables are Fixed Assets Ratio, Current Ratio, liquidity Ratio, Return on total assets Ratio.

Table 1.2
Regression Statistics ^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.888 ^a	.788	.619	.10123	.788	4.660	4	5	.061

The table 1.2 is the model summary reports the strength of the relationship between the model and the dependent variable. The multiple Regression coefficients, observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship. R Square, the coefficient of determination, is the squared value of the Multiple Regression Coefficients. The value of R^2 is 0.788; In other words the independent variables FAR, CR, LR, RTAR is able to explain around.061 the variation of the dependent variable (DER).

Table 1.3
ANOVA ^a

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	.191	4	.048	4.660	.061 ^a
Residual	.051	5	.010		
Total	.242	9			

The ANOVA table1.3 tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by the model. The Residual row displays information about the variation that has not been accounted by the model. The regression much is less than residual sums of squares, which indicates that around .242 of the variation in DER is explained by the model. However, F statistic is found significant, since the p value (0.000) less than 0.061.

Table 1.4
Regression Coefficients ^a

Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.076	.153		.494	.643
Fixed assets ratio	-.007	.010	-.244	-.625	.559
Current ratio	.811	.315	.803	2.575	.050
Liquidity ratio	-.498	.282	-.638	-1.764	.138
Return on total assets ratio	-.034	.014	-.876	-2.512	.054

- a. **Dependent Variable: Debt Equity Ratio**
- b. **Predictors: (Constant), Fixed Assets Ratio, Current Ratio ,liquidity Ratio ,Return on total assets Ratio.**

Multiple Regressions is applied to determine the best linear combination of Fixed assets ratio, Current ratio, Liquidity ratio, Return on total assets ratio, for predicting the Capital Structure (Debt Equity Ratio)

Preliminary analyses are carried out to ensure no violation of the assumptions of normality, linearity, multi-co linearity and homoscedasticity. The Means, Standard Deviations, and inter-correlations can be found. This combination of all four variables do not significantly predict the dependable variable i.e., the **Capital Structure (Debt Equity Ratio)** $F(4, 5) = 4.660, p = .061$ which is greater than .05 (Sig. Value at 5% level). Fixed Assets Ratio, LR and Return on total assets ratio show an inverse association with capital structure but they do not influence the capital structure.

Multiple Regressions – Capital Structure (TVS)

a. In multiple regression analysis, the dependent variable is the Capital Structure (Debt Equity Ratio) and the Independent variables are Fixed Assets Ratio, Current Ratio, liquidity Ratio, Return on total assets Ratio.

Table 1.5
Regression Statistics ^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.411 ^a	.169	-.496	.15644	.169	.254	4	5	.896

The table 1.5 is the model summary reports the strength of the relationship between the model and the dependent variable. The multiple Regression coefficients, observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship. R Square, the coefficient of determination, is the squared value of the Multiple Regression Coefficients. The value of R^2 is 0.169; In other words the independent variables FAR, CR, LR, RTAR is able to explain around .896 the variation of the dependent variable (DER).

Table 1.6
ANOVA ^a

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	.025	4	.006	.254	.896 ^a
Residual	.122	5	.024		
Total	.147	9			

The ANOVA table 1.6 tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by the model. The Residual row displays information about the variation that has not been accounted by the model. The regression much is less than residual sums of squares, which indicates that around .254 of the variation in DER is explained by the model. However, F statistic is found significant, since the p value (0.000) less than 0.896.

Table 1.7
Regression Coefficients ^a

Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.919	1.222		.752	.486
Fixed assets ratio	-.006	.048	-.084	-.133	.899
Current ratio	-.843	2.350	-.525	-.359	.734
Liquidity ratio	.234	.442	.759	.529	.619
Return on total assets ratio	.005	.038	.076	.137	.897

a. **Dependent Variable: Debt Equity Ratio**

b. **Predictors: (Constant), Fixed Assets Ratio, Current Ratio ,liquidity Ratio ,Return on total assets Ratio.**

Multiple Regressions is applied to determine the best linear combination of Fixed assets ratio, Current ratio, Liquidity ratio, Return on total assets ratio, for predicting the Capital Structure (Debt Equity Ratio)

Preliminary analyses are carried out to ensure no violation of the assumptions of normality, linearity, multi-co linearity and homoscedasticity. The Means, Standard Deviations, and inter-correlations can be found. This combination of all five variables do not significantly predict the dependable variable i.e., the **Capital Structure (Debt Equity Ratio)** $F(4, 5) = 2.54, p = .896$ which is greater than .05 (Sig. Value at 5% level).fixed Assets Ratio, CR, show an inverse association with capital structure but they do not influence the capital structure.

Multiple Regressions – Capital Structure (MRF)

In multiple regression analysis, the dependent variable is the Capital Structure (Debt Equity Ratio) and the Independent variables are Fixed Assets Ratio , Current Ratio ,liquidity Ratio ,Return on total assets Ratio.

Table 1.8
Regression Statistics ^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.736 ^a	.542	.175	.06686	.542	1.477	4	5	.335

The table 1.8 is the model summary reports the strength of the relationship between the model and the dependent variable. The multiple Regression coefficients, observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship. R Square, the coefficient of determination, is the squared value of the Multiple Regression Coefficients. The value of R² is 0.542; In other words the independent variables FAR,CR, LR, RTAR is able to explain around.335 the variation of the dependent variable (DER).

Table 1.9
ANOVA ^a

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	.026	4	.007	1.477	.335 ^a
Residual	.022	5	.004		
Total	.049	9			

The ANOVA table 1.9 tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by the model. The Residual row displays information about the variation that has not been accounted for by the model. The regression sum of squares is less than residual sums of squares, which indicates that around .049 of the variation in DER is explained by the model. However, F statistic is found significant, since the p value (0.000) is less than 0.335.

Table 1.10
Regression Coefficients ^a

Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.224	.104		2.162	.083
Fixed assets ratio	-.005	.010	-.299	-.518	.627
Current ratio	-.041	.101	-.218	-.405	.702
Liquidity ratio	.020	.035	.275	.560	.600
Return on total assets ratio	.000	.006	.020	.062	.953

- a. **Dependent Variable: Debt Equity Ratio**
- b. **Predictors: (Constant), Fixed Assets Ratio , Current Ratio ,liquidity Ratio ,Return on total assets Ratio.**

Multiple Regressions is applied to determine the best linear combination of Fixed assets ratio, Current ratio, Liquidity ratio, Return on total assets ratio, for predicting the Capital Structure (Debt Equity Ratio)

Preliminary analyses are carried out to ensure no violation of the assumptions of normality, linearity, multi-collinearity and homoscedasticity. The Means, Standard Deviations, and inter-correlations can be found. This combination of all five variables do not significantly predict the dependable variable i.e., the **Capital Structure (Debt Equity Ratio)** $F(4, 5) = 1.477, p = .335$ which is greater than .05 (Sig. Value at 5% level). Fixed Assets Ratio, CR, show an inverse association with capital structure but they do not influence the capital structure.

Multiple Regressions – Capital Structure (RANEMADRAS)

In multiple regression analysis, the dependent variable is the Capital Structure (Debt Equity Ratio) and the Independent variables are Fixed Assets Ratio , **Current Ratio ,Liquidity Ratio ,Return on Total Assets Ratio.**

Table 1.11
Regression Statistics^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df 1	df 2	Sig. F Change
1	.412 ^a	.170	-.495	.47466	.170	.255	4	5	.895

The table 1.11 is the model summary reports the strength of the relationship between the model and the dependent variable. The multiple Regression coefficients, observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship. R Square, the coefficient of determination, is the squared value of the Multiple Regression Coefficients. The value of R^2 is .170; In other words the independent variables FAR, CR, LR, RTAR is able to explain around.895 the variation of the dependent variable (DER).

Table 1.12
ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	.230	4	.057	.255	.895 ^a
Residual	1.127	5	.225		
Total	1.356	9			

The ANOVA table1.12 tests the acceptability of the model from a statistical perspective. The Regression row displays information about the variation accounted for by the model. The Residual row displays information about the variation that has not been accounted by the model. The regression much is less than residual sums of squares, which indicates that around 1.356 of the variation in DER is explained by the model. However, F statistic is found significant, since the p value (0.000) less than.895

Table 1.13
Regression Coefficients^a

Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.616	2.281		1.147	.303
Fixed assets ratio	.167	.225	.514	.746	.489
Current ratio	-2.235	2.764	-.757	-.808	.456
Liquidity ratio	.261	.686	.241	.381	.719
Return on total assets ratio	-.078	.094	-.820	-.826	.447

a. **Dependent Variable: Debt Equity Ratio**

b. **Predictors: (Constant), Fixed Assets Ratio, Current Rati ,liquidity Ratio ,Return on total assets Ratio.**

Multiple Regressions is applied to determine the best linear combination of Fixed assets ratio, Current ratio, Liquidity ratio, Return on total assets ratio, for predicting the Capital Structure (Debt Equity Ratio)

Preliminary analyses are carried out to ensure no violation of the assumptions of normality, linearity, multi-co linearity and homoscedasticity. The Means, Standard Deviations, and inter-correlations can be found. This combination of all five variables do not significantly predict the dependable variable i.e., the **Capital Structure (Debt Equity Ratio) F (4, 5) = 2.55, p = .895** which is greater than .05 (Sig. Value at 5% level).fixed Assets Ratio, CR, show an inverse association with capital structure but they do not influence the capital structure.

LIMITATIONS OF THE STUDY

Financial information collected for the Current study is completely secondary in nature. All such information is scrutinized with secondary data all inherent limitations with financial information. The study was conducted for selected companies based on a ten-year period only. When calculation these data for the purpose of analysis the approximation of decimal places leads to small variations if the ratio and percentage are analyzed.

FINDINGS

Debt Equity ratio Analysis

It was revealed that the total long term debt of Ashok Leyland Limited has the mean of 0.275 per cent. The regression value of total long term debt of Ashok Leyland is the highest (0.692). It was found out that the debt equity ratio is not steady and the mean ratio for all the four companies is very low when compared to the standard during the study period. The analysis by one way ANOVA test showed the results that the mean debt equity ratios of selected automotive companies differ significantly.

Fixed assets ratio Analysis

It was out found that except MRF Limited (6.072) the other three companies have higher mean fixed assets ratio than the sd fixed assets ratio (0.67:1). The regression value of net fixed assets of MRF Tyres is the highest (0.923). The results of one way ANOVA test showed the results that the calculated p value is lesser than the significant value (0.01). Hence, it was concluded that the mean fixed assets ratios of selected companies differ significantly during the period of study.

Current ratio Analysis

It was found that the mean current ratios of the four companies ranged from 0.132 to 0.625 whereas the standard ratio is 2:1, though the mean ratios are not up to the standard ratio. Coefficient of variation is also higher in all the cases, which shows the variation of the ratios over the period of study. The results of one way ANOVA test showed that the calculated p value is lesser than the significant value (0.01). Hence, it was concluded that the mean current ratios of selected companies differ significantly.

Liquidity ratio Analysis

It was revealed that the average liquid ratios of all the companies except Rane Madras are below the standard ratio (1:1). The mean of variation of Ashok Leyland is high (0.625 per cent) and for TVS Motors, it is 0.631 per cent during the study period. The one way ANOVA test showed the results that the calculated p value is lesser than the significant value (0.01).

Hence, it was concluded that there was significant difference among the liquidity ratio of selected companies.

Return on Total Assets ratio Analysis

It was revealed that the growth rate of earnings before interest and tax of MRF Tyres is the highest among that of the four companies during the period of study. It showed that the return on total assets of the four companies is very low and also fluctuating. The one way ANOVA test results showed that the average return on total assets ratios of the selected companies do not differ significantly, as calculated p value is greater than the significant value (0.01).

SUGGESTIONS

- ❖ The standard norm for current ratio is not attained by all the selected companies. It is recommended that they should try to improve the ratio in future.
- ❖ Low profitability and poor liquidity position of the selected sample companies may be due to Lack of adequate financial planning. It is imperative that sample companies follow Proper financial planning that will help them to achieve better financial results.
- ❖ The average liquidity ratios of MRF Tyres are below the standard ratio during the study period. So they should take steps to increase the liquidity ratio.
- ❖ The manufacturing to sales ratio is higher than the other three companies throughout the period, which requires more attention by the management to minimize it.

CONCLUSION

Ratio analysis allows companies to compare financial statements .it covers companies for a limited period of time i.e. only ten years and helps companies to calculate how their financial performance is set. The study found that there was a strong relationship between financial performance and honesty. This leads to the creation more efficient inventory management and providing greater liquidity to companies that are timely. This survey therefore proves that there are some significant changes to meet the financial position of the companies. Thus the report contains some fluctuations in the credit ratios and liabilities of automobile companies. The study also found that the company's performance, that is, the financial performance of the Ashok Leyland, TVS, MRF Tyres, Rane Madras, and their operations were highly effective and focused on future earnings and the potential for greater economic success.

REFERENCES:

- Kothari, C.R. 2008, 'Research Methodology methods & techniques', second edition, New age international publishers, Delhi.
- Maheswari S.N Principles of Management Accounting,Sultan Chand &Sons Educational Publishers, New Delhi.
- OmPrakash, 'Ratio Analysis for Management in new prospective-Management ratio',Himalaya publishing House, New Delhi.
- AT Kearney, (2013)The Contribution of the Automobile Industry to Technology and Value Creation Available : www.atkearney.com .[Dec. 23, 2013]
- Drucker, P, (1946), the Concept of the Corporation, John Day, New York.
- Nishi Sharma. (2011). Financial analysis of indian automobile industry. Retrieved from International Journal of Research in Computer Application and Management,vol- 1(9), pp-112-116.

Repalle Vinod. (2014). Evaluation of working capital management on profitability of Indian automobile Industries. Retrieved from International Journal of Engineering Technology and Sciences, vol1(2), pp-91-96.

Sheela Christina (2017) the study on Financial Performance of Wheels India Limited- Chennai.

Sujeet Kumar Yadav , Mridula Sahay (2020) A Study on Automobile Industry Growth in India and Its Impact on Air Pollution .

Annual Reports of Ashok Leyland Limited from the Financial Year 2012-13 to 2020-2021.

Annual Reports of TVS Motors Limited from the Financial Year 2012-13 to 2020-2021.

Annual Reports of MRF Tyres Limited from the Financial Year 2012-13 to 2020-2021.

Annual Reports of Rane Madras Limited from the Financial Year 2012-13 to 2020-2021.

Annual Reports of the Indian Automotive Industry.

www.auto.indiamart.com

www.cmie.com

www.economicstimes.com

www.economywatch.com

<https://www.amrita.edu/sites/default/files/a-study-on-automobile-industry-growth-in-india-and-its-impact-on-air-pollution.pdf>

A STUDY ON ANALYZING THE PROBLEMS AND EXPECTATIONS OF WOMEN ENTREPRENEURS

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ABSTRACT

The source of data is collected from women entrepreneurs. The sample size is 50 and time constraint is the major problem in the study. The tool used for analysis and interpretation is simple percentage analysis. Both open end and close end questions are used in the questionnaire. From the analysis of the study, it is found that most of the women entrepreneurs expecting respect from the society and security, family members help to business operation, financial help. The study helps to know about the women entrepreneurs' problems are lack of finance, local competition, maintaining work life balance. It helps to develop in monetary and non-Monetary basis for business. The study helps to know about the women entrepreneur problem and expectation. The government have to improve the service in the women entrepreneurs. This study examines the problems faced by women entrepreneurs in at various levels in their entrepreneur, further the study also tries to probe in to the factors motivating these women to become entrepreneur and suggests a framework for the development of women entrepreneurship.

INTRODUCTION

The Indian traditional set up made a distinction between "Men's work and Women's work, particularly that of the women with family responsibility. It curtailed the employment opportunity for women in conventional and unconventional field of economic activity. In spite of this, number of women looking after business as a career has increased significantly over the past decade. The business women can bring valuable innovation to entrepreneurship because they weigh more variables, consider more alternatives and outcomes, recall more points of view and see more ways to proceed. Moreover, as the competition increases, today's entrepreneurs must be able to alter plans quickly and frequently. A women's innate mental flexibility, their vision for long-term planning and the ability to tolerate ambiguity and changes better than men are a valuable asset for every venture and also their capacity to negotiate in marketing the product to prospective investors, suppliers and customers. These are the present-day requirements of the complex business world.

REVIEW OF LITERATURE

Ayadurai, Selvakumar and Sohail, M.Sadiq (1987) examined the demographic profile of "Tamil" women entrepreneurs who become entrepreneurs as a result of war. The study examined five main areas--their characteristics, factors that prompted them into entrepreneurs, their challenges, their actions of success and their demographic profile. The study revealed that majority of them were in business for the first time as they lost their husbands in the war and saw business as a means to end and their success in the venture is making a balance between family and work.

Sujata Kumari et.al (2010) conducted an empirical study about the problems of rural women entrepreneurs in Rajasthan with 60 rural women of whom 50% were involved in

entrepreneurial activity and the remaining were not. The results indicate lack of supportive network, financial and marketing problems stood the main problematic ones for rural women entrepreneurs.

Mauchi et.al. (2013) focused on the social pressure from the society remained recognized as additional challenge towards women entrepreneur. Mwobobia (2012) concluded that women are challenged with lack of knowledge and access to knowledge, lack of business intelligence. Sharma (2013) analysed that women entrepreneurs are also facing new forms of challenges. Contemporary growth confirms that business around the world is also fronting forceful challenges in relation to technology and social media. Azizan et.al. (2017) reviews studies accompanied on women entrepreneurs from the late 1980s till present. The 21st century postures additional challenges in numerous features explicitly technology, globalization and the effect of social media.

RESEARCH METHODOLOGY

Methodology is route to solve the research problem systematically.

1. AREA OF THE STUDY

For this study a survey was conducted in an industrial and agriculture area. In this area all kind of people like middle class business men, agri people are living. This area provider requiring scope of study.

2. SOURCE OF DATA

The study has used both primary data and secondary data.

1) PRIMARY DATA

Primary data were collected from women entrepreneurs and for this purpose an questionnaire is prepared in a detailed manners so as to collect required data. The data collected were analyzed and tabulated systematically.

2) SECONDARY DATA

The secondary data were collected from books, Magazines, journals, websites etc,

3. SAMPLE SIZE

For the purpose of the study 50 respondents are selected and data were collected by using questionnaire.

4. SAMPLING METHODS

In this study convenient sampling method was used.

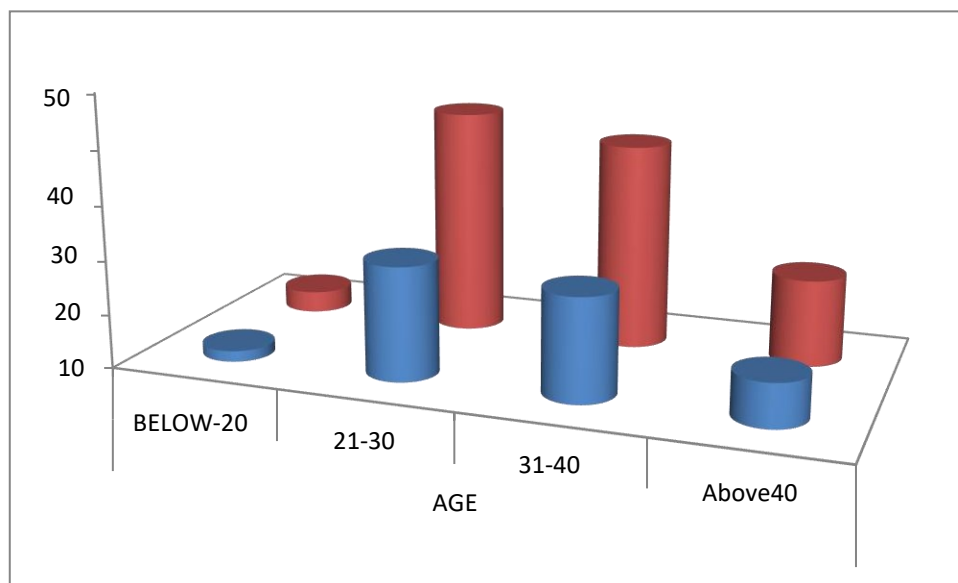
DEMOGRAPHIC FACTORS RESULTS

Particulars	Categories	No. of respondents	Percentage
Age	Below-20	02	04
	21-30	21	42
	31-40	19	38
	Above40	08	16

Educational qualification	Primary	10	20
	Secondary	09	18
	Graduation	20	40
	Post graduation	05	10
	No formal education	03	06
	Others	03	06

INFERENCE:

We accept the null hypothesis there is no relationship between the age and expectation.



FINDINGS

Majority of respondents are belongs to family members have to help for maintaining Work Life Balance group of high Majority of the respondents belongs to the age group of 20-30 years.

SUGGESTION

In India, women are still considered to be inferior to men. Women entrepreneurs play dual role and hence face role conflicts and difficulty in balancing work life. Reserve attitude of the society needs to be changed. Husband and other family members should share household activities.

CONCLUSION

The women entrepreneurs to succeed the entrepreneur burdensome government actions and widespread legal procedures. Planning training programmes and workshops,

more applicable to today's setup along with packages address the requirements of the women entrepreneurs at several phases would enormously benefit them by training them with skills and knowledge essential to generate a prosperous firm. The right kind of assistance from family, society and Government can make these Women Entrepreneurs one of the crucial entrepreneurial resource and they can contribute towards the economic and social development of India. To conclude, in the words of Former President APJ Abdul Kalam "Empowering women is a prerequisite for creating a good nation, when women are empowered, society with stability is assured.

REFERENCES

Bhatia Anju (2000) "Women Development and NGOs". Rawat Publication, New Delhi.

2nd OECD conference of Ministers Responsible for Small and Medium-Sized enterprises promoting entrepreneurship and innovative SMEs in a Global Economy (2004) Organisation for Economic co-operation and development, Istanbul, Turkey

Lalita .N, (2005) "Micro Finance and Rural Development", Gandhi gram Rural Institute, Gandhi gram, Dindigal, Tamilnadu.

Ram Naresh Thakur (2009). "Rural Women Empowerment in India" in Empowerment of Rural Women in India Kanishka Publishers, New Delhi.

WEBSITE

1. <http://www.ijmra.us>
2. www.iosrjournals.org

Green Marketing: A Study of consumer Awareness towards Jaggery in Erode District

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Abstract

The sugar industry generates enormous profits. A large portion of global society purchases sugar, either directly or indirectly. The biggest three producers, the European Union, Brazil, and India, account for around 40% of global production annually. However, only around 25% of the sugar produced is traded worldwide; the majority is consumed in the nations where it is produced. The global community's reliance on white sugar, particularly in India, presents a chance for the creation of alternatives. As a healthier alternative to white sugar, jaggery should be able to overtake it in market share. The purpose of this study is to learn more about the elements that must be taken into account while creating a marketing plan based on customer awareness. It is highly helpful for the jaggery industry to continue to exist and to grow in order to meet the demands of the domestic and global markets for alternate sources of healthy sweetness. The purpose of this study is to determine consumer knowledge about jaggery use in the Erode district.

Keywords: Organic food, Sugar, Jaggery, Health benefit, Consumer awareness

Introduction

Food which is produced without using conventional pesticides can be labelled as Organic food. Organic foods are those that are environmentally safe, produced using environmentally sound methods that do not involve modern synthetic inputs such as pesticides and chemical fertilizers, do not contain genetically modified organisms, and are not processed using irradiation, industrial solvents, or chemical food additives. The choice of organic versus inorganic food is significantly influenced by the perception of the health effect of organic foods. Households, who perceive organic foods as healthier, are more likely to purchase organic food, and they have a higher willingness to pay than other households.

White sugar is a daily need for the world community that is used as a sweetener of snacks and drinks as well as a raw material of processed food and beverage products. The world community has been very familiar with white sugar consumption (Wageningen University, 2014). India is the largest consumer and the second largest producer of sugar in the world. Sugar industry is the second largest organized sector industry in the country. Among the sugar yielding crops sugarcane, sugar beet, palms and sorghum, sugarcane is the most important. This sugarcane is used in the manufacturing of Jaggery and Sugar. In India sugarcane produced, 53% is processed into white sugar, 36% into Jaggery and Khandsari, 3% for chewing as cane juice, and 8% as seed cane (Nath et al., 2015). The jaggery is called a green product. Jaggery also has a major benefit, which is its being environmentally friendly.

Jaggery is available in the market mainly in three forms namely solid jaggery, liquid jaggery and granular jaggery (Rane and Up hade, 2016). The total production of jaggery in India, approximately 80% of the jaggery is prepared in solid form and the remaining 20% is prepared in liquid as well as granular form. Liquid jaggery is a part of diet in most parts of Maharashtra & West Bengal and is gaining commercial importance. The liquid jaggery is being utilized as sweetening agent in foods and drinks in Maharashtra, Gujarat, Kerala, Andhra

Pradesh, West Bengal and Tamil Nadu. Also it is being used in pharmaceutical formulations. The granular jaggery is also popular particularly among rural masses. Sugarcane juice is an opaque liquid and varies in colour from gray dark green to light yellow depending upon the colour of cane. In addition to various nutritional constituents, it also contain mud, wax and several other soluble and in soluble impurities. To maintain proper quality in jaggery, all these soluble and in soluble undesirable fractions should be removed. However, the manufacturing process depends on the ultimate form to be produced. Also, the minute detail of the process varies widely from state to state, in the state from one district to another, and in cases within a district also.

In Erode District there are two private jaggery warehouses. It is in Chittode and Kavinthapadi. In this warehouse 300 famers have membership weekly once i.e. on Saturday they meet on assemble, total 3000 tons of jaggery is turnover. It is packed for 60kg and 30kg. It is been distributed in three type of qualities. The first quality, Second quality and third quality is been sold. In Erode District from the total production of jaggery 25% of jaggery is used for domestic purpose of the remaining 75% of jaggery is used for industrial purpose like biscuit factories, temples, medicinal purpose cleaning agent, and nutrition production. Retail marketing for domestic purpose the available by packages are half kg and 1kg.

Objectives

To study the jaggery production and Marketing in India.

To study the Jaggery marketing in Erode district.

To study the socio –economic profile of the consumers and their awareness of jaggery in Erode District.

Review of literature

Manaktola and Jauhari (2007) they reported to sought to explore consumers' attitudes and behavior towards environment friendly practices in the lodging industry and found that consumers would prefer to use lodging that follow green practices although they were not willing to pay extra for such services.

Wageningen University (2014) in this study stated that European Union, Brazil and India are the top three producers and together account of about 40% of production per year. However, most of the sugar is consumed in the producing countries, and only about 25% are internationally traded. Sugar referred above is white sugar. White Sugar is a daily 39 need for the world community that is used as a sweetener of snacks and drinks as well as a raw material of processed food and beverage products. The world community has been very familiar with white sugar consumption. It can be explained that, according to Wageningen University (2014), White sugar is a type of sugar that has been recognized by the Polynesians since the year 510 BC and by Europeans since the 11th Century.

Manjunatha and Maruthi (2013) in their study results showed that dealers are highly satisfied with the service provided by the Davangere sugar company. So most of the dealers are highly satisfied business relationship with the davangere sugars. And most of the dealers are highly satisfied towards credit facility of the davangere sugar and some dealers are highly dissatisfied with the price of the sugar in Dsavangere Sugar Company and promotional activity of the company.

Gupta et al., (2006) in this study observed that jaggery, an indigenous sweetener, is being manufactured in India since time immemorial. Last century witnessed the growth of white sugar manufacturing at the expense of jaggery and khandsari industry. White sugar contains only sucrose which leads to varieties of health problems. Its excessive consumption causes coronary thrombosis, dental carries and other heart related problems. On the other hand

jaggery contains 51% sucrose, 0.25% protein, 21.2% glucose and 3.4% minerals in addition to trace amounts of fats, iron, calcium and phosphates, which are absent in white sugar. In addition it also possesses medicinal properties. In rural India jaggery enjoys wide acceptability. Scientific production and storage of jaggery will encourage this cottage industry and provide a healthy alternative to white sugar.

Sarika Yadav et al., (2014) in this study reported that, Sugars can be naturally going on, artificial sweetener but natural sugars are inorganic - related carbohydrates, most of the people which are used in food and beverages. Natural sugars contain rich calories so can raise blood sugar levels among most of the people. In industrial side added sugar and sweetener to food production during the processing. When more consumption of sugar, people affect to Cardiovascular disease, type 2 diabetes and obesity. Artificial / low calories sweeteners are sugar alcohols. Sugar alcohols have less effect on blood sugar levels. Artificial sweetener are rich sweet taste when compare to natural sweeter and do not increase the blood sugar levels to diabetic patients. Glycemic index is instrument that positions carbohydrates intake to their glycemic response. Measures the blood sugar response based on the intake of carbohydrates content food, not per gram of food. Glycemic load, a new concept takes service sizes into account. Glycemic index and Glycemic load reduces the difficulty of Heart problem, blood sugar disease, weight gain. Hence, to check the proper diet one should examine the quantity and intake of sugar content in food supplement.

Varucha Misra et al., (2016) made a study which stated that human body will not function properly if there is no adequate amount of sugar consumption in daily diet food. It provides impression of hormone of the brain but at the same time addicted to sweet taste and over consumption has some negative impact in our body particularly overweight, diabetic, also more affect in children and women. So, while taking excess amount of sugar 41 (overcome recommended sugar) one must be very careful for the balanced diet. Fruits, lactose, and milk which contain sugars, this sugars are called added sugars, and it is used for the preparation of food and beverages but injurious to our body.

Priyanka shrivastav et al., (2016) in this study discussed sugar crystals which are solid and hard having bright white color. Its syrup is used to treat the untreated particles. It is also known as the simplest form of sucrose, which is immediately absorbed in the blood, and release energy. Due to thin, it is not prescribed for diabetic peoples. Thus, with decreasing physical activity, the consumption of sugar assumes signifies to develops insulin resistance, abdominal adiposity, and hepatic steatosis and the increasing “epidemic” of type 2 diabetes and cardiovascular diseases.

Nath, et al., (2015) in their study reported that in India , total sugarcane production (300 MT) are converted to white sugar, jaggery and khandsari, chewing as cane juice, and breed cane which are following percentage 53%, 36% , 3% and 8%. It promote job offers to lot of people. More than 70 % jaggery manufactured in India, around world level production, but most of the jaggery trade suffers from losses. Jaggery is made by the concentration of sugar can juice without any hazards based natural sweetener, sugarcane, palmyra palm, coconut palm, wild date palm and sago palm, which can be collected the sap. It contains rich minerals, vitamins, micro nutrients, and antitoxic and anti – carcinogenic properties. It can be alleviate malnourishment and below nutrition problems. Jaggery available in the form of solid blocks and in semi – liquid form.

Rane and Up hade (2016) in their experimental research found that, conventional jaggery making process consumes large quantity of bagasse due to low furnace heat utilization. Boiling of juice at high temperature causes hot spots, it leads to caramelization of sugar. It gives dark brown colour to jaggery. Hence, jaggery makers uses chemicals to improve clarification of juice. These issues are addressed by improved Freeze Pre-concentration

System. It shows better prospects for efficient way of jaggery making. Researchers reported use of heat pump for concentration of juice, but sugar lost in inclusion and system cost are high. Energy consumption of improved FPCS system is 9 to 11 kWhe/m³ water removal at COPc 9 to 12. Partial heat removal of condenser heat helps to maintain condenser temperature at 30C and it is used for heating concentrated juice. It improves cycle COP and overall energy efficiency of FPCS. Challenge of excess condenser 49 heat to melt ice is overcome by this improved FPCS. Quality of jaggery is improved by reducing exposure of juice to low temperature during 63% water removal. Recycling of saved bagasse in field improves organic content of soil and productivity of sugarcane improves.

Vishal Awasthi et al., (2017) in this study reported that Gur has always got respect in Ayurveda Jaggery industry is growing at a rapid pace. The demand for jaggery is steadily growing in the urban, rural and semi-urban areas. Several applications of jaggery and its use in households makes it a better choice as compared to sugar. It is also cheaper than the sugar. Due to its nutritional and medicinal values it became highly recommendable by the health experts also. Apart from individual households, it is used in large quantities in restaurants, road-side dhabas, other eateries, hostels and clubs and by caterers. In view of its constantly growing market, it should not be difficult for a new entrant to enter and capture the market. As the major producer of Jaggery, the country has recognized as one of the leading traders and exporters of Jaggery to the world. India exported 2, 92,212.03 MT of jaggery and confectionery products to the world for the worth of Rs. 1,289.26 crores during the year 2015-16. Thus, we can say that Jaggery has good exportation ability and medical goodness as well. Production of Jaggery will help the country financially and medically too.

Anwar et al., (2011) in this study stated that Vitamin C helps to thin the blood and absorption of nutrients in the gut increased by antibody production act. It helps to the prevention of cancer, heart disease and stress, teeth decalcification, and cold. Highly Antioxidant were present in the Vitamin C. It also helps to the violent of malnutrition while taking Amla and Jaggery with proper proportion in powder forms, among the rural school going children. Jaggery with an Amla powder helps to keeping a healthy immune system and aids in offsetting pollutants and strong healthy gums.

Methodology

Data collection

In this study consisted of subjects residing in the Erode district who have purchased at least three months above selected for this study. The method used for the data collection was a face-to-face interview, using a structured questionnaire, with closed-ended questions, convenience sampling method was used by approaching consumers who were coming out of the stores and willing to answer the questions. Questionnaires were given to only those consumers who were purchased jaggery. In this study conducted survey from age 18 years and above. As the age group below 18 years generally does not buy grocery products it did not fall under the purview of our survey. Respondents were men and women both. Respondents were illiterate, school level, graduates and post graduate also. Out of 675 respondents for the research are selected by using convenience sampling from the customers of Erode District. After data evaluation only 600 filled are considered for the analysis. Hence the rate of response is 88.8%. In this study were measured on a five point Likert scale (1 = strongly disagree to 5 = strongly agree).

Statistical Tools for Analysis

The Primary data have been collected from the potential respondents from different areas and has been properly sorted, classified, edited, tabulated in a proper format and analyzed

by deploying appropriate statistical tools. The statistical tests are conducted at 5 percent level of significance. The percentage analysis statistical tools are used.

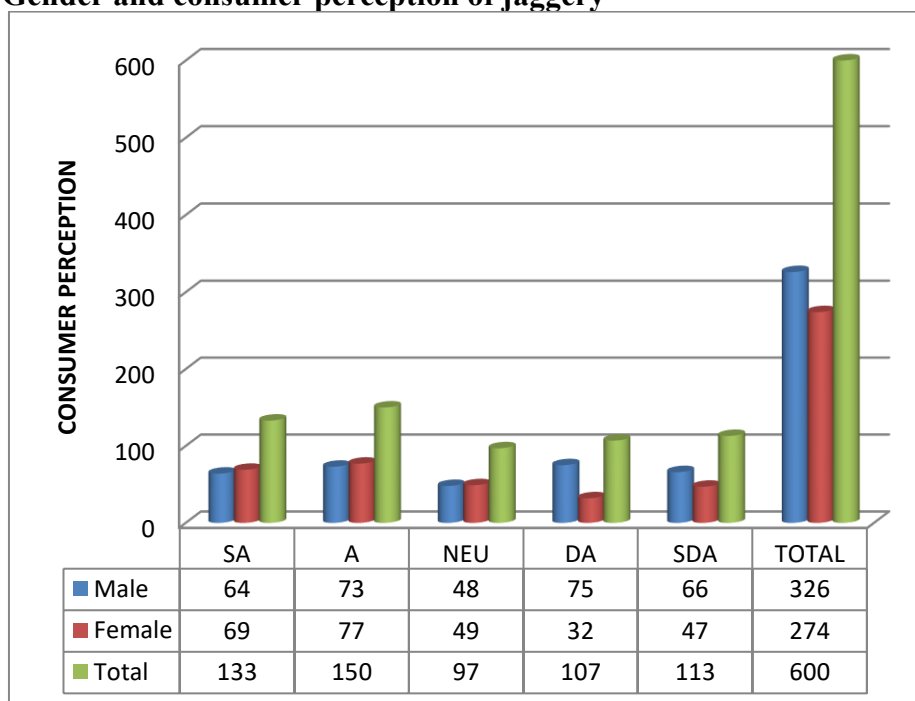
Data analysis and interpretation

In this paper, an in-depth study has been made to identify the consumers' awareness of jaggery in Erode District. For the purpose, a field survey method was employed to collect first-hand information from 600 sample respondents. The level of awareness towards purchasing jaggery by the selected respondents were considered as dependent variables. The Independent variables selected for the study are age, gender, educational level, residential status, occupational status and monthly income. The data were analyzed by using statistical tools like percentage, two-way classification table, Chi-square test.

Gender and consumer perception of jaggery

The gender and perception of jaggery under strongly agree category was 133 members in which 64 are male and 69 are female consumers (**Figure 1**). Out of 150 consumers, 77 are female who belongs to agree category and the remaining are male. The table also reveals that 48 consumers are male 85 and 49 consumers are female under neutral category. Out of 107 consumers, 75 are male who belongs to disagree category and the remaining are female. It is clear from the above table the Gender and Consumer perception of Jaggery under strongly disagree category was 113 members and 66 are male and 47 are female consumers respectively.

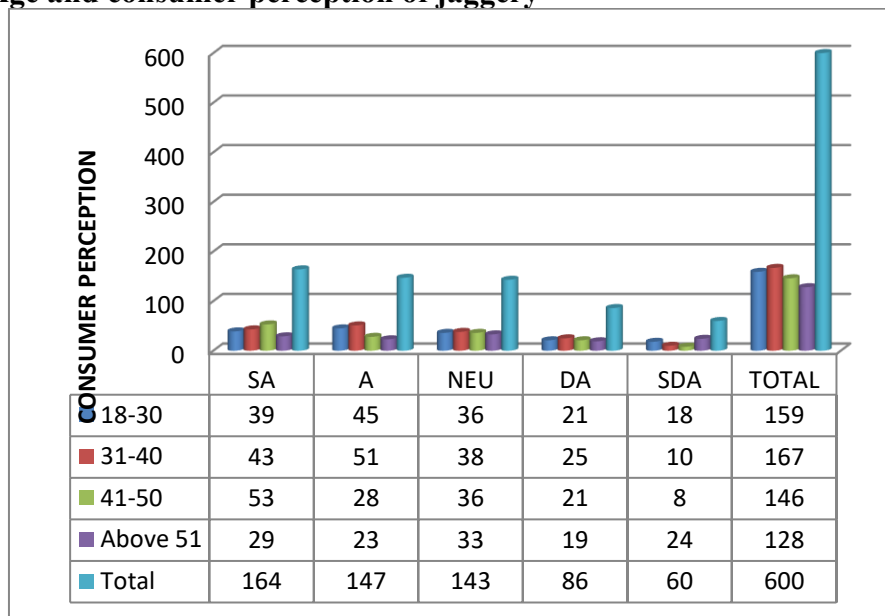
Figure 1: Gender and consumer perception of jaggery



Age and consumer perception of jaggery

The age and consumer perception of Jaggery under strongly agree category of 31-40 years is highest with the value of 167 and the age group above 51 is the lowest with 128 consumers (**Figure 2**). Out of 143 Consumers, in neutral category 38 are from the age group of 31-40 years. It is clear from the overall analysis about the age and consumer perception of jaggery that 164 consumers belongs to strongly agree and 147 consumers are in agree category.

Figure 2: Age and consumer perception of jaggery



Educational qualification and consumer perception of jaggery

The educational qualification and consumer perception of jaggery who are in illiterate category has the count of 59 out of selected 600 samples (**Figure 3**). The tabulation also reveals that highest number of respondents are graduates with the count of 263 and 132 total consumers are neutral. It is clear from the above table that the education qualification and consumer perception of Jaggery has 157 respondents from agree category and 195 respondents from strongly agree category. 73 disagree about the service whereas 43 are strongly disagree.

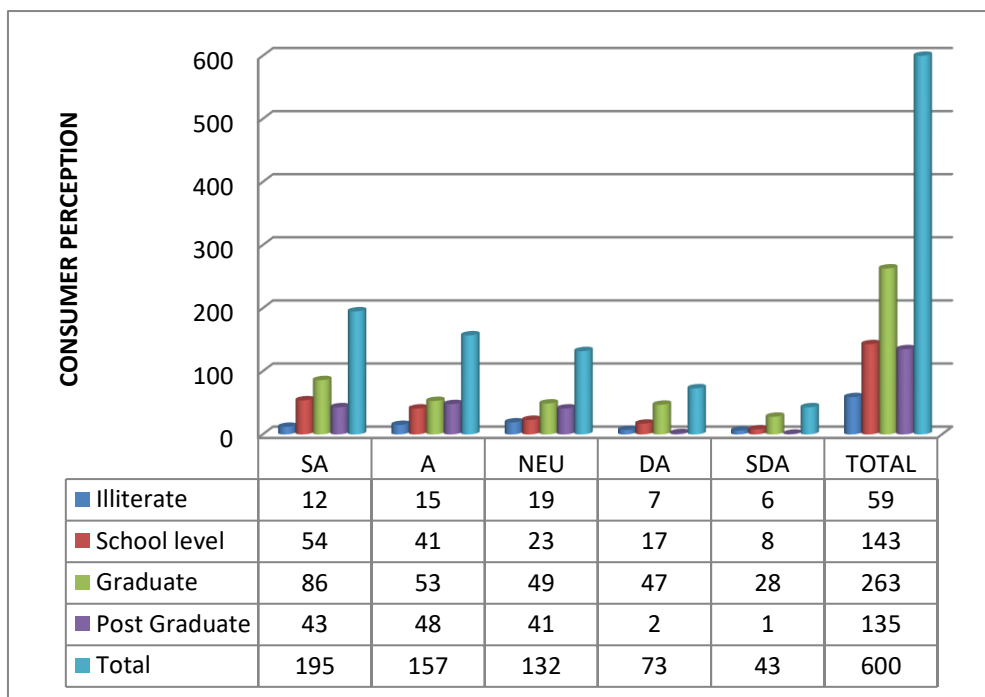
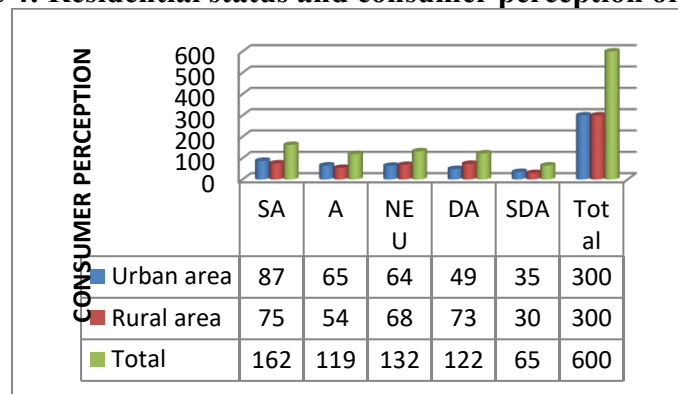


Figure 3: Educational qualification and consumer perception of jaggery

Residential status and consumer perception of jaggery

The residential status and consumer perception of jaggery under strongly agree category has 162 in which 87 are urban area consumers and 75 are rural area consumers (**Figure 4**). Out of 119 consumers, 65 are urban area consumers who belongs to agree category and the remaining are rural area consumers. The table also reveals that 64 consumers are urban area consumers and 68 consumers are rural area consumers who are under neutral category. Out of 122 consumers, 49 are urban area consumers who belongs to disagree category and the remaining are rural area consumers. 97 It is clear from above the table that residential status and consumer perception of jaggery under strongly disagree category was 65 consumers.

Figure 4: Residential status and consumer perception of jaggery



Occupational status and consumer perception of jaggery usage

The occupational status and consumer perception of jaggery usage who are in agriculturalist category has the count of 82 out of selected 600 samples (**Figure 5**). The tabulation also reveals that highest number of respondents are doing business with the count of 198 followed by employed category with the count of 164. It is clear from the table that the occupational status and consumer perception of jaggery usage has a total of 174 respondents from agree category and 169 respondents from strongly agree category. 60 disagree whereas 47 strongly disagree.

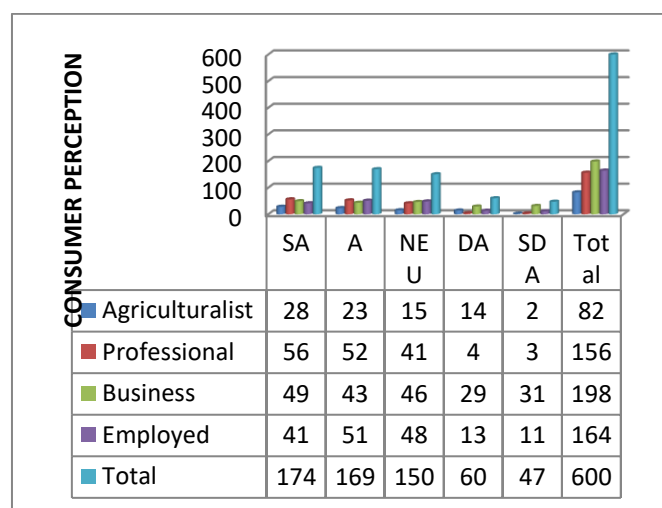


Figure 5: Occupational status and consumer perception of jaggery usage

Monthly income and consumer perception of jaggery usage

The monthly income and consumer perception of jaggery usage from strongly agree category is highest with the total count of 188 (**Figure 6**). Monthly income and consumer perception of jaggery usage from agree category is highest with 88 members having monthly salary of Rs 15,001-25,000 which is lowest among the respondents having family income above 30001 with the count value 13. There are 117 personal are natural about their salary and perception of jaggery usage.

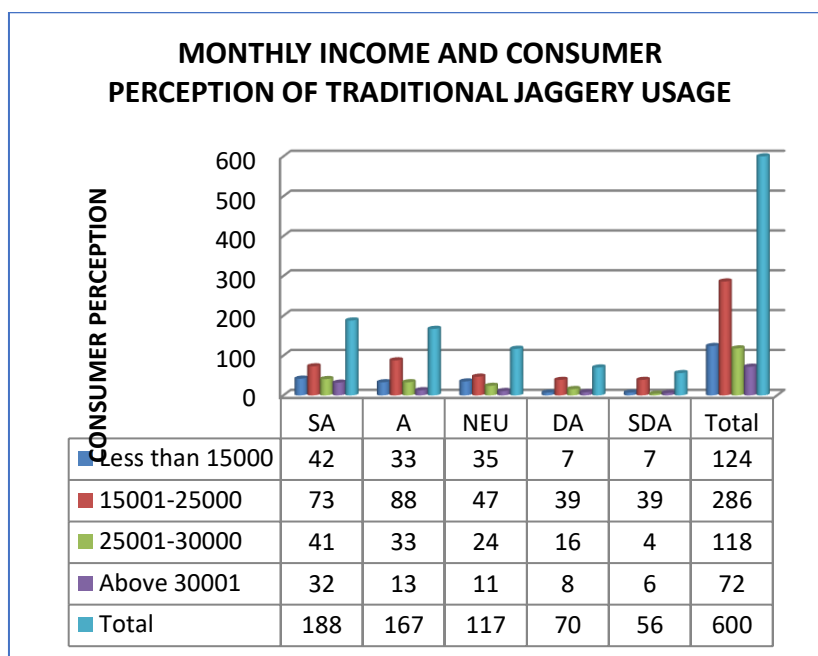


Figure 6: Monthly income and consumer perception of jaggery usage

Discussion

It is determined from the analysis that the majority (54.3%) of the respondents are male. It is surmised from the analysis that the majority of the respondents belong to the age group of 31-40 years. It is found from the analysis that the majority (43.8%) of the respondents are qualified with Graduate. It is noted from the analysis that the majority (33%) of the respondents are own business. It is evaluated from the analysis that the majority (47.6%) of the respondents are earning Rs. 15001-25000 as their monthly family income. It is found from the analysis that the majority (50%) of the respondents are living in semi-urban area.

Conclusion

This study gives retailers who sell organic food guidelines and suggestions. Aside from that, the study can help organic food companies find their target customers by showing how demographic factors affect whether or not someone buys organic food. Organic food stores can divide their customers into groups and then make their marketing plan based on those groups. It can give them useful information by showing that health benefits are the most important factor out of many others. They can make this a big part of their marketing plan. The results of this study also show that people's plans to buy organic food are affected by how easy it is to get. This is something that stores can use as part of their marketing strategy. They should make sure that their customers can get organic food on time and at the right places. The results of this study also show that people are willing to pay more for organic food, but stores will need to show them why it's worth it. The study also suggests that organic food stores could attract

customers by telling them about other benefits, such as quality, taste, freshness, and benefits to the environment.

References

- Wageningen University (2014) Sugar History [online] <http://www.food-info.net/id/products/sugar/history.htm> (accessed December 2014).
- Nath A., Dutta D., Pawan Kumar, and Singh J.P. (2015). "Review on Recent Advances in Value Addition of Jaggery based Products", *Journal of Food Processing Technology*, 6 (4): 14.
- Rane M.V., and Up hade D. B. (2016), "Energy Efficient Jaggery Making Using Freeze Pre-concentration of Sugarcane Juice", *Energy Procedia*, 90: 370-381.
- Manjunatha.k & maruthi.b (2013), "A study on dealer satisfaction toward davangere sugar company with reference to Karnataka state", *Global Journal of Commerce & Management Perspective*, 2(2):46-52.
- Gupta A K, Samsher, and Goyal S. K. (2006). "A review - jaggery "a healthy sweetener", *International Journal of Agricultural Science*, 2 (1) 278-282.
- Sarika Yadav, Neelam Yadav and Paul Khuran S.M. (2014). "Facts about natural and artificial sugars", *Indian journal of Health and Wellbeing*, 5(7): 796-801.
- Varucha Misra, Mall A.K, Pathak A.D, Solomon S. and Ram Kishor, (2016). "Microorganisms affecting Post-Harvest Sucrose Losses in Sugarcane", *International Journal of Current Microbiology and Applied Sciences*, 6 (7): 2554-2566.
- Priyanka shrivastav, Abhay kumar verma, Ramanpreet walia , Rehana parveen , Arun kumar singh (2016). "Jaggery: a revolution in the field of natural sweeteners", *European journal of pharmaceutical and medical research*, 3(3): 198-202.
- Vishal Awasthi, Rakesh B Gautam, Raj Mani Maurya, Ramjeet Singh, Vikas Yadav, Vishal, Vijay Shankar Yadav, Vijay Shankar Kushwaha and Vijay Pratap (2017). "A Case Study of Jaggery Production at Akbarpur Ambedkarnagar", *International Journal of Agriculture Innovations and Research*, 6(1).

SUSTAINABLE DEVELOPMENT PRACTICES IN BUSINESS

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Abstract

The concept of sustainable development is being used and is often heard every day. Nations worldwide are expected to be accountable for sustainable economic development without compromising environmental and social safeguards. Sustainable development goals have identified as a common indicator to sustainability. This paper provides an overview of sustainable development practices in business and highlights the benefits and challenges of their implementation.

Key words: Sustainability, development goals, social safeguards.

Introduction:

Sustainable development practices refer to approaches and strategies that aim to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. These practices involve promoting economic growth, social development, and environmental protection in a balanced and integrated way. Examples of sustainable development practices include renewable energy, sustainable agriculture, green building design, and waste reduction and recycling. Sustainable development practices are becoming increasingly important in business, as companies recognize the need to balance economic, social, and environmental considerations in order to create long-term value for stakeholders. Here are some examples

Resource Efficiency:

Implementing resource-efficient practices such as reducing waste, improving energy efficiency, and reducing water use can help reduce costs and minimize the environmental impact of business operations.

2. Supply Chain Management:

Adopting sustainable supply chain management practices such as reducing greenhouse gas emissions from transportation, improving working conditions for suppliers, and promoting sustainability throughout the supply chain can help build a more sustainable business.

3. Product Design:

Incorporating sustainability considerations into product design, such as using sustainable materials and reducing packaging waste, can help reduce the environmental impact of a business's products and improve customer perception of the brand.

4. Stakeholder Engagement:

Engaging with stakeholders, including employees, customers, and the community, to understand their concerns and priorities can help businesses identify opportunities for sustainability improvement and build stronger relationships with stakeholders.

5. Environmental Stewardship:

Implementing environmental stewardship practices, such as reducing greenhouse gas emissions, protecting biodiversity, and reducing waste, can help protect the environment and build a more sustainable business.

6. Social Responsibility:

Incorporating social responsibility practices, such as promoting diversity and inclusion, supporting communities, and improving working conditions, can help build a more responsible and sustainable business.

7. Transparency and Reporting:

Providing transparent information on a company's sustainability performance and goals, such as through sustainability reporting, can help build trust with stakeholders and demonstrate a commitment to sustainable development.

Characteristics:

1. Long-term perspective:

Sustainable development practices take a long-term perspective, aiming to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

2. Integration:

Sustainable development practices integrate economic, social, and environmental considerations, recognizing that these are interconnected and interdependent.

3. Stakeholder participation:

Sustainable development practices often involve the participation of diverse stakeholders, including local communities, governments, businesses, and civil society organizations.

4. Adaptability:

Sustainable development practices are adaptable and responsive to changing circumstances and new information, allowing for continuous improvement and learning.

5. Innovation:

Sustainable development practices encourage the development and adoption of new technologies, approaches, and solutions to meet the challenges of sustainability.

6. Systemic thinking:

Sustainable development practices take a systemic approach, recognizing that environmental, economic, and social issues are interdependent and must be addressed together.

7. Precaution:

Sustainable development practices recognize the need to exercise precaution when faced with uncertainty or potential harm, in order to prevent irreversible damage to natural systems and human health.

Advantages:

Advantages of sustainable development practices include:

1. Environmental protection:

Sustainable development practices aim to minimize the impact of human activities on the environment, which can help protect natural resources and biodiversity.

2. Economic benefits:

Sustainable development can provide economic benefits through the development of new industries, job creation, and improved resource efficiency.

3. Improved social well-being:

Sustainable development practices can improve the quality of life for individuals and communities by ensuring that their basic needs are met, such as access to food, water, and healthcare.

4. Long-term perspective:

Sustainable development practices focus on meeting the needs of the present generation without compromising the ability of future generations to meet their own needs, ensuring that resources are available for the long-term.

5. Reduced risks:

Sustainable development practices can reduce the risks associated with environmental degradation, such as natural disasters and climate change, which can have significant social and economic impacts.

Limitations:

While sustainable development practices have numerous advantages, there are also some potential disadvantages, including:

1. Higher costs:

Some sustainable practices may require significant upfront investment and may be more expensive to implement and maintain than traditional practices.

2. Limited public awareness:

Despite growing awareness of sustainability issues, many individuals and organizations may not fully understand the benefits of sustainable practices or may be resistant to change.

3. Trade-offs:

In some cases, sustainable practices may require trade-offs between economic, social, and environmental goals, making it difficult to balance competing interests.

4. Regulatory challenges:

Implementing sustainable practices may require changes in regulatory frameworks or policies, which can be time-consuming and politically challenging.

5. Limited technological development:

Some sustainable practices may require the development of new technologies, which may not yet be widely available or accessible, limiting their widespread adoption.

Conclusion:

It can be said that sustainable development brings out stability in the requirements of the environment. It makes the resources available for the use of future generations. Sustainable development is an amazing way to conserve the resources provided by nature.

References:

- Siddique, S., & Sciulli, N. (2018). Environmental initiatives and disclosures by large companies: The views of investors. *Australasian Accounting, Business and Finance Journal*, 12(3), 23-44.
- Wu, D., & Pupovac, S. (2018). Information overload in CSR reports in China: An exploratory study. *Australasian Accounting, Business and Finance Journal*, 12(1), 41-60.

Websites:

<https://chat.openai.com/chat/9d9e48d1-5ea2-43ba-8c5e-afe84f8a1a8b>

<https://www.conserve-energy-future.com/what-is-sustainable-development-and-its-goals.php>

CREATIVITY AND INNOVATION ENHANCE BUSINESS GROWTH AND SUCCESS” BUILDING PRODUTS USING BIG DATA

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ABSTRACT

High demands on the aesthetics of the final product as well as sophisticated packaging shapes make the labeling process an operation that requires more and more precision and quality of workmanship. The quality of the labeling process is influenced mainly by the technology used, i.e. machinery and equipment, the knowledge, skills, and experience of operators, organization and working methods used, and by aspects related to proper maintenance. This article is a case study on the analysis and evaluation of the technology used in the process of labeling glass packaging and its impact on quality and work safety.

Keywords: Contamination, Predominantly corrugated, Tertiary, Humidity, Reusaliity, Recyclability.

INTRODUCTION

While buying a new product, the first things we often notice are its packaging and labeling. Many products require a proper packaging so that they can be properly covered and protected from contamination or damage. Labeling is mostly done on the package and includes all basic information about the product that a sensible customer would want to know before making a purchase. Brand names, tag lines, designs, symbols and images printed on the product boxes and wrappers etc. are all part of the labeling. This article will discuss how packaging and labeling are different from one another in more detail. For this, it is important to first present the definitions and objectives of each process and then discuss the differences between the two.

MEANING OF PACKING

- Packing is the science ,art a technology of enclosing is protecting products for distribution,storage,sale and use.
- Packaging is the activities of designing and producing the container for a product.

TYPE OF PACKAGING

- Primary packaging
- Secondary packaging
- Tertiary packaging

PRIMARY PACKAGING

Primary packaging is the packaging in direct contact with the product itself and is sometimes referred to as consumer or retail packaging. The main purpose of primary packaging is to protect and/or preserve, contain and inform the consumer. There are various examples of primary packaging and there can sometimes be several components for one product. For example, for beer, the bottle containing the liquid and the label are both classed as primary

packaging. Corrugated primary packaging is often used for gift and luxury products such as in the tech and cosmetic industry.

SECONDARY PACKAGING

Secondary packaging's main purpose is for branding display and logistical purposes. As well as protecting and collating individual units during storage and are often used by the beverage, food and cosmetic sectors for displaying primary packs on shelves and are sometimes also referred to as grouped or display packaging. Secondary packaging also includes packaging purposely made to display multiple product units for sale which speeds restocking from storeroom to shelf, this packaging includes retail-ready packaging (RRP), shelf-ready packaging (SRP) or counter-top display units (CDUs).

Secondary packaging is predominantly corrugated cardboard packaging print finished to a high standard, such as being litho printed with well thought out branding and design, due to the integral part it has to play in the marketing funnel.

TERTIARY PACKAGING

Tertiary packaging facilitates the protection, handling and transportation of a series of sales units or secondary packaging in order to group everything into unit loads during transit. This type of packaging is rarely seen by the consumer.

OBJECTIVES

Protection

The primary purpose of packaging is to protect its contents from any damage that could happen during transport, handling and storage. Packaging retains the product intact throughout its logistics chain from manufacturer to the end user. It protects the product from humidity, light, heat and other external factors. This is the most important purpose of packaging. Because of that it is not unusual to end up with far more packaging than the actual product. Especially when ordering items from online stores. The amount of packaging waste the product leaves behind can be really staggering. All in all, packaging's purpose is to protect, but there is a difference between an intelligent and well-designed packaging and a packaging with no fit-to-purpose design.

Safety

Packaging has an important role in keeping its contents and consumers safe. Packaging should contain important information of the product and its safety. For example, for food products the packing date, best before date and a list of ingredients must be clearly visible on the packaging. No harmful chemical, smell, or taste should transfer from packaging materials to the food whether it is produced from virgin material or recycled material. Moreover, it must become clear from the packaging if it contains toxic substances. All these pieces of information add the product safety for the consumer. Too much information is always better than no information at all.

Attractiveness

Packaging counts an important part of the product brand and marketing. A unique packaging can increase the product attractiveness and thus affect to the willingness to buy the product. Packaging is as important as the product itself. Its purpose is to stand out from the shelf or website, enhance sales, provide relevant information on the product and augment interest. Two thirds of people say that the packaging has an effect on their buying decisions. A packaging

can also tell a whole story about the business behind the product and the product's environmental, social and economical impacts. It is a tool to communicate company's values and great benefits that the product brings to the consumer.

Usability

Consumers are looking for fit-for-purpose packaging. They demand a functional, "lifesaver" packaging that is incredibly user-friendly. The usability of the packaging is judged by the consumers only. A packaging which is simple to open and close, easy to fold and sort after usage, and which can be reused or recycled will satisfy some of the consumers' requirements. In addition, optimal design enhances usability. Today's trend in packaging usability has been seen to change direction from single-use culture back to buying products in bulk, in reusable packaging and own containers like before 1960s. Environmentally conscious consumers already bring their own empty jars, bags and containers to go to grocery shopping. Thus, one big challenge remains in packaging usability.

Sustainability

Consumers are paying attention to the packaging materials' carbon footprint, reusability and recyclability before making their buying decision. In fact, how sustainable packaging is perceived, the more positive impact it has to the sales numbers. The packaging design has a crucial role in defining how easy it is to separate the materials from each other and thus how easy the packaging is to reuse and recycle. Making more with less not only saves resources but also leaves less material for the consumer to handle properly.

LABELLING

Meaning Of Labelling

Labelling or using a label is describing someone or something in a word or short phrase. For example, the label "criminal" may be used to describe someone who has broken a law. Labelling theory is a theory in sociology which ascribes labelling of people to control and identification of deviant behavior. It has been argued that labelling is necessary for communication. However, the use of the term is often intended to highlight the fact that the label is a description applied from the outside, rather than something intrinsic to the labelled thing.

TYPES OF LABELLING

Brand label

Brand and label are two different activities. However, in some condition, they may be used together. If only brand of the product is used in packaging of the products, such label is brand label. Close Up toothpaste, Dettol, Puja Soap, Diyo Soap etc. are the examples of brand labeling. As brand itself does the works of label, it charges low cost. It does not affect price of the product. This also simplifies to recognize by both sellers and buyers and to sell and buy.

Grade label

Products may be of different classes, groups, and grades. The label used to give true information about the products is called grade label. This type of label indicates the quality of the product through sign, symbol, letter, or word, or number. While using such label, brand name of the product should also be used. As it reflects the grade, taste, and quality of the products in markets, it helps buyers to buy according to their capacity.

Descriptive label

Descriptive label provides information about features of the products. Nowadays, this type of labeling is used in most of the products. Descriptive labeling is used in the products which become difficult to give grade. In the eye of consumers, descriptive grading becomes useful. Manufacturer's name, product ingredients, manufacturing date, expiry date, quality of product, method of use etc. are mentioned in this type of grading.

Informative label

The label which gives instruction and information about the product is called informative label. Necessary instruction is given to take care of and about the use of the product. Such information and instructions become very useful to the customers. So, most of the customers give priority to informative label. Mostly brand name, manufacturer's name, address, packaging date, expiry date, retail price, instruction for special care, etc. are given in this type of label. Similarly, weight, necessary caution in using the product etc. are also mentioned on the label.

OBJECTIVES OF LABELLING

Information to customers

Labeling and packaging are closely connected. Label provides necessary information to customers. It helps the concerned sides to good identification of products. The main objective of labeling is to provide more and more information about the product to all its customers.

Social significance

Label has the objectives to provide both informative and promotional information to the society of its target markets. Products produced for certain society should be supplied to markets or sale centers only after giving correct/true label. Any medicines or poisonous products to be distributed to certain society should also contain words of warning and caution. In this way the labeling increases social importance.

Consumer protection

Labeling should also pay special attention to customer's welfare and protection. If components, composition or ingredients, utility, weight, price etc. of the products are mentioned on label, there does not remain any dangers or confusion for customers. If the weight is different due to some accidental reasons, the customers can get legal remedies. So, labeling protects consumers.

CONCLUSION

Packaging and labeling should be attractive.

- It acts as a promotional tool.
- Label determines status of a person.
- Companies should be scared of the consequences of false labeling.

Reference:

1. <https://www.slideshare.net/ANUJYADAV6880/packaging-labelling>
2. <https://www.researchgate.net>

Book Reference:

Ampuero O., Vila N. 2006. Consumer perceptions of product packaging, Journal of Consumer Marketing, Vol -23, Issue No-2, pp102-114.

A STUDY ON DIGITAL MARKETING IN TAMIL NADU

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ABSTRACT

This project will through a light on DIGITAL MARKETING, its trend in past and present and its future in the globalised world. As marketing has become a very important tool for every industry to reach the consumer it's become very complex as to decide what is the right medium for marketing. As the world has modernized dramatically in the last decade digital media has reached every home and hence become a very important vehicle for marketing. This project will cover digital marketing trends and its

Keywords: Societal behaviour, Audience Specific, Globalised.

INTRODUCTION

Social marketing is the application of marketing concepts and techniques to influence individual or societal behaviour change, typically for a social or public health purpose. It involves creating and promoting interventions that encourage individuals to adopt behaviours or take actions that are in their best interest or the interest of society as a whole. The goal is to create sustainable, positive social impact by promoting behaviour change and encouraging people to act in a way that benefits both themselves and society.

Advantages of Social Marketing Include

- 1. Behaviour change:** Social marketing campaigns aim to influence and change behaviour, attitudes, and beliefs, leading to healthier and more sustainable lifestyles.
- 2. Audience-specific:** Social marketing can target specific groups, including hard-to-reach populations, and tailor messages and interventions to their specific needs and preferences.
- 3. Cost-effective:** Social marketing campaigns can be a cost-effective way to promote social change and address public health and social issues, especially compared to traditional marketing methods.
- 4. Collaborative:** Social marketing typically involves collaboration between multiple sectors, including government, private, and non-profit organizations, and the communities they serve, leading to more effective solutions.
- 5. Sustainability:** Social marketing campaigns aim to create sustainable behaviour change, meaning that the positive effects of the campaign can be maintained over the long-term.

Disadvantages of Social Marketing Include

- 1. Difficulty in measuring ROI:** It can be challenging to measure the return on investment of social marketing efforts, as the impact may not be immediately visible or easily quantifiable.
- 2. Dependence on social media platforms:** Social marketing often relies on the use of social media platforms, which can be subject to changes in algorithms, policies, or user behaviour, making it difficult to maintain consistent reach and engagement.

3. Risk of negative feedback: Social marketing campaigns can sometimes receive negative feedback, criticism or backlash from certain segments of the population, potentially damaging the reputation of the organization or cause.

4. Over-saturation of social media: With so many brands and organizations vying for attention on social media, it can be challenging to cut through the noise and stand out, particularly for smaller organizations with limited resources.

5. Limited scope: Social marketing may not be effective in reaching certain audiences, such as those who do not use social media or who have limited access to technology.

6. Need for ongoing engagement: Social marketing often requires ongoing engagement and maintenance in order to be effective, which can be a challenge for organizations with limited staff or resources.

Overall, while social marketing can be a powerful tool for promoting social causes and driving behaviour change, it is important to be aware of these potential disadvantages and to develop strategies to address them.

CHARACTERISTICS

- Lack of clear goals: Without a clear understanding of what the campaign aims to achieve, it can be difficult to create effective messaging and strategies that will resonate with the intended audience.
- Insufficient research: Social marketing requires extensive research to understand the target audience, their attitudes and behaviours, and the factors that drive or inhibit behaviour change. Failure to conduct thorough research can result in ineffective or irrelevant campaigns.
- Limited budget: Social marketing campaigns can be resource-intensive, and a lack of budget can make it difficult to create effective messaging, target the right audience, or achieve significant reach or impact.
- Resistance to change: Some target audiences may be resistant to change, particularly if the desired behaviour change is seen as challenging or at odds with their values or beliefs.
- Lack of stakeholder buy-in: Successful social marketing requires support from stakeholders including policymakers, industry leaders, and community groups. A lack of buy-in can result in limited resources or impact, or resistance to the campaign message.
- Poor implementation: Even with a strong strategy and messaging, poor implementation can lead to campaigns that fail to achieve their intended outcomes. Factors such as poor timing, inadequate resources, or ineffective communication can all impact the success of a social marketing campaign.

Social Media Marketing Important

Social media marketing is important for several reasons:

- **Increased brand awareness:** Social media platforms allow businesses to reach a larger audience and increase brand recognition.
- **Improved customer engagement:** Social media provides a platform for businesses to interact with their customers and respond to their queries and concerns in real-time.

- **Cost-effective advertising:** Social media advertising can be more cost-effective than traditional advertising methods, making it more accessible for small businesses with limited budgets.
- **Targeted advertising:** Social media platforms allow businesses to target specific demographics and interests, resulting in more effective advertising campaigns.
- **Data analysis:** social media provides valuable insights and data about customer behaviour and preferences, allowing businesses to make informed decisions and adjust their strategies accordingly.
- **Increase brand awareness:** social media provides a great platform to increase the visibility of a brand and its products or services.

OBJECTIVES

- ❖ Drive traffic to website: social media can be used to drive traffic to a website, blog or landing page where users can learn more about the brand or make a purchase.
- ❖ Generate leads: social media can be used to generate leads by offering valuable content or promotions in exchange for contact information.
- ❖ Boost sales: social media can be used to
- ❖ To promote products or services and drive sales by creating targeted campaigns and offering exclusive promotions.
- ❖ Build customer loyalty: social media can be used to engage with customers, build relationships and foster loyalty by providing great customer service and offering valuable content.

CONCLUSION

In conclusion, social marketing is a powerful tool for promoting social causes, influencing behaviour change, and ultimately improving social well-being. It is a research-driven approach that uses many of the same principles and techniques as commercial marketing, but with a focus on achieving social benefits rather than financial gain.

Social marketing campaigns often require careful planning, audience segmentation, and collaboration between organizations from different sectors in order to achieve their intended outcomes. Challenges such as limited budgets, resistance to change, and poor implementation can also impact the success of social marketing efforts, but with the right strategies and approaches, it is possible to overcome these obstacles and achieve lasting, sustainable impact. Overall, social marketing is a dynamic and evolving field that has the potential to drive positive change in a wide range of areas, from public health and environmental sustainability to social justice and equality. By leveraging the power of marketing to promote social causes, we can work together to create a better, more equitable and sustainable world for all.

References:

- Deiss, R. & Henneberry, R. (2019). *Digital Marketing for Dummies*. John Wiley & Sons, Inc.
- Pulizzi, J. (2018). *Content Inc.: How Entrepreneurs Use Content to Build Massive Audiences and Create Radically Successful Businesses*. McGraw Hill Education.

CUSTOMER CARE SERVICES

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Abstract

The aim of this paper is to present the importance of customer services as a part of market orientation from both the theoretical view and by selected results of the survey of Hi-Tech firms in the Czech Republic. The research was particularly focused on a customer. The first part of the paper briefly describes the main characteristics of customer services from the customers' view. The second part is focused on survey of HiTech companies. The results from the research show that management of companies is usually aware of the importance of customers' satisfaction and of the quality supply of customer services as well. Customer services are widely seen as a necessity for today's survival on the market. The paper is written in the framework of research project "Research on implementation on market orientation in High-Tech Firms" supported by Grant Agency of the Czech Republic

Keywords: marketing, customer services, market orientation, Hi-Tech company, the Czech Republic.

Introduction

Every company should know customers' needs and mostly they claim they know. However the ability to provide a final product according to the expectations can be questionable. All company activities such as manufacturing, sales and customer services as well should ensure customer satisfaction. Therefore customer services are always very important and topical, because they can help to increase customer satisfaction with the product using. Services can be seen as a source of company profit and possible differentiation, too. Almost all companies have to be providers of customer services today. Moreover focusing on customers, e.g. providing customer services, is one of the main benefit of well done application of market orientation in a company. Market orientation is one of the key trends in the field of marketing today. The core elements of market orientation are its focus on the customer, focus on competitors, the setting up of long-term objectives, coordination of marketing activities and, last but not least, the importance of a good quality system of business intelligence.

Customer Services

Customer services Customer services are all what company does for satisfaction of its customers. They help to gain higher profit from sold products. According to Bovée & Thill (1992), quality and customer services present strong barrier against the competition, ensure customer loyalty; help to differentiate product and decrease marketing costs and increase company profit.

Nowadays industrial producers are becoming providers of customer services too. This situation helps to extend their activities for customers. In fact profit from provided customer services can be gained both for customers and also for companies. Many customers make final purchasing decision not only according to the product price, but also according to the range and level of customer services related to the product. The companies which try to hold dominant position in provided customer services are forced to determinate and evaluate

specific needs of their market segment and adapt their company strategy for them. Most of companies working in different spheres of economy know very well that strategy of differentiation on the basis of special and “customized” services can be seen as an important opportunity to avoid a price war with competitors. Therefore, customer services become an integral part of searching for competition advantages in a wide range of economic spheres. There are some possible reasons concerning the above tendency, which may be mentioned here: flattening of demand in traditional production, increasing of international competition, a short life cycle of product innovations and important profit potential of services.

The perception of the term customer service was changing over the years, see Table 1. At the beginning services were seen as an integration tool for intradepartmental activities (the definitions from.

Examples of customer services in Hi-tech companies

Customer services are often the last or even the first step in the process of considering the purchase of a new product. Therefore it is very important to spend a long time to prepare and implement the strategy of customer services, involving their supply for different customer segments on market. Customer services provided by hi-tech companies can be the following ones: cooperation on R&D of a product, its innovation and production, consultancy before and after sale, sufficient information about product involving deep technical information. We should mention payment conditions, transport, packaging and assembling of products according to customer requirements, after-sale services (such as replacement of spare parts and also customer training for the first use and on regular bases as well), etc. Indeed the fulfilling of customers’ needs is very individual in each company. Finally customer services should be managed according to customer expectations. In Hi-Tech companies, the customer is in the centre of attention and customer satisfaction becomes the priority.

Conclusions

The lowest average value reaches the statement referring to the reasons why potential customers did not buy companies’ products. The clue is probably in lack of company interest in searching for potential clients. Managers are more focus on current customers than not on potential ones. This is visible also from the result from statement relating to the individual approach to customers, which confirms high concentration on current customers and their individual needs. However reasons why potential clients deny company products could help company to extend their activities and product supply, increase employee motivation, or just to know more about competitors and their strategies.

References

- Amico, M.D`.,& Zikmund, W. G. (2001). The power of marketing. Creating and keeping customers in an ecommerce world. 7th edition. Cincinnati: South-Western College Publishing..
- Bovée, C. L., & Thill, J. V. (1992). Study guide to accompany Marketing, McGraw-Hill.

BUILDING PRODUCTS USING BIG DATA

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Abstract

Recently, the concept of big data has evolved and started to play an essential role in the advancement of new product development in various sectors contributing to value creation, idea generation and competitive advantage. However, limited research has been done on how the food industry can exploit BD to improve the processes involved in e - commerce. This research aims at understanding the use of BD in e-commerce product development. It helps to find relevant information and integrate sustainability to the early stages of the process in the e - commerce. This research illustrates a case study of filpart company strategy.

Key words: specter, dart service, file ingestor, flink, hadoop platform

Introduction

Big Data is also data but with a huge size. Big Data is a term used to describe a collection of data that is huge in volume and yet growing exponentially with time. In short, such data is so large and complex that none of the traditional data management tools are able to store it or process it efficiently. “Extremely large data sets that may be analyzed computationally to reveal patterns, trends and association, especially relating to human behavior and interaction are known as Big Data.”

Examples of Big Data

Following are some the examples of Big Data-

The New York Stock Exchange generates about one terabyte of new trade data per day.

Social Media The statistic shows that 500+terabytes of new data get ingested into the databases of social media site Facebook, every day. This data is mainly generated in terms of photo and video uploads, message exchanges, putting comments etc.

Characteristics of big data

The following are known as “Big Data Characteristics”.

1. Volume
2. Velocity
3. Variety
4. Veracity

1. Volume:

Volume means “How much Data is generated”. Now-a-days, Organizations or Human Beings or Systems are generating or getting very vast amount of Data say TB (Tera Bytes) to PB (Peta Bytes) to Exa Byte (EB) and more.

2. Velocity:

Velocity means “How fast produce Data”. Now-a-days, Organizations or Human Beings or Systems are generating huge amounts of Data at very fast rate.

3. Variety:

Variety means “Different forms of Data”. Now-a-days, Organizations or Human Beings or Systems are generating very huge amount of data at very fast rate in different formats. We will discuss in details about different formats of Data soon.

4. Veracity

Veracity means “The Quality or Correctness or Accuracy of Captured Data”. Out of 4Vs, it is most important V for any Big Data Solutions. Because without Correct Information or Data, there is no use of storing large amount of data at fast rate and different formats. That data should give correct business value.

How Big Data is helping Flipkart?

Let’s take a tour to the complete process of how Flipkart works on Big Data. Starting the FDP ingestion system –

1. FDP Ingestion System

A Big Data Ingestion System is the first place where all the variables start their journey into the data system. It is a process that involves the import and storage of data in a database. This data can either be taken in the form of batches or real-time streams. Simply speaking, batch consists of a collection of data points that are grouped in a specific time interval. On the contrary, streaming data has to deal with a continuous flow of data. With Batch Data has greater latency than streaming data which is less than sub-seconds. There are three ways in which ingestion can be performed –

Specter – This is a Java library that is used for sending the draft to Kafka.

Dart Service – This is a REST service which allows the payload to be sent over HTTP. File

Ingestor – With this, we can make use of the CLI tool to dump data into the HDFS.

Then, the user creates a schema for which the corresponding Kafka topic is created. Using Specter, data is then ingested into the FDP. The payload in the HDFS file is stored in the form of HIVE tables.

2. Batch Compute

This part of the big data ecosystem is used for computing and processing data that is present in batches. Batch Compute is an efficient method for processing large scale data that is present in the form of transactions that are collected over a period of time. These batches can be computed at the end of the day when the data is collected in large volumes, only to be processed once. This is the time you need to explore Big Data as much as possible.

3. Streaming Platform

The streaming platforms process the data that is generated in sub-seconds. Apache Flink is one of the most popular real-time streaming platforms that are used to produce fast-paced analytical results. It provides a distributed, fault-tolerant and scalable data streaming capabilities that can be used by the industries to process a million transactions at one time without any latency.

4. Messaging Queue

A Messaging Queue acts like a buffer or a temporary storage system for messages when the destination is busy or not connected. The message can be in the form of a plain message, a byte array consisting of headers or a prompt that commands the messaging queue to process a task. There are two components in the Messaging Queue Architecture – Producer and Consumer. A Producer generates the messages and delivers them to the messaging queue. A Consumer is the end destination of the message where the message is processed.

The most popular tool used in Messaging Queues is Kafka. Apache Kafka is an open-source stream-processing software system that is heavily inspired by the transaction logs. Thousands of companies around the world make use of Kafka as their primary platform for buffering messages. Its scalability, zero fault tolerance, reliability, and durability make it an ideal choice for industry professionals.

5. Real-time Serving

After the messages are retrieved from the Messaging Queue, the real-time serving system acts as a consumer for the messaging queue. With the help of this real-time serving platform, users can gather real-time insights from the data platform.

6. Data Lake

The core component of this architecture is the data storage platform. This is a Hadoop platform that stores raw data, journalised data as well as derived data. Using this, the data is stored in the form of a backup, archive that can be retrieved or purged according to the requirements.

7. Knowledge Graphs

Knowledge graphs represent an inter-linked network of real-world entities or objects through which we can extract information to process it in an efficient manner. This knowledge graph takes input from the meta-data. This metadata is beneficial for understanding the underlying semantics which is used for deriving newer facts

Conclusion

Hope now you understand how Big Data is helping Flipkart to offer the best services all around the World. In this article, we looked at the ingenious big data platform that is designed by Flipkart to handle large scale data transactions. We also understood how Flipkart makes use of various big data components to deliver dynamic results to the user. We also had a look at how the Big Data Platform is capable of processing large scale data queries that allow it to produce results. Still, if you want to ask anything about the same, feel free to ask through comments. I will happy to help you.

References:

<https://data-flair.training/blogs/big-data-at-flipkart>

CREATIVITY AND INNOVATION SKILLS FOR THE 21ST CENTURY SMART HOME AUTOMATION SYSTEM

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ABSTRACT

Home automation is a network of hardware, communication, and electronic interfaces that work to integrate everyday devices with one another via the Internet. Each device has sensors and is connected through WiFi, so you can manage them from your smartphone or tablet whether you're at home, or miles away.

Keywords: Hub, Controller Device, IOT- Internet of Things, Various electronic devices

INTRODUCTION

“Home automation” refers to the automatic and electronic control of household features, activity, and appliances. In simple terms, it means you can easily control the utilities and features of your home via the Internet. To make life more convenient and secure, and even spend less on household bills. A home automation system is a technological solution that enables automating the bulk of electronic, electrical and Atechnology-based tasks. Smart home technology, also often referred to as home automation or domestics automation (from the Latin "domus" meaning home), It provides homeowners security, comfort, convenience and energy efficiency by allowing them to control smart devices, often by a smart home app on their smartphone or other networked device. Alternatively, “Smart Automation” is the autopilot or enhanced cruise control systems that use cameras, radar and sonar to read and understand the immediate environment.

OBJECTIVE

- ❖ To study about Smart Home Automations.
- ❖ To identify top smart home automations in india.
- ❖ To analyse the importane of smart home automation facilities. To findout the facilities and features of smart home autmtations. To discuss the different types of PHILIPS Lights.
- ❖ To offer findings suggestions and conclusion.

FACILITIES OF HOME AUTOMATIONS



Diagram: 1.1

COST OF HOME AUTOMATION



Diagram:1.2

- Home automation costs Rs.791 on average. You'll most likely spend between Rs.173 and Rs.1,430 but some reports include installations of Rs.3,000.
- To fully automate an average 4-bedroom, 3-bath home, you might spend up to Rs.15,000. Luxury fully-connected homes run Rs.10,000 to Rs.150,000.
- Home Automation with its two variants have significant cost difference, wireless retrofit systems starting with 25000 INR per room to 100000 INR per room.

FEATURES OF SMART HOME AUTOMATION



Diagram:1.3

- Advanced security.
- Lighting control, automated window treatments. Distributed audio.
- Affordable Pricing.
- Work Within Your budgets. 24/7 Customer Service.
- Free Designs.

- Exciting Offers.49-days installation, Easy instalment.

WAYS TO TURN OUR HOUSE INTO A SMART HOME



Diagram:1.4

- Smart speakers for convenience. Invest in a smart security system. Smarter bulbs to light u your home.
- Thermostats for warming up your place. Cameras for the atmost safety.
- Vacuum and smart cleaners. Smoke dedectors.
- Smart Tvs for your entertainments.

TABLE OF SMART HOME AUTOMATION SYSTEM

Strengths	Weaknesses
Coordination between different devices and appliances	Costs of system integration and recurring fees
Simple user interface	Replacement issues
Product appearance and aesthetics	Single protocol limitation
Customer relations	

Opportunities	Threats
Platform integration	Open-source products and developers
New business models drawing from the sharing economy	Peer-to-peer (P2P) trading and communication
Integration and bundling	Open APIs

CONCLUSION

The main aim of home automation system is to provide safety and security and easy to people easy to people to control different home appliances with the help of the android application which is present in their mobile phone and to save electricity During the tenure the top offers who are working in the industry are gave me some useful and valuable information to improve my career. They show great kindness and co-operation and helped to collect the required information related to the industry. Finally, I wish to conclude my study as. The main purpose of home automation system is to provide easy to people to control different home appliances with the help of the android application present in their mobile phones and to save electricity, time and money.

REFERENCES

- Mocrii, D.; Chen, Y.; Musilek, P. IoT-based smart homes: A review of system architecture, software, communications, privacy and security. *Internet Things* 2018, 1, 81–98. [CrossRef]
- Strielkowski, W.; Streimikiene, D.; Fomina, A.; Semenova, E. Internet of energy (IoE) and high-renewables electricity system market design. *Energies* 2019, 12, 4790. [CrossRef]
- Almusaylim, Z.A.; Zaman, N. A review on smart home present state and challenges: Linked to context-awareness internet of things (IoT). *Wirel. Netw.* 2019, 25, 3193–3204. [CrossRef]
- Pino, N.; Skinner, C.A. Best Smart Home Devices 2021: Automate Your Home with These Gadgets. Available online: <https://www.techradar.com/news/smart-home-devices> (accessed on 8 November 2021).
- Brown, R.; Priest, D.; Crist, R.; Price, M. Best Smart Home Devices to Buy in 2021. Available online: <https://www.cnet.com/home/smart-home/best-smart-home-devices> (accessed on 8 November 2021).

CREATIVITY AND INNOVATION SKILLS FOR 21ST CENTURY FOR STUDENT'S LEARNING

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ABSTRACT

Twenty first century skills are a set of skills that has to be mastered by students in order to win new era competitions where the competitions are started to open globally. Several researches have shown that Creative Learning Cycle method can help students to master the twenty first century skills and make learning process more meaningful. The purpose of this research is to identify the influence of Creative Learning Cycle learning steps to the students' twenty first century skills. As a result, the 21st century learning skills to develop learners must go through a quality educational process. This could be done by changing from teaching to memorize and answer questions to learning activities that help to improve learning skills.

KEYWORDS: Teaching, 21st century skills, Creative learning cycle, Learning management system, Project-based learning.

INTRODUCTION

Creative Learning Cycle method considered can develop students' 21st Century skill. Technological infrastructure is also a crucial thing that needed to support 21st Century learning process. Learning Management System (LMS) can be a missing link that bound contemporary education used creative and innovative technology. It is important to provide people with knowledge, ability, and 21st century essential skills. The 21st century essential skills are known as "3R8Cs" – "3R" means to the skills of Reading, Arithmetic, and Writing while "8Cs" means to Critical Thinking and Problem Solving, Creativity and Innovation, Cross-cultural Understanding, Collaboration teamwork and Leadership, Communications, Information and Media Literacy, Computing and ICT Literacy, Career and Learning Skills, and Compassion. As a result, the educational process must be changed from teaching to memorization to providing learners with learning activities because there are many options in the world for educational process. Moreover, the mind set of new generation does not want to study in the classroom. Therefore, the teacher is the most important in education management for future people. Because teachers are the mentors of ideas for learners to discover their aptitudes and interests that lead to "3R8Cs" which considered as a re-skill process for an interdependent understanding about the world and for a sustainable combination of innovative workforce and creative workforce into artificial intelligence or AI.

21st Century Teaching Techniques

There are 11 methods of teaching and learning in the 21st century and each method can be integrated together as following:

1. Smart Classroom

Picture1.1



1. Smart classroom

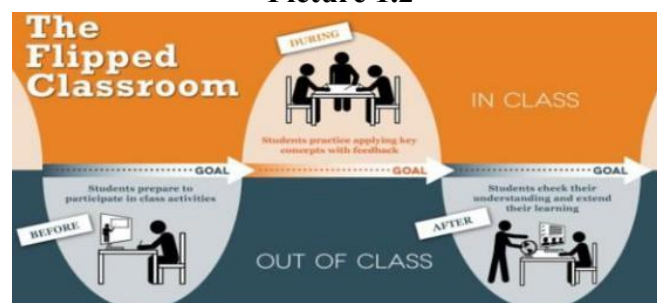
A smart classroom (S.C.) is the learning and teaching management that starts from the integration of teaching science and the advancement of information technology. The 3 main components of smart classroom are teachers, learners, and the media. Each smart classroom must include the following equipment: computers, notebooks, tablets, smartphones, smart boards, projectors, Internet, wireless networks, and hardware (e.g., tables and chairs that can move by wheel, electrical system, audio system, air conditioning, all-round screens). Instructors must plan their teaching and learning activities and determine the essential knowledge for learners to search for knowledge in a broad way. On the other hand, learners will learn happily and love to search for knowledge. The disadvantage of smart classroom is that the expense is too high and need to be invested heavily with smart classroom.

2. Discussion Group

Discussion group refers to discussion, consultation, or discussion meeting. A classroom that employs a discussion group technique is a classroom which provides a discussion of or ideas or experiences between students, teachers and experts. A hot issue to the attention of society will bring to find out who is doing, what, where, how, why, and how to impact. A discussion classroom must create an atmosphere that suits to a situation (e.g., screen, projector, Internet) to those who are interested in presenting to present the origin before the content and conclusion of the issue.

3. Flipped Classroom

Picture 1.2



Flipped classroom

A flipped classroom refers to a classroom that provides learning and teaching activities in reversible direction from a teacher to be a student to find what 380 Vol.20 Special Issue (September-October) 2018-JHSSRRU is needed to study in a classroom. Students and teachers collaborate to find out about the needs of the class. However, a knowledge content determined in curriculum does not leave, but the teacher must present the knowledge of the curriculum that

the learner must know through the current information technology (e.g., Facebook, Logbook, YouTube, and etc.). Further, students will be able to attend a class according to their needs, times, or places to study. Most of time in the classroom will be used for activities to find out the answer and knowledge needed by a class. This kind of learning and teaching activities is suitable for the current teaching and learning situation where students are tired of homework assigned by teachers. Therefore, this type of classroom is called as a flipped classroom that teachers and students help and support each other to learn.

4. STEM

STEM stands for Science, Technology, Engineering and Mathematics. It is a learning activity provided through science, technology, engineer, and math which all people think difficult. STEM teaching is the use of materials, toys, machinery, tools, etc., as well as what is around the body, things used in everyday life to extract knowledge about how to make it, what is a mathematical principle behind it, what is the origin of technology to make it. Then, those principles are brought to create a small project from materials around the body. There are 5 outstanding characteristics of STEM as follows: a teaching focused on integration, help students to create a connection between the 4 subjects and their everyday life, a teaching focused on development of 21st century skills, challenging the ideas of students, and allow students to express their opinions. The objective of STEM-based learning and teaching is to encourage students to love and see value of science, technology, engineer, mathematics, and aware that these subjects are close and can be used every day. A STEM-based instruction will bring a lot of fun in the classroom. The students will aware that objects around the body and used in everyday life are derived from the scientific and mathematical principles. However, teachers must prepare teaching in advance.

5. CDIO

CDIO is from “Conceive Design Implement Operate”. The word “Conceive” means to ability to analyze and identify problems in engineering. Design is an ability to design and find solutions to engineering problems. Implement refers to an ability to complete, apply, or solve engineering problems. Operate is an ability to develop and control a system properly. A CDIO-based instruction is a management Vol.20 Special Issue (September-October) 2018-JHSSRRU 381 aimed to create a teamwork, to encourage students to help each other to solve problems and produce outputs successfully. The output can be used as a sales item to form a startup company or entrepreneur. In short, CDIO is known as “creating, assessing, and learning”. Currently, schools around the world have adopted the CDIO based instruction in common since the students have to get a product or gain a patent after they graduated.

6. LMS

LMS stands for “Learning Management System” or a learning management system with software that manages learning through website. This system includes learner, instructor, administrator, and system administer. Instructors provide lessons through an online system (e.g., Instagram, Facebook, YouTube, or Line) together with a test. Students attend classes when they want. Administrators monitor a learning process. A system administer is planning a teaching system, assessing, monitoring discussion activities, answering questions, and collecting data.

7.MOOC

Massive Open Online Courseware (MOOC) is an online course on free source that can serve massive learners. Students can connect to watching a lecture video, practicing, doing exercises, or talking with others. It is a block course study. If learners need a certificate, they have to pay for a tutor fee for each content. Further, learners can graduate if they select to study subjects determined by each curriculum. Then, compiling all knowledge certificates to form a total credit. If the total credit is enough, a bachelor certificate will be issued. MOOC is popular in western countries such as at Stanford Oxford, Harvard, MIT, etc. For Thailand, Chulalongkorn University, Thammasat University, Mahidol University, and other universities are developing a MOOC-based instruction. This is because of: 1) cost saving and do not disturbing a work time; 2) learning with experts around the world; 3) meeting and sharing experience with people from different fields, ethics, countries; 4) matching with a personal life style learning; and 5) a continue lifelong learning.

8.Web Board

Picture 1.3



Web Board

There are many knowledges uploaded into a cyber system available to teachers for classroom instruction. However, most teachers do not use them for instruction, but they still use books, textbooks, or ready-made lessons for their classroom instruction. 382 Vol.20 Special Issue (September-October) 2018-JHSSRRU From the problem that students are very knowledgeable in reading and acquiring knowledge but they cannot write correctly especially in report making. Normally, when students are assigned to do a report, they will copy information from Internet and paste in their report. They do not read, analyze, synthesize, or add more things. The result is that the students lack the skills of writing, analyzing, synthesizing, and seeking additional knowledge.

9. Natural Room

Natural classrooms can be found around the school and can use to for learning to take place everywhere and every time. Therefore, the school environment is like a big and important classroom that can manage for learning and teaching activities. Teachers must design learning and teaching activities to create the integration of curriculum knowledge. As a result, students will have the skills of observation and critical thinking automatically. A concept mapping connected with outside classroom learning resources could be produced more than expected to happen.

10. Mobile Learning

Picture 1.4



Mobile learning

Mobile Learning means to take students of a field trip with a guide to explain or give knowledge. During a trip, there is a brief history of the place (e.g., geographical conditions, types of residence, ways of life, etc.). This kind of classroom will create an observation skill and a direct experience to answer students' interests and aptitude.

11.5 W3H Technic for Reading Literacy

The teacher must provide students with current appropriate teaching and learning activities. 5W3H means that after reading, readers must be able to talk about reading details (e.g. who, what, where, when, why, how long, how much, etc.). Therefore, every time of reading, readers will need to distinguish details to form a mind map. As a result, the teachers are important for instruction in the present world. After students have been taught repeatedly by the teachers until it becomes a reading habit, this leads to a critical life-skills in terms of reading comprehension, analyzing skill, differentiating skill, synthesizing skill, and summarizing skill. Such the mentioned skills help students to conquer PISA's test since the test is designed in terms of analytical thinking and 21st century learning.

Conclusion

The 21st century teaching techniques require teachers to change their teaching behaviors. In other words, the teachers have to design learning and teaching activities to facilitate students to learn in a practical way. Questions to create curiosity for students as the motivational inspiration to alert learning must be provided. This will lead to a learning and teaching activity that provides learners with the 21st century skills. In addition, teachers must work together as a team both in school and or nearby schools in order to create a Professional Learning Community (PLC). Learning must be focused to create systematic thinking, creativity, working skills and lifestyle for learners to enter the labor market with quality. The following 21st century teaching techniques 1) smart classroom; 2) discussion group; 3) flipped classroom; 4) STEM; 5) CDIO; 6) LMS; 7) MOOC; 8) web board; 9) natural room; 10) mobile learning; and 11) 5W3H technique for reading literacy. Should be done and taken into about. So, students will be able to adjust themselves and it will lead to the skill of "3R8Cs" which considered as a re-skill process for an interdependent understanding about the world and for a sustainable combination of innovative workforce and creative workforce into artificial intelligence or AI.

References

- Delors, J. (2008). Learning the treasure in their own. Bangkok: Office of the Education Council.
- Manowong, K. (2015). Development of reading comprehension ability of six students with learning problems in reading. Chiangmai.
- Office of the Education Council. (2017). Framework of National Education Plan 2018. Year (2017): 7-10
- Cooparat, P. (2018). Assoc. Prof. Interview. (July, 29)
- Phanitch.W.(2013). 21st Century Skills. [online]. Access from: <http://www.vcharkarn.com/varticle/60454> Retrieved 2 August 2018.

CREATIVITY AND INNOVATION OF 21st CENTURY IN MECHANISM OF BLOCKCHAIN TECHNOLOGY

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ABSTRACT

Blockchain has promise as an approach to developing systems for a number of applications within cybersecurity. In Blockchain-based systems, data and authority can be distributed, and transparent and reliable transaction ledgers created. Some of the key advantages of Blockchain for cybersecurity applications are in conflict with privacy properties, yet many of the potential applications have complex requirements for privacy. Privacy-enabling approaches for Blockchain have been introduced, such as private Blockchains, and methods for enabling parties to act pseudonymously, but it is as yet unclear which approaches are suitable in which applications. We explore a set of proposed uses of Blockchain within cybersecurity and consider their requirements for privacy. We compare these requirements with the privacy provision of Blockchain and explore the trade-off between security and privacy, reflecting on the effect of using privacy-enabling approaches on the security advantages that Blockchain can offer.

KEYWORDS: Blockchain, Node, Hash, peer to peer, Cybersecurity

INTRODUCTION

Blockchain could be a data structure that could be a growing list of information blocks. The knowledge blocks are unit coupled along, such recent blocks can't be removed or altered. Blockchain is the backbone Technology of Digital Cryptocurrency BitCoin. The blockchain is a distributed database of records of all transactions or digital event that have been executed and shared among participating parties. Each transaction verified by the majority of participants of the system. It contains every single record of each transaction. BitCoin is the most popular cryptocurrency an example of the blockchain. Blockchain Technology first came to light when a person or Group of individuals name 'Satoshi Nakamoto' published a white paper on "BitCoin: A peer-to-peer electronic cash system" in 2008. Blockchain Technology Records Transaction in Digital Ledger which is distributed over the Network thus making it incorruptible. Anything of value like Land Assets, Cars, etc. can be recorded on Blockchain as a Transaction.

WHAT IS BLOCKCHAIN TECHNOLOGY?

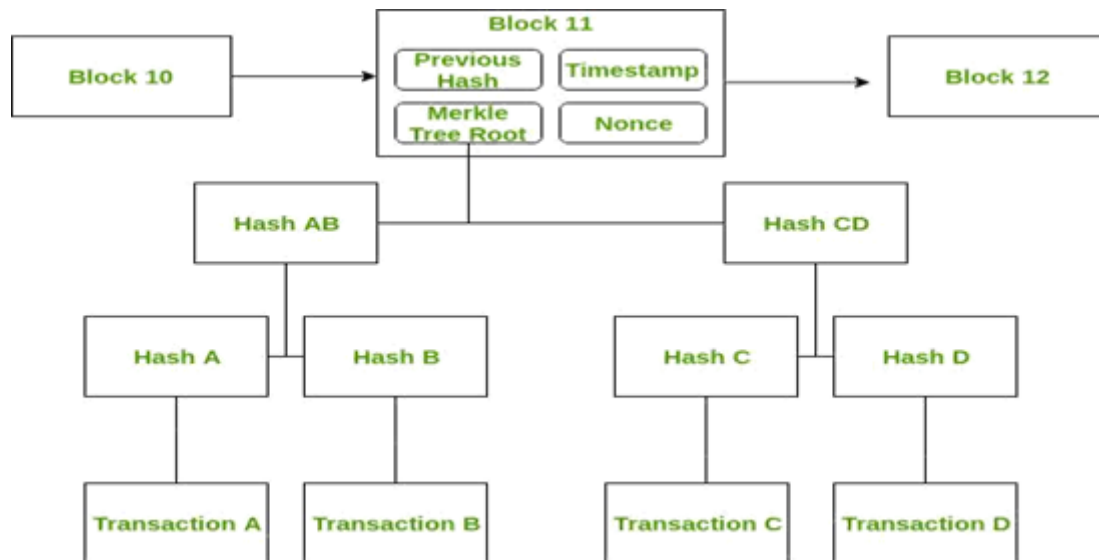
Blockchain started in 1991 as a way to store and secure digital data. Blockchain is an open ledger that several parties can access at once. One of its primary benefits is that the recorded information is hard to change without an agreement from all parties involved. IBM explained that each new record becomes a block with a unique, identifying hash. Linking the blocks into a chain of records forms a blockchain. Bitcoin cryptocurrency uses blockchain technology. Blockchain helps in the verification and traceability of multistep transactions needing verification and traceability. It can provide secure transactions, reduce compliance costs, and speed up data transfer processing. Blockchain technology can help contract management and audit the origin of a product. It also can be used in voting platforms and managing titles and

deeds. The data is recorded in chronological order. Also, once the data is recorded, it cannot be changed.

WHAT IS INSIDE A BLOCKCHAIN?

A blockchain is a chain of blocks connected to each other. A block consists of four parts:

- Previous Hash
- The timestamp
- Nonce
- Merkle tree root



Each block contains a cryptographic hash of the data of the previous block. The nonce is calculated by the miners by solving cryptographic puzzle to propose the next block in the chain. It is known as proof of work. The blockchain is said to be immutable because of its cryptographic properties. But this does not mean that changing the data is impossible. It means that it is extremely hard to change the data and any change can be easily detected. A merkle tree is a binary tree with hash pointers. A merkle tree is a structure that allows for efficient and secure verification of content in a large body of data. The advantage of using merkle trees is that proving membership requires $O(\log n)$ steps. Also, in a sorted merkle tree, non-membership can also be proved in $O(\log n)$ steps. The first block is known as the genesis block.

TYPES OF BLOCKCHAIN

There are different types of blockchains possible in the ecosystem.

1. Public

A public blockchain is also known as permission-less blockchain. Here, everyone can be a part of this blockchain and can participate by running as a node, by mining a block or by making transactions in the blockchain. Bitcoin and Litecoin are examples of public blockchains.

2. Private

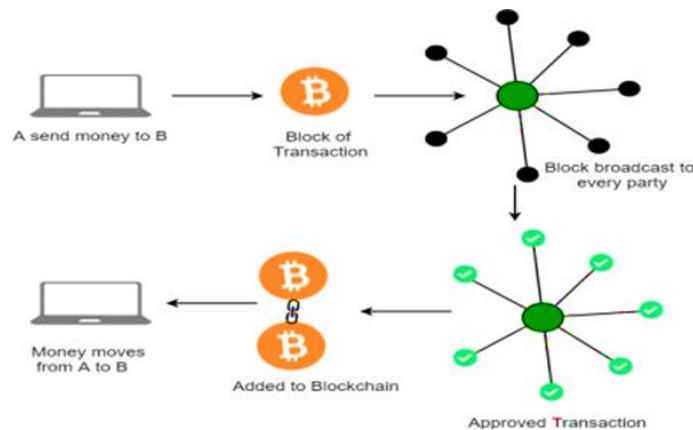
A private blockchain is also known as permissioned blockchain. Here, there are restrictions on the participation as only selected individuals or member of an organisation can be a part of the blockchain. Multichain and Hyperledger projects (Fabric, Sawtooth) are examples of private blockchain.

3. Consortium

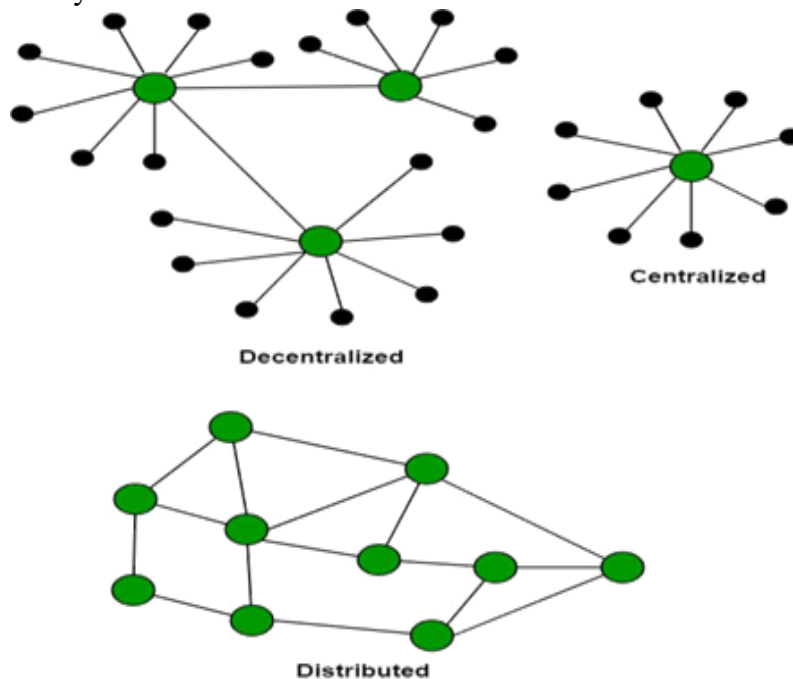
A consortium blockchain are said to be partially-decentralised or semi-decentralised. It is controlled by a group of organisations unlike one organisation as in private blockchain. The member organisations has the authority to participate by running as a full node, by mining etc. R3 and EWF (Energy Web Foundation) are examples of consortium blockchain.

HOW DOES BLOCKCHAIN TECHNOLOGY WORK?

One of the famous use of Blockchain is Bitcoin. Bitcoin is a cryptocurrency and is used to exchange digital assets online. Bitcoin uses cryptographic proof instead of third-party trust for two parties to execute transactions over the internet. Each transaction protects through digital signature.



Distributed Database: There is no Central Server or System which keeps the data of the Blockchain. The data is distributed over Millions of Computers around the world which are connected to the Blockchain. This system allows Notarization of Data as it is present on every node and it is publicly verifiable.



A network of nodes:

A node is a computer connected to the Blockchain Network. Node gets connected with Blockchain using the client. Client helps in validating and propagating transaction on to the Blockchain. When a computer connects to the Blockchain, a copy of the Blockchain data gets downloaded into the system and the node comes in sync with the latest block of data on Blockchain. The Node connected to the Blockchain which helps in the execution of a Transaction in return for an incentive is called Miners.

APPLICATION OF BLOCKCHAIN

- Leading Investment Banking Companies like Credit Suisse, JP Morgan Chase, Goldman Sachs and Citigroup have invested in Blockchain and are experimenting to improve the banking experience and secure it.
- Booking a Flight requires sensitive data ranging from the passenger's name, credit card numbers, immigration details, identification, destinations, and sometimes even accommodation and travel information. So the sensitive data can be secured using blockchain technology. Russian Airlines are working towards the same.
- Visa uses Blockchain to deal with business to business payment services.
- Unilever uses Blockchain to track all their transactions in the supply chain and maintain the product's quality at every stage of the process.
- Walmart has been using Blockchain Technology for quite some time to keep track of their food items coming right from farmers to the customer. They let the customer check the product's history right from its origin.
-

FUTURE SCOPE OF BLOCKCHAIN TECHNOLOGY

Finance, supply chain management, and the internet of things are just a few of the sectors that blockchain technology has the power to upend (IoT). The following are some potential uses for blockchain in the future:

Digital Identity:

Blockchain-based digital IDs might be used to store personal data safely and securely as well as offer a means of establishing identity without the need for a central authority

Smart Contracts:

A variety of legal and financial transactions could be automated using smart contracts, self-executing contracts with the terms of the agreement put straight into lines of code.

Decentralized Finance (DeFi):

Using blockchain technology, decentralised financial systems might be built that support peer-to-peer transactions and do away with conventional intermediaries like banks.

Supply Chain Management:

- Blockchain technology can be applied to a permanent record of how goods and services have been moved, enabling improved openness and traceability across the whole supply chain.
- Internet of Things (IoT):
- Blockchain technology may be used to build decentralised, secure networks for IoT devices, enabling them to exchange data and communicate with one another in an anonymous, safe manner.

- In general, blockchain technology is still in its early stages and has a wide range of potential applications.

ADVANTAGES OF BLOCKCHAIN

Now, what is the need for using blockchains. Blockchains are expected to be implemented by most businesses because of the several benefits it provides. The blockchain eliminates the need of a third party between two entities that are willing to exchange something. This saves time as exchanges can be done without any outside interference. It saves money as it reduces overhead and cost of intermediaries. It reduces risk of tampering, fraud and cyber crime due to its immutable nature. There is no need to trust a third party now as the records are stored in distributed ledgers. It has several other advantages specific to the use case it is applied to.

DISADVANTAGES OF CURRENT TRANSACTION SYSTEM

- Cash can only be used in low amount transaction locally.
- Huge waiting time in the processing of transactions.
- Need to third party for verification and execution of Transaction make the process complex.
- If the Central Server like Banks is compromised, whole System is affected including the participants.
- Organization doing validation charge high process thus making the process expensive.

CONCLUSION

The Bitcoin is the first successful implementation of blockchain. Today, the world has found applications of blockchain technology in several industries, where the trust without the involvement of a centralized authority is desired. So welcome to the world of Blockchain. we noticed that the usage of blockchains in the perspective of open science is in an early development phase. Nevertheless, the technology can already make valuable contributions to that area, for example, by improving current workflows of researchers, establishing trust in technical systems and enabling new collaborations as well as mitigating existing problems. One of them is the reproducibility crisis in which Bitcoin is not a standalone solution, but in our view, a supportive part of it. But many projects need more time to mature for being beneficial. However, there is still much to do in terms of standardization, governance models, beginner-friendliness, interfaces, security and legal issues, and educational work to fully exhaust the potential of the technology.

REFERENCES

- IBM. (n.d.). What is blockchain? IBM. Retrieved from <https://www.ibm.com/in-en/topics/what-is-blockchain>
- Google. (n.d.). Google Maps. Retrieved from <https://g.co/kgs/J8NzmH>
- Inderscience Publishers. (n.d.). International Journal of Blockchain and Cryptocurrency. Retrieved from <https://www.inderscience.com/jhome.php?jcode=ijbc>
- Antonopoulos, A. M. (2017). Mastering bitcoin: Programming the open blockchain (2nd ed.). O'Reilly Media, Inc.

DIGITAL PAYMENTS AND THEIR IMPACT ON THE INDIAN ECONOMY

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ABSTRACT

This perspective covers the potential impact of Digital Payment in Indian Economy as well all know that people in the economy on first hand use more of cash for any kind of purchase made and even few digital transaction also linking the bank account details due to the virus which is spreading across the country made the consumer to use more of the mobile based applications to avoid direct contact with merchants. From this digital payment facility adopted and supported by all banks in economy is to protect the local business as well as foreign trend even the society which helps to lead Indian economy. Likewise methods of digital payment system number of digital transaction undertaken during last five financial year and current financial year, Impact of Digital Payment in Indian Economy, Impact on Banks, Impact in Future are discussed in this article.

KEYWORDS: Unstructured Supplementary Service Data(USSD), Unified Payment Interface(UPI), Aadhaar Enabled Payment System(AEPS), Mobile Wallet, Digital Payment.

INTRODUCTION

Digital payments are transactions that take place via digital or online modes, with no physical exchange of money involved. This means that both parties, the payer and the payee, use electronic mediums to exchange money. The Government of India has been undertaking several measures to promote and encourage digital payments in the country. As part of the 'Digital India' campaign, the government has an aim to create a 'digitally empowered' economy that is 'Faceless, Paperless, Cashless'.

The payer and payee could be either a business or an individual. This means that for digital payments to take place, the payer and payee both must have a bank account, an online banking method, a device

from which they can make the payment, and a medium of transmission, meaning that either they should have signed up to a payment provider or an intermediary such as a bank or a service provider.

A digital payment transaction can happen both on the internet and in person to the payee. For example, if a buyer pays via UPI on an e-commerce website or buys from his local grocer and pays him through UPI while purchasing at the store, both are digital payment transactions. There are various modes of digital payments, including UPI, NEFT, AEPS, mobile wallets, and PoS terminals. UPI is the most preferred mode, having crossed the milestone of \$1 trillion in the value of transactions

However, many of the digital payment methods are not popular among the common people and people are not comfortable to use them for their day-to-day's transactions. There is less awareness among the people about different types of digital payment methods. There is also a myth among them that overspending is possible when we use the digital payment nodes and

banks deduct high transaction cost for the digital payment operations. Hence literacy about the digital payments has become a necessity

METHODS OF DIGITAL PAYMENT SYSTEM

1. Banking Cards: Banking cards are the most widely used digital payment system in India. It offers a great set of features that provides convenience as well as security to the users. Cards offer the flexibility of making other types of digital payments. Customers can store card information in the mobile application and pay for the services using the stored card information. Banking cards (debit and credit cards) can be used for a variety of digital transactions like Point Of Sale terminals, online transactions, as a payment medium in mobile apps, which provide any kind of service like grocery, healthcare, rental cab booking, flight tickets, etc. The most popular cards are issued by service providers like VISA, MASTERCARD, RuPay, AMEX etc.

2. USSD (Unstructured Supplementary Service Data): USSD is another popular digital payment method. It can be used for carrying out cashless transactions using mobile, without the need of installing any banking app. The good thing about USSD is that it works without the requirement of mobile data. The main aim of this digital payment service is to include those sections of people of the society who are not included in the mainstream. The striking feature of the USSD is that it can be availed in Hindi. The USSD can be used for the following types of activities:

- a. Initiating fund transfers
- b. Making balance enquiries
- c. Getting the bank statements

3. AEPS (Aadhaar enabled payment system): AEPS can be used for all the following banking transactions such as balance enquiries, cash withdrawal, cash deposit, aadhaar to aadhaar fund transfers. All such transactions are carried out through a banking correspondent which is based on Aadhaar verification. This service can be availed if the aadhaar is registered with the bank where an individual has a bank account.

4. UPI (Unified Payment Interface): UPI is the latest digital payment standard where the user having a bank account can transfer money to any other bank account using UPI based app. UPI enabled payments occur throughout the day and all 365 days in a year. Payment can be done using a Virtual Payment Address (VPA). To use UPI services one must have a bank account and a mobile number registered with that bank account.

5. Mobile Wallets: Mobile wallets are another popular payment option. Here the users can add money to their virtual wallet using debit or credit cards and use the money added in the wallet to perform digital transactions. Some of the most popular mobile wallets are PayTM, Mobikwik, PhonePe, etc.

6. Point of Sale Terminals: PoS terminals are installed in shops or stores where payments for purchases can be done through debit and credit cards. There are variations of one which can be Physical PoS and the other one is mobile PoS. The mobile PoS does away with the need of maintaining a physical device.

7. Mobile Banking: Mobile banking is a service provided by the banks through their mobile apps in a smartphone for performing transactions digitally. The scope of mobile banking has expanded extensively after the introduction of UPI and mobile wallets. Mobile banking is a term used to describe a variety of services that are availed using mobile/smartphones.

8. Internet Banking: Internet banking is the process of performing banking transactions from the comfort of your home using a mobile phone/laptop/ desktop and an active internet connection.

The major type of transactions can all be done using internet banking.

Top Five States In India Have Highest Digital Payment Transactions

- Mumbai
- Karnataka
- Kerala
- Tamil Nadu
- Andhra Pradesh

IMPACT OF DIGITAL PAYMENT ON INDIAN ECONOMY

Global Business is driven by technology and innovation. In many cases, innovation is changing the face of business and how it is run. Innovations have also changed the way payment systems are viewed. The latest technology has transformed traditional cash-based payment systems into a more efficient and effective cashless payment system. Digital payment transactions are more profitable than traditional systems due to digital payment features such as ease of use, convenience, security, and speed. Digital payments are considered the most favored payment method around the world, including India. With the Government's "Digital India" initiative, the spread of the Internet, the spread of smartphones, and the adoption of technology, digital payments have proliferated in India since 2014. India achieved a compound annual growth rate (CAGR) of 58.9% in volume and a CAGR of 28.4% in value for digital payments in 2019. This growth rate in India is also found to be quite remarkable in the global payment market (NITI Aayog 2018). Digital payments have many advantages over cash-based transactions. Cashless payments discourage robbery and many other crimes (Laura Armeiy, 2014). With people usually locking their smartphones, it doesn't harm a person that much if he loses it, unlike wallets.

An efficient payments system can boost the efficiency of financial markets and the financial system together, increase confidence within the consumer, and enable trade both in goods and services (BIS, 2003). However, unsecured and inconsistent payment systems hamper the transfer of funds among the transaction parties (Humphrey et al 2006). On the other hand, digital payments make sure that the transaction happens smoothly and at a minimal cost. Researchers observed that cashless payments provide increased efficiency, improved revenue, and less operational cost to the businessmen (Alliance, 2003). Consequently, this combination of higher operating efficiency with the lesser operational cost of the businesses opens the doors to higher revenue and business growth. India currently has around 350 million online transacting users across e-commerce, shopping, travel and hospitality and OTT and the number is set to double by 2030. In the financial year 2022, PhonePe held 46% share of unified payments interfaces (UPI) usage in India.

IMPACT OF DIGITAL PAYMENT ON BANKS

According to the Reserve Bank of India (RBI), the number of owned debit and credit cards has grown significantly to 990 million and 44 million, respectively, by September 2018, indicating that cashless transactions are preferred. Mastercard has invested heavily in the protection and

growth of the digital payment ecosystem. Digital Payments had a significant impact on the informal sector as well. Digital payments ensure accountability in every transaction. Since everything is recorded automatically, there is always a way to verify transactions and keep track of them. While using cash payments, it might become tough to hold anyone responsible for any additional expenditure. For example, when the Government made digital smart cards mandatory for pension payments to replace the system of manual cash transactions in rural areas, a forty seven percent reduction was reported in corruption and bribery. For any fraudulency as well, this maliciousness can be spotted faster from the digital records. Online payments are also fast and convenient for those people who find it hard to withdraw cash or carry it around or if there are no proper ATM facilities

IMPACT OF DIGITAL PAYMENT IN FUTURE

While India still needs to normalize cashless transactions completely to board on the journey to become the next super economy in the coming few years, there are a few hiccups on the way that need to be handled. With 5G, IoTs, and artificial intelligence looming in, it is also essential to have a sustainable and lucrative business model which accommodates the new-age digital ecosystem with a robust cybersecurity system. While challenges are aplenty, well begun is half done, and we believe the Government is already getting ready for a safer and brighter cashless future. At a time when it was previously mandated, there was a crisis of social distance and COVID 19. The transition from offline to online in payments has been going on for years. Nevertheless, in the latest blockade scenarios resulting from COVID 19, customer behavior is changing more and more. NPCI encouraged customers and all critical service providers to switch to digital payment systems to stay secure. We are starting to see solutions, and traders are moving into the "physical world." And they don't have to be completely online. By sharing photos and telling them what to buy, people can elicit the messaging mechanisms they use to order and communicate and ultimately pay digitally. Everyone goes out to collect and deliver things. After the blockade, until the world really gets rid of this situation, we are still at a stage where we need to be careful and take special precautions to stay safe. This time around, it's all about developing these solutions and innovations to meet these public, retail and corporate needs. Electronic payments are believed to be a significant force in economic development and particularly affect spending behavior and consumption.

CONCLUSION

In conclusion, digital payments have helped businesses in many ways. They enable them to keep track of their finances and customers transactions, satisfaction with customers, etc. In addition, digital payments make it easy for customers to pay online with just one click. Digital Payments also give a chance to owners to expand their business reach across the globe. Every business owner or manager needs to know how digital payments can benefit his/her business and how they can help him/her achieve success in the long run. Digital payments has taken off in India as is showing little to no sign of slowing down. With the Indian government demonetizing the 500 and 1000 Rupee note and government agencies companies incentivizing adoption by lowering fees and waiving taxes, Indian consumers are embracing cashlessness wholeheartedly. Nevertheless, as demand for digital payments grow, so will concerns for security. It is ultimately up to the companies promoting digital alternatives to cash to provide adequate security for their services, as well as consumers to maintain good security habits.

future the digital payments are going to be a must and so the change in the habits of the people to accept the digital payment is also must.

REFERENCES

- Natarajan, S., & Parameshwari, R. (2019). *Indian Banking* (Revised Edition).
Economic Times. (2019, December 28). Advantages of cashless payments and the pitfalls you should beware.
- Shah, Z. A. (2017, August). Digital Payment System: Problems and Prospects. *EPR International Journal of Economic and Business Review*, 194-201.
- Singh, S. (n.d.). Study of Consumer Perception of Digital Payment Mode. *Journal of Internet Banking and Commerce*, 15-23.
- Suma Valley, H. D. (2018). A Study on Digital Payments in India with Perspective of Consumer's Adoption. *International Journal of Pure and Applied Mathematics*, 1259-1267.
- Press Information Bureau, Government of India. (n.d.). Digital payments set to increase as India drives to a less-cash economy.
<https://pib.gov.in/FeaturesDeatils.aspx?NoteId=151163&ModuleId%20=%20>
- International Monetary Fund. (2022, October 26). How India's central bank helped spur a digital payments boom. <https://www.imf.org/en/News/Articles/2022/10/26/cf-how-indias-central-bank-helped-spur-a-digital-payments-boom>

ENVIRONMENT PROTECTION

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Abstract

Environmental protection is one of the basic prerequisites for the overall development of any country in the world. If economic growth and development are to be established, and there is no country in the world that does not want to do so, biodiversity must be contributed. As awareness of environmental protection is developed, human awareness is also developed about the need to preserve the environment by preventing adverse impacts on nature. Law, as a scientific discipline, plays a significant role in these endeavours.

Keywords: Environment; Protection; Health; Law; Breathable Atmosphere; Sample Water; Sunlight; Moderate Terrain; Energy and Minerals; Photosynthesis; The Hydrologic Cycle; The Carbon Cycle; Living Soils; Flora; Fauna; Species; Ecosystems; Evolutionary Biology

Introduction

For millennia, nature—specifically living systems—provided food and fibre to nourish and clothe us and materials to build us homes and transport [1]. Living systems conditioned the air we breathe, regulated the global water cycle, and created the soil that sustained our developing agriculture. They decomposed and absorbed our wastes. Beyond practicality, nature fed the human spirit. But pressure on nature from the impact of 6 billion humans is taking its toll. Living systems worldwide are collapsing. Changes in Earth’s biota caused by human actions range from indirect depletion caused by altering Earth’s physical and chemical environment to direct depletion of human and nonhuman life. We have not always had such devastating effects. When modern humans emerged some 200,000 years ago, changes we caused happened slowly, and over relatively small geographic scales. But now change is fast, fuelled by unconstrained population growth and advancing technologies. “Human dominated ecosystems” are not simply farm fields but the entire planet. The ecological footprint of modern human society is huge. The result is global ecological disruption and biotic improve freshmen. Yet modern society continues to behave as if there were no long-term consequences of transforming the biosphere, as if we were not connected to nature’s life-support systems.

For thousands of years, people worried most about the health of individuals, including injuries in fights or wars, periodic famine, vector-borne diseases, and accidents. Modern agriculture and the domestication of animals created new health challenges by transferring a vast array of new contagious diseases to humans. The industrial revolution brought some relief; wastewater treatment, for example, reduced the incidence of waterborne diseases. But new technologies generated new threats, ranging from toxic industrial chemicals to global transportation systems that spread infectious diseases and exposed individuals to a greater variety of diseases. Modern environmental regulation and medicine have attacked these problems, but they struggle to stay ahead of evolving, unforeseen consequences, such as the resistance of many disease organisms to antibiotics. The human condition has, of course, been the subject of intellectual and practical concern since civilization began. But economic and political changes during the industrial revolution moved humans away from their ties to the land. Technology and trade liberated

people from concerns about life-support systems, or so it seemed. Lessons of the past—especially accumulated knowledge about connections to living systems—seemed increasingly irrelevant. Emerging economic theories suggested that “the market” would, if allowed to operate freely, provide for humankind. So-called neoclassical economics argued (incorrectly) that economic growth and the forces that promote it are good for the environment and for the poor. The attainment of societal well-being was assumed to be an inevitable by-product of a market economy. Present environmental trends and the growing gap between rich and poor demonstrate that this assumption is flawed. We are increasingly conscious of the effects of our activities on the natural environment [2]. Man has always affected the environment to some extent, but this has become a serious matter of public concern during the last century. These effects may be classified according to the area used or affected by the energy generators, and by the pollution they produce. This pollution may be local or global, and includes not only poisonous chemicals, but also visual and aural pollution, and affects the atmosphere, the land and the sea. When considering man-made pollution, it is useful in appropriate cases to put it in perspective by comparing it with the natural sources of pollution that are beyond our control. Thus, bush fires due to lightning strikes have always occurred, and are even necessary for the germination of some plants. Volcanic eruptions throw huge amounts of poisonous chemicals into the atmosphere, and this falls on land and sea. The earth has great natural recuperative powers and, once the source of the pollution is removed, the land, lakes and seas return to their previous state. Reflect for a moment on the miracle – the extraordinarily rare combination of factors that together makes life on earth possible [3]. Our planet’s ideal position in the right kind of galaxy, the right distance from a perfect star, the right tilt for seasons, exactly enough of a protective stratospheric radiation shield, a thin layer of breathable atmosphere, Sample water resources, a moderate temperature range, sunlight, moderate terrain, energy and minerals, photosynthesis, the hydrologic cycle, the carbon cycle, living soils, flora, and fauna. Contemplate its magnificence – from outer space, the “piercingly beautiful” blue globe our astronauts see hanging in the void, or from a down-to earth panorama of its incredible landforms, mountains, canyons, plains, oceans, sea beds, rivers, lakes, wetlands, forests, jungles, archipelagos, deserts, fjords, glaciers, and ice fields. Then think of the incredibly rich life forms, species, and ecosystems that exist at this brief point in the billions of years the earth has been evolving.

Objectives of environment protection

1. It was enacted with the prime motto of providing protection and improvement of the environment and the things associated with it.
2. To take strict actions against those who harm the environment.
3. To safeguard the better environment and environmental conditions.
4. To apply the decisions made at the United Nations Conference on Human Environment, which was held in the year 1972 in Stockholm.
5. To enforce laws regarding the protection of the environment in the regions, which are not included in the prevailing laws.

Different way of protect the environment

- Save water – Water is a necessary thing so doesn’t be wasted; always use it according to needs. Without water, no life, so save water properly.

- Avoid plastic things – Everyone knows plastic nowadays has a destructive impact on our environment, so avoid using plastic things as the adverse effects of plastic cause several dangers and issues for humans.
- Utilize reusable bags instead of buying plastic bags.
- Save Energy – Use light bulbs and turn off the lights when not used.
- Utilize reusable bags instead of buying plastic bags Do not throw garbage on the roads. Dispose it correctly on the dustbins.

Environmental protection issues

1. Global warming and change of climate

Activities of humans have created global warming and climate change which creates a threats. The increasing level of carbon dioxide and other greenhouse gases have caused a rise in global temperatures. These changes are affecting all forms of life.

2. Pollution and ocean Acidification

Pollution causes a major problem for everyone nowadays. Water pollution is caused by the rapid development of urban, improper disposal of sewage by industries, oil spills, chemical waste disposal, etc. Water pollution causes various diseases and environmental issues.

Ocean water absorbs 30% of carbon dioxide released in the air, so it happens when the carbon dioxide absorbed by the seawater increases hydrogen ions concentration. Hence it makes it difficult for the oysters, sea corals, and calms and also affects the organism's behaviours.

3. Biodiversity loss

Biodiversity concludes diversity between species and ecosystems. So it is important for the environment but the loss of biodiversity disrupts the ecosystem functioning and reduces food security. Overexploitation is also the main cause of the loss of biodiversity. Hence these all are the main environmental protection issues that not only create problems but also make life in danger by causing diseases.

Climate change mitigation and adaptation

Global warming due to CO₂ emissions — which according to the UN have increased by almost 50% since 1990 — is accelerating climate change and threatens the survival of millions of people, plants and animals by causing meteorological events like droughts, fires and floods, which are becoming increasingly frequent and more extreme. This means we need to take measures to mitigate its effects and adapt to its consequences which, even if we keep global warming under 2 °C as required by the Paris Agreements, will last for centuries.

Pollution problems and their effect on health

The World Health Organization (WHO) estimates that 90% of humanity breathes polluted air, so is calling for a reduction in air pollution to cut rates of respiratory illnesses, thus preventing seven million deaths a year. Contaminated water also causes major health problems and five million deaths a year according to Oxfam Intermonth. The UN advocates eliminating dumping, minimising the use of chemicals and treating more wastewater, among other measures.

Protecting the oceans

The oceans have become the giant waste dumps for plastic. What's more, there are other serious environmental problems related to the oceans such as damage to ecosystems due to global warming, dumping of pollutants, wastewater and fuel spills. The UN calls for improved management of protected areas, giving them sufficient resources, and reducing overfishing, pollution and acidification of the ocean caused by the increase in the earth's temperature

The energy transition and renewables

While energy accounts for 60% of global greenhouse gas (GHG) emissions, the UN calculates that 13% of the world population lacks access to electricity and that 3 billion people depend on fossil fuels for cooking. This situation requires an energy transition towards a cleaner, more accessible and efficient model based on the use of renewable energy sources to build communities that are more sustainable, inclusive and resistant to environmental problems like climate change.

- At present, 22% of animal species are at risk of extinction.
- 5 billion people will live in cities by 2030.
- Waste management, including of technological waste, will be a key issue.
- The overexploitation of natural resources puts valuable habitats at risk.
- Water is vital to species survival and water scarcity already affects millions of people.

A SUSTAINABLE FOOD MODEL

Intensive food production harms the environment by depleting the soil and damaging marine ecosystems. What's more, overexploitation of natural resources has put food safety and the availability of drinking water at risk. The UN considers it essential to change the food production model and our food habits, including a more plant-based diet featuring local ingredients to save energy and reduce CO2 emissions.

PROTECTING BIODIVERSITY

We have already lost 8% of known animal species and 22% are at risk of extinction due mainly to the destruction of their natural habitats, poaching and the introduction of invasive species. The UN has called for conclusive actions to put an end to these threats and conserve our natural heritage, including our increasingly threatened forests.

SUSTAINABLE URBAN DEVELOPMENT AND MOBILITY

The growth of cities, which will need to accommodate around 5 billion people by 2030, will be another of the decade's big environmental challenges. The metropolises of the future will need to be compact, safe, inclusive, ecological and energy efficient, with more green spaces, more environmentally friendly buildings and more sustainable methods of transport which put the needs of pedestrians above those of traffic.

CONCLUSION

The law to environmental protection includes all legal norms related to environmental protection, with the aim of preventing adverse impacts on nature. The defines power of nature is becoming weaker, and awareness of the necessity of protecting natural resources is becoming more and more neglected. These are the main reasons why legal regulation in this area is a necessity at national and international level. The issue of environmental pollution today is a global problem that needs to be addressed in the international context.

REFERENCES:

- Karr JR (2000) Health, Integrity, and Biological Assessment: The Importance of Measuring Whole Things. In: Pimentel D, Westar L, Noses RF (Eds.) Ecological Integrity - Integrating Environment, Conservation, and Health, Island Press, Washington, pp. 209 - 210.
- Hodgson PE (2010) Energy, the Environment and Climate Change, Imperial College Press, London, pp. 87.
- Nanda VP, Prang G (2013) International Environmental Law and Policy for the 21st Century, 2nd Revised Edition, Martinis Nigh off Publishers, Leiden, and pp. 3.
- Wilcox B, Jessop H. (2010): Ecology and Environmental Health in Friskin H (Ed) Environmental Health - From Global to Local, Second Edition, Josser-Bass, John Wiley & Sons, Inc., Hoboken, pp. 6.
- Andersen TT, Regan KE (2010) Shifting Baselines and Backsliding Benchmarks - The Need for the National Environmental Legacy Act to Address the Ecologies of Restoration, Resilience, and Reconciliation in Flouny AC, Dreiser DM (Eds.) Beyond Environmental Law - Policy Proposals for a Better Environmental Future, Cambridge University Press, Cambridge, pp. 53 – 54.
- Steinway DM (2014) Fundamentals of Environmental Law in Sullivan TFP (ed) Environmental Law Handbook, Twenty-second Edition, Brenan Press, Lanham, pp. 1.

CREATIVITY AND INNOVATION OF 21ST CENTURY DIGITAL CURRENCY

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Abstract

Digital currency, also known as e- rupee, is a digital payment system launched by the Government of India in 2023. It is a prepaid, contactless, and cashless instrument designed to facilitate transactions and eliminate the need for physical currency. The e-Rupee is a unique, non-transferable voucher-based payment system that is delivered to the mobile phones of beneficiaries through an SMS or mobile app. It is designed to be secure, convenient, and easy to use, especially for the underprivileged sections of the society who do not have access to banking facilities.

Key words: Digital currency, e- Rupee, RBI, CBDC, Digital Money

INTRODUCTION

Digital currency is a form of currency that is available only in digital or electronic form. It is also called digital money, electronic money, electronic currency. The Digital Rupee (₹) or e INR or E-Rupee is a tokenised digital version of the Indian Rupee, to be issued by the Reserve Bank of India (RBI) as a central bank digital currency (CBDC). The Digital Rupee was proposed in January 2017 and will be launched in the 2022–23 financial year. Digital Rupee is using blockchain distributed-ledger technology.

Like banknotes it will be uniquely identifiable and regulated by Central Bank. Liability lies with RBI. Plans include online and offline accessibility. RBI will launch Digital Rupee for Wholesale (₹-W) catering to financial institutions for interbank settlements and Digital Rupee for Retail (₹-R) for consumer and business transactions. The implementation of the Digital Rupee aims to will remove the security printing cost borne by the general public, businesses, banks, and RBI on physical currency which amounted to ₹49,848,000,000.

DIGITAL CURRENCY

Digital currency in India or the digital rupee is a digital form or electronic form of paper money or physical money. The value of digital currency is the same as the value of physical money or hard cash. Digital currency is available in the form of a digital token that represents legal tender. The Central Bank of the Country will issue it in the same denominations, that paper currency or physical notes and coins are currently in use.

DIGITAL CURRENCY IN INDIA

The Governor of the Reserve Bank of India (RBI) gives the promise to the bearer “I PROMISE TO PAY THE BEARER THE SUM OF (ex. ONE HUNDRED) RUPEES” just like written on our physical currency notes. RBI is issuing it in the same denominations that paper currency or physical notes and coins are currently issued ex. Rs. 2000/-, Rs. 500/-, Rs. 100/-, Rs. 50/-, Rs. 20/- etc. (RBI Notification)



CENTRAL BANK DIGITAL CURRENCY

“Central Bank Digital Currency (CBDC)” is the official name of Digital Currency or Digital Rupee in India. Furthermore, Digital Currency is a sovereign currency just like our physical notes and coins.

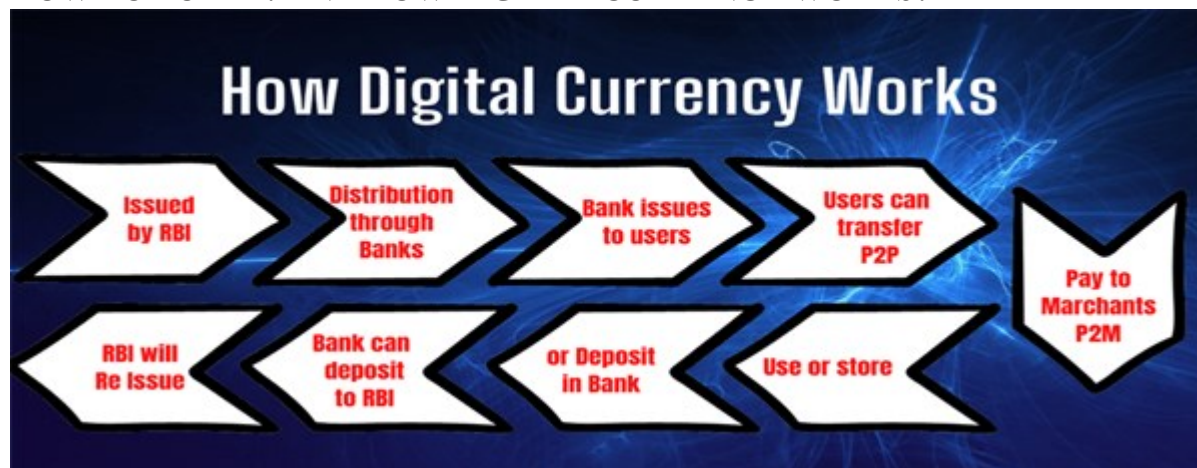
PARTICIPANT BANK IN DIGITAL CURRENCY IN INDIA.

Eight banks have been identified for the first phase to participate in this pilot project of Digital Currency.

1. The first phase will begin with four banks, that is State Bank of India, ICICI Bank, Yes Bank, and IDFC First Bank in four cities across the country.
2. In the Second Phase Four more banks, that is Bank of Baroda, Union Bank of India, HDFC Bank, and Kotak Mahindra Bank will join.

After successful testing, analysis and results this will be available in all the banks.

HOW TO BUY IT? AND HOW DIGITAL CURRENCY WORKS?



Digital Currency will be issued by RBI and available through banks. Account holders will be able to transact with Digital Currency through a digital wallet offered by the participating banks and stored on mobile phones/devices.

Transactions can be both Person to Person (P2P) and Person to Merchant (P2M). Payments to merchants can be made using QR codes displayed at merchant locations just like UPI. WHEN

DIGITAL CURRENCY IS AVAILABLE IN MY CITY?

The pilot project initially covered four cities, that is Mumbai, New Delhi, Bengaluru, and Bhubaneswar and later extended to Ahmedabad, Gangtok, Guwahati, Hyderabad, Indore, Kochi, Lucknow, Patna, and Shimla. It will expand gradually to include more banks, users, and locations after the analysis of the pilot project.

In this pilot project, RBI will test the robustness of the entire process of digital rupee creation, distribution, and retail usage in real-time. Different features and applications of the Digital Currency token and architecture will be tested in future pilots, based on the learnings from this pilot.

FEATURES OF DIGITAL CURRENCY IN INDIA

1. Digital Currency offers features of physical cash like trust, safety, and settlement finality.
2. It can be used as cash and it will not earn any interest and you can deposit it in your bank.
3. Digital Currency in India is a sovereign currency issued by the central bank Reserve Bank of India with the promise of the Governor “I Promise To Pay The Bearer The Sum Of One Hundred Rupees”
4. It is accepted as a medium of payment, legal tender, and a safe store of value by all citizens, enterprises, and government agencies.
5. Those who have no account also use this Digital Currency but if you want to get issued from a bank then there must be your account in that bank.
6. The cost of printing large currency notes by the RBI will be saved.

TYPES OF DIGITAL CURRENCY IN INDIA

RBI's Central Bank Digital Currency is classified into two types Retail (CBDC-R) and Wholesale (CBDC-W)

1. Central Bank Digital Currency – Retail (CBDC-R): Retail Digital Currency can be used by all including the private sector, non-financial consumers, and businesses. This Digital Currency version of cash is primarily meant for retail transactions. Central Bank Digital Currency can provide access to safe money for payment and settlement as it is a direct liability of the central bank.
2. Central Bank Digital Currency – Wholesale (CBDC-W): Wholesale Digital Currency is designed for restricted access to select financial institutions. It is designed for the settlement of interbank transfers and related wholesale transactions.

CBDC Wholesale has the potential to transform settlement systems for financial transactions and make them more efficient and secure which is equally important.

DIFFERENCE BETWEEN DIGITAL CURRENCY VS DIGITAL MONEY

Digital currency	Digital Money
Available like Hard Cash	Money Deposited in Bank
Can be Transferred by Token System	Can be Transferred by <u>UPI, NEFT, RTGS</u>
Do not earn Interest	Earn Interest
Liability of RBI	Liability of Commercial Banks
No need for a bank account to use	Need a Bank account to use

DIFFERENCE BETWEEN DIGITAL CURRENCY VS CRYPTO CURRENCY

Digital currency	UPI
Money Available in Token form	Money available in Bank account
Direct real-time payment	Real-time payment through bank
Regulated by RBI	Regulated by NPCI
Person-to-Person or Marchant Transfer	Bank-to-Bank Transfer
Actual Money	Its a medium to transfer Money

ADVANTAGES OF DIGITAL CURRENCY IN INDIA

1. Helps in reducing the cost of printing physical cash and its management
2. Another milestone of Digital India by achieving a less cash economy.
3. Indian Digital Payment Systems Creating competition, efficiency, and innovation in payments systems worldwide
4. Useful in cross-border transactions to minimize the monopoly of SWIFT transactions.
5. Financial inclusion up to the last person transparently.

DISADVANTAGES OF DIGITAL CURRENCY IN INDIA

1. It will take time to normalize in the huge Indian Population.
2. Difficult in auditing transactions.
3. It's not as simple as UPI, which was adopted by Indians in a very short time.
4. Need more awareness by stakeholders.
5. There are no clear guidelines for illiterate users.

COUNTRIES THAT HAVE ISSUED CBDC

Currently, very few countries launched CBDC but many more are on the Concept and Research level, you will find hundreds of CDDB launched in 2023. The following countries have issued CBDC:

Country / Region	Central Bank(s)	Announcement Year	Status
Bahamas	Central Bank of Bahamas	2022	Launched
Jamaica	Bank of Jamaica	2022	Launched
Singapore	Monetary Authority of Singapore	2022	Pilot
India	Reserve Bank of India	2022	Pilot
France	Banque de France	2022	Pilot
China	People's Bank of China	2022	Pilot

Nigeria	Central Bank of Nigeria	2022	Pilot
France	Banque de France	2022	Pilot
Eastern Caribbean Economic and Currency Union	Eastern Caribbean Central Bank (ECCB)	2022	Pilot

DIGITAL PAYMENT JOURNEY OF INDIA

Digital Payment Products	Year of Launch
Credit Card	1981
ATM	1987
ECS	1990
Online Banking Service (ICICI Bank)	1996
Bill Desk Payment Gateway	1999
RTGS	2004
NEFT	2005
IMPS	2010
RuPay Card	2012
UPI	2016
NACH	2020
CBDC	2022

CONCLUSION

As I have been working in the financial industry for a long time, I must say Digital Currency of India will be a Game Changer in India as well as worldwide. With this, users will experience a smooth and secure transaction of currency.

REFERENCES

1. Handbook of digital currency January Author- "DAVID LEE KUO CHUEN"
2. Concept note on central bank digital currency October-2022
3. <https://cleartax.in/s/digital-currency>
4. The faith for the future of money-"CHRISTOPHER GIALCAROL"
5. Blockchain and crypto coin-"Mr. JOHN DOTY"

A STUDY ON DIGITAL WALLETS PROMOTE INDUSTRIAL GROWTH

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ABSTRACT

An e-wallet also known as digital wallet refers to a device that allows an individual to make electronic commerce transactions quickly and securely. It has also evolved into a service that provides internet users with a convenient way to store and use online shopping information. E-wallets can store your passwords, credit card numbers, email contacts and vital data like your driver's license. It uses the basic concepts of Embedded Systems, an idea for changing the future of cards is proposed in this paper. Using this e-Wallet the transaction procedure can be as simple as the customer goes to the point of sale and does the purchasing and when it comes to the payment, the customer submits his e-Wallet to vendor who connects it to his terminal (PC). The vendor displays the billing information to the customer who finalizes it. The amount in the e- Wallet is updated accordingly.

Keywords: Electronic wallet, Smart card, One card solution, Mobile payments.

INTRODUCTION

Virtual cash is an upcoming technology that has seen a lot of growth in the past years. Cashless payments are now becoming a popular trend in almost every field. Electronic Wallet is the software which resides on the buyer's computer and it holds the digital cash and the digital certificate with the digital signature for billing, shipping and the payment information for online transactions. The credentials can be passed to merchant's terminal wirelessly via near field communication (NFC). It allows with a simple tap of the device onto a reader to exchange data between two devices. Traditionally, a customer sees a product examines it and then pays for it by cash, cheque or credit card. In the ecommerce world, the customer does not actually see the product at the time of transaction, and the method of payment is performed electronically. Electronic payment system (EPS) enables a customer to pay for the goods and services online by using integrated hardware and software systems. The main objectives of EPS are to increase efficiency, improve security, and enhance customer convenience and ease of use.

OBJECTIVES OF THE STUDY

- To find out the overall growth of digital wallets in India
- To assess and analyse the difference in growth across the categories of digital wallets
- To understand various problems in e-wallets.

FEATURES OF E-WALLET

- All ID information in one card
- Works with all scan types (Barcode, RFID, Strip)
- Firewall Encrypted security logic

- Universal access
- Reusability of the card is unlimited
- Current balance can be stored and read
- User authentication is provided
- Cannot be duplicated
- Multiple card features are incorporated card

E-WALLET SUPPORTED PLATFORMS

- Windows® PC running windows 7, Vista, or XP
- Apple ® iPhone ®iPad™ and I Pod ® and higher.
- RIM ®Black Berry ® 4.2 and higher.
- Windows phone
- Android Phone

E-WALLET AUTHENTICATION METHODS

Username and password PIN

Username and password has become standard for identification of individuals in world ranging from email to e-banking web passwords are independent of a physical device which makes them suitable identification.

Digital Certificates

Digital certificates were specifically designed for electronic identification and are effective in the closed system. Their value depends on the credibility of the trusted party which issues them and the procedures which must be followed before they are issued.

Biometric, voice recognition, retinal scanning and DNA matching

The new forms of identification come in the form of biological measurement. Electronic fingerprint scanning using biometric devices on PCMCIA card has already reached production.

WHERE CAN YOU USE E-WALLETS

Online Grocery Stores

All the online food and grocery store offer an e-wallets facility for a simple payment option. The e-wallets on its site can be filled up with any sum of money, starting from as low as Rs 10.

Utility Payments

Paying the electricity bill, phone bill, mobile bill and even booking a seat at the theatre can now be done.

Recharging Mobile Phones

A customer can also go for schedule recharge option where a filled e-wallet can recharge a number or DTH connection on set times of the month.

Buying online

The merchants introduced e-wallets service to its customers in addition to cash-on-delivery option.

Loyalty Redemption

The electronic wallet will give consumers real time reporting of points accrued under loyalty schemes.

Pre-emptive Purchasing

The electronic wallet performs the purchasing process for the consumer and therefore has a record of purchase made. The electronic wallet will be able to pre-empt purchasing based on habits and actually remind the consumer to make purchases on a regular basis.

BENEFITS OF DIGITAL WALLETS

Digital wallets or “e-wallets” as we call them, have seen a massive growth in popularity during the last few years. The covid-19 crisis has also led to an increase in the use of digital payments, as buyers prefer safe and contactless methods of transaction.

INCREASE SECURITY

Carrying cash at all times can be a risky decision. This is why senior citizens are common targets of small thefts or robberies. One of the main advantages of digital payments is that they are much more secure than regular cash transactions, as they require proper verification.

MORE CONVENIENT

Standing in long ATM queues just to withdraw a small amount of cash is hardly an exciting activity for anyone. However, most seniors have to face this scenario every time they step out to buy something.

SEAMLESS TRANSACTIONS

Since digital payments have been around for quite some time now, the process has become easier than ever, especially for seniors. Showrooms, malls and even small shops have now started accepting digital payments.

CONVENIENCE DURING TRAVEL

Gone are the days when we had to carry large amounts of cash during any outstation travel. Today, retailer all over the country have understood the importance of going cashless and have started accepting digital payments.

DISADVANTAGES OF DIGITAL WALLETS TECHNICAL DIFFICULTIES:

Digital any other technology-dependent programme online payments are liable to technical issues or downtime. Even while tech maintenance activities are scheduled in advance and often occur at night, they may sometimes annoy online buyers. Many organisations encounter high bounce rates, particularly when it occurs unexpectedly.

TREATS TO PASSWORDS:

There is a large risk that an online portal may access your private data or your bank account information if you are a registered user and often utilise online payments.

COST OF FRAUD:

Cybercriminals are adopting online payments as a preferred method of payments, just as more and more consumers are doing. Database exploits, phishing scams, and identity theft are all on the rise.

SECURITY CONCERNS:

There are several security dangers associated with utilising online payments, as was covered in the preceding paragraph. Important financial data and information may be readily hacked by thieves if suitable security precautions aren't taken.

TIME AND AMOUNT RESTRICTIONS:

Some firms may charge setup fees or even processing fees for consumers utilising such facilities when deploying online payment gateways.

CONCLUSION

In addition to the uses of a physical wallet, the electronic wallet needs to satisfy the core requirements of providing payment and authentication in online transactions initiated from any Internet-enabled device. Once this is achieved the electronic wallet will be extended to provide a range of "value-added" services. The electronic wallet is destined to become the virtual representation of a person on the Internet. The electronic wallet will be able to be reached from any Internet access point and will become the owner's authorized agent for e-Commerce transactions.

REFERENCES

- Au, A. & Kauffman, R. (2008). The economics of mobile payments: Understanding stakeholder issues for an emerging financial technology application. *Electronic Commerce/ Research and Applications*, 7(2), 141-164.
- Begonha, D.B., Hoffmann A. and Melin P. (2002) M -Payments: Hang up, try again. *Credit Card Management*, 15(4),40-44
- Duane, A., O'Reilly, P., & Andreev, P. (2014). Realising M-Payments: modelling consumers' willingness to M-pay using Smart Phones. *Behaviour & Information Technology*, 318-33
- Lu, Y., Yang, S., Chau, P. & Cao, Y. (2011). Dynamics between the trust transfer process and intention to use mobile payment services: A cross-environment perspective. *Information & Management*, 48(8), 393-403.
- Mallat, N. (2007). Exploring consumer adoption of mobile payments -A qualitative study. *Journal of Strategic Information Systems*, 16(4), 413-432

DIGITAL TRANSACTION PROMOTE INDUSTRIAL GROWTH HOW TO USE AMAZON PAY FOR YOUR ONLINE STORE

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Abstracts

A Comprehensive Review of the Payment Service" by Tom Taulli, published on Forbes.com, March 2021. The article provides an overview of Amazon Pay, including its features, benefits, and limitations. The author also discusses the competitive landscape for digital payment services and how Amazon Pay compares to other providers. "How to Use Amazon Pay for Your Online Store" by Syed Balkhi, published on WPBeginner.com, October 2021. This article is a step-by-step guide for merchants who want to integrate Amazon Pay into their online store. The author explains how to set up Amazon Pay, customize the payment button, and test the checkout process. "A Convenient Way to Shop Online" by Mark Stockley, published on NakedSecurity.Sophos.com, December 2021. The article highlights the security features of Amazon Pay, such as two-factor authentication and fraud detection. The author also discusses the benefits of using Amazon Pay for consumers, including faster checkout and access to exclusive deals. "Amazon Pay Expands Its Services to Compete with PayPal and Stripe" by Sarah Perez, published on TechCrunch.com, February 2021. The article reports on Amazon Pay's recent expansion into new markets and its efforts to attract more merchants to the platform. The author also discusses how Amazon Pay's fees compare to those of other payment providers. "How Amazon Pay is driving the Future of Mobile Payments" by Kevin Lee, published on MobileAppDaily.com, January 2022. This article discusses the increasing popularity of mobile payments and how Amazon Pay is positioning itself to be a leader in the space. The author highlights some of the key features of Amazon Pay's mobile app and how it is streamlining the payment process for consumers.

Introduction

With the emergence of the Internet and the progression of technology came the appearance of commercial websites. One of the biggest commercial sites in the world is Amazon. Amazon was incorporated in 1994 by Jeff Bezos and was initially named Cadabra; it was launched to the public as a website in October 1995 with the name Amazon (Byers, 2006). The idea grew when Jeff Bezos learned that the Internet was experiencing 2,300 percent annual growth; he also selected Seattle as the site of the company headquarters, because he wanted to be near one of the biggest book wholesalers, located in Roseburg, Washington. Today, Amazon has a significant number of stores, including Music, Video, Home Improvement, Software, Video Games, Kitchen, Camera, Sports, Gourmet Food, Health, Personal Care, Jewellery, Beauty, TV and Electronics. Moreover, Amazon has a number of branches around the world, which are located in the United States, United Kingdom, Germany, France, Japan, Canada, Italy, Spain and China. Finally, the essay will conclude by providing a recommendation to enhance the services provided by Amazon.

Objectives

- This article should provide an overview of what Amazon pay is, how it works, and its benefits for both merchants and customers. T
- This article should provide step-by-step instructions on how to set up Amazon pay on an e-commerce website or app including creating an Amazon pay account, integrating the Amazon pay API.
- Explain the fees associated with using Amazon pay including transaction fees, cross-border fees, and chargeback fees, and provide tips for merchants to optimize their use of the service.
- This article should compare Amazon pay to other popular payment methods, such as PayPal, Apple pay, and Google pay.

Amazon's competitors

Amazon is one of the largest commercial sites in the world; however, after the dot-com success of the nineties, a significant number of competitors appeared who are trying to benefit from e-commerce via the Internet. Amazon has several branches in different parts of the world, and the competition differs from one country to another. For example, in the United Kingdom, there are a significant number of competitors such as eBay, Argos, and Tesco. Moreover, in the Middle East, there are a number of new commercial sites similar to Amazon, such as Souq.com. In addition, there are other competitors in various places around the world, such as Ubid.com and Bids.com. Some of these competitors provide some features which are not available on Amazon (such as making the payment through PayPal), which has triggered an increase in the competition between them.

Advantages

- Convenience
- Security
- Familiarity
- Rewards
- Flexibility

Disadvantages

- Limited merchant acceptance
- Limited currency options
- Transaction fees
- Withdrawal fees
- Limited customer support
- Types of offer and coupons

Offers

- Percentages off
- Toller off
- Free shipping
- Buy one get one
- Limited time offer
- Referral offer

Loyalty Programs

- Coupons
- coupon method
- Printable coupon
- Online code
- Mobile coupon
- Direct mail Coupon
- Social media coupon

Conclusion

Amazon pay is digital payment service offered by Amazon that allows customers to use their Amazon account to make payments on third-party websites and apps. Amazon pay is designed to simplify the checkout process for customers and increase conversion rates for merchants. Amazon is available in many countries around the world and supports multiple payment methods, including credit and debit cards, bank accounts, and Amazon pay balance. Merchant who use Amazon pay benefit from Amazons expertise in fraud prevention and customer service as well as access to Amazon e-commerce ecosystem and strong brand recognition give it a competitive advantage.

References:

- What is Amazon pay? how to use Amazon payment service by tom Fogden published on tech.co (<http://tech.co/payments/amazon-pay>)
- Amazon pay ; everything you need to know by Roberta Pescow published on blockonomi (<https://blockonomi.com/amazonpay/>)
- Amazon Pay vs PayPal which one is right for your business? by Syed Balkhi, publish on WPbeginner (<https://www.wpbeginner.com/beginners-guide/amazon-pay-pay-vs-paypal-which-one-is-right-for-your-business/>)
- Amazon pay and its role in online payments by Gary Eastwood, published on tech radar (<https://www.techradar.com/news/amazon-pay-and-its-role-in-online-payments>)

IMPACT OF DIGITAL TRANSACTION IN SBI

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ABSTRACT

In the current scenario the world moving towards the digitalization. The current study focused on the impacts of digital transaction in state bank of India and types of digitalization used by the customers of sbi banks. Digital adaptation started off as an option but as evolved into a necessity in every bank's agenda . India's stands second in the world in terms of internet users next to China. The accelerated pace of internet penetration in India has opened now new opportunities for all baking and business industry in particular. Banks are now using electronic mode of delivering services and transaction methods to the customers.

KEYWORDS: digital wallet, UPI, USSD transfer, Net banking

INTRODUCTION

State Bank of India (SBI) a Fortune 500 company is an Indian Multinational, Public Sector Banking and Financial services statutory body headquartered in Mumbai. The rich heritage and legacy of over 200 years, accredits SBI as the most trusted Bank by Indians through generations. SBI, the largest Indian Bank with 1/4th market share, serves over 45 crore customers through its vast network of over 22,000 branches, 62617 ATMs/ADWMs, 71,968 BC outlets, with an undeterred focus on innovation, and customer centricity, which stems from the core values of the Bank - Service, Transparency, Ethics, Politeness and Sustainability. The Bank has successfully diversified businesses through its various subsidiaries i.e., SBI General Insurance, SBI Life Insurance, SBI Mutual Fund, SBI Card, etc. It has spread its presence globally and operates across time zones through 229 offices in 31 foreign countries. Growing with times, SBI continues to redefine banking in India, as it aims to offer responsible and sustainable Banking solutions.

A digital transaction is a seamless system involving one or more participants, where transactions are affected without the need for cash. The digital transaction involves a constantly evolving way of doing things where financial technology (fintech) companies collaborate with various sectors of the economy for the purpose of meeting the increasingly sophisticated demands of the growing tech-savvy users.

As the needs of investors and financial service users become more complex, there is a demand for effective tools to simplify the processes and transactions carried out by end-users. It is inevitable that financial institutions would have to increase the number of digitized services and offerings, given a rise in the use of automated services. Implementing technology in the financial industry is a necessity for the survival of businesses as customers seek lower-cost alternatives to traditional financial services. Fintech companies have led the revolution in transforming the financial sector by digitalizing the end-client's transactional eco-system.

OBJECTIVES

- To reduce the costs and risks of handling cash and to increase the ease of conducting transactions.
- Easy and convenience to use

- The increase in money movement and online business contributes to the progress of the economy.
- Safety and efficient tracking
- Increase transparency among monetary transactions among people.

TYPES OF DIGITAL TRANSACTION USED IN SBI

- Internet banking
- BHIM SBI Pay
- SBIPay
- Mobile banking
- Yono
- Whatsapp Banking
- Cyber security

IMPACT OF TECHNOLOGY ON BANKING SECTOR

Banking industry is a backbone of Indian financial system and it is afflicted by many challenging forces. One such force is revolution of information technology. In today's era, technology support is very important for the successful functioning of the banking sector. Technological innovation began in the Banking sector back in the 1980s. Technology has drastically improved the operational efficiency of the banking industry. India has introduced a number of options to make fund transfers easy. Using Real Time Gross Settlement (RTGS), electronic instructions can be given to banks to transfer funds to another bank account. In this scenario the Indian banking sector will continue to grow, and digitization will continue. The pace of digitization of financial transactions in India continues to gather pace. It is estimated that the total payments transmitted via digital payment instruments will be in the range of USD 500 billion by 2020, which is approximately 10 times the current levels. Banking today is a flourishing industry, focused on technological innovation. Hence, internet banking has emerged as the biggest focus area in the "Digital Transformation" agenda of banks.

DIGITAL TRANSFORMATION STRATEGIES IN SBI

SBI has been actively leveraging the capabilities of artificial intelligence to digitally transform its banking operations. For instance, the bank launched video Know Your Customer based savings account opening via its YONO mobile banking app. The feature uses AI and facial recognition technologies to allow customers to open a digital savings account through the app. AI based tools also enable the bank to identify branches that are prone to fraud and suspicious chargeback complaints.

SBI CUSTOMERS CAN MAKE DIGITAL TRANSACTION IN FOUR EASY WAYS

Post-demonetisation, cashless payment methods have become both a necessity as well as an acceptable method of payment for rural and urban populations alike. To support the surge in digital transactions, State Bank of India (SBI), the country's largest bank, has responded with new methods to make cashless transactions. Ranging from the popular digital wallets to options for transferring funds through SMS, a wide variety of payment options are available for SBI customers today. While SBI offers most of these services free of cost, a small fee is charged on a per-transaction basis in some cases. Read on to know some simple and secure methods to go cashless.

DIGITAL WALLET

Digital wallets are the easiest option to make small payments. SBI's digital wallet service, called 'State Bank Buddy', can be accessed through a mobile app and is available in 13 languages. With State Bank Buddy, you can simply send or ask money from any of your contacts even if they do not have an SBI account. The service also allows you to pay bills, transfer cash to your account, shop online and book movie or flight tickets. Before you use SBI's digital wallet, you must transfer funds from your account into the digital wallet. To use this mode of digital payments, you will need access to Internet data services either through a wireless facility or 4G/3G/GPRS/Edge, SBI said.

USSD TRANSFER

The USSD (Unstructured Supplementary Service Data) transfer system can be used by people who don't own a smartphone or don't have access to the Internet. This method of transferring money is universal to all phones and SBI customers can sign up by sending the text "MBSREG" through an SMS to 9223440000 or 567676. Upon doing so, the user will receive a User ID and a default MPIN over SMS. Using USSD, a user can do things like enquire balance in account, get a mini statement of the last five transactions or transfer funds to accounts with SBI.

UPI

This method gives a special emphasis to security. Transferring funds using NEFT or mobile banking requires the sender to reveal his or her account number to the receiver but with UPI the user will be able to send money using a unique username. "SBI Pay" is a payment solution not only for SBI account holders, but account holders of all banks who are part of UPI, to send and receive money from their smartphones. This happens through a virtual payment address that acts as a unique identifier. No additional details other than the virtual payment address (VPA) are required from the user's side.

NET BANKING

Net banking is a well-established way to access all your banking facilities. An SBI user is required to activate net banking via the Internet and create a unique name and password for further transactions. Users can transfer money, check statements, manage beneficiaries and apply for various banking privileges using the payment method. SBI net banking also allows users to apply for loans, fixed and recurring deposits besides a slew of other banking and investment options.

CONCLUSION

In the development of Indian Economy, Banking sector plays a very important and crucial role. With the use of technology there had been an increase in penetration, productivity and efficiency. Banking is an integral part of financial activity today and digital banking in India is highly advanced. The study focused on the Banking technology impact on financial performance of public and private banking sector. It has been considered the banking digital transactions of ATM, NEFT, RTGS and Mobile Transactions of the SBI from the public and ICICI bank of Private sector banks and their technology index has been designed with the help of the digital transactions and measured the relationship of the banking technology with the operating profit and the business per employee. Technology is going to hold the keys to future

of banking. So, banks should try to find out the trigger of change. Indian Banks need to focus on swift and continued infusion of technology. However, there is need for an education drive both for the customers as well as the merchants so that proliferation of digital payments to increase operational profitability of the sector.

REFERENCES

- Godfrey EK (2012) The IT Productivity Paradox: Evidence from the Nigerian Banking Industry.
- Raju T (2016) Impact Of Information Technology (It) On The Banking Sector. International Journal Of Current Advanced Research Research.
- Hangam MV, Narayana S (2016) Productivity Analysis Of Selected Banks In India. International Conference on Research avenues in Social Science.
- Namita R, Gupta M (2011) Impact of IT on Indian Commercial Banking Industry: DEA Analysis. Global Journal of Enterprise Information Systems.
- Anbalagan (2017) New Technological Changes in Indian Banking Sector.

IMPROVING THE NEW PRODUCT DEVELOPMENT USING BIG DATA A CASE STUDY OF A FOOD COMPANY

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Abstract

Recently, the concept of Big Data (BD) has evolved and started to play an essential role in the advancement of new product development (NPD) in various sectors contributing to value creation, idea generation and competitive advantage. However, limited research has been done on how the food industry can exploit BD to improve the processes involved in NPD. This research aims at understanding the use of BD in New Food Product Development (NFPD). It helps to find relevant information and integrate sustainability to the early stages of the NPD process in the food industry.

Keywords: New food product development, big data analytics, Food Supply Chain, Food & Drink, Beverages, Sustainability

Introduction

An effective new product development (NPD) is widely considered as a way for food companies to gain competitive advantages, in the cutthroat business environment (Santoro et al., 2017). The frequent changes in technologies, specifications and market patterns force them to invest in new food product development (NFPD) activities to either gain profits or survive (Lascom, 2018). Developing a new food product or reformulating a current product can be a painful process; various factors must be considered such as factory size, capacity, layout, its hygiene design, supply chain flow and the equipment specifications (Costa & Jongen, 2006). In this context, to ensure profitability and gain market share, food companies could accelerate the NFPD process and take the lead by being the first in launching the product. This situation is emphasised by the era of big data (BD) (IBM, 2017) with the increasing amount of data available to the business. According to IBM (2017), 90% of the data in today business was generated in the last 2 years.

1.New Food Product Development in the Era of Big Data

The food industry is under tremendous pressure to meet rapidly-changing consumer tastes and demands (Rudder et al., 2001). Addressing these changes with new products is a key factor in maintaining and gaining market shares of a food company. In the era of BD (IBM, 2017), the huge amount of data, the relentless rapidity, and the diverse richness of data generated transforms the NFPD process. Big data provides companies with ideas that can lead to new concepts, solutions, and engines for growth (Zhan et al., 2018). By studying the literature, we have identified fundamental principles of big data, its benefits and challenges in the context of NFPD.

Fundamental Principles of Big Data

The initial phase of product development cycle is centred on the recognition and creation of new ideas or concepts (Cooper, 2014). BD can support this phase through collection of external

information of customers' requirements or market trends. This information can be integrated into the NFPD process (Davenport, 2009). For example, the processed data source will span from food business news, scientific and academic foodrelated research papers, social media, or e-commerce. These collected data from various sources indicate the next generation technologies or developments. Business insights data inform in advance about the future disruptions and gives an opportunity for the NFPD team to create a product, which would be appropriate to future market needs. It provides stakeholders with the chance to be more proactive rather than reactive to market developments.

Diagram 1.1
Big data sources for Innovation Process and NPD



Table 1.1 Case study summary

Main Points	□ Explanation
Project Aims	□ To develop a new lemonade drink with less than 5g sugar per 100 ml
	□ Developing a recipe that can be replicated to different consumers
	□ To offer consumer with a product similar to original lemonade
Business Opportunities	
	□ Creation of new less sugar category and becoming an innovation leader in the key markets.
	□ Keeping a strong focus on innovations to shake up a juice drinks category
Product Category	
	□ Carbonated lemonade fizzy drinks (2 litre PET bottle)
Consumer Insights	
	□ The rising level of Type 2 diabetes and obesity among the UK population
;	□ The consumer will not compromise on the taste of lemonade.

The consumer will not compromise on the taste of lemonade.

Lemonade Supply Chain

Ingredients and packaging are supplied to the company by an approved list of suppliers. The ingredients and packaging undergo quality testing before being released for production. All the main ingredients (i.e., water, sugar, citric acid, sodium citrates, potassium sorbate, and sucralose) are mixed in a blender and pumped to bottle filling stations. It consists of seven NPD steps before the product is commercially produced: concept generation, product concept, prototype, product approval, production process development, launch and post-launch review.

Big Data Gathering, Synthesis and Use

The company aims to integrate sustainability during the product development phase, and they follow the model as shown in Figure 4. The model focuses on five principles which new food product needs to satisfy: Quality, Environmental impacts, Performance, Cost and Social Impacts. The company collected and synthesised BD to extract meaningful information from multiple sources.

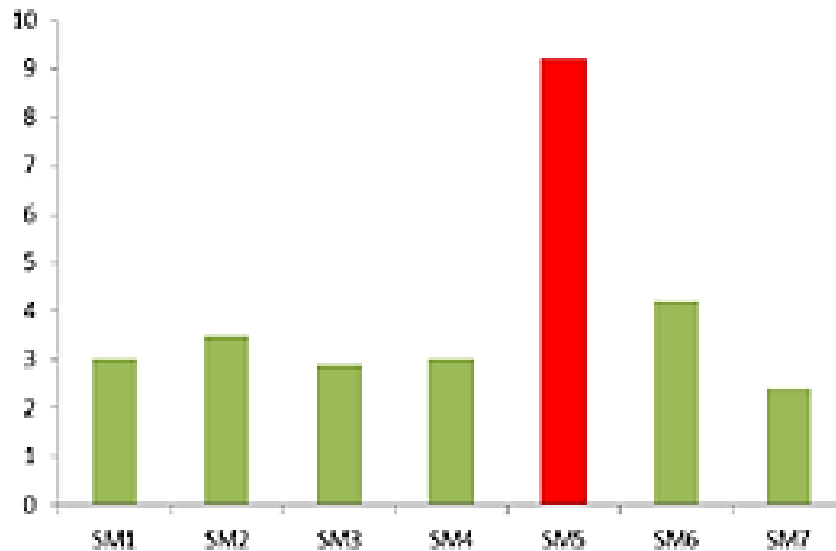


Picture 1.2 Sustainable Product Development

Sugar Level

Seven brands (SM1, SM2, SM3, SM4, SM5, SM6, and SM7) of two litres lemonade PET bottles were analysed using data analytics. These seven brands are selected as they have been identified as top seven priority products to the NPD team. These seven brands are freely available in the top seven UK supermarket. Among these brands, the sugar level of six brands were levy-liable and one was discarded (SM5) since it had more than 5g/100ml of sugar.

Chart 1.1 Number of grams of sugar per 100 ml



Conclusion

This research demonstrates the integration and application of BD in a food company. The results shows that using BD can accelerate the NPD process and expedite the launch of the product in relatively lesser time as supposed to a traditional NPD approach. It also supports stakeholders to identify any shortcomings of food products and address them earlier in the product development phase leading to massive saving on the cost involved in launching new products. However, BD also has some drawbacks such as security, privacy and confidentiality of sensitive business data. However, the case study was only limited to the selection of the best available recipe in the UK market. We also have not discussed other aspects relating to the use of BD such as security or privacy.

Reference

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<https://in.docworkspace.com/d/sAHMKpvX8wYFq4-6M5q-nFA>

WORLD 21-st CENTURY NEED AND DEVELOPMENT OF VENDING MACHINES

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ABSTRACT

Vending machines have been around for over a century, but their significance and role in the 21st century have evolved dramatically. The world has witnessed unprecedented technological advancements and changing consumer behaviors, which have created a pressing need for the development of vending machines that can cater to the modern-day needs of the customers. One of the primary requirements of vending machines in the 21st century is their ability to offer a wide range of products and services, beyond the traditional snacks and beverages. Modern vending machines need to cater to various customer demands, including healthy and organic foods, gluten-free options, and various dietary preferences. Additionally, vending machines must provide value-added services such as phone charging, Wi-Fi, and other amenities that cater to the needs of busy customers.

Keywords: Vending machine, Finger Print; Advertising platform; Automated machine.

INTRODUCTION

A vending machine is an automated machine that provides items such as snacks, beverages, cigarettes, and lottery tickets to consumers after cash, a credit card, or other forms of payment are inserted into the machine or otherwise made. The first modern vending machines were developed in England in the early 1880s and dispensed postcards. Vending machines exist in many countries and, in more recent times, specialized vending machines that provide Less common products compared to traditional vending machine items have been created.

OBJECTIVE

- To provide high quality service with competitive prices to attract large number of customers.
- To satisfy the needs and requirements of customers, stakeholders and project sponsors.
- To develop appropriate plan for managing financial and human resources for implementation, timescale and workable strategy.
- To provide a services/product within the reach of every potential customers.

VENDING MACHINE MARKET SIZE IN INDIA

Welcome to our brand new post on Vending Machine Market Size and scope in India. We will be talking about how big the market is and what are the growth opportunities available in the vending machine business. The world grows more globalized when more countries and areas become politically, culturally, and economically intertwined. This allows for the market size to expand, exponentially. Money, products, materials, information, and people flow more swiftly across national boundaries today than ever. Advances in technology have enabled and accelerated this flow and the resulting international interactions and dependencies. These technological advances have been especially pronounced in transportation and

telecommunications. This is why you can get a cup of rich Turkish coffee locally or even some grocery goods from all around the world at your local supermarket!

Globalization has thus increased the market size for not only vending machines but for all goods and services. For any business to grow, market size is a very important factor. With vending machines gaining popularity by the day, the market potential is enormous. The Indian market is now ready for smart vending machines and so is the world.

FUTURE OF VENDING MACHINES IN INDIA

According to reports by Research And Market and 6WResearch, India's Vending Machine Market is expected to witness substantial growth of 14.9% CAGR from 2020 to 2026. Vending machines were first implemented in India in the government transportation and hospitality sectors to allow consumers to obtain vital goods even while the stores were closed. Integration of IoT and cloud infrastructure into vending machines to make them smart and intelligent. The industrial vending machine market has become better with the emergence of advanced technology. The integration of RFID tags and cloud infrastructure into industrial vending machines is expected to create growth opportunities for the market in the coming years.

ADVANTAGES OF VENDING MACHINES

- Low Overhead Costs
- Easy Maintenance & Management
- Keeps Employees Happy
- Improves Team Productivity
- Employees Stay On-Site
- Employees Stay On-Site
- Customizable Options
- Promotes Health & Wellness
- Quick & Easy Access
- Increased Flexibility

DISADVANTAGES

- Vending machines require high maintenance
- Vending machines are constantly subjected to vandalism that may cause the machines to malfunction or be damaged.
- Machineries are bound to malfunction without regular maintenance services. Thus regular check on the machines have to be conducted.
- Vending machines requires electricity to function and thus the cost of making the products available to consumers 24 hours would be very high and costly.

NEW INNOVATIVE CONCEPTS FOR VENDING MACHINE IN WORLD:



Fig:1 or Pie:1 Future Vending Machine

Most people probably think of vending machine companies as offering snacks, drinks, and some useful odds and ends. They machines are part of the background, handing when needed but otherwise not given much thought. But even though people may take them for granted, vending machines are far from stagnating. Growth in the market is accelerating, with an estimated CAGR of 17% for the period 2019-2023 but a predicted growth rate of over 26% for 2023. Expect a market value increase of around \$10 billion over the next 4 years.

The increasing number of options for cashless transactions is helping to drive business for vending machine companies, making it easier for customers to purchase items without having cash on hand. The machines are also becoming increasingly popular in the retail sector, as they're self-serve and don't require staff on hand to help customers check out.

However, another factor influencing the market is innovation. Snacks and drinks may be common fare, but they're not the only products being sold. Around the world, consumers can find everything from branded merchandise, hot soup, bait, and even things like live crabs or solid gold. While Japan has a reputation for strange and interesting vending machines, it doesn't have a monopoly on them. From the US to Saudi Arabia to Singapore, vending machine companies are finding new and creative ways to do business. Here are some of the more unusual things being sold in vending machines today.

CONCLUSION

A novel vending machine was developed. The design emphasis was focused on the product retrieval system and the chute type driven by rack and pinion gear system was the choice made. Material for the machine was selected based on environmental impact and non-contamination of food items under varying operating conditions. The control system thought not discussed in this paper was developed to offer a friendly customer service platform. Safety and security of the machine is based on fingerprint sensing and alarm system. Purchasing is

possible thought three options, use of a credit card, mobile phone and cash. The machine provides an advertising platform for vendors through online platforms, making it a user-friendly vending machine.

REFERENCES

- Hui, Mary (3 January 2018). "Vending machine for homeless just launched in U.K., to debut in U.S. cities". Chicago Tribune. Retrieved 31 May 2018.
- Jaffe, Eric (December 2006). "Old World, High Tech" (World's First Vending Machine, scroll down to read". Smithsonian.com. Retrieved 4 April 2017.
- "Automatic Vending Machines". Highbeam Business. Archived from the original on 12 February 2010.
- Kerry Segrave (12 July 2002), Vending Machines: An American Social History, McFarland, ISBN 978-0-7864-8159-0
- "What's "Tei-Park". Archived from the original on 29 June 2013. Retrieved 5 June 2017.

A STUDY ON THE PROBLEMS FACED BY THE TRIBAL TEA LABOURERS IN THE NILGIRIS DISTRICT, TAMIL NADU, INDIA

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Abstract

Working class requires proper health and safety measures for better work effectiveness. The study concentrates on the tea labourers belonging to the traditional tribal communities of the Nilgiris district of South India. Tea plantation and production plays a significant role in Indian economy. Tea plantation and production footed well in the district due to the efforts of tribal people who structured the forests into cultivation lands. The study analyses the problems faced by the tribal tea labourers in their work place. The researcher found that the awareness level of the tribal tea labourers about the trade unions, labour welfare measures etc., are very low. There are some traces of slavery system like human rights violations, low wages for long working hours etc. Suggestions like enrolling all the tribal tea labourers in trade unions, creating awareness about the reservations for the tribal communities are recommended in this study.

Keywords: *Tea Labourers, Tribal Tea Labourers, Tea Plantation, Health and Safety Measures.*

Introduction

Tea plantation is one of the major sector in Indian Exports. Tea plantation and production is carried out in different parts of our country. North Eastern States contribute more in tea plantation and production. North Eastern States, Southern states like Tamilnadu, Kerala, Karnataka and some other states also produce Tea. Tea production in our country is about 1111.76 Million Kg in 2012 but during 2001 it is around 853.7 Million Kgs only. This shows the growth of tea production in India. The total area for tea plantation has also increased from 509,806 Hectares to 578,000 Hectares nationwide from 2001 to 2012. South India which includes Tamilnadu, Kerala, Karnataka and Andhra contributes around 172000 Hectares. In which the district of the Nilgiris alone constitutes 90000 Hectares of cultivation area. The tea produced per annum is around 30 Million Kg.

In Tamilnadu, Tea cultivation takes place in the districts the Nilgiris, Valparai, Kodaikanal, Manjulai of Tirunelveli etc. The Nilgiris plays a major role in tea plantation in TamilNadu. The efforts for tea plantation have been taken by the British Government during their rule. Migrants, repatriates, refugees and tribes who are the sons of the soil and other local people were employed by the British government to make the tea plantation as a large sector. Tribal labourers from primitive tribal groups like Kurumbas and Irulas are common in and around the tea estates of Kotagiri region. In Gudalur and Pandalur region, Paniyas and Kattunaickens are involved in tea plantation works as labourers. At present, there are around 17 INDCO (Industrial Co-operative

Tea Factories) and around 12 familiar trade unions for tea labourers have been functioning in the district.

During the field review, it was clearly understood that the condition of tribal tea labourers are pathetic as they were totally economically and socially backward from the current generations. They lack in knowledge about the labour law and in fact they do not know the term “labour law”. Majority of the tribal tea labourers were not enrolled in any trade unions. This is also one of the reasons for being crushed by the tea companies which were run by private bodies. They were not able to mention their actual working timings. It differs from day to day. But it is very clear that they work for more hours which was against the labourer working time advised by the labour laws. Their previous generation might be involved in some traditional occupation of the tribes, but due to the economic reasons and sometimes by influence of neighbouring tea factories they were forced to be employed as tea labourers. The total tribal population in the district is 32,813 in which the rural population is 22,752. Around 70 percent of the tribal population reside at villages and inside forest premises. The tribal groups which have been concentrated for the study includes Kurumbas, Irulas, Todas, Kattu Naickans, Kotas, and Paniyas. Kotagiri, Coonoor and Gudalur Taluks are the study area taken consideration.

Review of Literature

Kakali Hazarika (2012) studied about the pathetic conditions of the tribal tea labourers . He collected data from 1500 labourers as primary data from the tea estates of Assam. Secondary data was collected from various journals, publications, companies, books etc. He identified that the labourers are working under severe exploitations.

Shyamal Chandra Sarkar (2013) studied the poor condition of tea labourers and he mentioned about their conditions in a sorrowful manner. He stated that the labourers were persecuted by the management. He also mentioned that their socio-economic status seems to be worse. They do not have proper medical facilities and education facilities. Residential conditions are poor without proper drinking water facilities.

Objectives of the Study

- To ascertain the socio-economic profile of the Tribal tea labourers
- To examine the problems faced by the tribal tea labourers.

Research Methodology

The target respondents of this survey are the tribal tea labourers of the Nilgiris District. The interview schedule has been framed based on the objectives of the study. The questions are mainly related to the problems faced by the tribal tea labourers. The sample size is 120 as it is the population of tribal tea labourer could not be easily identified in the tea estates. Random sampling technique is adopted due to this reason. The collected data have been analysed by employing simple percentage method, chi square test and correlation test.

Data Analysis and Interpretation

The role of tribes is unavoidable in tea plantation and production as majority of the tea estates are located nearby the tribal settlements. Tribes and repatriates are employed in large numbers in tea estates. Besides their population, they face many problems related to safety, hygiene and economic factors. The tribal tea labourers are not much aware about the labour welfare and also about trade unions. Majority of the labourers from small tea estates were not enrolled in trade

unions. The data are collected from the 120 tribal tea labourers from different tea estates of different locations.

Table No-1.1 Demographic Details

S.No	Particulars	Classification	No.of Respondents	percentage
1	Age	19 - 25	7	5.83
		26 - 35	51	42.5
		36 - 40	39	32.5
		41 - 50	15	12.5
		51 and Above	8	6.67
2	Gender	Male	69	57.5
		Female	51	42.5
3	Educational Qualification	Uneducated	27	22.5
		High School	78	65
		Higher Secondary	12	10
		Graduates and Others	3	2.5
4	Monthly Income	Below 5000	30	25
		5000-10,000	90	75

Source: Primary data collected by the researcher

Interpretation

Table 1.1 explains the demographic factors of the tribal tea labourers who respond the survey through questionnaires, discussions and interviews. Among 120 respondents 5.83 percent of the respondents are under the age group from 19 to 25. 42.5 percent of the respondents are at the age group of 26 to 35. 32.5 percent of respondents come within the age group of 36-40. 12.5 percent of the respondents are under the age group of 41 to 50 and the remaining 6.67 percent are above the age of 55. 57.5 percent of the tribal tea labourers are male and the remaining 42.5 percent of the respondents are female. 22.5 percent of the respondents are uneducated, 15.83 percent of the respondents have completed their primary education. 36.67 percent of the respondents have not completed SSLC (10th Standard) but crossed primary education. 15 percent of the respondents have completed SSLC but not HSc (12th Standard). 10 percent of the respondents have completed their higher secondary education. No respondents have undergone any technical courses or graduation.

Table 1.2 Problems Faced by Tribal Tea Labourers

S.No	Problems	particulars	No.of Respondents	Percentage
1	Safety measures from Insect and animal attacks	Not at all	15	12.5
		To a little extent	89	74.2
		To a considerable extent	16	13.3
		To a greater extent	0	0
2	Consideration in working hours for dense forest region	Not at all	92	76.7
		To a little extent	28	23.3

		To a considerable extent	0	0
		To a greater extent	0	0
3	Witness on bonded labour/ Slavery system in any form	Not true in any case	6	5
		In some cases	83	69.2
		In most of the cases	25	20.8
		In almost all the cases	6	5

Source: Primary data collected by the researcher

Interpretation

Table 1.2 depicts that the safety measures for insect bites and animal attacks were not much satisfied by the tribal tea labourers. Around 12.5 percent of the labourers mentioned that there is no safety measures obtained in their tea estates. 74.2 percent of labourers states that the safety measures were up to a little extent. 13.3 percent of labourers mention that their tea estate management provides safety measures to a considerable extent. The table also reveals that the tribal tea labourers who reside at very dense forest area are not given any consideration in their work timings. 76.7 percent of the tribal tea workers say that they are not let to go home before the work time completes even though their home is in the dense forest premises. Only 23.3 percent of the labourers told that their estate management considers the work timings to a little extent. The table depicts that 5 percent of the labourers never witnessed any form of slavery system in their work area. Around 69 percent of the labourers mention that slavery systems still prevails in their estates in some cases. 20 percent of the labourers have witnessed the slavery system or bonded labourer system in many cases in their estates.

Findings

- ❖ Majority of the respondents are coming under the age group of 26-40.
- ❖ The numbers of male tribal tea labourers are large in number when compared to the female tribal labourers. But the difference in ratio between these two genders is just 5. This shows that the female are also permitted to work in a large number in tribal community.
- ❖ 77.5 percent of the total respondents are educated at least up to primary education. Only the remaining 22.5 percent are totally uneducated.
- ❖ When looking towards the income of the tribal tea labourers, none of them receive more than 10,000 per month as salary or wages. Their income is comparatively very low when compared to the other labourers in different sectors. It has been found out that only a minimum level of safety measures has been taken for the insect bites, animal attacks and water borne diseases.

Suggestions

- The tribal tea labourers work in the tea estates in spite of health issues like water borne diseases (Cholera, Typhoid etc.) and dangers due to insects, reptiles and animals. But due to lack of education, lack of awareness about society and ignorance, they are pulled inside the tea estates as labourers. They are not able to move towards other jobs as their only option is tea estates which nearby their tribal settlements.
- The government and the trade unions in the district have to take efforts to create awareness about the labourer laws, health and safety measures which are the basic rights of the tea labourers.

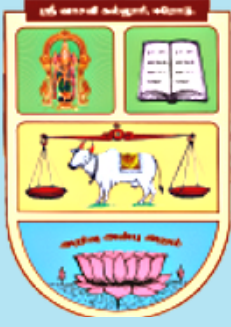
- The government and the local NGOs have to concentrate on the tribal children's education. The study reflects the poor education rate of the tribal children in the district.
- The tea estate managements have to concentrate on the safety of the estate labourers. Many tribal tea labourers reside inside the dense forest which would be hard to reach at night times. So it would be helpful if the management considers the work timings of those tribal tea labourers.

Conclusion

It could be concluded that the tea plantation and production sectors have to be monitored by the government constantly. The labourer laws have to be implemented in all the small- and large-scale tea industries in the district. The tribal tea labourers has to enrolled in trade unions and their socio economic conditions have been uplifted by initiating them to concentrate on their children education. The government has to monitor whether any human rights violations are witnessed in the workplace of the tribal tea labourers. The government has to inspect not only the production units but also the tea estates. Tea estates are the places where there are more possibilities for human rights violations. Health and safety measures have to be inspected by the labourer welfare departments and the labourers have to be educated about the safety measures. Tribal people never prefer to be a part of the society. Majority of the tribes resides within their settlements in the forest regions. So, this study has been conducted to bring out their problems and issues faced in their day-to-day life. The researcher concludes by mentioning that they are also the part of this society though they don't realise it so far.

References

- Kurian, T. Socio-Economic Background and Consumption Pattern of Women Workers in the Tea Industry in Munnar, Idukki District. *M Phil, Dissertation, Department of Applied Economics, Cochin University of Science and Technology, Cochin* (1990).
- Hazarika, K. Tea Tribes are Lagging behind in the Process of Urbanization. *International Journal of Trends in Economics Management and Technology* 1 (6) (2012) 2–6.
- Sarkar, S.C. The Condition of Tea Garden Workers of Jalpaiguri District in Colonial India. *International Journal of Advance Research* 1 (8) (2013) 14-25.
- Amsaveni, R., Ilavarasi, J. and Gomathi, S. A study on job satisfaction of women workers in tea estates with special reference to the Nilgiris District Prabhanda. *Indian Journal of Management* 6 (10) (2013).
- Srinivasan, M.G. A Study on Workers Perception about Health, Safety and Welfare Measures in the Nilgiris District. *International Journal of Scientific and Technical Advancements* 1 (4) (2015) 51-56.
- Srinivasan, M.G. A Study on Problems of Tea Plantation Workers in the Nilgiris District, Tamilnadu, India. *International Research Journal of Social Sciences* 5 (1) (2016) 8-14.
- Hariharanand, N.P. and Siva Kumar, S. A study on the economic status of the workers in large tea estates with special reference to the Nilgiris district of Tamilnadu in India. *IJABER* 12 (3) (2014).
- Singh Parduman. *Social Security Systems in Developing Countries*. Friedrich Ebert Stiftung, New Delhi, 1997.
- Nayar Depak. Livelihoods and Rights. *The Indian Journal of Labourer Economics* 46 (1) (2003).



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