New Horizons in Commerce, Management and Information Technology

Editors

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Dr. Rizwan Sayed

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Preface

Welcome to the exciting world of commerce and management, where innovation, strategy, and adaptability intersect to shape the future of business. This edited volume, "New Horizons in Commerce and Management," is a culmination of diverse perspectives, scholarly insights, and practical wisdom aimed at navigating the ever-evolving landscape of commerce and management. In today's rapidly changing global economy, staying ahead requires more than just traditional approaches. It demands a keen understanding of emerging trends, disruptive technologies, and evolving consumer behaviors. This book endeavors to shed light on these dynamic forces, offering fresh perspectives and cutting-edge strategies to empower both scholars and practitioners in the field. The chapters within this volume are authored by esteemed scholars and industry experts who bring a wealth of knowledge and experience to the table. Through their contributions, readers will explore a wide array of topics, ranging from digital transformation and sustainable business practices to strategic leadership and organizational agility. One of the key objectives of this book is to bridge the gap between theory and practice. While academic research provides the foundation, real-world applications drive innovation and drive change. By showcasing best practices and case studies from various industries, we aim to inspire actionable insights that can drive success in today's competitive marketplace. Furthermore, this book emphasizes the importance of interdisciplinary collaboration. Commerce and management intersect with fields such as technology, psychology, sociology, and economics, among others. By fostering cross-disciplinary dialogue, we can uncover new perspectives and unlock innovative solutions to complex challenges.

As editors, we are immensely grateful to all the contributors who have generously shared their expertise and insights. Their dedication and passion have been instrumental in shaping this volume into a valuable resource for scholars, students, and professionals alike. We sincerely hope that "New Horizons in Commerce and Management" serves as a catalyst for exploration, discovery, and transformation in the dynamic world of business. May it inspire readers to embrace change, seize opportunities, and embark on a journey of continuous learning and growth.

Thank you for joining us on this intellectual odyssey.

Professor Dr. Aftab Anwar Shaikh

Principal

Poona College of Arts, Science and Commerce

About the Editors

Professor Dr. Aftab Anwar Shaikh M. Com; MBA; Ph.D. (Business Administration) is an educationist, researcher, social activist and a transformational leader. He has more than 30 years of teaching, research, consultancy, executive education and industry experience. He was nominated as Senate Member of Savitribai Phule Pune University by the Governor of Maharashtra. He has served as BOS member, Faculty member, Examination Committee member of Savitribai Phule Pune University. Presently, Dr. Shaikh is working as Principal of Poona College of Arts, Science and Commerce, Pune -411001(MS). Dr. Shaikh is also Member of several Educational and Professional Bodies in India and abroad. He has been accorded with several prestigious awards including National Youth Award by the Ministry of HRD, Government of India, and Prof. G. B. Kulkarni Award for Best Teacher in Commerce by the University of Pune. He is Ph.D. and M.Phil. Research Guide of Savitribai Phule Pune University, Babasaheb Ambedkar Marathwada University, Aurangabad and Tilak Maharashtra Vidyapeeth, Pune. 33 students have completed Ph.D. and 16 students have completed M.Phil. under his guidance. Dr. Shaikh has authored several books and published research papers and articles in refereed National and International Journals and presented papers in international conferences. As a Social entrepreneur, Dr. Shaikh has established and run the organizations from scratch. He also offers advice to upcoming Educational Institutions and IT Education sector. He is a motivational speaker,

Result-focused and effectual leader. He has extensively travelled to countries like China, Iran, Malaysia, Thailand, Singapore Oman, UAE (Dubai, Abu Dhabi, Saudi Arabia), Fiji, Kingdom of Tonga, Sri Lanka and Nepal.

Dr. Manasvi Kamat is currently Principal and Professor in MES Vasant Joshi College of Arts & Commerce, Zuarinagar, Goa and a column writer publishing 06 columns in each month on higher education, every Thursday on Daily Goan and every forth nightly on daily Tarunbharat. Outstanding scholastic record in the area of expertise in subjects like International Business, Banking and Finance & Economic Policy being an Gold Medalist and an University topper both at BA (Economics) and MA (Economics) level. Has a post graduate diploma in Management (Marketing), Post Graduate Diploma in International Business, PhD. (International Business) in 2007 and UGC-NET in 1998. Teaching experience of 24 years with 16 years of PG teaching experience having taught at Goa Institute of Management-Ribandar; IMTR-Margao; at Faculty of Management Studies, Faculty of Commerce, and Dept of Computer Sciences, Goa Institute of Management and at the Goa University. Worked as Officiating Principal at SSPES's Goa Multi-Faculty College, Dharbandora since Sept. 2014 to December 2018. Gold Medalist at UG & PG level and a Research Guide in the subject of Economics for PhD. in Goa University. Have authored 04 books on Economics and 60 research papers in Journals, Completed 03 Research Projects, also serves as the Member of Editorial / Advisory Board of 05 International Journals.

Presented research papers in 70 Conferences and spoken as a Resource Person in 20 National Academic events. For contribution in the field of Research and Teaching bagged the National Teaching Award the Bharat Shiksha Ratan Award by Global Society for Education, New Delhi in the year 2013 and Education Excellence Award by Indo-Global Chamber of Commerce, Industry & Agriculture in 2015. For outstanding research awarded Teacher Fellowship by the UGC-Delhi, Research Fellowship by ICSSR-Mumbai, Prof. Manubhai Shah Award, Citation and a Gold Medal for Best paper in Finance and the Best Research Paper Award at the International Conference in Accounting. Had been member of Jaycees, and is a Trustee of the Educational Trust that runs a CBSE school in Ponda, the Gurukul Academy. Besides academics, research and administration has deep interest in music, gardening and working for social cause.

Dr. Nasrin Parvez Khan is a distinguished educator, dedicated researcher, passionate social activist, and catalyst for change. With over two decades of experience in academia and a solid foundation in the corporate sector spanning five years, she brings a unique blend of expertise to her role as Head of the Department of Commerce at Poona College of Arts, Science, and Commerce, Camp, Pune-411001 (MS).

Dr. Khan holds a Ph.D. and an M. Phil from Savitribai Phule Pune University, Pune, reflecting her commitment to advancing knowledge and scholarship. She currently mentors four Ph.D. candidates, nurturing the next generation of

researchers.

Her scholarly contributions extend beyond the classroom, with over 20 research papers presented at esteemed state, national, and international conferences. In 2018, she initiated the Muskaan: "The Healing Smile" charity project at her college, exemplifying her dedication to community welfare.Dr. Khan's impact is not confined to academia; she has authored the acclaimed book "Socio-Economic Origins of Women Managers" and made significant contributions to the syllabi of various commerce courses, including S.Y.B. Com, T.Y.B. Com Business Administration, and M. Com in Elements of Knowledge Management, aligned with the curriculum of SPPU.Recognized for her expertise, Dr. Khan serves on the Board of Studies for Economics at Abeda Inamdar Senior College Autonomous, where she plays a pivotal role in shaping educational standards and practices.Her contributions have garnered prestigious accolades, including the Empowering Women's Award 2023 from the District Sports Officers, Pune Prutha Foundation, Pune. Additionally, she holds a patent, underscoring her innovative spirit and commitment to driving positive change.In summary, Dr. Nasrin Parvez Khan's multifaceted career epitomizes excellence in academia, research, community service, and innovation, making her a beacon of inspiration and leadership in her field.

Dr. Rizwan Sayed is a senior faculty member at Department of Commerce, Poona College of Arts, Science, and Commerce, Pune. He possesses an impressive array of qualifications including a Ph.D. in Business Administration, M.Com, M.Phil, MBA in Finance, SET, M.A in English, B.Ed, and G.D.C & A. As an Assistant Professor in the Department he brings with him 18 years of enriching teaching experience. Dr. Sayed harbors a profound interest in Marketing and Finance, showcasing his expertise through articles penned at both national and international levels. His multifaceted qualifications and dedication to academia underscore his commitment to advancing knowledge and fostering intellectual growth within the educational community. He has written more than 12 research paper for International, National and State level conferences.

Table of Contents

FROM STRUGGLE TO STRENGTH: IMPACT OF COUNSELING ON MARITAL WELLBEING

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ABSTRACT

Marriage provides emotional support, companionship and a sense of belongingness that can improve one's physical, mental and emotional health. Married couples need to be well equipped with stress management skills, as it has a greater impact on martial adjustment leading to marital dissatisfaction. The present research study is carried out to understand how married couples move from struggle to strength and the impact counseling has, on marital wellbeing. As stress management leads to better marital adjustment. This study is comprised of 50 couples from Goa. The random sampling method was used with equal distribution of couples (husband and wife sample). The selected samples were administered the questionnaires related to the two variables i.e stress management and martial adjustment and the results were interpreted based on the hypotheses. The findings revealed that the obtained 't'value (t 4.88*) shows that there is a significant difference (P<0.05) observed among the couples in terms of stress management and a significant difference (P<0.05) is observed in the marital adjustment as the obtained t-value (t 0.10*) among the couples. Study concludes that wives have low level of marital adjustment as compared to their husbands. The correlation value 0.35* indicates a low correlation between stress management and martial adjustment among the couples. Thus, it can be concluded that there are differences regarding marital adjustment and stress management among the married couples and counseling can improve stress management skills for healthy marital adjustment among the couples.

Keywords: Stress Management, Martial Adjustment and Married Couples

INTRODUCTION

Marriage is designed to mirror our Creator's unconditional love for us. It is a physical, spiritual and emotional union. Marriage brings economic and emotional stability in the family. It is a lifelong commitment with challenges. People marry for different reasons like love, happiness, belongingness, companionship, financial stability and desire to have children. Marriage has a definite objective, such as a stable permanent association based on mutual affection and companionship, sexual intimacy and procreation. In a marital relationship, it is considered that women are

well equipped to manage with stress, but sometimes males are in a better position to manage stress, as they spend more relaxation time with their friends, exercise, involve in outdoor activities as compared to their female counterparts. Though marriage has fulfilling lifelong experiences, yet it can sometimes challenge the strength of marital relationship. Cox (1978) states that stress is a stimulus that results from an interaction between the two partners in a marital relationship. High stress can cause physical and psychological imbalances. Stress management involves a wide spectrum of techniques and psychotherapies, aimed at managing stress thus improving a marital relationship. Stress management provides practical techniques in order to manage with various underlying sources of stress. Strategies such as relaxation techniques, physical exercise, behavioral self-control, social support, playing sport, yoga, listening to music, outdoor activities, enjoying a holiday, counseling, can help to manage stress. Amanda Kepler (2015) findings revealed that couples who sought premarital counseling indicated greater marital adjustment and satisfaction. Marc A. Brackett (2015) research revealed that couples who scored low on emotional intelligence experienced more conflicts and poor marital relationship. Saroj Parasuraman (2016) research study showed that work disappointment and conflicting stressors in family role were associated with greater family dissatisfaction. Cheryl Buchler (2020) findings revealed that the families who practiced devotional activities and shared religious belief had a positive link with quality relationships in a marriage.

The research study focuses on how married couples move from struggle to strength and impact of counseling on marital wellbeing, as stress management leads to better marital adjustment among married couples. This study sheds light on how married couples have shaped themselves, to adjust to the expectations of their partners and improve the marital relationship. It also stresses on the fact that, it is important to change the mindset and psyche of couples in order to have marital adjustment. Considering the above; the researcher focused on:

Aim: The need for married couples to move from struggle to strength and impact of counseling on marital wellbeing.

Objective: To analyze how essential, stress management skills are, for a successful marital relationship, as it paves the way for marital adjustment and leads to a happy family.

OPERATIONAL DEFINITIONS:
Independent Variable: Stress Management

Dependent Variable   : Marital Satisfaction

Grouping Variable   : Gender Differences among married couple

DATA AND METHODS
The study was conducted on a sample size of 50 couples from the state of Goa. Two scales namely stress management scale by Dr. Puspraj Singh & Anjali Srivastava and marital adjustment questionnaire by Kumar & Rastogi (1976) were used. With an

effort to justify our hypotheses, the results were tabulated and interpreted. Following are the hypothesis of the study.

Ha₁: In a marital relationship, husbands will have significantly better stress management skills as compared to their wives.

Ha₂: The family adjustment among husbands will be better as compared to their wives in a marital relationship.

Ha₃: A significant high correlation will be observed in stress management and marital adjustment among the married couples.

RESULTS AND DISCUSSION

Ha₁: In a marital relationship, husbands will have significantly better stress management skills as compared to their wives.

Table no 1.1: Indicating Mean, Standard Deviation and t-scores of Stress Management among husband and wife in marital relationship.

Married Couple	Mean	S D	't' Score
Husband	87.96	9.09	
Wife	81.3	14.39	4.8*

* p<0.05

A perusal of the table no.1.1 reveals that the obtained stress management mean and standard deviation scores for husbands (M = 87.96; SD = 9.09), wives (M= 81.3; SD = 14.39) and t-value (t=4.88*) revealed that there exists significant differences (p<0.05) among husbands and wives in terms of stress management in a marital relationship, thus our hypotheses is proved.

We can support our finding by postulating that husbands in this study are more focused, intelligent and have better emotional maturity. They also join extra-curricular activities; have good connectivity on social networking sites, leisure activities and when required, seek professional counseling. Whereas wives tend to ruminate more about stressors, they have to strike a balance between managing family life and work. The present study finding of stress management of married couples is falling in line with the earlier study findings of Miller and Kirsch (1987) which notes that gender differences exists in managing stress, between husbands and wives, leading to increase in stress and poor marriage adjustment. Similar findings are revealed in Black and Morton (1986) wives tend to perceive most work events as more stressful than do their husbands.

Ha₂: The family adjustment among husbands will be better as compared to their wives in a marital relationship.

Table no 1.2 Indicating Mean, Standard Deviation and t-scores of marital adjustment among of married couples.

Couples	Mean	S D	't' Score
Husband	19.32	3.68	0.04*

Wife	18.26	2.12	

*p<0.05 – Significant

An observation of table no.1.2 reveals that the obtained mean and standard deviation scores for marital adjustment among wives (M = 18.26; SD = 2.12) and husbands (M = 19.32; SD = 3.68) obtained t-value is (t=0.04*) shows that there is a significant difference (p<0.05). The above findings reveal that there is a significant difference observed among husbands and wives in their marital adjustment. From the above analysis it can be concluded that wives have low level of martial adjustment as compared to their husbands. Our findings revealed that husbands have better martial adjustment, as they adopt effective stress management strategies. The findings suggest that there exists gender differences among the couples in terms of martial adjustment is getting reflected with the earlier study of Kim, (2005) who found that and husbands are satisfied in their marital relationship as compared to their life partners.

Ha₃: A significant high correlation will be observed in stress management and marital adjustment among the married couples.

Table no 1.3 Indicating Mean and the Correlation between martial adjustment and stress management

Variables	Mean of Husbands	Mean of Wives	Correlation
Stress management	87.96	81.3	
Martial adjustment	19.32	18.26	0.30*

* p<0.05

An examination of the table no.1.3 clearly reveals that the obtained martial adjustment mean scores for husbands and wives (M=19.32; M=18.26), stress management (M=87.96; M=81.3) and obtained correlation value is 0.30* indicating a low correlation between stress management and martial adjustment among husbands and wives. A significant difference (p<0.05) is observed. Thus the hypothesis which states that a significant high correlation will be observed in stress management and marital adjustment among the married couples is partially proved. From the above analysis it can be concluded that as wives have low level of martial adjustment as they face the difficulty in managing their varied roles, this may in turn have an impact on their family relationships. Our findings suggested that husbands have better stress management strategies, may in turn help their partners in managing the difficulties encountered by them in managing the family. Thus marital wellbeing will be enhanced.

CONCLUSION
In a marital relationship the couples move from struggle to strength and therefore counseling will bring marital wellbeing. It is essential that married couples need to be well equipped with the essential skills to manage stress, as it has a greater impact on martial adjustment leading to marital satisfaction. Thus, it can be concluded from the

above discussion that there are differences among husbands and wives regarding marital adjustment and stress management. The findings of the study revealed that, in a marital relationship, husbands have significantly better stress management skills as compared to their wives. The family adjustment among husbands is better as compared to their wives, as men train themselves to manage stress level, therefore their stress management skills are better comparatively as revealed in this research. A significant low correlation is observed in stress management and marital adjustment among the married couples. Some recreational activities, exercise and professional counseling can improve good marital adjustment and stress management in a marital relationship.

Implications: The research findings imply that couple counseling is essential to maintain a healthy marital relationship as various psychological factors affecting the couples can be improved. Psychological interventions through counseling will help them to enhance stress management and thereby improve their overall mental health. This study suggests the urgent need for the services of professional counsellors, psychotherapists and psychiatrists in society are essential.

LIMITATIONS OF STUDY:
The sample of this study has no restrictions to particular age group. Comparative study can be conducted between older and younger couples. Interstate comparative study and other psychological variables can also be studied.

SUGGESTIONS FOR FURTHER RESEARCH:
The study can be carried out on Counseling interventions that can be administered to married couples who experienced trauma, to encounter martial adjustment and enjoy a happy married life.

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AN ANALYSIS OF CASHEW FARMING BUSINESS IN GOA

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1.1 INTRODUCTION TO BACKGROUND OF THE STUDY

Cashew was discovered by Portuguese traders and explorers in Brazil in 1578. The statistics worldwide shows that in 2021-22, the cashew exports by value grew from US$ 420 million in 2020-21 to US$ 452 million in 2021-22, witnessing a growth of 7% (Statistica, 2022). Ivory Coast ranked the highest in cashew nut production with 970,000 tonnes followed by India and Vietnam in 2022. After Côte d'Ivoire, India is the second largest producer and exporter of Cashew Nuts with a share of more than 15%, followed by Vietnam in the world's cashew export. Cashew is one of the most important crops in India fetching considerable foreign exchange. India exports cashews to over 60 countries of the world. India's top export destinations are the UAE, the Netherlands, Japan, and Saudi Arabia the USA, the UK, Canada, France, Israel, and Italy, (National Horticulture Board, Indian Institute of Food Processing Technology and Ministry of Food Processing Industries, Government of India, 2022).

1.2 STATEMENT OF THE PROBLEM

The journey of cashews in Goa began 450 years ago when Portuguese brought Cashew plant from Brazil to Goa to prevent soil erosion. During the years 1942-1943, Zantye's Cashew processing industry was popular. After liberation of Goa in 1961, the cashew processing industry progressed. Since 1961-2023, Zantye's are currently leading the cashew processing industry in Goa.

There are several issues affecting Goa's cashew industry such as increasing quantities of cashews coming to Goa from other states and countries. Approximately, 30-40% raw cashews processed in Goa are from Tanzania and Mozambique at low-price ranging between Rs 80 -Rs 92 per kg. Inferior quality imports are endangering the quality of Goan brand cashews. In 2022 farmers demanded increase in support price of the cashewnut from Rs 125 per kg - Rs 160 per kg. Goan farmers, cannot compete with cheap imports from countries. In the recent years, cashew sales are adversely affected due to climatic conditions, unfavorable market forces, increasing number of cashew retailers in the coastal belt in Goa, selling poor quality nuts in the name of Goan cashews. With this background, there was a need felt in the present study to analyze the performance of cashew farmers/cultivators business in Goa.

1.3 OBJECTIVES OF THE STUDY

1. To examine the performance of cashew farming business in Goa.

2. To analyze the problems faced by farmers engaged in cashew farming business in Goa.

1.4 SIGNIFICANCE/PURPOSE OF THE STUDY

Cashew is the main cash crop and plays a key role in ensuring household income and food security for farmers in Goa. In Goa, cashew farming occupies the largest area among horticultural crops covering about 55302 ha area with an annual production estimated at 27070 tonnes. The present study highlights the demographic characteristics (variables) namely; gender, age, educational qualification, number of cashew trees cultivated by the cultivators. The study analyses business profile, finance, labour employed and problems in cashew farming business. The contribution of this study is to understand the efficiency of farmers growing cashews in Goa, in terms of finance, cost, labour and production.

The findings of this study will help in improving productivity of the cashew sector, provide employment opportunities to rural communities, increase income, reduce poverty, and improve food security among cashew cultivators in Goa.

1.5 RESEARCH METHODOLOGY

The research methodology includes sample size, sample design, sources of data, period of the study, hypothesis, statistical tools, data analysis and interpretations.

1.5.1 Sources of Data, Sample Size and Sample Design

Sources of data is primary and secondary for the study. The primary data is collected from 60 cultivators/farmers doing cashew nut business in North and South Goa using interview schedule. Selection of the respondents was based on their experiences in cashew farming. Random sampling method is used in the study. Secondary data is collected from various organizational databases, websites, other necessary official records, books & magazines.

1.5.2 Period of study: The study was undertaken from 3rd October 2022 to 15th February 2023.

1.5.3 Hypothesis of the study

The null hypotheses formulated for the present study are as follows:

H_{01}=There is no significant association between number of cashew trees and profitability of the farmers involved in cashew farming business in Goa.

H_{02}= There is no significant association between number of cashew tress owned and number of years into cashew farming business in Goa.

1.5.4 Statistical Tools

i. Parametric Tests: Statistical measures like percentage bar graphs, frequency, descriptive statistics, mean, are used in the study to analyze primary data.

ii. Non-Parametric Tests: Chi-square tests is used to analyse the primary data.

Following findings, discussion, suggestions and conclusion drawn from the present study are summarized in the ensuing sections:

1.6 SUMMARY OF MAJOR FINDINGS

i.   Most of the cultivators/farmers involved in cashew business in Goa are males.

ii.   Majority of the respondents in cashew farming business are in the age between 26-55 years.

iii.   The educational qualification of majority of the respondents in the study area is between 5th -12th Std.

iv.   Majority of the cultivators owned cashew trees ranging between 1-1,000 trees.

v.   Majority of the farmers inherited cashew farming business from their ancestors, they are the cultivators under mundkarial rights cultivating cashew trees on Communidade land.

vi.   Majority of the farmers annual turnover from selling cashew nuts in 2022-2023 is less than Rs 2,00,000 per annum per season.

vii.   Majority of the respondents employed labourers ranging between 5-15, maximum up to 20 labourers per season depending on the area of the land cultivated.

viii.   Majority of the labourers in cashew farming worked between 60-120 days per season.

ix.   Majority of the farmers total average expenditure per season approximates between Rs 1,00,001 -Rs 3,00,000.

x.   The results of the chi-square tests shows that there is no significant association between the variables, numbers of cashews trees owned and profitability of cashew nut business.

xi.   The chi-square tests shows that is no significant association between the variables number of years in cashew nut business and numbers of cashews trees owned.

xiii.   The average amount spent on fertilizer by each farmer is approximately Rs 79,548/- per season in 2023.

xiv.   Major problem faced by the farmers is crop failure due to climatic conditions. Farmers receive very low price per kg on the sale of their cashew produce, as there is no government control on the price per kg fixed by the monopoly of wholesalers/purchasers/retailers.

1.7 SUGGESTIONS

In the light of empirical study, suggestions are proposed to the Government of Goa which will benefit cultivators doing cashew farming business. The following suggestions are recommended to the government for future implementation:

1.7.1 Suggestions to the Government

i.   Government is not involved in fixing the price of cashew nut per kg. Rates of the cashew nuts are quoted by the purchasers without consulting the cashew farmers. The present price of cashew nuts per kg received by the cultivator as on 13th March, 2023 is Rs 123 per kg which is very low. Farmers are forced to sell cashew nuts in the monopoly market to the buyers at the quoted price, earning very low income. Thus, there is an urgent need for the intervention of the government to hike the price per kg of cashew nuts. Farmers are totally dependent on this seasonal income from selling their cashew produce which they earn in from February to May. Cashew farmers from Sanguem and other parts of Goa have urged the government in the year 2023 to fix the minimum base rate for cashew seeds at Rs 200 per kilogram.

ii. The rates which existed for liquor of cashew some years back did not increase as per the existing market inflation. Cashew liquor production has decreased over the years because expenditure is more than the income. There is no market rate fixed by the government, every producer sells at their own price, thus earning maximum profits at the cost of hard toiling cultivators. Excise department issues license for cashew juice extraction and liquor production but the laws are very complicated. Under the banner of small-scale industry, cashew liquor planation and liquor industry can get benefit from Government of Goa but because of stringent laws they cannot get benefits directly, hence the laws regarding the cashew industry needs amendments by the government. The cultivators should get the opportunity to avail the benefit from the Government to start small scale industries.

iii. In the past there was a market in North Goa and people would come to sell cashews and liquor, in Mapusa and Siolim market, but this is presently discontinued.

iv. In the past cashew festivals were organised by the government but only the landlords would participate and avail the government schemes, no benefits were passed on to the cultivators. To solve this issue, government should organize cashew festival for the cultivators who are not the owners but managing the cashew farms.

v.   Most of the landlords sell the cashew farm property to buyers who offer high price other than the cultivators or mundkars without taking the 'No Objection Certificate' from the cultivators or mundkars. Strict action has to be taken by the government on such landlords by amending the laws regards sale of agricultural cashew farm property to protect the interest of the existing cultivators or mundkars. Resurvey of the cultivators should be done by the Government survey department so that those who have cultivated cashew farming business for more than 50 years should be given the legal rights to land.

vi. In villages there is lack of transportation facilities for the cashew nut cultivators to take their cashew nut produce for sale to the market. The cost of transportation increases in the villages for the farmers. Government through local authorities could arrange for transport facilities so that the farmers could take their cashew nut produce for sale in the market, thus saving time, cost of labour and transportation cost.

vii. Government should promote organic farming, as nowadays cashew plants do not sustain for long period due to use of artificial fertilizer as compared to ancestors who used organic manure.

viii. Government should conduct awareness programmes and implement schemes which will benefit the cashew farmers/cultivators. In order to encourage the growth of cashew business, subsidy should be provided by the Government of Goa to the cultivators.

ix. Government should provide financial support and loans at concessional rate to cashew farmers belonging to lower income category. There is a need for the government to initiate measures in coordination with the financial institutions to give extension period to the farmers to pay the loans specially when there is crop failure.

x. The officials should be made free from bias- corruption, partiality, and illegal activities through proper inspections. Government should implement permanent and fixed wage system to the cashew workers.

xi. Special packages should be introduced by the government for securing better working conditions to raise the living conditions of cashew workers. Government should provide ample measures to regenerate the cashew industry for sustaining the socio economic conditions of cashew workers.

xii. The government should implement the policies and programs especially for the weaker sections of cashew workers for sustaining the industry.

1.8 IMPLICATIONS AND POTENTIALS FOR FUTURE RESEARCH

In the present study there is a considerable scope for future research. The focus of the present study was restricted to four talukas in Goa due to constraint of time. The present study excluded respondents from the cashew nut industry involved in processing of cashew nuts in Goa, hence further studies could be done on the same. The sample size was restricted to 60 due to their busy farming schedule.

1.9 CONCLUSION

If all the above suggestions are implemented then production will increase and benefit will go to the cultivators which is the need of the hour. To conclude, the results of the present study will help the government to implement the proposed suggestions for the welfare of the cashew famers in Goa to fulfil their basic financial needs and improve their standard of living specially for cashew farmers/cultivators who are below poverty line and low-income group.

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"EXPLORING THE IMPACT OF SOCIAL ENTERPRISE ON MOTIVATION AND INNOVATION IN INDIAN ENTREPRENEURSHIP: A CRITICAL REVIEW"

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ABSTRACT

This study explores how entrepreneurship in contemporary India is shifting towards social enterprise, where businesses prioritize addressing social and environmental challenges alongside financial goals. This paradigm shift challenges the traditional profit-centric model, emphasizing the multifaceted impact of social enterprises on motivation, innovation, and sustainability. By integrating social and environmental objectives into their business models, these ventures reshape entrepreneurial motivations and foster innovative approaches to societal needs. The rapid ascent of social enterprise suggests its potential to redefine entrepreneurship in India, offering a vision aligned with broader social and environmental imperatives.

Keywords: Social Entrepreneurship, India, Motivation, Innovation, Impact

INTRODUCTION

Entrepreneurs are commonly understood as individuals who initiate or organize commercial ventures, often involving financial risks. In the context of a capitalist society, entrepreneurship has long been recognized for its vital economic role. Adam Smith's concept of laissez-faire economics and the invisible hand principle provide a framework for entrepreneurs to pursue their self-interests within an unregulated market system. Traditional entrepreneurship, characterized by both egoistic self-interest and utilitarian motivations aimed at the common good, shares several key features. Firstly, it drives innovation and economic progress through what Schumpeter termed as 'creative destruction', often observed in fiercely competitive industries such as telecommunications. Secondly, it focuses on the balance of supply and demand dynamics. Thirdly, it prioritizes the development of new knowledge to enhance the effectiveness of products and services. Lastly, it underscores the importance of intellectual property rights and the protection thereof. However, traditional entrepreneurship, primarily driven by profit maximization and external opportunities, is increasingly perceived as unsustainable in modern society. The rise of social entrepreneurship, which places a greater emphasis on addressing societal needs, signifies a shifting paradigm. This paper aims to explore the transition from traditional to social entrepreneurship within the Indian context, considering its implications for motivation, innovation, and sustainability in the contemporary economy. Additionally, it examines the potential repercussions when entrepreneurs deviate from their corporate social responsibility obligations.

Exploring Entrepreneurship: From Individual Traits to Social Impact- a review
Entrepreneurial Traits and Achievement:
Studies have extensively examined the correlation between entrepreneurial traits, such as need for achievement, and success.

Kaufmann and Dant (2008) suggest that entrepreneurs capitalize on external opportunities presented within the market system.

However, Borland (1974) and Hull et al. (1980) argue that the need for achievement must be complemented by conducive business environments for entrepreneurial success.

Venkataraman (1997) characterizes entrepreneurs as individuals who identify and exploit opportunities arising from changing business conditions

Research by Hornaday & Bunker (1970) and DeCarlo & Lyons (1979) suggests a positive relationship between the need for achievement and entrepreneurial success.

Market Opportunities and Entrepreneurial Behavior: Contemporary perspectives on entrepreneurship emphasize the role of market opportunities in shaping entrepreneurial behavior.

External Influences on Entrepreneurship:
External factors, such as economic conditions and population dynamics, significantly impact entrepreneurial activities.

Tellegen (2011) highlights how population growth and economic changes create new opportunities for entrepreneurship, leading to the emergence of innovative business ventures.

Frese and De Kruif (2010) argue that challenging economic conditions in developing countries drive an increase in entrepreneurial activities.

Social Entrepreneurship and Ethical Considerations:
The concept of social entrepreneurship has gained prominence, with a focus on businesses that prioritize social impact alongside financial goals.

Scholars like Ana & Mclean (2015) and Dees (1998) highlight the rise of ethical entrepreneurship, where goodwill and ethical considerations drive entrepreneurial endeavors.

Social entrepreneurship places emphasis on fulfilling human values and meeting stakeholders' demands while pursuing business objectives, as articulated by Mort et al. (2003).

OBJECTIVE OF THE STUDY
1. To study the scenario of present entrepreneurship in India.

2. To know the impact of Impact of Social Enterprise on Motivation and Innovation in Indian Entrepreneurship

RESEARCH METHODOLOGY

The research paper is based on secondary data the data was collected from Internet, reference books, articles and research papers. Analysis and findings are based on reviews of various articles and papers discussed in this paper.

Impact of Social Entrepreneurship:

In India, the emergence of social entrepreneurship represents a significant departure from the traditional focus solely on profit-making. One notable example is the Grameen Bank, founded by Muhammad Yunus, which exemplifies how social entrepreneurs creatively address pressing societal challenges. These ventures prioritize social impact alongside financial success, reflecting a broader revaluation of corporate social responsibility (CSR) within the Indian business landscape. Today, entrepreneurs are increasingly expected to contribute positively to society while pursuing their business objectives, reflecting a growing recognition of the interconnectedness between business success and societal welfare.

Influence of Social Entrepreneurship on Entrepreneurial Motivation:

Social entrepreneurship plays a pivotal role in shaping the motivations driving entrepreneurial endeavours, particularly in the Indian context. Traditionally, entrepreneurial motivation has been deeply intertwined with commercial imperatives, primarily focused on profit maximization and competitive advantage. However, the emergence of social entrepreneurship introduces a paradigm shift, emphasizing ethical considerations and societal impact alongside financial goals. This shift alters the trajectory of entrepreneurial motivations, compelling businesses to operate within moral boundaries and address pressing societal needs. When entrepreneurs breach ethical norms, they face significant backlash from society and legal repercussions, prompting a fundamental revaluation of their motivations. There are many cases such as BP's Deepwater Horizon oil spill in the Gulf of Mexico, the Volkswagen emissions scandal involving the use of illegal software to manipulate emissions tests, Nike's use of sweatshops and child labor in its manufacturing facilities, the Enron accounting scandal, which led to one of the largest corporate bankruptcies in history, the Wells Fargo fake accounts scandal, where employees opened millions of unauthorized accounts to meet sales targets etc. These incidents highlight the repercussions of unethical behavior and the subsequent impact on the companies' reputations, financial stability, and stakeholder trust, which triggered a profound transformation in the company's entrepreneurial mindset, leading to a renewed focus on environmental protection. Indian entrepreneurs can glean valuable insights from these cases, recognizing the importance of aligning business practices with ethical and societal considerations to navigate the evolving entrepreneurial landscape effectively. Embracing social entrepreneurship not only mitigates risks associated with ethical breaches but also fosters long-term sustainability and positive societal impact, making it a compelling imperative for entrepreneurs in India.

Influence of Social Entrepreneurship on Enterprise Innovation in India

Entrepreneurs, known for their drive for innovation and creativity, often face questions regarding the boundaries of their creativity and the moral values they should adhere to. Social enterprises set a moral barometer for innovative endeavours, requiring firms to innovate within the confines of societal values and benefit the social construct. In essence, companies cannot freely innovate but must align their innovations with the moral requirements of society. There is a growing body of literature emphasizing the importance of benchmarking innovation against social values to prevent unethical practices. Organizations like UNESCO advocate for actions against innovations that undermine human values. While innovation is essential for societal progress, unchecked "permissionless innovation" can lead to products and services that detract from moral values. Take, for instance, the introduction of smartphones, which have been criticized for impeding cognitive development among children. Ambitious entrepreneurs, like Steve Jobs, champion disruptive innovations that revolutionize industries. However, there is a need to inject social expectations into innovation processes to ensure they align with the principles of social enterprise. Recent examples, like the introduction of the iPhone 8 amidst concerns of minimal improvements over previous models, underscore the importance of considering societal implications in innovation. Ultimately, social moral values serve as inherent limitations on the extent of innovation within firms, guiding entrepreneurs to innovate responsibly and ethically within the country.

Impact of Social Entrepreneurship on Sustainable Business Practices in India

Typically, entrepreneurs aim to enhance competitive advantage and add value to products to outperform competitors. However, social entrepreneurship transforms how entrepreneurs sustain their ventures. It compels them to integrate Corporate Social Responsibility (CSR) into business practices to fulfil societal obligations. This aligns with Porter and Kramer's shared value model, advocating for a symbiotic relationship between corporations and society. For instance, Starbucks' ethical practices in supporting coffee farmers exemplify integrating ethics into business defence strategies. Porter's model not only benefits firms but also fosters community development, exemplifying social entrepreneurship's reciprocal benefits. Various reports highlight the efficacy of social entrepreneurship in sustainable business, such as increasing alliances between corporations and society in Lebanon and Romania. Overall, social entrepreneurship reshapes entrepreneurial motivations, innovation processes, and sustainability strategies, emphasizing moral considerations and long-term synergistic impacts within the Indian business landscape.

Balancing Profit and Purpose: The Complex Landscape of Social Entrepreneurship in India

The concept of social entrepreneurship has often been at odds with traditional business practices, which prioritize profit-making over social welfare. Figures like Friedman argued that corporations have no moral obligation to society beyond maximizing shareholder profits. However, despite its evolution, social entrepreneurship is sometimes seen as superficial and lacking true transformative

value in organizations. Many CSR and social entrepreneurship initiatives appear to be merely surface-level efforts, serving as window dressing rather than genuine ethical commitments. This approach often focuses on profitable areas for the firm, neglecting marginalized stakeholders. Additionally, the increasing government intervention in regulating responsible innovation poses challenges, potentially stifling entrepreneurial creativity. This dilemma between the need for social entrepreneurship and competition-driven innovation is likely to persist. While models like Porter's CSR framework may lack a purely ethical approach, regulatory measures risk constraining entrepreneurial freedom. Nonetheless, cases like Shell and Volkswagen demonstrate that breaching social enterprise values can lead to severe consequences, altering the course of entrepreneurial motivation, innovation, and sustainability. In the India, where social issues are increasingly significant, navigating this balance between profit and social responsibility is crucial for the future of entrepreneurship.

CONCLUSION

The rise of social entrepreneurship in India marks a significant departure from traditional profit-centric models, ushering in a transformative era where businesses integrate social and environmental objectives alongside financial goals. This paradigm shift reshapes entrepreneurial motivations, emphasizing ethical considerations and societal impact. By setting a moral barometer for innovation and fostering long-term alliances through Corporate Social Responsibility (CSR), social enterprises redefine the trajectory of entrepreneurship. Despite challenges, the embrace of social entrepreneurship is crucial for navigating the evolving landscape effectively and ensuring sustainable and inclusive growth in India.

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IMPACT OF ARTIFICIAL INTELLIGENCE ON BUSINESS: OPPORTUNITIES & CHALLENGES

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ABSTRACT

The introduction of AI is today creating major advancements and changes across various sectors. It is today understood as an interdisciplinary field which helps in machine learning, accumulating huge data, Cloud Computing, and disseminating Information. Machine learning builds on prior experience, thus machines are self-learning and can predict the future without any errors. This article brings out applications of artificial intelligence in various sectors and analyses various negative effects. AI in the health sector aids in the management of healthcare care, early diagnosis, documentation and robotic surgery. In the financial sector, AI helps to improve the customer experience, market analysis, mobile banking, and digital payment systems. In the education sector, AI provides advanced teaching to students by using data mining, intelligent teaching platforms, and personalized learning systems. Increasing productivity, increasing revenue, creating new jobs, and reducing human error are the positive effects of artificial intelligence. The negative effects of AI include layoffs, reductions in the labour market, privacy protection issues, and inequalities. Thus AI is a transformative technology which has a great potential to enhance decision-making, data analysis, and information integration across different sectors.

Keywords: Artificial intelligence, Machine learning, Business sectors. AI Algorithms, predictive analysis.

BACKGROUND:

Over the past decades, almost all aspects of how we work and how we live have changed. AI specialists anticipate that the data generated from the Internet will outstrip the data generated by the Internet of People many times over. This increased data is already resulting in standardisation, which naturally leads to automation and personalisation of products and services. The introduction of artificial intelligence and its applications across the globe has enabled various segments to flourish and change the way for the future. The current technological advancements in fields like wearable technology, chip market solutions, self-driving cars, and automated medical procedures have significantly made a huge influence in the market growth. In 2022,

the global market size of AI was valued at 136.55 billion dollars and further is expected to rise exponentially in the later years. Today AI is well supported by increasing investments, digital disruptions and competitive advantages in this rapidly growing economy. The global AI market size is expected to increase at a CAGR of 37.3% from 2023 to 2030. It is expected to hit 1,811.8 billion by 2030. By 2030, AI is expected to contribute 15.7 trillion dollars to the world economy, more than India and China's current output combined. The greatest economic gains from AI will be in China, with a 26% rise in GDP in 2030, followed by North America's 14.5%, totalling $10.7 trillion and accounting for almost 70% of the global economic impact.

GROWTH OF AI IN INDIA:

In India, the rise of AI has been a transformative journey coupled with a robust ecosystem of startups, academic institutions, government initiatives, and multinational corporations. It is becoming today the technological backbone of the advancements happening worldwide. India is also no exception to this transformative wave. Over a few decades, AI has been the focal point for technologies in India, touching upon various sectors and influencing the lives of the people. The AI-powered tools, the demand for them and AI systems are rising across India because of fast digitisation across sectors like education, healthcare, financial services, transportation, logistics, agriculture and telecommunication. Artificial intelligence today can assist in automation, minimising errors and helping in repetitive tasks. The AI market size reached $ 680 million in 2022 and is expected to reach $3.935.5 million by 2028, with a CAGR of 33.28% between 2023 and 2028. AI expenditure in India increased by 109.6% million in 2018 and is expected to grow at a CAGR of 39% to hit $11,781 million by 2025. AI can add nearly $500 billion to India's GDP by 2025.

REVIEW OF LITERATURE:

In the paper (Ward et al., 2014) AI will help business analytics be very important, further streamlines data analysis and connects it to cutting-edge innovation, which in turn revolutionizes business decision-making. Aside from data visualization and statistical modelling, AI is one of the three important pillars of business analytics. (Mishra & Pani, 2020) in their study observed that the company's procedures are designed to yield some sort of valued product, and the advent of cutting-edge technologies has raised expectations for dramatic enhancements to these procedures. Artificial intelligence is no different; it can aid in the reimagining of corporate procedures that aim to radically shift the status quo. According to Silva et al. (2021), "Industry 4.0" has come to characterize diverse implementations of ICT in manufacturing processes. (Namvar et al., 2021) in their paper concluded that business analytics today is been recognized as a significant development in IT that improves the quality of business decisions. (Schmitt, 2022) in their study concluded that AI is frequently used to help business analytics translate data into information. AI is a cutting-edge and game-changing technology that can revolutionize company operations. A study conducted by Shi et al. (2022) pointed out that firms using

business analytics shall boost consumer engagement due to the abundance of data and the limitations of digital products.

OBJECTIVES:

The objectives of the paper are:

1. To know and understand the opportunities of AI across various sectors.

2. To know and understand various challenges of AI.

RESEARCH METHODOLOGY:

The data for the study is collected from secondary sources through different articles and published journals and analysed the impact and increasing influence of artificial intelligence in different sectors of the business and try to understand the present challenges faced.

OPPORTUNITIES OF AI ACROSS VARIOUS BUSINESS SECTORS:

Education Sector:

The potential of AI is helping to transform education immensely by offering innovative solutions for effective teaching and learning experiences. Under Intelligent tutoring systems, AI algorithms analyse students' data to provide personalized feedback, recommendations, and adaptive learning experiences. Such systems help in identifying knowledge gaps, tailor content as per individual needs and support the self-paced learning of the students. AI technologies like augmented reality (AR) and virtual reality (VR) technology shall enable students to visualize complicated topics and participate in more hands-on learning.

Healthcare Sector:

AI in the healthcare sector has come in a big way whereby collecting accurate and relevant data about patients and knowing their medical history to treat them better. Further, deployment of predictive healthcare can help doctors make proactive moves towards ensuring their patients' health. With the help of IoT-enabled embedded devices, doctors can remotely monitor the health of patients, and can also be informed in case a patient is in an emergency. AI enables easier analysis of scan results through image recognition, whereby doctors can diagnose symptoms of the patients at a much higher rate.

Financial Services Sector:

In the banking sector AI has helped to automate processes that were previously done manually, such facilities shall help to decrease the time required to solve issues and enable banks to serve customers better. The predictive analysis, can help bankers identify high-value customers through data mining and parsing text online and can retain customers longer by providing additional services based on their spending and financial activities. AI shall help to predict the likelihood of an individual defaulting on a loan which will help in streamlining the process of onboarding new customers while reducing the likelihood of non-payment of the loan taken.

Logistics Sector:
In logistics predictive analytics can accurately help in predicting the inventory required by a vendor and shall also optimize routes to minimize overhead costs. Image recognition algorithms and intelligent automation can help customs officials conduct checks more seamlessly by scanning the documents involved, transitioning them into a digital realm. This data can then be used to accurately keep track of shipments while cutting down on time spent at ports. Shipping industry has also adopted AI, especially predictive analytics, to optimize supply chain economics.

Retail Sector:
Retail analytics in the retail sector has helped the retailers to optimize the supply chain and predict how much to stock to be maintained in their supermarkets. The introduction of AI has helped to start self-shop stores, whereby the retailers make use of machine learning, deep learning, image recognition, and smart automation whereby customers can purchase products and services as per their choice. Retail analytics shall help for analysing customer browsing patterns and their purchases on the site, can be accurately predicted for similar products.

Agriculture Sector:
The AI in the agricultural sector, is playing a very crucial role and is transforming the agriculture industry. AI saves the agriculture sector from different factors such as climate change, population growth, employment issues and food safety. The introduction of AI has improved crop production and real-time monitoring, harvesting, processing and marketing. AI platform shall help in weed detection, yield detection, crop quality to make the agricultural sector vibrant.

Manufacturing Sector:
AI in the manufacturing sector shall help in refining product inspection and quality of products, AI-powered systems shall help to predict possible breakdowns and plan preventive maintenance, and AI algorithms shall help to improve the efficiency of industrial processes and supply chain management for efficient production of goods.

Oil, gas & Energy Sector:
AI in the oil, gas and energy sectors help with sensors, smart grids, and energy systems to optimize energy consumption. The AI algorithms can help in predicting demand patterns, managing load balancing, and controlling energy supply to minimize wastages. Refineries can use AI models to predict consumer demand by optimizing production and manage inventory.

Challenges of Artificial Intelligence:
The challenges on account of implementation of AI are as follows:

Job Displacement: One of the applications of AI is the manufacturing of robots. Generative artificial intelligence systems can create content that closely resembles human-generated output but at the same time, the result of such automation could lead to the erosion or complete replacement of the human workforce.

Building Trust: AI is new to people, it is all about science, technology, and algorithms which most people are unaware of, thus making people believe and reposing trust in the new technology is a major challenge.

AI human Interface: AI being a new technology it is observed that there is a huge shortage of working manpower having data analytics and data science skills. As the advancement of AI rises, businesses lack a skilled professional who can match the requirements and work with this technology.

Investment: AI technology although is set to provide ample benefits, entrepreneurs willing to adapt this new technology to scale their operations call huge capital investment, thus at times for new enterprises such a step will not turn out to be cost beneficial.

Software Malfunction: Due to the lack of ability of human beings to learn and understand how these tools work, they have little or no control over the system which is further complicated as automated systems become more prevalent and complex.

Data Security: AI and its application are based on huge volumes of data, which is often sensitive and personal in nature. This makes it vulnerable to serious issues like data breaches and identity theft.

Data Scarcity: The applications of AI depend on the accuracy and relevance of the datasets for training and learning. If quality labelled data are scarce it will largely create problems by not responding to the problems faced or information to be sought.

CONCLUSION:
To conclude emerging technologies is a source of both enthusiasm and scepticism for humankind as it is a source of both advantages and disadvantages from different perspectives. However, we need to overcome certain challenges before we can realize the true potential and immense transformational capabilities of this emerging technology. Artificial Intelligence is the intelligence possessed by the machines under which they can perform various functions with human help. AI is coming in a big way whereby it is going to help human beings to lead a better, easier and more comfortable life ahead. With the help of artificial intelligence human beings will be able to learn, solve problems, plan things, think, etc. In the field of technology, AI is evolving rapidly and it is believed that soon, it is going to change human life very drastically and will most probably end all the crises of the world by sorting out the major problems.

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INDIA IN THE ERA OF DEGLOBALIZATION: CHALLENGES AND OPPORTUNITIES AHEAD

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ABSTRACT

The global landscape is witnessing a significant shift from the era of globalization towards deglobalization, marked by reduced interdependence among nations and a reevaluation of global economic structures. For a nation as diverse and dynamic as India, this transition holds profound implications across economic, geopolitical, and societal dimensions. This abstract explores the challenges and opportunities presented by deglobalization for India, focusing on key areas such as supply chain resilience, export diversification, currency stability, and fostering innovation and technological advancement. While deglobalization poses challenges such as supply chain vulnerabilities and fluctuations in foreign investment, it also offers opportunities for India to strengthen domestic manufacturing, promote entrepreneurship, and lead in digital innovation. By adopting proactive strategies and embracing collaboration, India can navigate the complexities of deglobalization, emerge as a pioneer in addressing its challenges, and position itself as a resilient leader on the global stage.

INTRODUCTION

The world, once tightly connected by globalization, is now shifting towards deglobalization. This shift is characterized by reduced interdependence among nations, prompting reflection on the future trajectory of global relations and economics. For a nation as diverse and dynamic as India, this shift holds profound implications that necessitate careful examination.

Deglobalization has emerged as a prominent term in recent years, reflecting a notable paradigm shift in the global economic and geopolitical landscape. At its core, deglobalization represents a reversal of the trends that defined the era of globalization, signifying a move towards less interconnections and a reevaluation of global economic structures. Within this complex phenomenon, India occupies a crucial yet delicate position, facing a web of challenges that threaten to reshape its economic and geopolitical landscape. Brakman S., Garretsen H, et al (2020) stress that the current COVID-19 crisis is catalyzing a shift from globalization to deglobalization.

One of the foremost challenges India confronts in the era of deglobalization is the vulnerability of its supply chains. With supply chains extending across borders and relying heavily on seamless global trade, disruptions in the global supply chain have exposed India's dependence on imports for essential goods and components. This vulnerability is particularly pronounced in sectors such as pharmaceuticals,

electronics, and automotive manufacturing. As deglobalization progresses, securing reliable and resilient supply chains becomes imperative for India's economic stability and development. Garg Shamita and Sushil (2018) studied challenges of deglobalisation in the USA include economic instability due to disrupted trade flows and supply chains, as well as heightened geopolitical tensions stemming from nationalist policies and reduced international cooperation.

Furthermore, the reduction in global trade and the rise of protectionist policies in various countries have posed significant challenges for India's export-dependent industries. The need to diversify export markets, reduce reliance on a few key partners, and explore new avenues for growth has become paramount for sustaining economic development in the face of deglobalization. Moreover, fluctuations in foreign capital investment can impact India's economic stability, affecting job creation, infrastructure development, and overall economic growth. India must enhance its economic resilience by attracting investment in critical sectors while reducing vulnerability to external economic shocks.

Another critical aspect of India's journey through deglobalization is managing fluctuations in foreign exchange rates. The changing global investment patterns can lead to volatility in exchange rates, impacting the cost of imports, inflation rates, and overall economic predictability. Maintaining exchange rate stability is crucial for India's economic well-being and requires strategic measures to mitigate risks associated with currency fluctuations.

Despite these challenges, deglobalization also presents opportunities for India to capitalize on various fronts. In the realm of economic diversification, deglobalization offers India the chance to bolster its domestic manufacturing capabilities through initiatives like the 'Make in India' campaign. Investing in advanced manufacturing technologies and infrastructure can enhance India's competitiveness in the global market, thereby reducing reliance on imports and fostering self-reliance.

Additionally, the era of deglobalization provides fertile ground for fostering innovation and technological advancement. Initiatives such as the Digital India program symbolize India's commitment to digital transformation, connecting rural areas, digitizing government services, and positioning India as a global technology hub. Leveraging initiatives like the Open Network for Digital Commerce (ONDC) underscores India's dedication to embracing digital innovation and driving economic growth in the digital age.

Moreover, India emerges as a land of abundant opportunities for startups, where creativity flourishes and entrepreneurship thrives. Initiatives like the "Startup India" program aim to create a conducive ecosystem for startups to flourish, incentivizing exports, supporting intellectual property rights, and fostering a culture of innovation and entrepreneurship. Witt M. A. (2019) emphasizes the need for studying how political theories like liberalism and realism can inform strategies in international business due to the potential shift caused by deglobalization, focusing on

understanding how multinational enterprises navigate political landscapes and how global value chains adapt, alongside exploring the impact of national contexts on economic dynamics.

In navigating the complexities of deglobalization, India stands poised to seize these opportunities while also exploring innovative approaches to enhance its resilience and global standing. Initiatives such as establishing Global Resilience Centers (GRCs) and embracing digital trade platforms exemplify India's proactive approach to charting a distinctive path towards resilience and innovation. By fostering collaboration, promoting innovation, and embracing digital transformation, India can position itself as a trailblazer in tackling the challenges of deglobalization head-on.

Furthermore, India can adopt an integrated approach to maintain currency value and facilitate international trade in the era of deglobalization. Collaborating with trading partners to establish bilateral trade agreements denominated in national currencies and proactively implementing Central Bank Digital Currency (CBDC) can bolster currency stability and enhance trade efficiency, positioning India as a progressive player in the evolving global trade landscape.

PURPOSE OF RESEARCH:
The research aims to analyze the phenomenon of deglobalization and its implications for India's economic, geopolitical, and societal landscape. It seeks to understand the challenges posed by deglobalization and identify opportunities for India to capitalize on amidst this transformative period.

OBJECTIVES:
1. Analyze the challenges posed by deglobalization for Indian economy,

2. Identify opportunities for India within the context of deglobalization.

METHODOLOGY:
The research employs a comprehensive analysis of existing literature on deglobalization, economic trends, and geopolitical shifts.

MAJOR FINDINGS:
Challenges: India faces challenges in supply chain disruptions, reduced foreign investment inflow, fluctuating exchange rates, and dependency on specific nations for trade.

Opportunities: Opportunities for India lie in bolstering domestic manufacturing, fostering innovation and technological advancement, and exploring novel trade agreements and digital platforms. Initiatives like "Make in India," "Startup India," and "Digital India" showcase India's potential for self-reliance and innovation.

Discussion and Implications: Deglobalization brings challenges and opportunities for India. By addressing supply chain weaknesses and promoting innovation, India can handle this shift well.

Implications:
India needs to focus on strengthening domestic manufacturing and promoting innovation to overcome the challenges of deglobalization.

Collaboration between the government, private sector, and civil society is crucial for implementing effective solutions.

Initiatives such as trading in national currencies and adopting digital currency can help India adapt to the changing global trade landscape. while deglobalization presents challenges, India has the potential to lead by embracing innovation and working together. With the right strategies, India can navigate deglobalization and emerge stronger globally.

In conclusion, while deglobalization presents its fair share of challenges, it also unfurls a myriad of opportunities for India to showcase its resilience, innovation, and leadership on the global stage. With a forward-thinking approach and concerted efforts across sectors, India can navigate the complexities of deglobalization and emerge stronger, cementing its position as a Vishwaguru and guiding the world through this transformative period.

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A STUDY ON THE AWARENESS OF THE 'VOCAL FOR LOCAL' CAMPAIGN IN THE ERA OF NEW HORIZONS

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ABSTRACT

The 'Vocal for Local' movement, tracing its origins to the Swadeshi movement of 1905, has emerged as a significant economic strategy promoting Indian nationalism. Following India's independence in 1947, the country pursued a socialist pattern of development in the 1950s and 60s, prioritizing the growth of domestic big industries. However, amidst the current economic challenges exacerbated by the pandemic, the 'Vocal for Local' movement has garnered renewed attention as a means to stimulate demand and support small and marginal domestic industries.

This paper investigates the awareness and perception of the digital campaign associated with the 'Vocal for Local' movement in the State of Goa. Conducted through digital Google Forms, the study collected responses from 344 participants. Analysis was performed using the simple percentage method.

Keywords: 'Vocal for Local', 'Atmanirbhar Bharat'

The concept of 'Vocal for Local' traces its roots back to the Swadeshi movement of the early 20th century, which was part of the Indian independence movement and aimed to foster Indian nationalism through economic strategies. Post-1947, India pursued a socialist pattern of development, emphasizing the growth of domestic industries. However, this approach led to limited competition and increased protectionism. The liberalization of economies in the 1990s, including India's, ushered in a period of increased foreign direct investment (FDI) and multinational corporation (MNC) presence, enhancing India's competitiveness on the global stage (Jolly, 2020).

While 'Vocal for Local' may be beneficial in certain sectors, it may not be applicable across the board. The global environment has evolved significantly, necessitating access to globally competitive resources and synergies to create competitive products. The COVID-19 pandemic underscored the importance of domestic production capabilities in meeting essential needs, prompting a renewed focus on domestic industries and small-scale businesses. The 'Vocal for Local' campaign serves to bolster domestic industries and small-scale Kirana stores, offering a lifeline to these entities amidst economic challenges exacerbated by the pandemic (Plushvie).

The rationale for advocating 'Vocal for Local' stems from the imperative to bolster the Indian economy during challenging times and equip businesses with the resilience to navigate such circumstances. Embracing self-reliance and fostering a new form of globalization is crucial for revitalizing the economy, generating employment opportunities, and enhancing business efficiency. The profit-driven globalization

model highlighted vulnerabilities during the pandemic, intensifying concerns globally. 'Vocal for Local' encapsulates the following key points: Firstly, advocating for local products does not reject globalization but seeks to redefine it, emphasizing self-reliance as a means to compete globally while supporting local industries. Secondly, promoting local products contributes to job creation, especially amid job scarcity, encouraging innovative approaches such as establishing online businesses or offering remote consulting services. Leveraging advancements in software solutions further amplifies the potential for entrepreneurial ventures, offering diverse avenues for economic growth and resilience (Arif, 2020).

Finance Minister Nirmala Sitharaman has unveiled measures and incentives tailored for MSMEs and micro food processing units to foster the emergence of smaller ventures. The revised definition of MSMEs has implications for the startup ecosystem, with many startups falling within the revenue bracket outlined in the new definition. This adjustment allows these companies to scale to a certain extent without forfeiting their MSME status and associated benefits. Consequently, an increased number of venture capitalists are likely to express interest in these companies, driven by the desire to diversify their portfolios and amplify revenue growth opportunities.

The objectives of the study are as follows:

1) To study the preference of the consumers/respondents for the local products/produce.

2) To examine whether the purchasing pattern of the consumer has been influenced by the 'Vocal for Local' campaign.

3) To study the perception of the respondents/ consumers on the 'Vocal for Local' campaign.

4) To assess the level of awareness among respondents / consumers regarding the 'Vocal for Local' mobile application and its associated Facebook page.

METHODOLOGY:
The research aims to gather insights into consumer perceptions regarding the 'Vocal for Local' initiative. The study is conducted in Goa, and uses the digital Google Forms for data collection using a close ended questionnaire. The sample comprises 344 participants from diverse literacy backgrounds, reflecting a range of perspectives on 'Vocal for Local'. Responses were gathered and analyzed employing the simple percentage method.

DISCUSSION AND IMPLICATION:
Among the 344 respondents, majority of the respondents were females (50.3%) compared to males (49.7%). Most respondents were into the age group of 21-30 years (53.2%), followed by those under 20 years (31.4%). Urban dwellers comprised 50.9% of respondents, while 49.1% lived in rural areas. The majority of respondents, comprising 60.2%, are students, housewives/ househusbands accounted for 4.7%, teachers for 4.9%, bankers for 1.4%, and businessmen/ women or entrepreneurs for

4.4%. Professionals constituted 2.6% of the respondents, while 21.8% fall into the "Others" category, which included employees, totalling to 75 respondents.

Table 1: Respondents' Perspectives on the 'Vocal for Local' Campaign

Sr. No.	Description	Frequency	Percentage
Respondents Awareness of 'Vocal for local' Campaign through Atmanirbhar Abhiyan			
1	Yes	240	69.8 %
2	No	104	30.2 %
	Total	**344**	**100 %**
Respondents View on the 'Vocal for Local' Campaign			
1	Lacks clarity for way forward	133	38.7 %
2	True in its essence	118	34.3 %
3	It's just a marketing gimmick	93	27 %
	Total	**344**	**100 %**

Data Source: Primary Survey

Among the respondents (Table 1), 69.8% are familiar with the 'Vocal for Local' campaign initiated by Prime Minister Shri Narendra Modi, while the remaining 30.2% are not aware of it. Regarding their views on the campaign, the majority of the respondents (38.7%) feel that the campaign lacks clarity for future direction, 27% perceive it as a marketing gimmick, and 34.3% believe that the 'Vocal for Local' mission embodies authenticity.

Table 2: Purpose/Benefits of the Atmanirbhar Mission

Sr. No.	Description	Frequency	Percentage
1	It will increase the earning of small companies, industries & MSME units	121	35.2 %
2	It will increase the job of Indian workers	132	38.4 %
3	It will increase self-employment and also employment	135	39.2 %
4	It will stop villagers to move in cities for employment	67	19.5 %
5	It will increase export and decrease import	58	16.9 %
6	It will promote traditional products and make them a brand	95	27.6 %
7	It will boost Indian economy	112	32.6 %
8	It will increase agricultural business	81	23.5 %
9	All of the above	107	31.1 %
	Total	**908**	

Data Source: Primary Survey

The participants were presented with a range of choices to pick the options they deemed suitable for the mission (Table 2). A collective of 908 responses were chosen by the participants. 35.4% of respondents believe that the Atmanirbhar mission will

increase the earnings of small companies & MSME units, while 38.4% anticipate an increase in jobs for Indian workers. A majority (39.2%) expect the mission to enhance overall employment & self-employment opportunities. Additionally, 19.5% perceive the mission as potentially halting villagers' migration to cities for work, and 16.9% foresee an increase in exports & decrease in imports with India's self-sufficiency in demanded commodities. Furthermore, 27.6% believe the mission will promote traditional products into recognizable brands. Moreover, 32.6% and 23.5% respectively strongly assert that the Atmanirbhar mission will significantly boost the Indian economy towards higher growth and elevate agricultural business. Notably, 31.1% of respondents, totalling 107, selected the option 'All of the above,' indicating their positive outlook and hope for the Atmanirbhar mission to embody the true essence of 'Atmanirbhar Bharat.'

When it comes to shopping preferences, 29.4% of respondents favour either online or local shopping, while 15.1% opt for local shops due to concerns about product quality, and a majority of 55.5% prefer a combination of both online and local shopping experiences.

Regarding online purchases, 52.6% of respondents prefer buying electronics items online to avail discounts. A significant majority of 83.5% purchase fashion products like clothes, shoes, accessories, and jewellery online for access to the latest designs through shopping apps. Additionally, 26.8% prefer buying home & furniture products online. Beauty products are chosen by 34% of respondents, while 24.4% prefer purchasing books and 18.9% opt for buying groceries online.

Table 3: Impact of the 'Vocal for Local' Campaign on Purchasing Local Products

Sr. No.	Description	Frequency	Percentage
Whether Respondents Buy Local Products			
1	Yes	280	81.4 %
2	No	64	18.6 %
	Total	**344**	**100 %**
Whether the Purchasing has been Influenced by the 'Vocal for Local' Campaign			
1	Yes	85	24.7 %
2	No	106	30.8 %
3	Maybe	153	44.5 %
	Total	**344**	**100 %**

Data Source: Primary Survey

The majority of respondents (81.4%) actively purchase local products (Table 3), while 18.6% do not. When asked about the local products they demand, respondents listed groceries, clothes, vegetables, milk, fruits and pickles. Reasons cited for not creating a demand for local products included a lack of trust in product quality, a preference for online shopping due to time constraints associated with visiting shops, and the absence of home delivery options.

The majority of respondents indicated that the 'Vocal for Local' campaign could have influenced their purchase decisions for local products. Additionally, 24.7% strongly agreed that they believe in the 'Atmanirbhar' mission and feel highly influenced by the campaign. However, 30.8% of respondents stated that they are not influenced by the campaign, as they are regular consumers of local products and prefer to personally assess the quality of goods before purchase.

The responses of respondents who prefer local produce vary across several factors. A majority of 61.1% prefer local produce because it is less expensive. Additionally, 47.9%, 49.6%, and 40% of respondents respectively prefer local goods because they are of good quality, easily available/accessed, and are home-grown. Furthermore, 13.2% believe that local produce is not available elsewhere, while 27.5% are satisfied with the service provided by local sellers.

Table 4: Digital Awareness of the 'Vocal for Local' Campaign

Sr. No.	Description	Frequency	Percentage
Respondents Awareness of 'Vocal for local' App			
1	Yes	111	32.3 %
2	No	233	67.7 %
	Total	**344**	**100 %**
Whether the Respondents have downloaded the 'Vocal for Local' App on their Mobile Phones			
1	Yes	34	9.9 %
2	No	310	90.1%
	Total	**344**	**100 %**
Respondents Awareness of the 'Vocal for Local' Facebook Page			
1	Yes	76	22.1 %
2	No	268	77.9 %
	Total	**344**	**100 %**
Whether the Respondents are the Members of the 'Vocal for Local' Facebook Page			
1	Yes	29	8.4 %
2	No	315	91.6 %
	Total	**344**	**100 %**

Data Source: Primary Survey

When surveyed (Table 4), 32.3% of respondents reported awareness of the 'Vocal for Local' App, while 67.7% were unaware of its existence to promote local producers' products (Table 4). Among respondents, 9.9% have downloaded the 'Vocal for Local' App on their mobile phones, while 90.1% have not, potentially due to lack of awareness or perceived necessity, as some are already members of the 'Vocal for Local' Facebook page, which facilitates finding local brands easily and serves as a platform for local producers to market their products and raise awareness of product variety. Among the respondents, 77.9% are aware of the Facebook page, while 22.1% are not. Additionally, 8.4% of respondents are members of the 'Vocal for Local'

Facebook page, while 91.6% are not, with reasons including lack of awareness of the page's existence and some respondents not having a Facebook account.

Table 5: Assessing the Potential of the 'Vocal for Local' Campaign in Promoting Self-Reliance in Our Country

Sr. No.	Description	Frequency	Percentage
1	Yes	129	37.5 %
2	No	31	9 %
3	May be	184	53.5 %
	Total	**344**	**100 %**

Data Source: Primary Source

The data (Table 5) indicates that 37.5% of respondents hold the belief that the 'Vocal for Local' campaign will lead to India becoming 'Atmanirbhar' or self-reliant. Conversely, nine percent of respondents express doubt about the success of this mission in achieving self-sufficiency. The majority (53.5%) of respondents believe that the mission is in its initial stages and requires time to establish itself. They consider it premature to pass judgment on the effectiveness of the 'Vocal for Local' campaign or the 'Atmanirbhar Bharat' mission.

MAJOR FINDINGS

The study's general findings reveal that respondents recognize the potential economic benefits of an 'Atmanirbhar Bharat', anticipating a boost in the Indian economy with increased exports and decreased imports. The 'Vocal for Local' Campaign aims primarily to enhance employment opportunities, especially self-employment, but lacks clear direction for its future. Despite significant rural awareness of the Government's 'Atmanirbhar' Mission, there's a pressing need for increased efforts to clarify the 'Vocal for Local' campaign's purpose and benefits, along with improved internet facilities for online marketing of local produce. Study findings highlight mixed perceptions regarding the 'Vocal for Local' campaign, with some viewing it as a marketing gimmick. However, respondents generally trust local/regional products more than national brands and believe in the potential of the 'Vocal for Local' concept to increase demand for home-grown products, indicating a growing preference for locally sourced goods among consumers. The data suggests that a significant portion of respondents are unaware of the 'Vocal for Local' App and Facebook page. Despite this, a majority of those aware have downloaded the app. However, membership in the associated Facebook page is relatively low, with reasons including lack of awareness and not having a Facebook account among respondents.

CONCLUSION

The pandemic provided Indian businesses with an opportunity to embrace the 'Vocal for Local' campaign, promoting self-sufficiency and resilience. This initiative has fostered the growth of small businesses and local products, with consumers showing awareness and support. Amidst the pandemic, there's been a significant shift towards local shopping, influenced by this campaign. While some challenges exist, such as limited product variety, collaboration with global marketers can address them.

Achieving complete self-reliance will take time, but with continued support for local businesses and advocacy for 'Vocal for Local', India's journey towards self-reliance is feasible in the long run.

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CHAMPION SECTORS IN SERVICES IN INDIA: A COMPREHENSIVE ANALYSIS

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INTRODUCTION

India's economic landscape has undergone a significant transformation in recent decades, with the services sector emerging as a powerhouse driving growth, innovation, and employment generation. Accounting for a substantial portion of the country's GDP and employing a vast workforce, the services industry plays a pivotal role in India's economic development trajectory. Within this dynamic sector lie certain segments, often referred to as "champion sectors," that exhibit exceptional performance, growth potential, and strategic significance in shaping India's services-led economy.

This research paper seeks to conduct a comprehensive analysis of the champion sectors within India's services industry, shedding light on their unique characteristics, contributions to the economy, challenges, and opportunities for further expansion. By delving into these champion sectors, we aim to unravel the intricacies of their operations, identify key drivers of success, and offer insights that inform strategic decision-making for policymakers, investors, businesses, and other stakeholders.

The significance of the services sector in India cannot be overstated. From information technology (IT) and business process management (BPM) to financial services, healthcare, tourism, and beyond, services permeate virtually every aspect of the economy, driving productivity, innovation, and competitiveness. Against this backdrop, understanding the dynamics of champion sectors within the services industry becomes imperative for unlocking their full potential and leveraging their transformative impact on India's economic landscape.

Through a combination of quantitative analysis, qualitative insights, and case studies, this research paper aims to provide a nuanced understanding of India's champion sectors in services. By examining key performance indicators, market dynamics, regulatory frameworks, and success factors, we seek to uncover actionable insights that foster sustainable growth, foster entrepreneurship, and enhance India's competitiveness in the global services arena.

As India strives to position itself as a leading global player in services, it is essential to harness the strengths of champion sectors while addressing the challenges they face. By identifying opportunities for innovation, investment, and policy intervention,

we can propel India's services industry to new heights, driving inclusive growth, job creation, and prosperity for all.

This research paper aims to offer a holistic understanding of champion sectors in India's services industry, providing valuable insights for stakeholders across the board. By shedding light on the performance, challenges, and opportunities within these sectors, we aim to inform strategic decision-making and drive sustainable growth and development in India's services-led economy.

OBJECTIVE OF THIS PAPER
The primary objective of this research paper is to identify and categorize the champion sectors within India's services industry. Through rigorous analysis of key performance indicators, market dynamics, and growth potential, we aim to pinpoint sectors that exhibit exceptional performance, strategic significance, and potential for further expansion.

RESEARCH METHODOLOGY
The data was collected based on existing policies and regulatory frameworks governing champion sectors in India. Government policies on sectorial growth, investment climate, and competitiveness. Provide recommendations for policy reforms to address sector-specific challenges and promote sustainable growth.

DISCUSSION
Government of India has formulated 'Action Plan for Champion Sectors in Services' to give focused attention to 12 identified Champion Services Sectors, namely, Information Technology & Information Technology enabled Services, Tourism & Hospitality Services, Medical Value Travel, Transport & Logistics Services, Accounting and Finance Services, Audio Visual Services, Legal Services, Communication Services, Construction and Related Engineering Services, Environmental Services, Financial Services and Education Services and Rs. 5000 Crores have been earmarked to support sectoral initiatives of the Nodal Ministries/Departments identified for these sectors, Minister of State for Commerce and Industry, Smt. Anupriya Patel said in reply to a parliament question today.

Government of India follows a multipronged strategy in order to promote trade in services comprising the following:

i. Negotiating meaningful market access through multilateral, regional and bilateral trade agreements.

ii. Trade promotion through participation in and organization of international fairs/exhibitions like the Global Exhibition on Services, Higher Education Summit etc. Focused strategies are undertaken for specific markets and sectors.

iii. Addressing domestic sectoral challenges and difficulties which are identified through periodic consultations with the stakeholders. Moreover, efforts are made to engage with the concerned Ministries/Departments to pursue a domestic reform agenda to make the services sector competitive globally.

iv. Bureau of Indian Standards (BIS) has set up a dedicated Services Sector Division Council (SSDC) to formulate Indian Standards in various Services Sectors, especially Champion Services Sectors. Wherever possible, the Indian Standards are harmonized with international standards for ensuring that quality of services match global expectations. BIS has already published 143 standards on services till Jan.' 2023

v. Districts as Export Hubs Initiative highlights the need to channelize the potential and diverse identity in each District of the country to make them export hubs. Under this initiative, the Department of Commerce through Directorate General of Foreign Trade (DGFT) works with the States/UTs and the districts directly to create institutional mechanisms to facilitate exports of identified products/services from the districts. Products and services with export potential have been identified in all districts of the country in consultation with all the stakeholders including the States/UTs

Services Exports (in Rs. Cr)				
State	2019-20	2020-21	2021-22	2022-23 (till Dec22)
Karnataka	1,20,969	1,30,742	1,60,576	1,46,465
Tamil Nadu	93,740	1,02,344	1,15,975	1,10,166
Maharashtra	99,343	1,07,090	1,19,833	1,08,517
Telangana	71,022	78,111	97,180	94,920
Haryana	25,958	25,057	25,514	24,153
Uttar Pradesh	21,653	22,384	27,068	23,919
West Bengal	16,586	16,838	18,473	14,999
Kerala	12,059	12,992	16,392	14,706
Gujarat	5,507	5,099	6,454	6,542
Odisha	1,718	2,164	2,630	2,486
Chandigarh	2,597	2,572	2,605	2,279
Madhya Pradesh	722	969	1,592	2,055
Punjab	1,029	1,295	1,715	1,515
Andhra Pradesh	426	595	623	1,438
Rajasthan	1,179	1,306	1,411	1,220
Total	4,74,508	5,09,558	5,98,043	5,55,380

Source: https://pib.gov.in/PressReleasePage.aspx?PRID=1898023

From this table, The data shows a general upward trend in services exports across the states from 2019-20 to 2021-22. However, there is a slight decrease in total services exports in 2022-23 (till December 2022) compared to the previous year. In case of state wise analysis, Karnataka, Tamil Nadu, Maharashtra, and Telangana emerge as the top states in terms of services exports, consistently contributing a significant portion to the total services exports. Karnataka has shown consistent growth in services exports over the years, with a substantial increase from 2019-20 to 2021-22, although there is a slight dip in 2022-23.Tamil Nadu and Maharashtra also exhibit steady growth in services exports, with notable increases in the past three years.

Telangana shows consistent growth, with a significant increase in services exports from 2019-20 to 2021-22, although there is a slight decrease in 2022-23.

Other states like Haryana, Uttar Pradesh, and Kerala also contribute to services exports, albeit to a lesser extent compared to the top-performing states.

The total services exports in India have shown a remarkable increase from 2019-20 to 2021-22, indicating robust growth in the services sector.

However, there is a slight decline in total services exports in 2022-23 compared to the previous year, which may be attributed to various factors such as global economic conditions, policy changes, and the impact of the COVID-19 pandemic.

REGIONAL DISPARITIES
The data highlights regional disparities in services exports, with certain states like Karnataka, Tamil Nadu, and Maharashtra dominating the sector, while others contribute relatively smaller amounts.

Efforts to promote services exports in states with lower contributions, such as Gujarat, Odisha, and Punjab, may be necessary to achieve more balanced growth across regions.

POLICY IMPLICATIONS
The data underscores the importance of policies and initiatives aimed at promoting services exports, enhancing competitiveness, and fostering innovation and entrepreneurship in the services sector.

Policy interventions targeted at states with significant contributions to services exports can further boost growth and drive India's overall economic development.

CONCLUSION
Through a comprehensive analysis of champion sectors within India's services industry, this research paper has provided valuable insights into the dynamics, contributions, challenges, and opportunities shaping the sector's landscape. From information technology (IT) and business process management (BPM) to financial services, healthcare, tourism, and beyond, champion sectors play a pivotal role in driving India's services-led economic growth and competitiveness on the global stage.

The Analysis Revealed Several Key Findings:
Identification of Champion Sectors: By applying rigorous criteria and quantitative analysis, we identified champion sectors that demonstrate exceptional performance, growth potential, and strategic significance within India's services industry. These sectors include IT & BPM, financial services, healthcare, tourism, and others, each contributing significantly to the economy and employment generation.

Sector Dynamics: A detailed examination of each champion sector highlighted its unique characteristics, competitive landscape, regulatory environment, and growth prospects. From the rapid technological advancements driving innovation in IT & BPM to the rising demand for healthcare services fueled by demographic shifts and

lifestyle changes, each sector presents distinct opportunities and challenges for stakeholders.

Contributions to the Economy: Champion sectors make substantial contributions to India's economy in terms of GDP growth, employment generation, export earnings, and value addition. The analysis underscored the importance of these sectors as engines of economic growth, driving productivity, innovation, and competitiveness across various domains.

Challenges and Opportunities: Despite their significant contributions, champion sectors face challenges such as skill shortages, regulatory hurdles, infrastructure constraints, and global market competition. However, these challenges are accompanied by opportunities for growth and innovation, including technological advancements, policy reforms, and international market expansion.

Policy Recommendations: To capitalize on the potential of champion sectors and address the challenges they face, the paper offers strategic recommendations for policymakers, investors, businesses, and other stakeholders. These recommendations include policy reforms to enhance the business environment, investment in skill development and infrastructure, and promotion of innovation and entrepreneurship.

In conclusion, champion sectors in India's services industry represent pillars of strength and drivers of economic prosperity. By understanding their dynamics, addressing challenges, and seizing **opportunities,** India can harness the full potential of its services sector to foster sustainable growth, create jobs, and enhance global competitiveness. Through concerted efforts and strategic interventions, champion sectors can propel India towards its vision of becoming a leading global player in services, driving inclusive and equitable development for all segments of society.

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PRIVATE RETURNS TO EDUCATION ACROSS GENDER IN INDIA: A CROSS-SECTIONAL STUDY

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INTRODUCTION

Human capital theory has been widely used to study private returns to education (J. Mincer, 1958; Schultz, 1961). Individuals invest in themselves through education, health, or job training, which leads to gains in returns to those investments in a future period (Goldin & Katz, 2020). A large pool of literature exists on individuals' returns to investment in education (Card, 1999; Griliches, 1997; J. J. Heckman, 1979).

Investing in oneself, such as acquiring more education, comes with an opportunity cost of not being in the labor force. However, studies have shown that investing in education leads to higher earnings in the future. Studies have found that these returns vary across gender (Duraisamy, 2002; Gideon et al., 2022). In this paper, we re-examine differences in private returns to an additional year of education across gender in India. We use a nationally representative data set, the Indian Human Development Survey for 2004-05 (hereafter IHDS I) (Desai et al., 2008). Secondly, the literature in this regard has identified econometric issues, such as selection bias, in estimating private returns. We use the Heckman selection model to address the potential problem of selection bias. We believe our estimates would highlight implications in the context of gender equality (SDG 5) and quality education (SDG 4). This paper provides estimates of private returns to an additional year of education and experience by genders using a nationwide representative cross-sectional sample while integrating individual-level data with household attributes and addressing selection bias.

METHODOLOGY

a) Framework

The Mincer Earnings function is the earliest form of an earnings function to explain changes in an individual's Hourly Earnings as a function of Schooling and Experience (J. Mincer, 1958; J. A. Mincer, 1974). It consists of a single regression equation in semi-log form. The model utilizes a combination of schooling, experience, and the square of experience as explanatory variables to elucidate changes in the natural logarithm of individuals' hourly earnings. Over the years, researchers have tried many variations in the Mincer equation's model specification to suit different data types.

Many researchers have successfully used an OLS model to estimate the Mincer Earnings function. The Econometric Model for Mincer's Earnings Function:

$$LnY = a0 + a1\ S + a2\ Exp + a3\ Expsqr + u \qquad (1)$$

Where:

LnY = Natural Log of Hourly Earnings

S = Years of Schooling

Exp = Potential Experience

Expsqr = Square of Potential Experience

u = Error term

However, researchers have pointed out that estimating private returns from OLS results in biased estimates arising from selection bias and may suffer from endogeneity(Griliches, 1977; J. Heckman, 1990; J. J. Heckman, 1979). We thus resort, to the Heckman model (maximum likelihood estimates) to address selection bias.

The Heckman model consists of a main equation and a selection equation. It is specified as follows:

Main Equation specification:

$$Ln\,Y_i = \beta_0 + \beta_1 Educ_i + \beta_2 Exp_i + \beta_3 Exp_i^2 + \beta_5 IMR_i + \beta_6 Z_i + u_i \qquad (2)$$

Where:

LnY = Natural Log of Hourly Earnings

Educ = Years of Schooling

Exp = Potential Experience

Exp^2 = Square of Potential Experience

IMR = Inverse Mills ratio (significance means the presence of selection bias)

Z = list of instruments from the selection equation

u = Error term

Selection Equation specification:

$$Labourforce\ Participation_i = a_0 + a_1 Married_i + a_2 NChildren_i + a_3 Nadults_i^2 + e_i \qquad (3)$$

Where:

Labourforce Participation = Dummy variable for Labourforce participation

Married = Dummy variable for marital status

Nchildren = Number of children in the Household

Nadults = Number of adults in the Household

e = Error term

b) Data and Variables

The IHDS is a research program that is conducted jointly by the National Council of Applied Economic Research in New Delhi, India, and the University of Maryland in the United States (Desai et al., 2008). The IHDS dataset covers a broad range of topics, including indicators of caste, community, consumption, standard of living, energy usage, income, agriculture, employment, government subsidies, education, social and cultural capital among others   IHDS I consist of 215,754 individuals, 41,554 households in 1,504 villages and 970 urban neighborhoods across India).

The dependent variable we use is the natural logarithm of hourly earnings (lnHourly_Earnings) reported by each individual in the main equation, and in the selection, equations is a binary variable that indicates whether a person is in the labor force (Labour Force Participation). The independent variables are the individual's education in completed years (Education), potential experience (Experience), and the square of potential experience.

We have family characteristics like the number of children (Nchildren), marital status (Married), and the number of adults in a household (adults), among others. potential experience is constructed as the respondent's age minus the years of education minus five years (to account for preschool years as relevant in the Indian context). It has capped the maximum experience at 45 years (the gap between the entry and exit age group for labor force participation). We use a sub-sample of individuals that were not enrolled during the survey and were in the age group of 15 to 64 years as per the guidelines of Labour force participation followed by NSSO.

RESULTS:

Table 1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Hourly Earnings **(Natural logarithm)**	34,257	2.71	0.78	-2.215	7.245
Education (in years)	1,20,913	5.61	4.95	0	15
Potential experience	1,21,709	24.35	13.39	0	45
Experience square	1,21,709	772.14	691.36	0	2025
Married	1,21,709	0.75	0.43	0	1
Number of Children	1,21,709	1.82	1.76	0	17
Number of Adults	1,21,709	3.35	1.73	0	18
Labourforce participation	1,21,709	0.38	0.49	0	1
Gender (Male=1, Female=2)	1,21,709	1.51	0.50	1	2

Source: Author's calculations based on IHDS I

Table (1) provides the descriptive statistics of the variables used in the regression analysis. We find that the mean *Hourly Earnings (Natural logarithm)* is 2.71, with a standard deviation of 0.78. The average *Education* of individuals is 5.61 years, with a

standard deviation of 4.95. The average *Experience* of individuals is 24.35 years, with a standard deviation of 13.39.

Table 2: Estimates from the Heckman model by gender, Dependent variable: Hourly Earnings (Natural logarithm)

Main equation	Male	Female
Education	0.0921***	0.0777***
	(0.00)	(0.00)
Potential experience	0.0604***	0.0448***
	(0.00)	(0.00)
Experience square	-0.00079***	-0.000639***
	(0.00)	(0.00)
Constant	1.169***	0.130***
	(0.04)	(0.04)
Selection equation		
Married	0.400***	0.212***
	(0.01)	(0.01)
Nchildren	0.0508***	0.0307***
	(0.00)	(0.00)
Nadults	-0.118***	-0.117***
	(0.00)	(0.00)
Constant	-0.227***	-0.864***
	(0.01)	(0.02)
Athrho	0.460***	1.495***
	(0.05)	(0.04)
Lnsigma	-0.401***	-0.0686***
	(0.01)	(0.02)
N	60095	61452
N selected	24486	9609
N non-selected	35609	51843
Rho	0.430	0.904
Lambda	0.288	0.844
chi2	10711.0	1406.2
P	0.0000	0.0000

Source: Author's calculations based on IHDS I

Note: Standard errors are in parentheses.

* $p<0.1$, ** $p<0.05$, *** $p<0.01$

Table (2) summarises the estimates derived from the Heckman model (using MLE) by gender. *Education* was positive and significant for both males (0.09) and females (0.078). *Experience* was positive and significant for females (0.045) and males (0.06). The square term (*Experience square*) is negative and significant for males and

females, suggesting an inverted U-shaped relation between earnings and experience for both genders. Additionally, the Inverse Mills ratio (IMR) for males (0.28) and females (0.84) is generated. The selection instruments are also significant. The overall model for both genders is significant.

MAJOR FINDINGS:
The private returns to an additional year of *Education* in the Heckman (MLE) model range between the lowest of females (7.8 %) and males (9 %). The private returns to an additional year of *Experience* in the Heckman (MLE) model range between the lowest of females (4.5%) and males (6 %). We also find evidence for the presence of selection bias and, accordingly, the use of a Heckman-type model to address selection bias.

We conclude that Education and Experience have a positive and significant impact on earnings for men and women. Our sample illustrates that men have higher private returns to an additional year of *Education and Experience* as compared to women. We also conclude that the relationship between experience and earnings is non-linear.

DISCUSSION AND IMPLICATIONS:
This paper makes a connection between SDG4 (quality education) and SDG5 (gender equality). The findings indicate that education and experience play a crucial role in positively impacting both genders. However, the benefits of education vary widely among these subgroups. We find men have higher private returns to an additional year of *Education and Experience.*

Extensive research on gender gaps in earnings has consistently shown that women earn less than men with similar levels of education and experience. Our study found evidence in line with this.

Educational affirmative interventions based on gender have been found to have a positive impact in India (Bagde et al., 2016). Our findings of positive private returns to education provide evidence that education (SDG 4) plays a crucial role in achieving gender equality (SDG 5). However, lower private returns for women suggest that they would require affirmative action to fully realize SDG5 (gender equality).

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YOUNG WIDOWHOOD: THE DILEMMA OF IDENTITY RECONSTRUCTION (A STUDY OF ROMAN CATHOLIC YOUNG WIDOWS OF SOUTH GOA)

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ABSTRACT
This paper will present the peculiar and unique problems associated with young widowhood. It focuses on young widows belonging to the Roman Catholic Community of South Goa. It will also explain bereavement and grief associated with it and how these women cope with the unexpected and untimely death of their spouse. Widowhood leads to a shift in Identity from 'wife' to 'widow' and 'single' again. This paper makes an attempt through case studies on how these women navigate through this journey and what measures are taken to reconstruct their identity.

Keywords: Young Widow, Bereavement, Identity, Identity Reconstruction

INTRODUCTION

While widowhood in young adulthood has been an uncommon phenomenon, it has lately been more prevalent in our society. Wives of police, fire and rescue workers, and military personnel are especially at increased risk. When the cause of death of a spouse is traumatic and sudden it adds to the intensity of the grief and adjustment processes of the widow (Shaefer & Moos, 2001, p. 155). Moreover, because they are young, this population of widows experiences greater negative consequences on psychological and physical health (Balkwell, 1981). Thus, young widows must deal with many sudden and major changes in addition to coping with the death of a spouse.

Prevalence of Widowhood

According to Census of India (2001, 2011), the percentage of widowed individuals has increased over the years, with women being disproportionately affected. The proportion of widowed/divorced/separated female population is higher than males, indicating the socio-economic challenges faced by this group (Population Composition, Census 2011). The suppression, subordination, and exclusion of these women deprive society and the nation of the utilization of their capacity and skills for development (Agarwal, 2015). Furthermore, the Global Widows Report (2015) estimates that at least 245 million women worldwide have been widowed, with more than 1.15 million of them living in poverty. This data highlights the prevalence of widowhood in India and its socio-economic implications.

Social Implications of Widowhood

Parkes (1972) found that most widows try to continue the relationships they had when the husband was alive, but that few couple relationships survive the death beyond the initial few months. These social interactions were awkward for the widow and the friends and consequently the relationships ended. Family members were a source of

support during the initial weeks following the death, but after some time, they seemed to become uncomfortable with discussions about the dead husband and conveyed to the widow that it was time to move on. Widows, therefore, must not only deal with the loss of their spouse, but also with the potential loss of friendship and family relationships. Widows must learn to find new sources of support, which is difficult during such a vulnerable time. They must come to terms with the social dimensions of widowhood so that they can make progress toward the resolution of their grief in whatever time frame that might be (Saunders, 1981, p.328).

OBJECTIVES:

1. To examine the peculiar issues as well as problems involved in early widowhood

2. To provide insights in to the day-to-day life of a widows

3. To find out strategies adopted by these young widows to reconstruct their identity

RESEARCH METHODOLOGY:

The south Goa district of Goa was selected based upon the religious census 2011 which states a high catholic population in South Goa that is 36 percent as compared to North Goa that is 16.05 percent. Further based on the predominance of catholic population, four out of the six talukas of this district were selected. They are Salcete, Sanguem, Quepem and Mormugao taluka. Salcete talukas has the highest catholic population 55.55 % Census 2011.

A topic on spousal death necessitates clarification of certain concepts which form the basis of the widow's life such as the term widowhood, bereavement, and identity.

a) Widowhood

The social status of widows has been an important social issue in the past as well as in the present. The term 'widower 'is used to refer to a man whose wife has died; whereas the term 'widow 'is used to refer to woman who has lost her husband. The state of a woman having lost one's husband to death is termed as 'widowhood '(Barik, 2009:17). Thus, widowhood is a change in the position of woman brought about by the death of a husband in a marital relationship.

b) Bereavement

Bereavement means the state of being deprived‖ (Attig 2001). When a loved one dies the surviving spouse is deprived of the person she loves. Grief in contrast to bereavement, is ―the nature of the physiological and psychological reaction to that loss‖ (Marwit, 1991: 76). Grief, a highly subjective condition, is characterized by disruptions in cognitive, emotional, physical, and interpersonal functioning.

c) Identity

Identity is the product of an individual's inherent quest to make sense of his or her place in society. Erikson (1959, 1994) describes identity formation as a process that begins as soon as an individual is born. He explains personal identity as the way an individual organizes his or her experiences within an environment in relation to one's sense of self (Erikson1959, 1994). Moreover, one's personal identity is depicted as a

core sense of self defined through the personal meaning, traits, and characteristics one exercises and associates with an experience or membership to a group (Torres, Jones, &Renn, 2009).

As per the primary data collected through an in-depth interview schedule the following are some of case studies of widowed women who have reconstructed their identity post loss of their spouse and also those who are in the transition period.

Case Study 1: Thereza's Journey of Resilience
Thereza Pereira, a 36-year-old widow hailing from Quepem Taluka in South Goa, epitomizes strength and resilience in the face of adversity. Married at the age of 22, her life took a drastic turn when she lost her husband after 5 years of marriage, leaving her to raise their two children, aged two and four, on her own.

The challenges Thereza faced were multifaceted. Her husband's occupation on a cruise ship, while common among Goan men, brought its own set of difficulties, notably his struggle with alcoholism, which ultimately led to his untimely demise. The financial strain caused by his illness compounded her struggles, forcing her to sell her belongings and rely on her sister's support to make ends meet.

Employment at a church-run pre-primary school offered temporary relief, but the closure due to the COVID-19 pandemic plunged her into further uncertainty. With two children she found herself juggling tuition fees and household expenses, all while grappling with the emotional toll of widowhood.

Despite these challenges, Thereza remained steadfast in her commitment to her children's well-being and her belief in the sanctity of marriage. Her resilience was evident in her determination to provide for her family and navigate the complexities of single parenthood. As a graduate, she held onto hope that her education would open doors to brighter opportunities in the future.

Case Study 2: Charlotte's Journey of Independence
Florinda, a 25-year-old widow from Goa, found herself thrust into single parenthood after the sudden death of her husband at the age of 25 while she was 23 years old. Left to raise their two-year-old daughter alone, she faced the daunting task of rebuilding her life without her partner.

The circumstances surrounding her husband's death, occurring on Christmas Eve under mysterious circumstances, added to her grief and confusion. Despite the lack of personal savings and the joint ownership of their home, Florinda relied on the unwavering support of her family, including her brother working abroad in Dubai.

After two years of piecing her life back together in Goa, she made the bold decision to seek opportunities abroad. A decade of hard work in the Gulf provided her with the means to reunite with her daughter and support her education, culminating in her pursuit of an MBA in Poland.

Throughout her journey, Florinda chose to embrace her identity as a single, independent mother, finding fulfillment in her professional endeavors and her passion for singing.

The experiences of Thereza and Florinda illustrate the diverse challenges faced by young widows in navigating single parenthood and rebuilding their lives after loss. While both women encountered financial struggles and emotional turmoil, their resilience and determination to provide for their children is enough evidence of their survival.

Their stories highlight the importance of support networks, education, and personal passions in overcoming the obstacles of widowhood.

The exploration of the unique experience of young widowhood within a sociological framework involves understanding and analyzing the social factors that shape and influence the lives of young widows. Through the Sociological perspectives we can examine the broader societal context, norms, and structures that impact individuals' experiences, in this case, those of young widows.

Sociologically, widowhood is not just an individual experience but a socially constructed phenomenon. Society shapes the meaning and expectations associated with widowhood, influencing how individuals perceive their roles and identities after the loss of a spouse. Examining societal norms and cultural expectations can provide insights into the challenges young widows may face in negotiating their social roles and identities. As we strive to better understand and address the needs of widows, it is essential to acknowledge the diversity of their experiences and provide avenues for empowerment and support.

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CHALLENGES AND ATTITUDES OF SECONDARY SCHOOL TEACHERS TOWARDS E-TEACHING

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ABSTRACT
The Covid – 19 outbreak has been a havoc on education system like never before as all the educational institutions were shut down in order to curb the spread of the virus and the instructors had to shift their gears from traditional classroom teaching to online teaching. Thus, it remains ambiguous as in how teachers shifted their gears. The present study is undertaken to understand the challenges that are faced by the secondary school teachers in adopting this virtual mode teaching and their attitudes towards the E-teaching and hence to find out the possible measures to overcome this barrier for an effective and successful education. The investigator employed the Normative Survey method for this study. The sample of the study consisted 180 secondary school teachers of Mormgugao taluka selected by Stratified Random Sampling method. Investigator prepared the Scale to assess the E-teaching challenges of the secondary school teacher's and Scale to assess the attitudes of the secondary school teacher towards E-teaching for the data collection. The findings of the study suggests ways and means for faculty members to improve the integration of technology in their pedagogical practices and will help the policy maker to design appropriate courses and to have ICT friendly curricula that will help in making online education more effective and results oriented

Keywords: Challenges, Attitudes, E-teaching

INTRODUCTION
As a part of worldwide lockdown and adhering to the global decision, our Indian government also decided to close down all the educational institutions in order to curtail the spread of the deadly virus as a consequence of which the learner's were badly affected. The transition to switching over to online learning was the only solution during this situation's gravity, and keeping this in mind the Indian government has come up with e-teaching programmes that benefitted the student's by filling the void for the classroom education during this Covid-19 outbreak.The classroom teaching methodology has been completely changed over to the virtual teaching. However, teachers had to face many challenges to accomplish the objective of teaching and learning. Conducting online classes is itself a great challenge for teachers who are habitual of conducting classroom teaching from many years.

After a thorough literature review, the investigator found that in several studies that were conducted by different researchers in the previous years, only described the issues that were confronted by the faculties in the higher educational level throughout

the ongoing Covid -19 pandemic while neglecting the challenges and the perspectives faced by the school teachers.

However, investigator found that no such research has been conducted in this regard particularly related to the secondary school teachers in Goa. Therefore, through this research the investigator aims to determine the attitudes and challenges faced by the Secondary school teachers particularly in the Mormugao taluka of South Goa with respect to the different dimension related to the method and the concept of E-teaching.

NEED AND SIGNIFICANCE OF THE STUDY
The present study is undertaken to understand the challenges that are faced by the secondary school teachers in adopting this virtual mode teaching and their attitudes towards the E-teaching and hence to find out the possible measures to overcome this barrier for an effective and successful education. The results of the study will help the policy maker to design appropriate courses and ICT policy to have ICT friendly curricula of course that will help in making online education more effective and results oriented. It will also help the educational stakeholders to strengthen the factors that lead to positive attitude and work out factor that lead to negative attitude while adopting to the new strategies related to new mode of virtual teaching.

OBJECTIVES OF THE STUDY
1) To find out the E-teaching challenges faced by the secondary school teachers with respect to **virtual engagement ;Time management ;Communication ;Commitment ;Computer skills ;Monitoring discipline ;Flexibility ;Modality ;Technical hitches and Assessment**

2) To find out whether there exists significant difference in the E- teaching challenges experienced by the secondary school teachers with respect to gender.

3) To find out whether there exists significant difference in the E- teaching challenges experienced by the secondary school teachers with respect to locale.

4) To find out whether there exists significant difference in the E- teaching challenges experienced by the secondary school teachers with respect to type of management.

5) To find out the level of attitudes of secondary school teachers with respect to E-teaching.

6) To find out whether there exists significant difference in the attitudes of secondary school teachers in E-teaching with respect to the gender.

7) To find out whether there exists significant difference in the attitudes of secondary school teachers in E-teaching with respect to the locale.

8) To find out whether there exists significant difference in the attitudes of secondary school teachers in E-teaching with respect to the type of management.

9) To find out the possible suggestions to overcome E-teaching challenges experienced by the secondary school teacher.

HYPOTHESES OF THE STUDY

1) The E-teaching challenges faced by the secondary school teachers may vary with respect to the following with respect to **virtual engagement ;Time management** ;**Communication** ;**Commitment ;Computer skills ;Monitoring discipline ;Flexibility ;Modality ;Technical hitches and Assessment.**

2) There exist significant difference in the E-teaching challenges experienced by the Secondary school teachers with respect to gender.

3) There exist significant difference in the E-teaching challenges experienced by the Secondary school teachers with respect to locale.

4) There exist significant difference in the E-teaching challenges experienced by the Secondary school teachers with respect to type of management.

5) The attitudes of Secondary school teachers with respect to E- teaching may vary.

6) There is no significant difference in the attitudes of Secondary school teachers in E-teaching with respect to the gender.

7) There is no significant difference in the attitudes of Secondary school teachers in E-teaching with respect to the locale.

8) There is no significant difference in the attitudes of Secondary school teachers in E-teaching with respect to the type of management.

ANALYSIS AND INTERPRETATION OF DATA

Hypothesis 1
The study shows that the secondary school teachers have average level of e-teaching challenges with respect to **Virtual engagement, Time management, Communication, Commitment, Computer skills, Monitoring discipline, Flexibility, Modality, Technical hitches and Assessment.**

Hypotheses 2
There exist significant difference in the E-teaching challenges experienced by the Secondary School teachers with respect to gender.
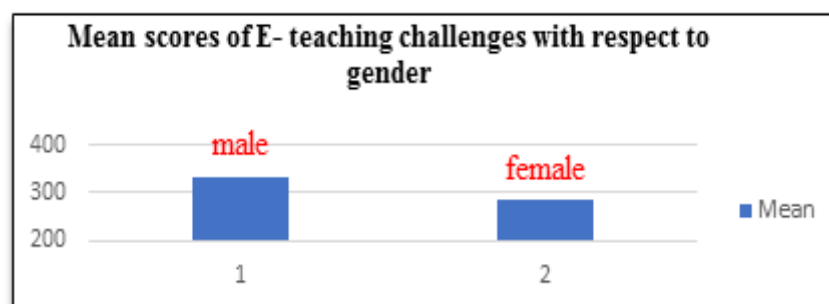
As per the study, the obtained **t** value is 5.657. The significant value or p value is computed as < 0.001. Hence, there exist significant difference in the E-teaching challenges with respect to gender of the Secondary school teachers in Mormugao taluka of South Goa.

Hypotheses 3

There exist significant difference in the E-teaching challenges experienced by the Secondary School teachers with respect to locale.
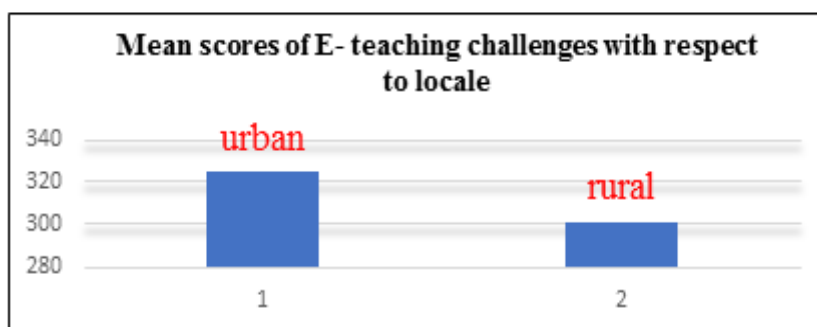
As per the study, the obtained t value is 2.316. The significant value or p value is computed as < 0.001. Hence, there exist significant difference in the E-teaching challenges with respect to locale of the Secondary school teachers in Mormugao taluka of South Goa.

Hypotheses 4

There exist significant difference in the E-teaching challenges experienced by the Secondary School teachers with respect to type of management

ANOVA					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	75447.101	2	37723.551	10.557	<.001
Within Groups	632498.099	177	3573.436		
Total	707945.200	179			

As per the study, the F value obtained is 10.557 which is greater than the table value set for the corresponding degree of freedom 2 at 0.001 level. Hence, there exist significant difference in the E-teaching challenges with respect to type of management of the Secondary school teachers in Mormugao taluka of South Goa.

Hypotheses 5

The attitudes of Secondary School teachers with respect to the E-teaching may vary.

Dimension	Groups	Score	N	%
	High	**> 51.13184**	**56**	**31.1**
Attitudes	**Average**	**50-34**	**32**	**51.1**
	Low	**< 33.2015**	**92**	**17.7**
Total 180				

The study shows that the secondary school teachers from Mormugao taluka of South Goa differ in the levels of attitudes towards E-teaching. From the study it is evident that 17.7% of the total sample has high attitude towards E-teaching, 51.1% respondents have average level and about 31.1% respondents have low level of attitude towards E-teaching. This depicts that the most of the Secondary school teachers have average attitude towards E-teaching.

Hypotheses 6
There is no significant difference in the attitudes of the Secondary School teachers in E-teaching with respect to the gender

	gender	N	Mean	Std. Deviation	t	Sig
Attitude	male	84	44.92	8.568	4.008	0.371
	female	96	39.76	8.647		

As per the study, there is no significant difference in the attitudes with respect to gender of the Secondary school teachers in Mormugao taluka of South Goa.

Hypotheses 7
There is no significant difference in the attitudes of the Secondary School teachers in e-teaching with respect to the locale.

locale	N	Mean	Std. Deviation	t	Sig
urban	52	42.98	8.848	0.805	0.776
rural	128	41.84	9.026		

As per the study, that there is no significant difference in the attitudes with respect to locale of the Secondary school teachers in Mormugao taluka of South Goa.

Hypotheses 8
There is no significant difference in the attitudes of the Secondary School teachers in E-teaching with respect to the type of management.

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	353.979	2	176.990	2.232	.110
Within Groups	14033.021	177	79.283		
Total	14387.000	179			

According to the study there is no significant difference in the attitudes of Secondary school teachers with respect to the type of management.

EDUCATIONAL IMPLICATIONS
The present study will help the policy maker to design appropriate courses and to have ICT friendly curricula of course that will help in making online education more

effective and results oriented. It will also help the educational stakeholders to strengthen the factors that lead to positive attitude and work out factor that lead to negative attitude while adopting to the new strategies related to new mode of virtual teaching

This study will give a boost to research in more areas of e-teaching which will enable researchers to take up more detailed research in the areas of interactive learning environments. Research and innovation should be encouraged in use of different software and technologies for E-learning. E-teaching Challenges Scale can be used by the researchers in the field of education to monitor the level of E-teaching challenges at various intervals to overcome the challenges.

CONCLUSION

The main purpose of this study is to examine the teachers attitudes towards the online teaching and the challenges they faced with respect to certain dimensions in E-teaching during ongoing Covid-19 pandemic in Mormugao taluka of South Goa through a Normative survey. This research also aims to determine areas of improvement based on the challenges faced in online teaching. Although, the study is limited by its small sample, it provides the basis for the further exploration of online teaching and would persuade the educational institutions and the policy makers for enhancing the quality of E-teaching with the integration of latest technique of teaching along with the support of the government for improving basic amenities and aiding in making E-learning more successful.

SUGGESTIONS FOR FURTHER RESEARCH

The present study was carried out on a relatively small population, teachers in Mormugao taluka of South Goa, which limit the ability to generalize the situations experienced by the teachers in other talukas of Goa. A large scale study on the topic needs to be executed with more samples representing proportional population background after the implementation of new normal protocols.

An E-learning challenges scale was developed on 10 major dimension in which E-teaching challenges existed. A more comprehensive scale can be developed by taking into consideration all the other major dimension. This study can be replicated using experimental design. Replication of the study can be conducted among the children's with special needs and can be also replicated among the Heads of the educational institutions.

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EFFICIENCY OF INDIA'S ORGANISED MANUFACTURING SECTOR IN THE ERA OF GLOBALISATION

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I. INTRODUCTION

India is prioritizing productivity-driven growth in its manufacturing sector to boost economic growth, create employment opportunities, and improve living standards. This change is due to the vulnerability of economic expansion to decreasing returns to scale and the difficulty in providing enough employment for the growing population. Technological advancements and innovation have been shown to have a more sustainable impact on economic growth than investment-driven development. Prioritizing total factor productivity (TFP) growth can foster long-term economic stability and resilience in the face of diminishing returns to scale. Combining technological progress and technical efficiency can optimize productivity and ensure competitiveness. However, prior literature on productivity growth in India has focused on aggregate levels and lacks studies considering the heterogeneity of Indian industries.

II. REVIEW OF LITERATURE

Farrell's 1957 article marked the beginning of efficiency measurement in various industries and countries. Since then, significant literature has been produced to capture and analyze productivity in various sectors. Studies have shown that official tariff rates, trade reforms, and age of firms and ownership contribute to technical inefficiency. In the Indian context, few studies have attempted to measure technical efficiency. Narayanan and Vashisht (2008) found that market share, capacity utilization, and R&D expenditures positively influence technical efficiency, while wages, taxes, and fuel have a negative impact. Kim and Saravanakumar (2012) proposed that investment in technology would be more effective when accompanied by the development of a skilled workforce over time. Mazumder and Adhikary (2010) found inverse associations between firm age and efficiency but positive associations with market share and automation. Tripathy et al. (2013) revealed that 81 Indian pharmaceutical companies experienced a positive technical efficiency change, impacting factors like establishment age, research and development, ownership, and foreign direct investment. Goyal et al. (2019) assessed intra-sector efficiency in the Indian banking sector, finding it to be 73.44% efficient.

III. DATA AND CONSTRUCTION OF VARIABLES

The Annual Survey of Industries (ASI) provides data on industrial activities for 15 states between 1995-96 and 2021-22. Researchers compiled data from different years to ensure consistent comparisons across different years. The data is published at current prices and uses the single deflation method and splicing technique to measure price changes over time. Gross value added data is adjusted for inflation using a

wholesale price index from 1993-1994. City-specific information on industrial workers' consumer price index is also available in various RBI Bulletins and Bulletin of Food Statistics.

VI. Empirical Results and Discussion

The success of stochastic frontier analysis relies on selecting the appropriate model. The Cobb-Douglas and Translog models are two standard production functions used in literature. The flexibility and ability to avoid assumptions regarding production constants and input substitution elasticity make Translog models popular. They also reduce the risk of errors in model specification. The Translog model allows for non-constant returns to scale and a nonlinear production function. To assess the adequacy of the model's fit, we define the models and then utilise the generalised likelihood ratio (LR) statistic for hypothesis testing. In order to ensure the accuracy of the relationship between inputs and outputs, this method analyses the translog production function. Additionally, it identifies any departures from constant returns to scale or linearity, which can provide valuable insights for improving the production function.

Table 1 presents the stochastic frontier model parameters' maximum likelihood estimates obtained using balanced panel data for the manufacturing sector.

Table 1: Estimating the Stochastic Frontier Production Model

Variables	Coefficient
Constant	3.425***
	(7.89)
$\ln Capital$	0.24***
	(34.76)
$lnLabour$	0.16***
	(51.25)
$1/2(lnK_{it})^2$	0.099
	(0.910)
$1/2(lnL_{it})^2$	0.013
	(2.116)
$(lnK_{it} * lnL_{it})^2$	0.13***
	(8.45)
Diagnostic statistics	
Sigma Square	0.399***
	(6.654)
Gamma (γ)	0.237
	(23.455)
Log-likelihood value	69.63
LR test of the one-sided error	90.756
Wald Chi	344.43
Prob>Chi2	0.000***
Number of observations	12323
Mean technical efficiency	0.64

Source: Authors' calculation based on ASI data

Note: *** signifies significance at 1% confidence level, and values in parentheses are t statistics.

The study confirms the reliability and goodness of fit of a stochastic frontier production model for analysing industrial production processes. It suggests that current production processes are not optimised, and there is room for improvement in efficiency. Implementing the model could improve budgeting and decision-making in industrial production. The Indian organised manufacturing sector has a technical efficiency level of 0.64, indicating most firms are operating at an optimal level. However, there is an average of 36% technical inefficiency, which means their actual output is 36% less than the maximum output achievable from the existing input level. This indicates a significant potential for expanding output by improving technical efficiency using existing resources and technology. The analysis reveals that capital is the most significant input parameter estimator in India's manufacturing sector, with greater elasticity for capital than for labour. The Translog model indicates that capital positively influences efficiency, contributing to total output. A 1% increase in capital leads to a 0.70% increase in total output. The joint terms of labour and capital show a negative sign, suggesting that as capital increases, labour is also responsive to it. However, this relationship is insignificant. A large unskilled labour force may have limited overall productivity in India despite the introduction of advanced technology resulting from massive foreign direct investment in the 1990s.

V. Sources of Technical Efficiency

This study examines factors contributing to technical inefficiency and productivity variability in India's organised manufacturing sector. The inefficiency model results presented in Table 2 reveal that the coefficients have significant implications on the technical efficiency of manufacturing firms. Negative coefficients indicate increased efficiency and positive effects on output. For instance, a negative coefficient on labour indicates a decrease in inefficiency and an improvement in output. Conversely, a positive coefficient on raw material costs suggests increased inefficiency and reduced output. The findings underscore the need to comprehend the impact of various factors on the efficiency of India's organised manufacturing sector.

Table 2: Results of Determinants of Technical Inefficiency

Variables	Maximum Likelihood Estimation (MLE) Coefficient
Constant	0.762 (11.466)***
Ln Wage Rate	-0.1979 *** (0.402)
Ln Capital Intensity	-0.176 (-2.991)***
Ln Capacity Utilization	-0.459 (-3.125)***
Ln Skill Intensity	-0.149 (-8.962)***

Firm Size Dummy	-0.049
	(-5.064)***
R & D Dummy	-0.460
	(-1.369)

Note: *** signifies significant at a 1% confidence level and the values in parentheses are t statistics.

The analysis reveals that the wage rate is the most significant input parameter in the manufacturing sector, with an absolute coefficient of -0.17 and a significant level of 1 per cent. When employees' wages increase by 1 unit, technical inefficiency decreases by 17 per cent. This indicates that increasing wages can motivate employees to improve productivity and increase production output. Muhlau and Lindenberg (2003) and Liew et al. (2012) support these findings through their studies. Higher wage rates encourage employees to work harder, increasing efficiency and productivity (Muhlau & Lindenberg, 2003; Mazumder & Adhikary, 2010). Other factors, such as recognition and rewards for good performance, motivate employees significantly. Studies have shown that regular recognition and professional development opportunities can increase employee motivation and productivity (Mazumder & Adhikary, 2010).

The labour-capital ratio in the manufacturing sector has a significant negative relationship at the 1 per cent significance level, suggesting that firms can reduce their technical inefficiency. An increase in the ratio can reduce inefficient techniques by 0.05 per cent, indicating that firms should focus on increasing their capital-labour ratio to enhance overall efficiency. Firms can improve production processes and achieve higher productivity by investing more capital and reducing reliance on labour. The research emphasises the importance of evaluating and optimising the labour-capital ratio to ensure long-term competitiveness and profitability. The findings also support the idea that firms should monitor and adjust the labour-capital ratio to maximise performance. The coefficient of capacity utilisation in India's manufacturing sector is -0.23, with a significant positive impact on technical efficiency. When capacity utilisation increases by 1 per cent, inefficiency is reduced by 23 per cent. Bertrand (2013) emphasised that a high composition of capital utilisation positively impacts technical efficiency and productivity growth when production levels increase due to the increased use of machines. The manufacturing sector can reduce inefficiency and achieve higher technical efficiency and productivity growth by increasing capacity utilisation, particularly by increasing production levels.

The skill intensity variable measures labour quality and indicate that high-quality labour is crucial in reducing inefficiency. Investing in improving workforce skills and qualifications could lead to increased efficiency and productivity. Targeted policies and initiatives play a critical role in improving the quality of labour. Training increases the firm's efficiency as workers' skills enhance and encourage product and

service production. Additionally, employee training can increase job satisfaction and retention, as workers feel valued and supported by their employers. This results in a motivated and dedicated workforce, benefiting the firm's overall success.

Table 2 shows that firm size negatively correlates with firm technical inefficiency effects, implying a positive effect on productivity. This aligns with the theoretical arguments that early development economics emphasised large firms as the driving force of economic growth. Many people consider small companies to use old-fashioned manufacturing practices. Large firms with managerial know-how offer a better organisational framework, reducing transaction costs.

VI. CONCLUSION

The study investigates the technical efficiency and factors affecting inefficiency in India's organised manufacturing sector using firm-level data from 1995–96 to 2021–22. The results show that manufacturing firms operate at 64% of their potential output level. Factors such as wage rate, skill, capital intensity, research and development expenditure, and higher capacity utilisation can significantly reduce inefficiency. However, the research has limitations, such as data scarcity, inability to estimate allocative efficiency, and reliance on data from a single production period. Future research should compare results from different approaches, investigate additional variables like exports and imports, and replicate studies in different states or sub-sectors. Sensitivity analyses could improve the robustness of the findings. The study also overlooks factors like government policies, market competition, and technological advancements that may influence efficiency. To improve efficiency, manufacturing firms should improve employee wages, invest in training and development programmes, foster a positive work environment, and provide career growth opportunities. Intervention strategies targeting specific sectors, consolidating small, technically inefficient firms, and developing comprehensive skills development programmes for the entire value chain can also contribute to a sustainable and resilient manufacturing sector.

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EXPLORING THE INFLUENCE OF FACEBOOK USAGE ON THE WELL-BEING AND SOCIAL BEHAVIOUR OF POSTGRADUATE STUDENTS

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ABSTRACT

In this era of internet, face book, a social media networking platform is reaching to its saturation. Many recent studies says about the stress which users started feeling during its usage. But if we see the young generation of students, they still have fantasy to share their activities and achievement on Facebook. So now we have contradictory outcomes here where people wants to de-tox from social media and at a same time the new users are keep on increasing. In this paper the researcher wants to find out the happiness of post graduate students using Facebook and the demographic factors like gender, Income, academic performance, behaviour, (introverts and extroverts) students best subject and average sleeping hours influencing the happiness

Keywords: Facebook, students, happiness

Statement of Problems and Need for Study

If we analysis the data of increase in number of active Facebook users it has increasing from 1591 million in 2015 end to 2449 million in the third quarter of 2019 (source Statista 2020). On the other hand we could found out the Facebook users addictions and resulting in psychological disorders leading to unhappiness. In these two contradictory outcomes of research we may try to find out the human features influences the happiness of Facebook users or the level of saturation to the certain type of students. By finding out the causing factor we may categorize and recommend to people using Facebook whether to spend more time or not etc.

Purpose/Objective:

- To study the relationship between demographic profile (gender, Income, academic performance, behaviour) of students with their happiness while socialising on face book.

- To find out the relationship between students best subject and average sleeping hours with their usage duration of while socialising on Facebook

- To find out the relationship between students gender and passing grade with their agreement on Facebook acting as an stress buster during work pressure

Hypotheses

Ho1 There is no significant relationship between students' Family Income and their Happiness while socialising on Facebook.

Ho2 There is no significant relationship between students' Behaviour Type and their Happiness while socialising on Facebook.

Ho3 There is no significant relationship between students' Average Sleeping Hours and their Usage Duration of Facebook

Ho4 There is no significant relationship between students' Best Subject and their Usage Duration of Facebook

Ho5 There is no significant relationship between students' Gender and their Happiness while socialising on Facebook

Ho6 There is no significant relationship between students' Gender and their Agreement on Facebook acting as a Stress Buster during work pressure

Ho7 There is no significant relationship between students' Passing Grades and their Agreement on Facebook acting as a Stress Buster during work pressure

RESEARCH METHODOLOGY

Source of data collection would be primary data. The study is carried out in southern part of Pune City randomly through a survey involving 250 post graduate students' respondents. The elements of usage of Facebook is measured in terms hours and elements of happiness is measured in terms of high and low on five point likert scale along with demographic profile like students respondents' gender, Income, academic performance, behaviour, (introverts and extroverts) students best subject and average sleeping hours. Analysis would be done by using appropriate statistical tools on SPSS software like Pearson's Chi-Square and One-Way ANOVA to prove the statistical significance amongst the variables as per hypothesis.

TYPE OF RESEARCH

Descriptive type primary research with Simple Random Sampling method involving 250 respondents as sample size

REVIEW OF LITERATURE

Hunt Allcott, Luca Braghieri, Sarah Eichmeyer, and Matthew Gentzkow (2019) The Welfare Effects of Social Media, Standford University in their research outcome the results left little doubt that Facebook provides large benefits for its users. Even after a four week "detox," their participants spent substantial time on Facebook every day and needed to be paid large amounts of money to give up Facebook. The results on news consumption and knowledge suggest that Facebook is an important source of news and information. Participants' answers in free response questions and follow-up interviews make clear the diverse ways in which Facebook can improve people's lives, whether as a source of entertainment, a means to organize a charity or an activist group, or a vital social lifeline for those who are otherwise isolated.

Aida Abdulahi, Behrang Samadi, Behrooz Gharleghi in their Research paper. The purpose of this study is to identify the negative effects of social network sites such as Facebook among Asia Pacific University scholars. The researcher, distributed 152 surveys to students of the chosen university to examine and study the negative effects. Electronic communication is emotionally gratifying but how do such technological distraction impact on academic performance? Because of social media platform's

widespread adoption by university students, there is an interest in how Facebook is related to academic performance. This paper measure frequency of use, participation in activities and time spent preparing for class, in order to know if Facebook affects the performance of students. Moreover, the impact of social network site on academic performance also raised another major concern which is health

Result from the study shows that social network sites such as Facebook affects the scholars of Asia Pacific University. Firstly, the outcome of the study aligns perfectly with other studies mentioned above in the literature review of academic performance. For instance Reynol Junco, 2012 found that time spent on Facebook and checking Facebook was negatively related to the overall GPA. Time spent on social network sites is shown to negatively impact academic performance. As time spent on social networking sites increases, the academic performance of the students is seen to deteriorate.

Dr Sam Thomas, 2011 discovered that SNS addiction is seen by internet addiction and chatting, which Facebook provides and allows people to have instant messaging even though they are in different continents. In addition, Balakrishnan and Shamim 2013, found in their result, that some the students exhibit some addictive symptoms. Moreover, according to the results of the study of Mekinc, Smailbegovic, Kokic in 2013, said that using Facebook increases the likelihood of addiction to the internet. However, the outcome of this research does not completely align with the result mentioned above. In this paper, this particular independent variable was the highest contributor in regression analysis and also showed a positive relationship with the dependent variable. This study also shows that people do not know how their personal data can be shared.(*Vol. 5, No. 10; September 2014)*

Sulaiman Ainin, M. Muzamil Naqshbandi, Sedigheh Moghavvemi, Noor Ismawati Jaafarin their Research paper This paper examines the impact of Facebook usage on students' academic performance. In addition, it also analyses whether Socialization influences Facebook usage. Empirical data was collected from 1165Malaysian university students using a questionnaire survey.

The study examined the relationship between Socialization, Facebook Usage intensity and Academic Performance of Malaysian university students. It was found that only one Socialization variable i.e. Social Acceptance significantly predicted Facebook Usage Intensity while Acculturation was not found to be significant.

This study found that Socialization particularly Social Acceptance does influence Facebook usage while Acculturation does not. As with any research, this study has its limitations. It uses a cross-sectional data and the Academic Performance is measured using an Indirect measure. Future research should consider collecting longitudinal data and use actual GPA. (Computers&Education83 (2015)64e73)

Rooma Roshnee Ramsaran-Fowdar ,Sooraj Fowdar in their Research paper With the explosive popularity of Facebook as a social media, there has not been much research that examines Facebook marketing and its implications for businesses. This paper

represents an exploratory effort into this direction and analyzes existing Facebook marketing practices and tools, their benefits, and concerns associated with this type of social media marketing. Practical implications are suggested for organizations using Facebook as a social marketing tool and areas for future research are identified Organizations are interested in exchanging and spreading information, trading products or services, staying close to current and potential customers, acquiring a better understanding of their customers and other benefits generated by Facebook. The increase of communication flow of information among customers together with the increased availability of assorted communication channels is creating a new level of complexity in the design and implementation of new marketing strategies. (Contemporary Management Research Pages 73-84, Vol. 9, No. 1, March 2013 doi:10.7903/cmr.9710)

Sana Rouis, Moez Limayem, Esmail Salehi-Sangari This paper provides a preliminary analysis of the effects of Facebook usage by undergraduate students at Luleå University of Technology in Sweden. The proposed research model tests the perceived effect of personality traits, self-regulation, and trust on students' achievements.

Tarsem Singh Cooner, Liz Beddoe, Harry Ferguson & Eileen JoyThis article draws from a 15-month participant observation study of social work and child protection practices in England to illustrate how social workers used Facebook to gain another view of service-users' lives. Social media use was not an intended focus for the study, its presence emerged during our data analysis. While some research has shown that such practices occur, our long-term ethnographic approach provides new insights into how Facebook was actually used in ongoing casework with families and why it was used. Our findings show that Facebook use took multiple forms. Some social workers actively searched service users' Facebook pages and some opposed any such usage. We further advance the literature by introducing a third group who were unwillingly drawn into" acting on Facebook information presented to them by others such as their managers. Our research insights suggest that social work must pause to consider the implications of these complex emerging practices. Much greater clarity and guidance is needed for social work leaders, managers and practitioners to help them navigate their way through this digital mine field. As we discovered, there is uncertainty even in the legal profession in England about what is permissible use of Facebook within the law (Reed, 2019). This is particularly pertinent at a time when challenging debates are taking place exploring how social media surveillance is being used at a societal level to monitor, predict and shape the political (Gleib's, 2015) and consumer behaviors (Zuboff, 2019) of users without their explicit consent or awareness. To avoid social work going down a similar morally indefensible road, or more accurately to remove it from the road it is already on, the profession needs to protect service users from unthinking, unethical, and potentially illegal social media use, while opening up discussion around the use of social media as a possible resource in child protection.

DATA ANALYSIS

Ho1: There is no significant relationship between students' Family Income and their Happiness while socialising on Facebook.

Table 1.1	Mean Square	F	Sig.
Between Groups	2.772	2.557	.059
Within Groups	1.084		
Total			

Interpretations: As per the One Way ANOVA the F statistics significance p value is 0.059 as shown in table 1.1, If Sig. p value is greater than 0.05 → it implies that there is no that students' family income are not significantly related to their happiness while socialising on Facebook .Null hypotheses is Accepted.

Ho2: There is no significant relationship between students' Behaviour Type and their Happiness while socialising on Facebook.

Table 2.1 **Chi-Square Tests**			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.111[a]	4	0.191
Likelihood Ratio	7.653	4	0.105
Linear-by-Linear Association	0.004	1	0.950
N of Valid Cases	250		
a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.88.			

Interpretations: As the Sig. (2 Sided value) of Pearson Chi Square the p value is greater than 0.05 i.e. 0.191 as shown in table 2.1, it implies that students' behaviour type are notsignificantly relatedto their happiness while socialising on Facebook . Null hypotheses is Accepted

Ho3: There is no significant relationship between students' Average Sleeping Hours and their Usage Duration of Facebook

Table 3.1 Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.184[a]	9	0.006
Likelihood Ratio	19.981	9	0.018
Linear-by-Linear Association	0.006	1	0.937
N of Valid Cases	250		
a. 9 cells (56.3%) have expected count less than 5. The minimum expected count is .57.			

Interpretations: As the Sig. (2 Sided value) of Pearson Chi Square the p value is less than 0.05 i.e. 0.006 as shown in table 3.1, it implies that students average sleeping hours are significantly related with theirusage duration of Facebook. Null hypotheses is Rejected

Ho4: There is no significant relationship between students' Best Subject and their Usage Duration of Facebook

Table 4.1 Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	10.372[a]	12	0.583
Likelihood Ratio	12.418	12	0.413
Linear-by-Linear Association	0.290	1	0.590
N of Valid Cases	250		
a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .05.			

Interpretations: As the Sig. (2 Sided value) of Pearson Chi Square the *p* value is greater than 0.05 i.e. 0.583 as shown in table 4.1, it implies that students' Best subject is not significantly related with their usage duration of Facebook. Null hypotheses is Accepted

Ho5: There is no significant relationship between students' Gender and their Happiness while socialising on Facebook

Table 5.1 Chi-Square Tests			
	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson Chi-Square	3.020[a]	4	0.554
Likelihood Ratio	2.962	4	0.564
Linear-by-Linear Association	1.369	1	0.242
N of Valid Cases	250		
a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.11.			

Interpretations: As the Sig. (2 Sided value) of Pearson Chi Square the *p* value is greater than 0.05 i.e. 0.583 as shown in table 5.1, it implies that students' gender is not significantly related Best subject is not significantly related with their Happiness while socialising on Facebook . Null hypotheses is Accepted

Ho6: There is no significant relationship between students' Gender and their Agreement on Facebook acting as a Stress Buster during work pressure

Table 6.1	Mean Square	F	Sig.
Between Groups	3.102	3.631	0.015
Within Groups	0.854		
Total			

Interpretations: As per the One Way ANOVA the F statistics significance p value is 0.015 as shown in table 6.1, If Sig. p value is less than 0.05 → it implies that students' gender and significantly related their agreement on Facebook acting as a stress buster during work pressure.Null hypotheses is Rejected

Ho7: There is no significant relationship between students' Passing Grades and their Agreement on Facebook acting as a Stress Buster during work pressure

Table 7.1	Mean Square	F	Sig.
Between Groups	0.083	0.090	0.914
Within Groups	0.928		
Total			

Interpretations: As per the One Way ANOVA the F statistics significance p value is 0.915 as shown in table 6.1, If Sig. p value is greater than 0.05 → it implies thatstudents' passing grades are not significantly related and their agreement on Facebook acting as an stress buster during work pressure. Null hypotheses is Accepted

OTHER OBSERVATIONS
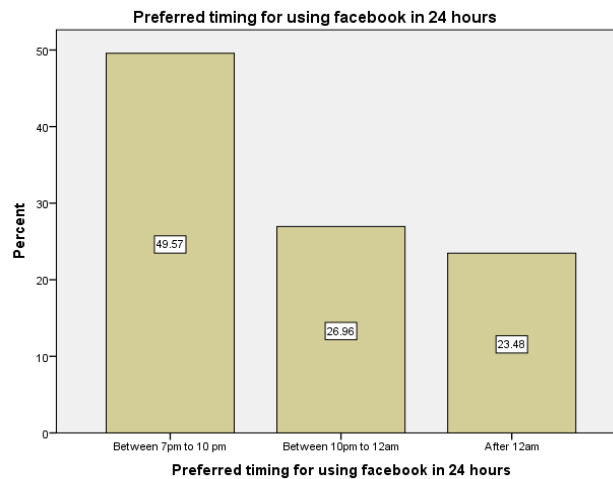
The above graph shows that around 50 % of the students respondents use Facebook between 7 pm to 10 pm compares to 27 % after 10.00 pm and 23 % after 12

DISCUSSIONS

The above outcome of the study shows that family income of student is not influencing his happiness while using Facebook. Also their behavioural aspects like introvert and extrovert are making no change in the desire of students' happiness while using Facebook. Also the students' best subject doesn't show any effect on their happiness on Facebook.

On the other side it was observes that students habit of less sleeping number of hours are effecting their happiness while using Facebook. We may say that students having less sleeping requirement are happy to socialise on Facebook or we may also say that students using Facebook sacrifice their sleeping hours due to their happiness during usage of Facebook. Gender of the students also influence that group of students agreement on Facebook usage acting as a stress buster during work

CONCLUSIONS

The findings of this research shows that students happiness on socialising on Facebook having a significant relationship with sleeping hours of students. We may conclude that students, tendency to sleep less is due to Facebook or additional satisfaction by using Facebook. We may conclude that the happiness feeling is too high to sacrifice his sleep or vice versa. There may also a possibility that students spends more time on Facebook are unable to sleep due to blue light. We also conclude that we have different feeling amongst gender in experiencing Facebook acting as a stress buster during work.

LIMITATIONS

The study is carried out in the city of south Pune particularly with post graduate student only. The results may vary if students from higher secondary or under graduate levels are considered.It will also show different results when students sample from all the location is taken. There is a scope for further detailed study in this area of research by taking more variables and increase in number of sample size.

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VOLATILITY SPILLOVER EFFECT IN INDIAN STOCK MARKETS

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ABSTRACT
This study is an attempt to investigates the existence of volatility spillover effect between BRICS nations by using EGARCH methodology. The study covered from 1/01/2018 to 31/12/2023. The entire study period divided into pre, during and stable Covid-19 period. The study investigated the impact of Covid-19 on the volatility spillover and leverage effect on select Indices. The main aim of the study is to investigate the volatility spillover effect from the Brazil, Russia, China, South Africa to India. The study found the interesting results in case of average return given by BRICS nations, the highest average return generated for the pre, during and stable period is by China, India, and Brazil respectively.

INTRODUCTION
The emergence of the novel coronavirus disease 2019 (COVID-19), caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has rapidly evolved into a global pandemic, presenting an unprecedented challenge to public health, economies, and societies worldwide. The study of volatility spillovers, wherein fluctuations in the volatility of one asset or market affect another, has become a crucial area of interest in financial research due to the interconnected nature of the global financial system. Comprehending these spillovers is essential for effectively managing risk, diversifying investments, and formulating policies. This research aims to examine the dynamics and ramifications of volatility spillovers across diverse markets. This study will analyse the dynamic relationships among the BRICS nations, which include Brazil, Russia, India, China, and South Africa, collectively constituting a formidable bloc in the global economy. Established in 2009, this association promotes cooperation and dialogue among its members, who together make up a significant portion of the world's population, landmass, and economic output. With their diverse cultures, resources, and developmental trajectories, the BRICS nations are assuming increasingly influential roles in shaping international geopolitics, trade, and development agendas.

LITERATURE REVIEW
Spillover effect can be studied for diverse asset classes, markets, and regions (Abidin et al., 2014), taking into account factors such as globalization, technological

advancements, and financial innovation. (Taly, 2015) studied the return and volatility spillover effects among stock market, credit default swap (CDS) market and foreign exchange market. Cryptocurrencies and Currencies Spillover effects are also being studied by the researchers (Shu-Han Hsu, 2022). (Maitra & Dawar, 2018) investigated the return and volatility spillover among Commodity Futures, Stock Market and Exchange Rate. (Ngo Thai Hung, 2019) used VAR-GARCH-BEKK Model to study the return linkage and volatility spillover between China market and the four Southeast Asian market. Whereas some studies employed EGARCH methodology to study the spillover effect (Thangamuthu et al., 2022). It is found from the literature that the prominent methodology that are employed to test for spillover effect are VAR-GARCH-BEKK Model (Vadar et al., 2022; Ngo Thai Hung, 2019; Shu-Han Hsu, 2022; Taly, 2015; Elyasiani et al., 2015) and EGARCH (Thangamuthu et al., 2022)

RESEARCH GAP

From the existing literature review it was found that the limited studies are available on spillover effect by clustering the period of covid-19 pandemic. Limited studies are found considering BRICS countries. This study investigates the existence of volatility spillover effect between BRICS by using EGARCH methodology. This study focuses on the impact of BRICS nation on Indian stock market. The study is conducted dividing the entire study period into pre, during and stable Covid-19 period. The literature is available on the relationship and volatility dynamics of the BRICS nations. Hence, the present study is an attempt to bridge the gap of the existing literature.

RESEARCH METHODOLOGY

This study is an attempt to investigates the existence of volatility spillover effect between BRICS nations by using Exponential Generalized Auto Regressive conditional Heteroscedasticity (EGARCH) methodology. The study covered the period of 5 years that is from 1/01/2018 to 31/12/2023. The entire study period divided into pre, during and stable Covid-19 outbreak period. The BRICS nation market indices closing prices data for the study period is extracted from the yahoo finance website. Brazil – Bovespa, Russia - MOEX Russia Index, India - Nifty50, China - FTSE, South Africa - FTSE/JSE Index. The daily returns are computed with the help of daily closing prices using following formula.

$$R_t = \ln\left(\frac{P_t}{P_{t-1}}\right) \times 100 \tag{1}$$

The returns are calculated as the log difference of the price series. P_t is closing value of the index on the day t is, P_{t-1} is the closing value on the day t-1. The announcement date i.e. 11 March 2020 has been considered as event date to break whole study period into pre, during and stable Covid-19 pandemic period. The pre period is from 01/01/2018 to 10/03/2020, during period is from 11/03/2020 to 31/12/2021 and stable period is from 01/01/2022 to 31/12/2023.

The EGARCH model to examine volatility spillover from foreign markets to Indian markets is given below:

$$R_{t(Indian)} = \alpha_0 + \alpha_1 R_{t-1} + \alpha_2 R_{t-1(foreign)} + \varepsilon_t \qquad (2)$$

$$h_{t(Indian)} = \beta_0 + \beta_1 h_{t-1} + \beta_2 \left|\frac{\varepsilon t-1}{\sqrt{ht-1}}\right| + \varphi \frac{\varepsilon t-1}{\sqrt{ht-1}} + \delta_{resid(Foreign)} \qquad (3)$$

Equation (2) is the conditional mean equation and (3) is the conditional variance equation. In the conditional mean equation, $R_{t(Indian)}$ is the return of Indian indices and α_2 measures the foreign market changes on Indian indices. In the conditional variance equation, $h_{t(Indian)}$ represents log of conditional variance of Indian indices. β_0 represents constant of volatility; $\beta_1 h_{t-1}$ represents the consistency which is function of volatility. $\beta_2 \left|\frac{\varepsilon t-1}{\sqrt{ht-1}}\right|$ captures the impact of changes in news on volatility; $\varphi \frac{\varepsilon t-1}{\sqrt{ht-1}}$ measures asymmetric effect of volatility and finally, $\delta_{resid(Foreign)}$ examines the volatility spillover transmitting from foreign market to Indian market (Thangamuthu et al, 2022).

RESEARCH QUESTION
➤ **RQ1:** Is there any spillover effect from Indian stock market to foreign stock market in pre covid-19 pandemic period?

➤ **RQ2:** Is there any spillover effect from Indian stock market to foreign stock market in during covid-19 pandemic period?

➤ **RQ3:** Is there any spillover effect from Indian stock market to foreign stock market in stable covid-19 pandemic period?

OBJECTIVES OF THE STUDY
➤ **O1:** To understand the spillover effect from Indian stock market to foreign stock market in pre covid-19 pandemic period.

➤ **O2:** To understand the spillover effect from Indian stock market to foreign stock market in during covid-19 pandemic period.

➤ **O3:** To understand the spillover effect from Indian stock market to foreign stock market in stable covid-19 pandemic period.

Table No. 1: Results for Descriptive statistics of Indices returns of BRICS nation

Period		BRZ	RUS	IND	CHN	SA
Full	Mean	0.034474	0.023099	0.049050	-0.010288	-0.005849
	Maximum	13.02228	18.26195	8.400295	5.436916	7.488817
	Minimum	-15.99303	-40.46744	-13.90376	-8.949416	-13.09555
	Observations	1477	1477	1477	1477	1477
Pre	Mean	-0.012651	0.005065	-0.001415	0.006100	-0.050670
	Maximum	13.02228	3.887342	5.182473	5.436916	4.114654

	Minimum	-15.99303	-8.712979	-5.019500	-8.949416	-3.837133
	Observations	534	534	534	534	534
During	Mean	0.073310	0.107244	0.112686	0.058160	0.022752
	Maximum	9.247464	7.434938	8.400295	4.008106	7.488817
	Minimum	-10.92441	-5.181283	-13.90376	-5.521620	-13.09555
	Observations	450	450	450	450	450
Stable	Mean	0.050068	-0.034172	0.045625	-0.090516	0.016592
	Maximum	5.392802	18.26195	2.981035	4.279374	4.708620
	Minimum	-3.407462	-40.46744	-4.896027	-6.277274	-6.340528
	Observations	493	493	493	493	493

Source: Authors Compilation

Table No. 2 exhibits the result of descriptive statistics for BRICS nations index returns. Mean is an average value that indicates the performance of particular index and higher mean indicate the higher return. The study found the interesting results, the highest average return given by BRICS nations for the pre, during and stable period is by China, India, and Brazil respectively. However, India showed highest average return for the entire study period indicating that still it remains to be the attractive investment option of emerging market. It is noticed that in a either of the period of pre, during and stable both maximum as well as minimum returns are generated.

Table No. 2: Results for Augmented Dicky Fuller Test of BRICS market indices return.

Country	t-statistic	Prob
BRZ	-15.65891	0.0000
RUS	-48.73834	0.0001
IND	-15.75280	0.0000
CHN	-44.57537	0.0001
SA	-43.38804	0.0000

Source: Authors Compilation

The study employed Augmented Dickey-Fuller test to check the stationarity of the data. The existence of a unit root indicates that the data is non-stationary. In the unit root test, the P-value is 0.0001. So, it can be observed that p-value is less than 0.01. So, in this case we reject null hypothesis at 1% level of significance. So, it is said that there is no unit root and the data is stationary.

Table No. 2: Results for ARCH Test

	F-statistic		
Country	Pre	During	Stable
BRZ	21.99543***	8.793138***	23.08644***

RUS	26.25669***	9.536322***	25.50156***
CHN	26.81710***	12.79408***	23.77408***
SA	25.91400***	18.07321***	24.53586***

Note: '***' significant at 1%.

Above table no. 2 exhibits the results of ARCH-LM test. The statistically significance of the F-statistic for the ARCH-LM test indicates the presence of Autoregressive Conditional Heteroskedasticity in the residuals. This confirms the volatility clustering effects in returns, that is, large changes tend to be followed by large changes, of either sign, and small changes tend to be followed by small changes, Mandelbrot (1963).

Table No. 3: Results for Volatility spillover from foreign markets to Indian market (Pre)

	Mean Equation Coefficients				Variance Equation Coefficients			
	α_0	α_1	α_2	β_0	β_1	β_2	φ	δ
BRZ	0.006528	-0.02434	0.105124***	-0.1678***	0.161063***	-0.2487***	0.902688***	0.000124
RUS	0.012950	0.018924	0.104189***	-0.1700***	0.165397***	-0.2410***	0.905993***	-0.01126
CHN	0.016443	0.020418	0.103435***	-0.1660***	0.161089***	-0.2405***	0.909138***	-0.00882
SA	0.006713	-0.03871	0.107025***	-0.1728***	0.167533***	-0.2491***	0.902647***	-0.00164

Table No. 4: Results for Volatility spillover from foreign markets to Indian marke (During)

	α_0	α_1	α_2	β_0	β_1	β_2	φ	δ
BRZ	0.259612***	-0.14 04***	0.120457***	0.518595***	0.646454***	0.084006***	-0.6974***	-0.0760***
RUS	0.249819***	0.119600***	0.000866	-0.1215***	0.156786***	0.060887**	0.950325***	-0.1812***
CHN	0.239908***	-0.001952	0.025177	-0.1202***	0.155944***	0.049172*	0.953132***	-0.1595***
SA	0.242577***	-0.024174	0.031379	-0.1047***	0.133406***	0.047052*	0.962569***	-0.1605***

Table No. 5: Results for Volatility spillover from foreign markets to Indian market (Stable)

	α_0	α_1	α_2	β_0	β_1	β_2	φ	δ

BRZ	0.16020 2***	0.0131 90	0.0550 00	- 0.07927 **	0.08 6358 **	0.08 2836 **	0.97 0674 ***	- 0.193 1***
RUS	0.16017 3***	- 0.0150 0	0.0663 36	- 0.09490 **	0.10 3933 **	0.07 4790 **	0.96 8551 ***	- 0.187 0***
CHN	0.16290 1***	0.0014 39	0.0556 45	- 0.07960 **	0.08 6078 **	0.08 5376 **	0.96 9416 ***	- 0.194 9***
SA	0.16096 8***	- 0.0050 0	0.0588 80	- 0.08686 **	0.09 4500 **	0.07 9586 **	0.96 8818 ***	- 0.190 2***

Source: Authors Compilation

Table No. 3 shows the results of the mean returns and variance equation of the EGARCH model. The α_2 value is positive and significant for all four nations indicating a positive return spillover from Brazil, Russia, China and South Africa's stock markets to the indian stock market. In the variance equation β_1 (GARCH term) represents the impact of prior period volatility on current volatility. β_1 is significant for Brazil, Russia, China and South Africa. The coefficients of β_2 (ARCH term) are negative and significant for all five foreign markets; this represents that the change in volatility news from these stock markets disturbs the Indian stock market significantly. The coefficient of leverage effect (φ) is positive and significant for three foreign market indices; it measures the asymmetric effect of volatility. The leverage effect is positive and significant, indicating that shocks are asymmetric, with positive shocks having a greater influence than negative shocks. In case of Brazil it is negative and significant, indicating that shocks are asymmetric, with negative shocks having a greater influence than positive shocks. Volatility spillover parameter (δ) for all foreign stock markets except Brazil are significantly negative suggesting that Indian stock market offers diversification opportunities for investors. Incase of Brazil the parameter is significantly positive indicating that there is a positive volatility spillover effect from the Brazil to India. Whereas in tale no. 4 and 5 for the during and stable period parameter (δ) is significantly negative for all the nations.

CONCLUSION

This study is an attempt to investigates the existence of volatility spillover effect between BRICS nations by using EGARCH methodology. The study covered from 1/01/2018 to 31/12/2023. The entire study period divided into pre, during and stable Covid-19 period. The study investigated the impact of Covid-19 on the volatility spillover and leverage effect on select Indices. The main aim of the study is to investigate the volatility spillover effect from the Brazil, Russia, China, South Africa to India. The study found the interesting results in case of average return given by BRICS nations, the highest average return generated for the pre, during and stable period is by China, India, and Brazil respectively. Incase of pre period Volatility spillover for all foreign stock markets except Brazil are significantly negative

suggesting that Indian stock market offers diversification opportunities for investors. However, Brazil the parameter is significantly positive indicating that there is a positive volatility spillover effect from the Brazil to India. Whereas, for the during and stable period volatility spillover is significantly negative for all the nations.

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A STUDY ON IMPACT OF COVID-19 ON VOLATILITY OF ESG INDEX AND PARENT INDEX

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ABSTRACT
This study is an attempt to investigate the impact of Covid-19 on Volatility of ESG Index and Parent Index. The study covered the period of 5 years that is from 1st April 2018 to 31st July 2023. The study investigated the impact of Covid-19 on the volatility and leverage effect on select Indices. The main aim of the study is to compare the volatility and leverage effect in Nifty100 ESG Index and Nifty100 Index during the study period. The study found that the overall returns during the study period by Nifty100 ESG index is higher as compared to the parent Nifty100 index even it generated positive return during pre and post Covid-19 pandemic announcement by the WHO. However, in terms of volatility we did not found any major significant differences. Hence, we can suggest that the volatility behaviour is similar in both indices. Nifty100 ESG index remains a better investment option for the investors who take into consideration ESG factors before investing.

Keywords: Volatility, Leverage Effect, EGARCH, Covid-19.

INTRODUCTION
In recent times, the investors takes into consideration the (ESG) environmental, social and governance aspects before making investment in companies. Therefore, they look for the ESG stocks for the investment. It is noticed that social disclosure has a significant positive impact on accounting performance (Guglielmo Maria Caporale, Luis Gil-Alana, Alex Plastun and Inna Makarenko; 2023) and the ESG-related news has a significant impact on stock market returns than ESG-unrelated news (Xiaoqing Xu, Yan Chen, Jingmei Zhao and Jun Wang; 2023). As the improvement takes place in social and governance performance it may lead to higher returns (Philipp Mühr; 2020). Investing in an index with constituents that meet energy efficiency is a good investment option for the investors to diversify their portfolio and contributing towards environmental sustainability (Renu Choudhary and Vandana Jain; 2018). Sometimes it is also possible that the companies performance remain unaffected by ESG commitments (Mario La Torre, Fabiomassimo Mango, Arturo Cafaro and Sabrina Leo; 2020). Focusing on ESG parameters benefit investors and corporates from its sensitivity in stock markets (Nitika Jain and Vandana Mehrotra). NSE

Nifty100 ESG is an index of National Stock Exchange that is designed to reflect the performance of companies within Nifty 100 index based on ESG risk score. The index was launched on 27th March 2018 that is prior to the Covid-19 pandemic. The pandemic highlighted the importance of the "S" in ESG. It exposed vulnerabilities in healthcare systems, social safety nets, and workplace practices. Companies' responses to the pandemic in terms of employee health, safety, and well-being became a significant aspect of their ESG performance. The pandemic highlighted the effectiveness of companies' governance structures and crisis management plans. Transparent communication, ethical decision-making, and adaptability became crucial aspects of governance in the face of unexpected challenges. The health and safety of employees, customers, and communities became a central concern. This aligns with the social aspect of ESG, emphasizing a company's responsibility to protect the well-being of stakeholders. Some companies pivoted their operations to support pandemic-related needs, contributing to the broader social good. This highlighted the value of companies aligning their activities with societal and environmental goals. The crisis prompted discussions about the need for businesses to adopt more long-term and sustainable strategies that can withstand unforeseen shocks. (Preeti Sharma and Deepmala Jasuja; 2020) suggested that the retail investors should consider ESG criteria in their financial decision making process as socially responsile investing (SRI) may not be so attractive in terms of returns. World Health Organisation (WHO) officially declared the Novel Corona Virus, Covid-19 as pandemic on 11 March 2020.This study is an attempt to find the impact of Covid-19 on Nifty100 ESG Index and Nifty100 Index. The objective is to get the better insight into the volatility and leverage effect in these both indices during the pre and post effect of Covid-19 pandemic.

LITERATURE REVIEW

In past decades, countries were concentrating more on sustainable development. In this process ESG has gained the greate importance and will help the companies create sustainable business culture. (Guglielmo Maria Caporale, Luis Gil-Alana, Alex Plastun, Inna Makarenko 2023) suggested that companies should improve their social disclosure practices as it has positive impact on performance and there is need to adopt performance-improving measures in environmental disclosure. Sometimes some crisis gives an opportunity to test the theories related to environment and social policies. Firms with higher ES rating tend to have higher performance. However, there was no implication discussed on governance aspect of the company (Albuquerque, R., Koskinen, Y., Yang, S., Zhang, C.; 2020). In another study where governance is taken into consideration, it was found that firms with higher ESG scores perform better than low-rated ESG firms during Covid-19 pandemic (Cardillo, G., Bendinelli, E., Torluccio, G.; 2022). (Demers, E., Hendrikse, J., Joos, P., Lev, B.; 2021) on a contradictory found neither ESG nor ES was a share price resilience element during the COVID-19 pandemic. Not only stocks but also the sustainability performance of ETFs does not safeguard the investment from financial losses during crises period (Folger-Laronde, Z., Pashang, S., Feor, L., ElAlfy, A.; 2022).

(Nektarios Gavrilakis, Christos Floros, 2023, Philipp Mühr; 2020) investigated the challenges and opportunities of ESG investing by studying relationship between ESG performance, stock returns, and herding behavior. (Broadstock, D.C., Chan, K., Cheng, L.T., Wang, X., 2021) conducted a study to understand the role of ESG during Covid-19 crises period in China. (Apergis, N., Apergis, E., 2022) found that Covid-19 in Chinese stock market like other markets significantly affected market returns and its volatility. (Xiaoqing Xu, Yan Chen, Jingmei Zhao, Jun Wang; 2023) suggested that as the ESG news have more information, ESG-related news has a greater and more significant impact on stock market returns than ESG-unrelated news. In Europe and the USA, sustainable indexes were noticed to be negatively affected by the lockdown announcements. However, generating superior risk adjusted performance in stock market remains a debatable topic. Depending on sample selected ESG Firms stocks performance during Covid-19 pandemic have provided mixed results (Gianfrate, G., Kievid, T., van Dijk, M.V.; 2021). There are no significant differences between ESG and conventional stock price indices with regards to the degree of persistence (Guglielmo Maria Caporale, Luis Gil-Alana, Alex Plastun, Inna Makarenko, 2022). (Valentina V. Karginova-Gubinov, 2022) noticed ESG-focused investors tend to give less consideration to the securities' growth potential. This could lead to the market prices of sustainable stocks being less consistent with the valuation based on the corporate performance fundamentals. This could reduce the efficiency of the entire stock market. From the above literature reviewed it can be seen that there is a potential research gap of studying impact of Covid-19 on Volatility of ESG Index and Parent Index in emerging country like India. There had been less focus on analysing volatility of ESG index and parent index by taking into consideration the crises event that Covid-19 announcement by WHO.

RESEARCH QUESTION
1. Is there any significant difference between pre and post Covid-19 returns in select indices?

2. Whether there is leverage effect in the Nifty100 ESG and Nifty100?

OBJECTIVES OF THE STUDY
1. To study whether there is significant difference between pre and post Covid-19 returns in select indices.

2. To examine the volatility and leverage effect in the Nifty100 ESG and Nifty100.

HYPOTHESES
1. There is no significant difference between pre and post Covid-19 returns in select indices.

2. There is no leverage effect in the Nifty100 ESG and Nifty100.

RESEARCH METHODOLOGY
This study is conducted by considering the Nifty100 ESG and Nifty100 index of NSE. The study covered the period of 5 years that is from 1st April 2018 to 31st July 2023. The study investigate the impact of Covid-19 on the volatility and leverage

effect on select Indices. The main aim of the study is to compare the volatility and leverage effect in Nifty100 ESG Index and Nifty100 Index during the study period.

The Nifty100 ESG and Nifty100 closing price data for the study period is extracted from the official website of National Stock exchange (NSE). The daily returns are computed with the help of daily closing prices using following formula.

$$R_t = \ln\left(\frac{P_t}{P_{t-1}}\right) \times 100$$

The returns are calculated as the log difference of the price series. P_t is closing value of the index on the day t is, P_{t-1} is the closing value on the day t-1. Since the study employs time series data analysis technique, the data series needs to be checked for stationarity. The stationarity of the data can be checked using unit-root test. The existence of a unit root indicates that the data is non-stationary. As such, it is important to check for heteroskedasticity in the residuals to account for time varying volatility normally seen in stock return series. Accordingly, the ARCH test is employed and the results are interpreted at 5% level of significance with the null hypothesis that "there exist no ARCH effect" in the log return series. The statistical techniques used in the study are descriptive statistics, unit root test, ARCH test GARCH (1,1) model and EGARCH model. The study employs the dummy variable regression. Since the returns variable has two categories that is pre and post days, we have introduced only one dummy that is for the post Covid-19 pandemic announcement in the variance equation. So, here we don't have to worry about the dummy variable trap. The announcement date i.e. 11 March 2020 has been considered as event date to break whole study period into pre and post Covid-19 pandemic announcement.

GARCH Model
The volatility is the one that significantly affect the returns series. The return series may show that the periods of high volatility are followed by high volatility and period of low volatility followed by low volatility. Such patterns are known as volatility clustering. Such clustering and shocks may bring uncertainty to the returns expected by the investors in the stock market. The GARCH (1,1) model, variance equation can be written as:

$$\sigma_t^2 = \alpha_0 + \alpha_1 u_{t-1}^2 + \alpha_2 \sigma_{t-1}^2$$

Which represents that the conditional variance of u at time t that depend not only on the squared residual term in the previous time period (ARCH Term) but also on its conditional variance in the previous time period (GARCH Term). A GARCH (p, q) model is represented as:

$$R_t = \beta_0 + \epsilon_t \quad \text{......... (1)}$$

$$\sigma_t^2 = \alpha_0 + \alpha_1 u_{t-1}^2 + \alpha_2 \sigma_{t-1}^2 + \beta_1 Dummy \quad \text{......... (2)}$$

Where, D is the dummy variable of post Covid-19 return in the variance equation (2). R_t is the daily returns of the Index at time 't'. Thus, D (i = 1, 2) is the dummy variable for Post Covid-19 announcement.

Table No. 1: Results for Descriptive statistics of Nifty100 ESG and Nifty100 Index

Period	NIFTY100 ESG			NIFTY100		
	Full	Pre	Post	Full	Pre	Post
Mean	0.050176	0.008725	0.073899	0.046866	-0.000255	0.073816
Maximum	8.699691	5.249930	8.699691	8.090676	5.235736	8.090676
Minimum	-13.44716	-4.899051	-13.44716	-13.695	-4.946015	-13.69513
Std. Dev.	1.172224	0.907583	1.299628	1.179834	0.905497	1.311054
Skewness	-1.481941	-0.130908	-1.712059	-1.6157	-0.089902	-1.866304
Kurtosis	23.64332	7.575990	23.69503	23.97689	7.658527	23.87735
Jarque-Bera	23939.35	419.2893	15418.64	24794.70	433.7784	15761.61
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Observations	1321	479	841	1321	479	841

Source: Authors Compilation

Table No. 2 exhibits the result of descriptive statistics of Nifty100 ESG and Nifty100 index. Mean is an average value that indicates the performance of particular index and higher mean indicate the higher return. For the selected period of study. In case of Nifty100 ESG the average return and maximum return is noticed to be higher as the value is 0.050176 and 8.699691 respectively. In pre as well as post Covid-19 pandemic announcement Nifty100 ESG have given positive returns. Surprisingly, the highest returns were generated post Covid-19 announcement in case of both indices. Higher the value of standard deviation more risk is involved during select period of study. The standard deviation values are noticed to be little higher in case of Nifty100 index. Here, the negative skewness indicates that the distribution is skewed to the left, that is, it is more overspread towards negative values. The data for the index have been leptokurtic as the kurtosis are found to be more than three. Jarque-Bera test statistics have been used for testing whether the series is normally distributed. The non-normality of the data is confirmed in the results of the Jarque-Bera normality test and allows us to reject the null hypothesis of normality of returns.

Table No. 2: Results for Augmented Dickey-Fuller Test

Index	t-Statistic	Prob.
NIFTY100 ESG	-12.41366	0.0000
NIFTY100	12.43699	0.0000

Source: Authors Compilation

The time series data is stationary if its mean, variance and auto-covariance are constant no matter at what point it is measured i.e. they are time invariant. The above table no. 2 exhibit the result of ADF test. It can be seen that both indices return series are stationary at level at 1% level of significance that means we can reject null hypothesis and conclude that the series are stationary.

Table No. 3: Results for Breusch-Godfrey Serial Correlation LM Test

Nifty100 ESG			
F-statistic	1.494110	Prob. F(2,1318)	0.2248
Obs*R-squared	2.988247	Prob. Chi-Square(2)	0.2244
Nifty100			
F-statistic	1.517797	Prob. F(2,1318)	0.2196
Obs*R-squared	3.035513	Prob. Chi-Square(2)	0.2192

Source: Authors Compilation

Table No. 4: Results for ARCH Test

NIFTY100 ESG			
F-statistic	43.47526	Prob. F(1,1318)	0.0000
Obs*R-squared	42.15085	Prob. Chi-Square(1)	0.0000
NIFTY100			
F-statistic	41.21082	Prob. F(1,1318)	0.0000
Obs*R-squared	40.02196	Prob. Chi-Square(1)	0.0000

Source: Authors Compilation

The Autocorrelation or Serial Correlation is one of the violations of CLRM (Classical Linear Regression Model). The residuals in the model should not be auto-correlated. The Breusch-Godfrey Serial Correlation LM Test results for the hypothesis that there is no serial correlation indicates that we have autocorrelation problem as the probability chi-square value is 0.0000 which is less than 0.05 at 5% level of significance. The statistically significance of the p-values for the ARCH-LM test indicates the presence of Autoregressive Conditional Heteroskedasticity in the residuals. This confirms the volatility clustering effects in returns, that is, large changes tend to be followed by large changes, of either sign, and small changes tend to be followed by small changes, Mandelbrot (1963). This gives a reason to use ARCH family model.

Table No. 4: Results for GARCH Model

	Nifty100 ESG		Nifty100	
Variable	Coefficient	Prob.	Coefficient	Prob.
β_0	0.087726	0.0002	0.083510	0.0005
	Variance			
α_0	0.023852	0.0032	0.025235	0.0020
α_1	0.113994	0.0000	0.120084	0.0000
α_2	0.869209	0.0000	0.861157	0.0000
β_1	-0.001472	0.8115	0.001134	0.8593
Akaike info criterion	2.716099		2.722783	
Schwarz criterion	2.735729		2.742413	
Hannan-Quinn criterion	2.723459		2.730143	

Source: Authors Compilation

Table No. 5: Results for Exponential Generalized Auto Regressive conditional Heteroscedasticity (EGARCH) Model

	Nifty100 ESG		Nifty100	
Variable	Coefficient	Prob.	Coefficient	Prob.
β_0	0.048760	0.0302	0.037529	0.1022
	Variance			
α_0	-0.139423	0.0000	-0.139528	0.0000
α_1	0.155646	0.0000	0.156976	0.0000
α_2	-0.131427	0.0000	-0.130628	0.0000
α_3	0.963787	0.0000	0.965762	0.0000
β_1	0.020638	0.0109	0.021265	0.0077
Akaike info criterion	2.674983		2.677141	
Schwarz criterion	2.698538		2.700696	
Hannan-Quinn criterion	2.683814		2.685972	
ARCH LM Test				
F-statistic	0.078069		0.120245	
Obs*R-squared	0.156475		0.240994	
Prob. F(2,1316)	0.9249		0.8867	
Prob. Chi-Square(2)	0.9247		0.8865	

Source: Authors Compilation

The selection of the ARCH family model, most relevant for the time series data selected for the study can be done through the choice of the model with the (AIC) Akaike info criterion, (SIC) Schwarz information criterion and Hannan-Quinn criterion (HQ). The results in table no. 4 and 5 revealed that the Akaike info criterion, Schwarz criterion and Hannan-Quinn criterion values were the lowest for EGARCH model. Hence it can be concluded that for the time series data selected for the study, the EGARCH model is the most appropriate than basic ARCH and GARCH model. The EGARCH model as specified by Nelson (1991) accounts for the leverage effect. The empirically observed fact that negative shocks at time t-1 have a stronger impact in the variance at time *t* than positive shocks. Table 5 shows the results of the mean returns and variance equation of the EGARCH model for the day-of-the-week effect. ARCH-LM test indicate that there is no ARCH effect in residual now. All the coefficients that is ARCH term (α_1), GARCH term (α_2), Leverage effect term (α_3) and (β_1) dummy of post Covid-19 announcement period are significant therefore the size of the shock has a significant impact on the volatility of returns and past volatility helps to predict future volatility. ARCH coefficient is positive which shows there is a positive relation between the past variance and the current variance in absolute value. This implies the bigger the magnitude of the shock to the variance, higher the volatility. The leverage effect coefficient is negative which indicates that bad news will increase volatility more than good news of the same size thereby giving evidence of leverage effect.

FINDINGS AND CONCLUSION

The study investigated the impact of Covid-19 on the volatility and leverage effect on select Indices. The main aim of the study is to compare the volatility and leverage effect in Nifty100 ESG Index and Nifty100 Index during the study period. All the coefficients that is ARCH term, Leverage effect term GARCH term and dummy of post Covid-19 announcement period are significant therefore the size of the shock has a significant impact on the volatility of returns and past volatility helps to predict future volatility. ARCH coefficient is positive which shows there is a positive relation between the past variance and the current variance in absolute value. This implies the bigger the magnitude of the shock to the variance, higher the volatility. The leverage effect coefficient is negative which indicates that bad news will increase volatility more than good news of the same size thereby giving evidence of leverage effect. It can concluded that the overall returns during the select period by Nifty100 ESG index is higher as compared to the parent Nifty100 index even it generated positive return during pre and post Covid-19 pandemic announcement by the WHO. However, in terms of volatility it did not showed any major significant differences. Hence we can suggest that the volatility behaviour is similar in both indices and negative news have greater impact on the volatility rather than positive news. As per the study, Nifty100 ESG index remains a better investment option for the investors who take into consideration ESG factors before investing.

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EXPIRATION-DAY EFFECT ON RETURNS OF UNDERLYING INDEX: A CASE STUDY ON NATIONAL STOCK EXCHANGE

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ABSTRACT
This study examines the impact of Nifty 50 index futures expiration day on underlying index returns and volatility in the National Stock Exchange (NSE). The study employed OLS regression, GARCH and EGARCH technique to investigate the presence of expiration day effect. The daily return series of the Nifty50 Index for the period of 24 years i.e. from 12 June 2000 through 28 December 2023. The results derived from GARCH (1, 1) and EGARCH (1, 1) models consistently confirm that there is existence of Index futures expiration-day effects on market returns in the NSE. The average daily return for the expiration days is lower than other trading days for the sample period. However, the results derived from the EGARCH (1,1) reveal that all estimated coefficients for daily dummy variables are not statistically significant, suggesting that the day-of-the-week effects are not present for the Indian Stock Market.

Keywords: Index Futures, Expiration-Day Effect, Market Volatility.

1. INTRODUCTION
Derivatives have various uses in the Indian economy. By offering risk management tools, they enable market players to protect themselves against changes in the value of a range of financial assets, including currencies, commodities, and stocks. Through their ability to draw in speculators and arbitragers, derivatives also improve market liquidity by promoting efficiency and price discovery. Derivatives also present chances to diversify portfolios and leverage investments. Derivatives are generally used in the Indian market to reduce risk, boost efficiency, and offer a variety of investment possibilities. Derivatives are the contract that derives its value from an underlying asset. The National Stock Exchange (NSE) in India was the venue for the initial launch of derivatives. On June 12, 2000, index futures contracts went live, signifying the start of trading in derivatives in the whole country. For the National Stock Exchange of India (NSE), the Nifty 50 is the premier stock market index. Across a range of Indian economic sectors, it shows the performance of the 50 biggest and most liquid companies listed on the NSE. To determine the general state and direction of the Indian stock market, traders and investors use the Nifty 50 as a major

benchmark. Market investors can speculate on the future direction of the index by purchasing index futures linked to the Nifty 50. Investors can hedge, speculate, or acquire exposure to the wider market fluctuations with these futures contracts, which are valued based on the underlying Nifty 50 index, without having to purchase or sell individual equities. Trading Nifty 50 index futures is a popular activity on the financial markets in India

Derivatives is expected to bring stability in the spot market. However, when the opportunities are available in the market that needs to be tapped by the investors during that period. Calendar anomalies are one of the examples that provides opportunities of creating abnormal returns during a particular calendar period. Likewise, expiration effect is also one of the anomalies created due to the introduction of the derivatives futures contract. Index futures provides picture of the overall market movements. This study explores the expiration effect in Indian stock market. The objective of the study is to investigate the impact of futures expiration day on returns and volatility on National Stock Exchange. Expiration day is the day where the contract holders have to close their positions. In simple words, expiration is a settlement day for the contract. On NSE, index futures expire on last Thursday of each month. Trading in derivatives have impact on underlying asset and on its returns. Hence, the asset returns and its volatility is expected to have an impact due to the trading in derivatives market. Investors may also look for an arbitrage opportunity during this time that will lead to a generation of abnormal returns.

2. LITERATURE REVIEW

(Stoll and Whaley, 1997) pointed four possible causes of the expiration-day effect: (I) cash settlement or arbitrage trading; (II) market procedures that take order imbalances into account as the close draws near; (III) market procedures that involve outright manipulation; and (VI) market procedures. (Bollen and Whaley, 1999) no evidence of increased stock market volatility after analyzing price and volume data in the days leading up to the expirations of the derivative contracts for the Hong Kong Futures Exchange's Hang Seng Index (HSI). Previous study records revealed strong returns on the final trading day of the month and for the next three trading days, according to (Maberly et al., 2000). After looking at the S&P 500 futures, the author noticed that the turn of the month vanished after 1990. According to study (Chen and Wu, 2001), trading volume and price patterns point to the possibility of significant block purchases of the underlying stock by the issuers during the warrant introduction in order to satisfy hedging demand, as well as block sales of the underlying stock around expiration as a result of unwinding hedging-related positions. Basically, the expiry impacts are reduced when the settlement day and the expiration day are separated (Chou et al., 2006). The results of some studies revealed that trading volumes were significantly higher on expiration days and during the five days leading up to expiration days ("expiration weeks"), compared with non-expiration days (weeks), and also had significant expiration day effects on daily returns to the market index and on the volatility of these returns (Bhaumik and Bose, 2007). (Fung and Yung, 2007) examined the intraday trading activity of index stocks on the common

expiration day of index derivatives. Of particular note is the fact that trading increases in volume and frequency around the five-minute time intervals when the index is sampled to determine the settlement price. No notable price reversal or price reduction tendencies are discovered by the analysis.(Bhaumik and Karanasos, 2008) suggested that: (i) spot volatility decreases with the introduction of futures trading; (ii) volume decreases following the introduction of option contracts; and (iii) there are significant expiration day effects on volatility series and the value of traded shares. Some studies have found both NSE is significantly impacted by the expiration of index-based derivatives contracts (Bose and Bhaumik, 2009) and not much different from the returns and volatility on other days Tripathy (2010). Joensuu Markus (2010) found significant expiry day effects around the expiration of derivatives based on the EURO STOXX 50 index when the author examined the unusual volume, return, volatility, and return reversal effects around the monthly options and quarterly futures expiration days. In HOSE Regression model results showed that the expiration day has no effect on trading volume or market volatility, but GARCH, and EGARCH models validate the existence of index futures expiration day impacts on market returns (Nguyen et al., 2022). So, using these all models together will provide better understanding about volatility and expiration effect. (Creutz and Abrahamsson, 2018) The weak-form efficiency level in the Swedish stock market from 2000 to 2017 was investigated in this study. By examining if any weekday differs from the others using ARCH, GARCH, and TGARCH, the authors are able to determine that this anomaly does not occur. (Gupta and Chabra, 2022) The literature on calendar anomalies and market efficiency in agricultural commodities futures markets in India and outside was studied for this study. Only a small number of markets were found to be weakly efficient, according to the study, which showed that most studies utilized ordinary least squares regression analysis to test for the weak form of market efficiency. Studies have found the presence of week of the month effect, month of the year effect, semi-month effect and turn of the tax year effect in Indian commodity market and indicates that Indian commodity market is weakly inefficient (Chhabra, and Gupta, 2022).

RESEARCH GAP
From the literature reviewed it is noticed that the studies including recent data is not available. Limited studies are found in Indian context. This study not only explores the expiration effect but also the volatility changes in spot market due to futures expiry.

The news effect is also studied to make investors understand dynamics of effect of good and ad news. Unlike previous study, this study took into consideration the results from OLS, GARCH and EGARCH to achieve the study ojectives.

3. RESEARCH METHODOLOGY
The data employed in this study consist of daily closing prices data of Nifty 50 extracted from the official website of NSE. The daily closing prices data of the Nifty50 Index is collected for the period of 24 years i.e. from 12 June 2000 through

28 December 2023. Then, data is transformed into natural logarithm for the primary data to generate a time series of continuously compounded returns. Specifically, the spot market returns are calculated by the following equation:

$$R_t = \ln\left(\frac{P_t}{P_{t-1}}\right) \times 100$$

The returns are calculated as the log difference of the price series. P_t is closing value of the index on the day it is, P_{t-1} is the closing value on the day t-1. Since the study employs time series data analysis technique, the data series needs to be checked for stationarity. The stationarity of the data can be checked using unit-root test. The existence of a unit root indicates that the data is non-stationary. As such, it is important to check for heteroskedasticity in the residuals to account for time varying volatility normally seen in stock return series. Accordingly, the ARCH test at lag one is employed and the results are interpreted at 5% level of significance with the null hypothesis that "there exist no ARCH effect" in the log return series. The statistical techniques used in the study are descriptive statistics, unit root test, ARCH test GARCH (1,1) model and EGARCH model. The study also employs the dummy variable regression to account for the days of the week and expiration day.

4. OBJECTIVES OF THE STUDY

1. To examine the impact of Nifty 50 index futures expiration day on underlying index returns in the National Stock Exchange (NSE).

2. To examine the impact of Nifty 50 index futures expiration day on underlying index volatility in the National Stock Exchange (NSE).

Table 1: Results for Descriptive statistics of Nifty50 returns

	Obs.	Min	Max	Mean	Std. Dev.	CoV
Expiration days	283	-5.34960	13.01249	-0.17815	1.639132	-9.20100 815619
Other days	5575	-16.3345	13.90375	-0.03964	1.363069	-34.3896 710062
Entire sample	5858	-16.3345	13.90375	-0.04633	1.377834	-29.7414 898439

Source: Authors Compilation

The descriptive statistics for the daily market return for the sample are shown in Table 1. The average daily return for the entire sample for the period is -0.046327. This is low compared to the standard deviation of daily returns for the entire sample of 1.377834. In addition, the average daily return for the expiration days is -0.178147 making it lower than other trading days from the sample period. Specifically, the market declined on average by -0.178147 % on the expiration days while it was on average higher by -0.039636% on other trading days than the entire sample mean.

What is really telling is an examination of the coefficient of variation (CoV) for the different samples. The CoV for the non-expiration day subset is -34.3896710062. However, it is only -9.20100815619 for the expiration day subset. This indicates that though the standard deviation of the observed daily returns is slightly higher for the expiration day returns, it is relatively much lower than the average returns for the non-expiration days. In addition, when the negative returns for the expiration day subset are included in the average for the entire sample, the CoV reduces to -29.7414898439.

Table 2: Results for Unit Root Test of Nifty50 returns series

ADF test statistic	t-Statistic	Test critical values:		
	-72.36627***	1% level	5% level	10% level
		-3.431287	-2.861839	-2.566971

Source: Authors Compilation

Note: '***' significant at 1%.

The study employed Augmented Dickey-Fuller test to check the stationarity of the data. The existence of a unit root indicates that the data is non-stationary. In the unit root test, the P-value is 0.0001. So, it can be observed that p-value is less than 0.01. So, in this case we reject null hypothesis at 1% level of significance. So, it is said that there is no unit root and the data is stationary.

Table 3: Results for effects of index futures expiration-day on market returns and volatility

Variable	OLS	GARCH (1,1)	EGARCH (1,1)
Conditional Mean Equation			
Constant	-0.025724 (-0.56358)	-0.051144 (-1.742369)*	-0.015408 (-0.552329)
Index futures expiration day	-0.152423 (-1.62576)	-0.172653 (-2.959503)***	-0.147263 (-2.501992)***
Monday	-0.056997 (-0.93615)	-0.060324 (-1.420452)	-0.061725 (-1.566671)
Tuesday	-0.049843 (-0.81849)	-0.015854 (-0.370048)	-0.027587 (-0.709323)
Wednesday	0.006609 (0.108667)	-0.008576 (-0.212778)	-0.010834 (-0.287984)
Friday	0.034310 (0.561715)	-0.039339 (-1.023435)	-0.036444 (-0.959699)
ARCH test (1 lag)	300.5669***		
Conditional Variance Equation			
Constant		0.023964 (8.400185)***	-0.155294 (-20.27830)***
ARCH		0.110539 (20.23461)***	0.208086 (22.57775)***
GARCH		0.879910	0.085052

		(153.3363)***	(16.56490)***
Leverage			0.975274 (445.3425)***
Index futures expiration day			0.039970 (0.849073)

<center>*Source:* Authors Compilation</center>

Note: '*', '**', '***' significant at 10%, 5% and 1% respectively.

The results derived from the GARCH (1,1) and EGARCH (1,1) models also presented in Table No. 2 consistently indicate that the expiration days of index future contracts have a negative impact on the underlying market returns in India. Specifically, it is found from the EGARCH (1,1) model that the average market return for expiration days is lower than other trading days by 14.73% at the 1% level of significance. This finding is consistent with the conclusions of Chow et al. (2003); Alkebäck and Hagelin (2004) that the futures expiration days have a negative impact on the underlying market returns. Based on this finding, it is proposed that investors can seek arbitrage opportunities by selling the futures contract (holding a short position) prior to the expiration day and buying the underlying market portfolio at the end of the expiration day. In order to examine the effect of index futures expiration days on the volatility of market returns, the dummy variable for index futures expiration-day is included in the variance equation of the EGARCH (1,1) model. The results derived from the EGARCH (1,1) model point out that the coefficient of the dummy variable for the index futures expiration days is positive, but it is not statistically significant. Therefore, it is concluded that the index futures expiration day have no impact on the underlying market volatility. This finding is in line with previous findings of Stoll and Whaley (1997); Bollen and Whaley (1999) and Kan (2001) and seems appropriate for the case of India. The Indian derivatives market is in its infancy where stocks traded in the market are very limited. Therefore, index futures trading activities do not have significant impact on the spot market volatility on expiration days. In addition, the results derived from the EGARCH (1,1) reveal that all estimated coefficients for daily dummy variables are not statistically significant, suggesting that the day-of-the-week effects are not present for the Indian Stock Market. Specifically, the results obtained from the EGARCH (1,1) model show that the coefficient of leverage effect is statistically positive at the 1% level of significance. This result indicates that good information has a larger effect on the market returns volatility than bad information of the same size.

5. CONCLUSION

This study examines the impact of Nifty 50 index futures expiration day on underlying index returns and volatility in the National Stock Exchange (NSE). The study employed OLS regression, GARCH and EGARCH technique to investigate the presence of expiration day effect. The daily return series of the Nifty50 Index for the period of 24 years i.e. from 12 June 2000 through 28 December 2023. The results derived from GARCH (1, 1) and EGARCH (1, 1) models consistently confirm that there is existence of Index futures expiration-day effects on market returns in the

NSE. The average daily return for the expiration days is lower than other trading days for the sample period. However, the results derived from the EGARCH (1, 1) reveal that all estimated coefficients for daily dummy variables are not statistically significant, suggesting that the day-of-the-week effects are not present for the Indian Stock Market. The Indian derivatives market is in its infancy where stocks traded in the market are very limited. Therefore, index futures trading activities do not have significant impact on the spot market volatility on expiration days. In addition, the results derived from the EGARCH (1,1) reveal that all estimated coefficients for daily dummy variables are not statistically significant, suggesting that the day-of-the-week effects are not present for the Indian Stock Market. From the results of EGARCH (1, 1) model that the coefficient of leverage effect is statistically positive at the 1% level of significance. This result indicates that good information has a larger effect on the market returns volatility than bad information of the same size.

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EXPLORING NEW HORIZONS IN COMMERCE AND MANAGEMENT: A COMPREHENSIVE ANALYSIS WITH REAL-WORLD EXAMPLES

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ABSTRACT
The dynamic landscape of commerce and management is undergoing significant transformations driven by technological advancements, globalization, and changing consumer behaviors. This research paper aims to delve into the emerging trends and new horizons in the fields of commerce and management, backed by illustrative examples from various industries. By analyzing these developments, we aim to provide insights into how businesses can adapt and thrive in the evolving landscape.

Keywords: commerce, management, technology, globalization, sustainability, digital transformation, examples.

1. INTRODUCTION

The traditional paradigms of commerce and management are being reshaped by the advent of new technologies, changing market dynamics, and an increasingly interconnected global economy. This paper seeks to explore the new horizons that are emerging in these fields and their implications for businesses.

The world of commerce and management is undergoing a profound metamorphosis, ushering in an era of unprecedented change. Traditional paradigms are giving way to innovative approaches, fueled by technological advancements, globalization, and the evolving expectations of consumers. This introduction sets the stage for a comprehensive exploration of these new horizons, dissecting the key drivers behind the transformations and offering a glimpse into the dynamic landscape that businesses must navigate to thrive in the 21st century.

Historically, commerce has been the lifeblood of economies, driven by brick-and-mortar establishments and face-to-face interactions. However, the advent of the digital age has rewritten the rules, challenging established norms and creating an environment where agility and adaptability are paramount. The rise of e-commerce stands as a testament to this shift, with platforms like Amazon and Alibaba reshaping the retail landscape and redefining consumer expectations.

Simultaneously, the realm of management is experiencing its own revolution. Traditional hierarchical structures are yielding to more agile and decentralized models, necessitated by the rapid pace of technological innovation. The emergence of digital transformation as a strategic imperative underscores the need for businesses to harness technology not merely as a tool but as a fundamental driver of organizational success.

1.2 Objectives

❖ To identify and analyze key trends shaping commerce and management.

❖ To provide real-world examples illustrating the impact of these trends.

❖ To offer insights into how businesses can leverage these trends for sustainable growth.

2. TECHNOLOGICAL ADVANCEMENTS IN COMMERCE

The digital revolution in commerce has redefined business landscapes. E-commerce giants like Amazon and Alibaba exemplify the transformative power of online marketplaces. Blockchain technology, showcased by IBM and Wal-Mart, revolutionizes transparency and trust. These advancements underscore the imperative for businesses to embrace technology, ensuring resilience and global competitiveness.

2.1 E-commerce and Online Marketplaces

The rise of e-commerce has revolutionized the way businesses operate and connect with consumers. Companies like Amazon, Alibaba, and Shopify have demonstrated how online platforms can redefine the shopping experience and open up new avenues for businesses to reach global markets.

2.2 Block chain Technology

Block chain is not limited to crypto currencies; it has the potential to transform various aspects of commerce, such as supply chain management, transparency, and security. Case studies involving companies like IBM and Wal-Mart will be examined to showcase the practical applications of blockchain in commerce.

3. MANAGEMENT IN THE DIGITAL AGE

Digital transformation is reshaping management paradigms. Leaders like Microsoft and Sales force exemplify effective strategies. The COVID-19 pandemic accelerated remote work, demanding innovative approaches to collaboration and leadership in the digital age.

3.1 Digital Transformation

Businesses are increasingly embracing digital transformation to streamline processes, enhance customer experiences, and stay competitive. Organizations like Microsoft and Sales force have successfully navigated this transformation, and their strategies will be analyzed as examples of effective management in the digital age.

3.2 Remote Work and Collaboration

The COVID-19 pandemic accelerated the adoption of remote work, challenging traditional management practices. Companies like Zoom, Slack, and Trello have become instrumental in facilitating remote collaboration. This section will explore how these tools have redefined workplace dynamics.

4. GLOBALIZATION AND CROSS-CULTURAL MANAGEMENT

Globalization demands adept cross-cultural management. Companies like Tesla and Starbucks showcase successful international business expansion. Diversity and

inclusion initiatives at Google and Accenture exemplify the necessity for culturally sensitive approaches in today's interconnected business environment.

4.1 International Business Expansion

With the world becoming more interconnected, businesses are expanding globally. Companies like Tesla and Starbucks provide valuable examples of successful international expansion and effective cross-cultural management.

4.2 Diversity and Inclusion

An inclusive workplace is crucial for success in today's diverse business environment. Examining initiatives by companies like Google and Accenture, this section will highlight the importance of diversity and inclusion in management practices.

5. SUSTAINABLE BUSINESS PRACTICES

Embracing sustainable business practices is imperative. Companies like Patagonia and Unilever lead in corporate social responsibility, integrating ethical strategies. Circular economy initiatives by IKEA and Dell demonstrate minimizing waste and maximizing resource efficiency, setting benchmarks for environmentally conscious commerce.

5.1 Corporate Social Responsibility (CSR)

Corporate Social Responsibility (CSR) is a strategic imperative, transcending profit-centric models. Companies like Patagonia and Unilever exemplify CSR integration into core strategies, fostering positive social and environmental impacts. Initiatives range from ethical sourcing to community engagement, demonstrating a commitment beyond profit maximization. By aligning business practices with societal needs, these companies not only contribute to community welfare but also build trust and brand loyalty. The integration of CSR is evolving from a mere checkbox to a foundational element, showcasing the transformative power of businesses as socially responsible agents for sustainable and ethical practices on a global scale.

5.2 Circular Economy

The Circular Economy paradigm aims to minimize waste and maximize resource efficiency. Companies like IKEA and Dell lead in implementing circular economy practices. By reimagining product lifecycles, they prioritize recycling, reuse, and sustainable design. This innovative approach fosters environmental sustainability, reduces ecological impact, and promotes responsible consumption. Embracing circular economy principles transforms businesses from linear to regenerative, aligning economic success with environmental stewardship. Such initiatives exemplify a shift towards a more sustainable and resilient future, where the concept of waste is replaced by a closed-loop system that preserves resources and minimizes environmental harm.

6. CONCLUSION

In conclusion, the dynamic evolution of commerce and management necessitates continuous adaptation for businesses to remain relevant and competitive. The showcased examples underscore the strategic approaches employed by successful

companies in navigating these transformative changes. Embracing technological advancements becomes imperative, as demonstrated by the innovative practices of industry leaders. Effective management strategies, as seen in the case studies of Microsoft and Sales force, are vital for steering organizations through the complexities of the digital age.

Furthermore, the imperative for global collaboration, exemplified by the rise of remote work tools like Zoom and collaborative platforms like Trello, highlights the interconnected nature of the modern business landscape. Lastly, the commitment to sustainability, illustrated by pioneers such as Patagonia and IKEA in corporate social responsibility and circular economy initiatives, emerges as a cornerstone for long-term success.

In essence, businesses poised for success in this new era of commerce and management must intertwine technological prowess, innovative management, global collaboration, and an unwavering dedication to sustainability. These elements collectively form a strategic framework that not only ensures survival in the evolving landscape but positions businesses as leaders, driving positive change in the global economic ecosystem.

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PROBING THE IMPACT OF CRUDE OIL'S INFLUENCE ON THE NIFTY 50 INDEX IN THE CONTEXT OF THE INDIAN STOCK MARKET

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ABSTRACT

The study probes into the relationship between daily crude oil prices and the Nifty 50 index, a major indicator for the Indian stock market. It investigates the link between these variables using data spanning a year (December 28, 2022–December 27, 2023). The study uses descriptive statistics, correlation analysis, unit root testing, and regression to investigate how fluctuations in crude oil prices affect the Nifty 50 index. The Nifty 50 represents 50 significant Indian enterprises, therefore its success is critical for investors, legislators, and corporations. The study aims to provide helpful insights for navigating India's complicated economic landscape by shining light on the influence of crude oil price fluctuations on the stock market.

Keywords: Probing, Nifty 50, Crude oil prices, Investors, Fluctuations, and Volatility.

INTRODUCTION

Crude oil, which is also known as the "Industry Life Blood," is an important component of global economies since it serves as a key energy source and is required for the production of a variety of products. (Sathyanarayana, 2018) India's reliance on crude oil imports makes its economy especially vulnerable to swings in oil prices, which are impacted by a variety of variables. (Upadhyay, 2019) The association between oil prices and the Indian stock market, which is frequently analyzed using the NIFTY 50 index, sheds light on market dynamics. The NIFTY 50 index, which was introduced in 1996, is made up of 50 important firms listed on the National Stock Exchange and serves to guide investment decisions while also reflecting general market performance. Despite India's large oil production, crude oil imports remain significant. As a result, understanding the relationship between oil prices and the stock market is critical for investors navigating India's economic environment. The volume of crude oil production in India in financial year 2023 amounted to about 29.2 million metric tons. Compared to the previous fiscal year, there was a slight decrease in crude oil production in the country.

➢ REVIEW OF LITERATURE

(MALARVIZHI, 2011) Conducted a thorough analysis of the impact of selected macroeconomic factors on the NIFTY Index movement over a ten-year period, from April 2000 to March 2010. The NIFTY Index has significant long-term correlations with elements such as FII, Money Supply, BOP, IIP, and the exchange rate. Recommendations were made for the monitoring of these indicators to assist policymakers and SEBI in managing stock market movements. The ARIMA technique was highlighted for forecasting macroeconomic elements as well as the NIFTY Index, which informs the development of successful financial plans and laws.

(Sharma, 2018) Used secondary data to evaluate the relationship between crude oil prices and Indian stock market indices between January 2010 and January 2017. Using Augmented Dickey-

Fuller, Johansen cointegration, Philips-Perron unit root tests, and VAR analysis, it discovered a linear relationship between crude oil prices and Indian stock market indexes. The analysis found that oil price shocks had a considerable impact on inflation and foreign exchange reserves, demonstrating the impact of worldwide oil price volatility on the Indian stock market.

(Modak, 2015) Examined the influence of crude oil price changes on the Indian economy using secondary data from 2000 to 2014. It used regression models and ANOVA to investigate patterns in economic growth, the relationship between oil prices and inflation, factors influencing crude oil prices, and their impact on the Indian economy.

(Gopinath, 2023) Examined the growth, performance, and interrelationships of key indices in the Indian stock market, such as the Nifty 50, Auto Index, Pharma Index, Bank Index, and FMCG Index. It analyzed trends and connections among these indices by using secondary data from the NSE website from January 2018 to December 2023. Despite limits in data accuracy and the time period covered, the study gave insights into market efficiency and sectoral dynamics, underlining the necessity of current knowledge for making educated investment decisions. It contributed to the understanding of sectoral efficiency and index linkage in the Indian stock market landscape by using descriptive statistics, graphics, and correlation analyses.

(Sathyanarayana, 2018) Examined the relationship between crude oil prices and the Indian stock market, specifically the BSE Sensex, from 2006 to 2015. Using descriptive statistics, ADF tests, residual diagnostics, and the GARCH (1,1) model, it discovered that variations in crude oil prices had a significant impact on BSE Sensex volatility. The findings highlighted the need of taking crude oil price changes into account when formulating economic and stock market policy choices. While noting past research showing this association, the study suggested that future studies include additional stock market indices and macroeconomic variables to gain a more complete picture.

SCOPE OF THE STUDY

The scope of our study is limited to only one independent variable .i.e. Crude Oil Prices. Howeverthere are many other factors that do have an impact on NSE and its various Indices, but we have restricted our study to Crude Oil as we are studying the impact of changes in Crude Oil prices on Nifty 50 index.

NEED FOR THE STUDY

The main purpose of this study is identifying the crude oil price of various stocks which is nifty 50 during the study period. The Krishna-Godavari (KG) Basin holds immense significance for the Indian oil and gas sector due to its substantial hydrocarbon reserves.

RESEARCH GAP: - Few studies have been conducted in this time period December 28, 2022 to December 27, 2023 on this topic probing the impact of crude oil's influence on the nifty 50 indexin the context of the Indian stock market.

❖ **RESEARCH QUESTIONS, OBJECTIVES, PERIOD, TOOLS & TECHNIQUES,VARIABLES AND HYPOTHESIS OF THE STUDY**

1. Research Question 1: Is there any relationship among Daily Crude Oil prices & Nifty 50Index.

Research Objective 1: To study the significant relationship between daily Crude Oil Prices & Nifty 50 index.

Period of the study: 20 Jan 2014 to 19 Jan 2024 (10 Years)Tool and Techniques Used: Correlation Test

Variables: Dependent Variables - Nifty 50 Returns Independent Variable – Daily prices of Crude Oil

Hypothesis:

H0: There is no significant relationship between daily crude oil prices & Nifty 50 index.

H1: There is a significant relationship between daily crude oil prices & Nifty 50 Returns.

2. Research Question 2: Do daily prices of crude oil have any significant impact on Nifty 50Index.

Research Objective 2: To study the significant impact of daily prices of crude on stock market(Nifty 50 index).

Period of the study: 20 Jan 2014 to 19 Jan 2024 (10 Years)

Tool and Techniques Used: Regression Analysis (Ordinary Least Square Model – OLS Model)Variables: Dependent Variables - Nifty 50 Returns.

Independent Variable – Daily prices of Crude OilHypothesis:

H0: There is no impact of Daily Crude Oil prices on Nifty 50 Index.

H1: There is a significant impact of Daily Crude Oil prices on Nifty 50 index.

RESARCH METHODOLOGY

The study is based on secondary data. The study has used the data of nifty 50 & crude oil price for a period of 1 years from 28th dec 2022 to 27th dec 2023. The dependent variables are nifty 50, whereas the independent variable is crude oil. The descriptive statistics is used to check the statistics in the model. The correlation is used to find the relationship between the variables. Unit root is used to check the stationarity of data and OLS (ordinary least square) is used to check the impact.

➢ **METHODOLOGY**

Source and Collection of Data: The study is completely based on secondary data.

Variables	Sources	Type/ Frequency
Crude Oil Prices	Macro trends (WTI)	Daily
Nifty 50 Closing Prices	National Stock Exchange of India Limited (NSE)	Daily

- Log formula – [=Ln (Today's prices/Yesterday's prices)*100] is used in order to normalize the data set. Unit root is also used to check the stationarity.

➢ **PERIOD OF THE STUDY**

The time period of the study is 1 years on a daily basis. Beginning from 28th Dec 2022 to 27th Dec 2023.

➢ **TOOLS AND TECHNIQUES USED**

1. Descriptive Statistics

2. ADF Unit Root Test to test the stationarity of data

3. Correlation Test

4. Regression Analysis using OLS Model

- Software used: Eviews

➢ **LIMITATIONS OF THE STUDY**

- The study is restricted to only 1 year's data.

- There are various other factors which have an impact on NSE and its various indices, but only 1 variable that is Crude Oil is studied.

DATA ANALYSIS AND INTERPRETATION

The following statistical tools and techniques are used for objectively analysing and interpreting data.

1. DESCRIPTIVE STATISTICS
Descriptive statistics have been used in order to describe the features of the series data that has been considered for the study.

	RETURNS_OF_NIFTY_50	RETURNS_OF_CRUDE_OIL
Mean	0.074592	-0.029656
Std. Dev.	0.626996	2.184130
Skewness	-0.139677	-0.346368
Kurtosis	3.106207	3.188679
Observations	238	238

Source: Compilation by Author

Descriptive statistics helps us with the data frequency and its characteristics. From the above analysis it is observed that Mean value is an indicator of performance. From the 238 observationsthe mean value of nifty 50 returns is 0.074592 and the mean value of crude oil returns is -0.029656in a given period. The standard deviation of nifty 50 returns is 0.626996 which shows less variationin data and standard deviation of crude oil returns is 2.184130 which indicates more variation in data. The value of Skewness for nifty 50 returns is -0.139677 and of crude oil returns is -0.346368which signifies that the data is negatively skewed. The kurtosis value for nifty 50 returns is 3.106207 and of crude oil returns is 3.188679 which state that K>3 and if the value is more than 3it is called as Leptokurtic.

Research objective: To study the significant impact of daily prices of crude on stock market (Nifty50 index).

2. REGRESSION ANALYSIS (ORDINARY LEAST SQUARE MODEL – OLS MODEL)BETWEEN CRUDE OIL AND NIFTY 50 INDEX

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RETURNS_OF_CRUDE_OIL	0.023926	0.018622	1.975853	0.0001
CONSTANT	0.075302	0.040590	1.855178	0.2001

INTERPRETATION OF ORDINARY LEAST SQUARES:
By running the OLS regression model we have obtained the following output. Where Nifty50 is the dependent variable and crude oil is the independent variable. It was found that it has a significant impact on Nifty 50 at 5% significance level with p-value **0.0001.**

3. AUGMENTED DICKEY FULLER TEST (ADF)
The Augmented Dickey Fuller Test (ADF) is a stationarity unit root test. In your time series analysis, unit roots can produce unexpected results. With serial correlation, the Augmented Dickey-Fuller test can be used. The ADF test is more powerful and can handle more complex models than the Dickey-Fuller test. However, as with most unit root tests, it should be used with caution because it has a relatively high Type I error rate.

> ## UNIT ROOT TEST OF CRUDE OIL RETURNS & NIFTY 50 RETURNS

Variables	ADF Value	Critical Value	Probability Value	Decision
Crude Oil returns	-12.90022	1% level: -3.457865 5% level: -2.873543 10% level: -2.573242	0.0000	Reject the Null Hypothesis
Nifty 50 returns	-14.19451	1% level: -3.457865 5% level: -2.873543 10% level: -2.573242	0.0000	Reject the Null Hypothesis

Source: Compilation by Author

With the help of ADF Unit Root Test, all the variables have the probability value is lesser than

0.01 at 1% significant level, thus it leads to rejection of null hypothesis. Therefore all the variablesare found to be stationary at level.

Research Objective: To study the significant relationship between daily Crude Oil Prices & Nifty50 index.

4. CORRELATION TEST

	RETURNS_OF_ CRUDE_OIL	RETURNS_OF _NIFTY_50
RETURNS_OF_CRUDE_OIL	1	0.083345
RETURNS_OF_NIFTY_50	0.083345	1

Correlation means relationship between two variables. When the variables increase or decrease in same direction it means that there is positive correlation and vice versa. Correlation coefficient ranges between -1 to +1 which indicates that there is perfectly negatively and positive correlation respectively and if it is zero it indicates that the variables are random and there is no relationship between them. Ideally it is expected to have correlation above 0.7 to have strong relationship between the variables.

FINDINGS
From the above analysis it is found that Indian Stock Market and crude oil has positive and strong relationship and further it is observed that they are statistically significantly impacted among eachother. This result further reveals that both variables move together which proves a co-movement relationship. Any impact or corrections in stock market will reflect an immediate and equal impact in crude oil. This study provides crucial information that will help investors make informed decisions about both the Nifty 50' index and crude oil prices.

CONCLUSION
The studies analyzed shed light on the relationship between crude oil prices and the Indian stock market, as represented by the Nifty 50 index. While some research reveal strong correlations and causal ties between oil prices and stock market indices, others

find weak or inconsequential links. Overall, these findings highlight the complicated and multifaceted nature of the relationship between crude oil prices and the Indian stock market, emphasizing the need of taking into account a variety of economic indicators and determinants when analyzing market dynamics and making informed investment decisions.

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EXAMINING GLOBAL INTERCONNECTEDNESS BETWEEN INDIAN- USA, CHINA, JAPAN, GERMANY, AND FRANCE SELECTED G20 NATIONS STOCK EXCHANGES

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ABSTRACT
The Indian stock market is a major player in the global stock market. The study aims to provide an in- depth understanding of cross-country correlation between major global economies and indices using financial econometric techniques such as Unit Root, Correlation, and Regression. Using a dataset of 2676 observations, the study examined the cross correlations between the Indian stock markets and the stock exchanges of a specific G20 nations China, Japan, USA, France and Germany. The Indian market's vulnerability to global contagious events is attributed to its ability to adapt to worldwide market trends. The findings of this study provide a critical insight into the impact of volatility and its relationship between the India stock market and selective international stock markets. The study also provides insights into their dynamic interactions over a ten-year period.

➢ INTRODUCTION

The spread of a more localized and nationalistic view of an interconnected world market with unrestricted cross-border movement of capital, goods, and services is known as globalization. Multinational markets and global networks that are a part of an economic and social system come together to form globalization (Rabiul Islam, 2019). Global banking systems and stock exchanges are two examples of financial markets that are becoming more interconnected. This interconnectedness increases the risk of financial crises that can quickly spread across borders while also facilitating capital flows for investment and economic (Insights, 2024).

The G20 (Group of 20) is an intergovernmental organization consisting of 19 countries and the European Union. It has become a forum for talking about global economic cooperation and financial stability. It included a broader range of countries than the G7 or G8, including major advanced economies like the United States, Japan, Germany, and France, as well as significant emerging economies like China, India, Brazil, and others. India has played a pivotal role in advocating for the interests of developing economies within the G20. India has a lot of weight in the G20 because it is a big emerging market with one of the fastest-growing economies in the world.

➤ **LITERATURE REVIEW**

1. (Ali, 2022) analyzed the integration of the stock markets of India with various international economies, with a focus on Asian and American markets. The study examined cross-country cointegration between major global economies and indices using financial econometric techniques such as Unit Root, Johansen cointegration, Correlation, and Augmented Dickey-Fuller. Although the study presents strong evidence of a significant degree of integration between the Indian and global financial markets. The study demonstrated the Indian market's vulnerability to global contagion, highlighting its adaptability to worldwide market trends and providing investors with insightful information for tactical financial decision-making.

2. (Vinupriyadharshini, 2019) examined the effects of volatility on the Nifty50, SSEC, NIKKEI225, FTSE100, and S&P 500 stock indices following the 2008 financial crisis. Descriptive statistics, GARCH, ARCH, the correlation test, Johansen's cointegration test, and the Granger causality test were used to analyze the indices. It recognized certain limitations, including the lack of pre-recession data and its exclusive focus on the designated indices. It found that some indices had weak spillover effects and suggested expanding the scope of event analysis to include political, economic, social, technological, and legal factors.

3. (Dixit, 2016) investigated how developed economies and stock markets in developing countries under the Organization of Islamic Cooperation (OIC) interact. It was determined that there was a commonality among the national economic factors influencing stock market returns by using a variety of analytical tools, international portfolio diversification is frequently profitable, but the co-integration that was seen suggested that it also contributed to market co-movement.

4. (Subbaiyan, 2020) studied the cointegration of Asian stock markets is, with a particular focus on the dependency of the Indian stock market on some of the selected emerging markets (Hong Kong, Indonesia, Korea, Japan, and Israel). The outcomes validate the cointegration of the selected markets and to identify long-term causality, the study uses the Vector Error Correction Model. It emphasized how the Indian stock market is integrated with other Asian markets and provides insights into their dynamic interactions over a ten-year period.

5. (RAMAKRISHNA, 2022) focused on the relationship between the major global indices and the Indian stock market while examining the COVID-19 contagion effects on a few stock market indices. It found higher cointegration among stock

indices after COVID-19, suggesting closer ties between the Indian stock market and its global counterparts. Following the pandemic, shock transmission effects were observed from India to the United States, Euronext, Japan, and the United Kingdom. The study emphasized the need for risk management and portfolio diversification as the post-pandemic environment changed, particularly since India attracted foreign investments at favorable valuations.

➢ RESEARCH GAP

While the existing studies have explored various aspects of global interconnectedness and interdependence between the Indian stock market and selected G20 nations, there is a noticeable gap in the literature regarding a comprehensive examination of cross-country cointegration, especially using an extensive dataset and advanced financial econometric techniques. Additionally, the literature lacks a recent analysis that specifically focuses on the selected G20 nations, namely the USA, China, Japan, Germany, and France, to provide up-to date insights into their interconnectedness with the Indian stock market.

➢ SCOPE

The scope of this study is delimited to a meticulous examination of the interconnectedness between the Indian stock market and the stock exchanges of a specific subset of G20 nations. The focus is particularly on the stock market returns of the United States (USA), China, Japan, Germany, and France. By concentrating on these key G20 economies, the study aims to provide an in-depth and contemporary understanding of the cross correlations among the Indian stock market returns and those of the selected nations.

➢ RESEARCH QUESTIONS, OBJECTIVES, PERIOD, TOOLS & TECHNIQUES, VARIABLES AND HYPOTHESIS OF THE STUDY

Research Question 1: Are there any trend patterns between the movements of the Indian stock market and selected G20 countries stock market?

Research Objective 1: To analyse trend patterns between the movements of the Indian stock market and selected G20 countries stock market.

Period of the study: 1 January 2013 to 31 December 2023 (10 Years)

Tool and Techniques Used: Trend Analysis

Variables: Dependent Variables - Nifty 50 closing Prices

Independent Variable – selected G20 Stock market closing prices

Hypothesis: H0: There is no trend patterns between the movements of the Indian stock market and selected G20 countries stock market

H1: There is a trend patterns between the movements of the Indian stock market and selected G20 countries stock market.

Research Question 2: Whether there are cross correlations among the Indian stock market returns and G20 stock market returns?

Research Objective 2: To study the cross correlations among the Indian stock market returns and selected G20 countries stock market.

Period of the study: 1 January 2013 to 31 December 2023 (10 Years)

Tool and Techniques Used: Correlation Test

Variables: Dependent Variables - Nifty 50 Returns

Independent Variable – selected G20 countries stock markets return

Hypothesis: H0: There is no cross correlations among the Indian stock market returns and selected G20 countries stock market.

H1: There are cross correlations among the Indian stock market returns and selected G20 countries stock market.

Research Question 3: Is there any significant impact of the selected G20 countries stock markets on the Indian stock market?

Research Objective 3: To study the impact of selected G20 countries stock markets on the Indian stock market.

Period of the study: 1 January 2013 to 31 December 2023 (10 Years)

Tool and Techniques Used: Regression

Variables: Dependent Variables - Nifty 50 returns

Independent Variable – selected G20 countries Stock market returns

Hypothesis:
H0: There is no significant impact of the selected G20 countries stock markets on the Indian stock market.

H1: There is significant impact of the selected G20 countries stock markets on the Indian stock market.

➢ **RESEARCH METHODOLOGY**
Source and Collection of Data: The study is completely based on secondary data.

Countries	Variables	Sources	e/ Frequency
India	Nifty 50 Closing Prices	Yahoo Finance	Daily
China	HSI	Yahoo Finance	Daily
France	CAC 40	Yahoo Finance	Daily
Germany	DAX	Yahoo Finance	Daily
Japan	NIKKEI 225	Yahoo Finance	Daily
United States	NYSE 100	Yahoo Finance	Daily

- Log formula – [=Ln (Today's prices/Yesterday's prices) *100] is used in order to normalize the data set.

➢ PERIOD OF THE STUDY

The time period of the study is 10 years on a daily basis. Beginning from 1st January 2013 to 31st December 2023.

➢ TOOLS AND TECHNIQUES USED

1. Data Characteristics - Descriptive Statistics, ADF Unit Root Test to test the stationarity of data

2. Comparative trend analysis

3. Correlation Test

4. Regression Analysis

- Software used: EViews

➢ LIMITATIONS OF THE STUDY

- The study is restricted to only 10 years data.

➢ DATA INTERPRETRAION AND ANALYSIS

❖ DESCRIPTIVE STATISTICS

	NIFTY 50	HSI	CAC 40	DAX	NIKKEI 225	NYSE 100
Mean	-0.047169	0.012458	-0.028364	-0.023289	-0.044513	-0.026040
Std. Dev.	1.059994	1.278384	1.184678	1.217998	1.306265	1.037291
Skewness	1.229322	-0.064983	0.831083	0.580041	0.249404	0.823883
Kurtosis	21.11301	6.279016	14.02485	12.98157	7.033485	23.70282
Observations	2676	2676	2676	2676	2676	2676

From the above descriptive statistics analysis, we can say that HSI (China) is performing better as compared to other stock exchanges, as it as higher mean value i.e. 0.012458. The standard deviation of Nikkei 225 (Japan) has higher value i.e. 1.306265 and nyse100 (USA) i.e. 1.037291 has lower value compared to other exchanges. HSI is positively skewed and other stock exchanges are negatively skewed. All the stock exchanges are above 3 which means value that there is leptokurtic.

❖ UNIT ROOT TEST

Variables	T-statistics	Probability Value	Decision
NIFTY 50	-18.38518	0.0000	Reject the Null Hypothesis
CAC 40	-52.10019	0.0001	Reject the Null Hypothesis
DAX	-52.58169	0.0001	Reject the Null Hypothesis
HSI	-51.17368	0.0001	Reject the Null Hypothesis
NIKKEI 225	-53.66586	0.0001	Reject the Null Hypothesis
NYSE 100	16.23232	0.0000	Reject the Null Hypothesis

With the use of ADF Unit root test all the stock indices have the probability value of less than 0.05 i.e. 0.0000 & 0.0001 causing the null hypothesis to be rejected. Therefore, all the variables are found to be stationary at level.

❖ COMPARATIVE TREND ANALYSIS

Research Objective 1: To analyse trend patterns between the movements of the Indian stock market and selected G20 countries stock market.
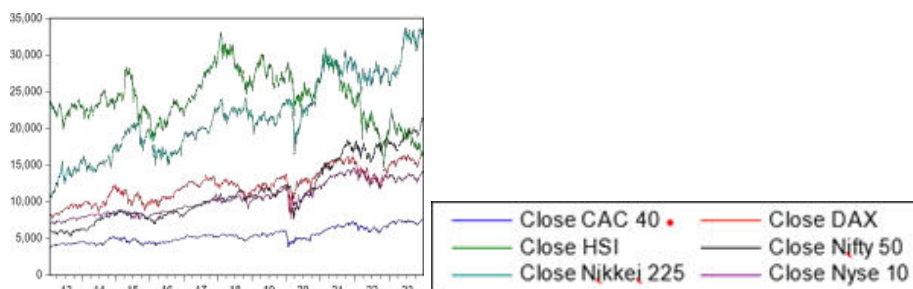
In the above graph the X- axis represents the period of the study and the y axis represents the closing prices. The above graph shows the monthly trend of all the selected stock exchanges i.e. NIFTY 50, CAC 40, DAX, HSI, NIKKEI 225 ANDD NYSE 100 from the period January 2013 to December 2023. As we can see from the above graph, HSI is at the highest position but have fallen down in 2021. Nikkie 225 have been moving upward. DAX, NIFTY 50 and NYSE 100 have been moving in the same pace. CAC40 are the lowest compared to other stock exchanges.

❖ CORRELATION ANALYSIS

Research Objective 2: To study the cross correlations among the Indian stock market returns and G20 stock market returns.

	Nifty 50	HSI	CAC 40	DAX	NIKKEI 225	NYSE 100
Nifty 50	1	-0.025026	-0.003780	0.02934	0.046809	0.021884

Correlation means a relationship between two variables. From the above correlation matrix, it can be said that there is a negative correlation between Nifty50 & HSI (-0.025026), CAC 40 (-0.003780). There is a positive correlation between Nifty50 & DAX (0.02934), NIKKEI225 (0.046809), NYSE 100 (0.021884).

❖ OLS REGRESSION MODEL

Research Objective 3: To study the impact of selected G20 countries stock markets on the Indian stock market.

	Coefficient	Std. Error	t-Statistic	Prob.
CONSTANT	-0.044133	0.020493	-2.153510	0.0314
HSI	-0.022401	0.016023	-1.398018	0.1622
CAC 40	-0.007864	0.017429	-0.451229	0.6519
DAX	0.027688	0.016963	1.632254	0.1027

NIKKEI 225	0.038264	0.015672	2.441530	0.0147**
NYSE 100	0.024295	0.019760	1.229475	0.2190

By running the OLS regression mode; we have obtained the following output. Where Nifty50 is the dependent variable and HIS, CAC40, DAX, NIKKEI 225 and NYSE100. It was found that Nikkei225 has a significant impact on Nifty 50 at 5% significance level with p-value 0.0147 and all the other stock has no impact on NIFTY 50.

➢ **CONCLUSION AND FINDINGS**

The analysis of the descriptive statistics shows that the Hang Seng Index (HSI) performs better than other stock exchanges, with a mean value that is higher than the DAX Index. NYSE 100 has a relatively lower standard deviation than the Nikkei 225, which is notable for having a higher one. Differentiating between different market dynamics, the skewness of HSI is positive, while other exchanges show negative skewness. There is increased volatility indicated by the leptokurtic distributions of all the indices. Utilizing the ADF Unit root test additionally validates each variable's stationarity at a noteworthy degree, thereby enhancing the data's dependability. The graph from January 2013 to December 2023 demonstrates the importance of HSI, even though it saw a fall in 2021, while Nikkei 225 continued to rise. NYSE 100, NIFTY 50, and DAX all move simultaneously, with CAC 40 lagging behind. A closer look at the correlation matrix shows that the NYSE 100, DAX, Nikkei 225, and Nifty 50 have positive correlations with each other and with HSI and CAC 40, respectively. At a 5% significance level, additional OLS regression analysis reveals the Nikkei 225's noteworthy influence on the Nifty 50, highlighting its role in the dynamics of the market.

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GLOBAL FINANCIAL IMPLICATIONS: A PROFOUND EXPLORATION OF THE RUSSIA-UKRAINE WAR AND ITS IMPACT ON THE FINANCIAL SERVICES SECTORAL INDEX WITHIN THE NIFTY 50 PARADIGM

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ABSTRACT

On January 24, 2022, the Russian-Ukrainian war broke out, sending shockwaves across the world's financial system. This study employs an event study methodology to examine how the Russia-Ukraine War affected the stock market performance of the Nifty 50 and the Financial Service Sectoral Index. The purpose of this study is to ascertain whether the Nifty 50 and Nifty financial Service Sectoral Index have a meaningful link. From March 3, 2022, to March 1, 2023, historical index data for the select index were gathered from the National Stock Exchange (NSE) database. The data was analysed using appropriate econometric tools, such as the regression model, Trends and the Augmented Dickey-Fuller (ADF) test. According to the study's findings, changes in the Nifty sectoral index prices may impact changes in the flow of stock index prices, or Nifty 50, and vice versa. The policymakers and financial planners in assisting investors and clients in making financial decisions during the research period.

Keywords: Russian-Ukraine War, Event Study, Nifty 50, Nifty Financial Service Sectoral Indices, Indian stock market.

➤ INTRODUCTION

The Russian invasion happened on February 24, 2022. There was a chance that the Cold War between Russia and Ukraine would escalate into World War III. (JAYESH, 2022) The world is being affected by the two countries' growing war, which also has an impact on the financial market. Markets and the economy could go worse if there are disasters in Russia and Ukraine. Businesses that can tolerate transition risk profited during this conflict breakout, particularly in the U.S

➤ LITERATURE REVIEW

1. **(Harika, 2023)** This study conducted an event analysis on the volatility of share prices in particular pharmaceutical stocks that were listed on the NSE during the conflict in Russia and Ukraine.

2. (**K Ramya, 2021**) This study examined the short- and long-term correlations between the Nifty 50 and Nifty sectoral indexes using regression, Granger causality, and Johansen cointegration tests used secondary data.

3. (**Kumar, 2020**) This study emphasized the relationship between sectorial and Nifty-Fifty index performance, looks at causal linkages, and examines patterns in the data.

4. (**Bhuvaneshwari, 2021**) This study examined the future reactions and calculate the causal relationship between certain financial sector indexes and the 'Nifty50'. On particular industries.

➢ RESEARCH GAP
As per the extensive literature review on studies related to the Indian stock market and Nifty sectoral indices, a noticeable research gap emerges in the context of the financial services sectoral index.

➢ SCOPE AND NEED OF THE STUDY
The urgency for this study stems from the pressing need to comprehensively examine the global financial implications of the Russia-Ukraine war, particularly within the context of the Nifty 50 paradigm.

➢ RESEARCH OBJECTIVES, QUESTIONS, PERIOD, TOOLS & TECHNIQUES, VARIABLES AND HYPOTHESIS OF THE STUDY

Research Objective 1: To study the significant impact of Daily prices of Nifty 50 Index on Financial Service Sectoral Index during Russia-Ukraine war.

Research Question 1: Do daily prices of Nifty 50 have an impact on financial service sectoral Index during Russia-Ukraine war?

Period of the study: 3 March 2022 to 1 March 2023(1 Years)

Tool and Techniques Used: Regression Analysis (Ordinary Least Square Model – OLS Model)

Variables: Dependent Variables - Nifty 50 Returns

Independent Variable – Financial Service Sectoral Index Returns

Hypothesis:
H0: There is no impact of Daily prices of Nifty 50 Index on Financial Service Sectoral Index.

Research Objective 2: To analyse trend patterns between the movements of the Nifty 50 & Nifty Financial Service Sectoral Index during Russia-Ukraine war

Research Question 2: Are there any trend patterns between the movements of the Nifty 50 & Nifty Financial Service Sectoral Index during Russia-Ukraine war

Tool and Techniques Used: Trends Analysis

H0: There is no trend patterns between the movements of the Nifty 50 & Nifty Financial Service Sectoral Index during Russia-Ukraine war

Research Objective 3: To study the significant relationship between Nifty 50 & Nifty Financial Service Sectoral Index during Russia-Ukraine war

Research Question 2: Is there any relationship among Nifty 50 & Nifty Financial Service Sectoral Index during Russia-Ukraine war?

Tool and Techniques Used: Correlation Test

H0: There is no significant relationship between Nifty 50 & Financial Service Sectoral Index.

➢ RESEARCH METHODOLOGY
This study is based on secondary data. The study has used the data of Nifty 50 and Nifty Financial service sectoral index for a period of 1 years from 2022 to 2023. The dependent variables are Nifty 50, whereas the independent variable is Nifty Financial Service Sectoral Index.

➢ METHODOLOGY
Source and Collection of Data: The study is completely based on secondary data.

Variables	Sources	ype/ Frequenc
Nifty 50 Closing Prices	National Stock Exchange of India Limited (NSE)	Daily
Nifty Financial service Closing Prices	National Stock Exchange of India Limited (NSE)	Daily

- Log formula – [=LN (Today's prices/Yesterday's prices)*100] is used in order to normalize the data set. Unit root is also used to check the stationarity.

➢ PERIOD OF THE STUDY
The time period of the study is 1 year on a daily basis. Beginning from 3 March 2022 to1 March 2023(1 Years)

➢ TOOLS AND TECHNIQUES USED
1. Data Characteristics - Descriptive Statistics, ADF Unit Root Test to test the stationarity of data, Correlation Test, Tends Analysis, Regression Analysis using OLS Model, Software used: Eviews

➢ LIMITATIONS OF THE STUDY
1. The study is restricted to only 1 year data.2. The study focuses on how the Russian-Ukrainian war affected Financial Service Sectoral Index and Nifty 50 indexes

➢ DISCUSSIONS AND ANALYSIS

1. Descriptive Statistics

	RETURNS_OF_FINANCIAL_SERVICES	RETURNS_OF_NIFTY_50
Mean	0.035915	0.019932
Median	0.054224	-0.033497
Maximum	4.533241	2.848156
Minimum	-4.379292	-2.689111
Std. Dev.	1.180317	0.964524
Skewness	-0.100720	-0.033829
Kurtosis	4.267670	3.349461
Jarque-Bera	17.09348	1.314521
Probability	0.000194	0.518269
Observations	**249**	**249**

Descriptive statistics helps us with the data frequency and its characteristics. From the above analysis it is observed that Mean value is an indicator of performance from the 249 observations the mean value of nifty50 returns is 0.019932 and the mean value of Nifty Financial Service index returns is 0.035915 in a given period of years 2022-2023.The maximum value of nifty50 returns is 2.848156 and the maximum value of Nifty Financial Service Index returns is 4.533241.The minimum value of nifty50 returns observed during one year period is -2.689111 and the minimum value of Nifty Financial Service Index returns is-4.379292. The standard deviation of nifty50 returns is 0.964524 which shows less variation in data and standard deviation of Nifty Financial Service Index returns is 1.180317 which indicates less variation in data. The value of skewness for nifty50 returns is -0.033829 and of Nifty Financial Service Index returns is -0.100720 which signifies that the data is not normally distributed. The kurtosis value for nifty50 returns is 3.349461 and of Nifty Financial Service Index returns is 4.267670 which state that K>3 and if the value is more than 3 it is called as Leptokurtic. Jarque-Bera test value of the nifty50 returns is 1.314521 and Nifty Financial Service Index returns is 17.09348. Jarque-Bera and Probability levels, Nifty Financial Service Index displays better data characteristics compared to Nifty 50.

2. OUTPUT OF TREND

- To analyse trend patterns between the movements of the Nifty 50 & Nifty Financial Service Sectoral Index during Russia-Ukraine war
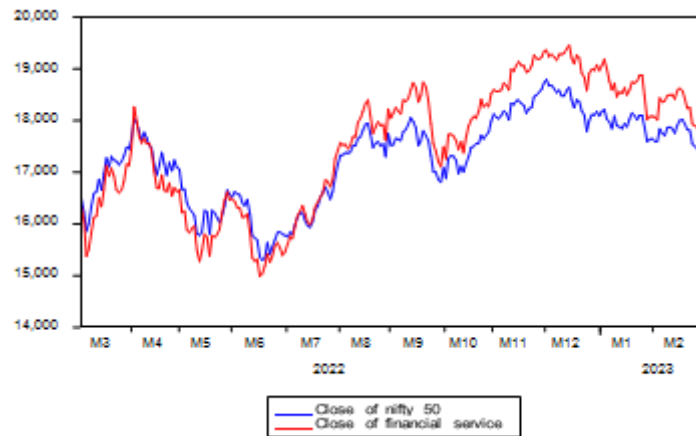
Interpretation of trend

Here in the graph, it can be seen that there is no trend in the nifty 50 returns and Nifty Financial Service Sectoral Index returns. It can be seen continuously fluctuating.

The data collected from the period March 3, 2022 to March 1, 2023 with total of 249 observations. The trend for data collected is fluctuating over a period of time. The trend at initial is low. The values are fluctuating thereafter but at point of time values are declining drastically and after that the value are getting increase with the high pace, thus the value at end of period is similar to the value of starting period.

3. OUTPUT OF ORDINARY LEAST SQUARES (OLS)

- To study the significant impact of Daily prices of Nifty 50 Index on Financial Service Sectoral Index during Russia-Ukraine war.

Dependent Variable: RETURNS_OF_NIFTY_50				
Method: Least Squares				
Date: 02/15/24 Time: 06:42				
Sample: 3/03/2022 3/01/2023				
Included observations: 249				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.006663	0.025916	-0.257080	0.7973
RETURNS_OF_FINANCIAL _SERIVCES	0.740487	0.021991	33.67207	0.0000
R-squared	0.821119	Mean dependent var		0.019932
Adjusted R-squared	0.820395	S.D. dependent var		0.964524
S.E. of regression	0.408764	Akaike info criterion		1.056641
Sum squared resid	41.27068	Schwarz criterion		1.084893

Log likelihood	-129.5518	Hannan-Quinn criter.	1.068013
F-statistic	1133.808	Durbin-Watson stat	1.876759
Prob(F-statistic)	0.000000		

INTERPRETATION OF ORDINARY LEAST SQUARES:

a) NIFTY50 COEFFICIENT
As P-value is 0.0000 it is statistically significant at 5%of level that means we reject the null hypothesis.

b) R^2
R^2 is coefficient of determination is the measure of goodness of fit it can be seen that the value of the R^2 is 0.821119 so, it is said that out of 100%.82% of variation in the dependent variable (Nifty 50) is explain by independent variable (Nifty Financial Service Index returns)

As per the adjusted R^2 is 0.820395. So, it is said that out of 100%. 82% of variation in the dependent variable (Nifty 50 returns) is explain by independent variable (Nifty Financial Service Index returns).

c) DURBIN WATSON
The value of Durbin Watson is 1.876759. Usually the value should be close to 2 which mean that there is no auto correlation. When it is said the model should be close to 2, it is restricted to certain limit. The value should not be less than 1.5 and shouldn't be more than 2.5.

In the model it can be seen that the Durbin Watson value is 1.876759, so there is no auto correlation and the model is good. Thus, it complies with the CLRM assumption.

d) T-STATISTICS
The estimate t-statistic should be greater than 1.96 so here, t-test is 33.67207 which is more than 1.96 this means it is statistically significant.

4. OUTPUT OF AUGMENTED DICKEY-FULLER TEST

a) Unit root test of Nifty 50 Returns

Null Hypothesis: RETURNS_OF_NIFTY_50 has a unit root			
Exogenous: Constant			
Lag Length: 0 (Automatic - based on SIC, maxlag=15)			
		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-15.05430	0.0000
Test critical values:	1% level	-3.456622	
	5% level	-2.872998	
	10% level	-2.572951	

INTERPRETATION OF UNIT TEST
In the unit root, the P value is 0.0000. It can be observed that P value is less than 0.01 at 1% of significant level.

So, in such case we reject null hypothesis and we do not reject alternate hypothesis. So, it is said that there is no unit root and the data is stationery.

b) Unit root test of Nifty Financial Service Returns

Null Hypothesis: RETURNS_OF_FINANCIAL_SERIVCES has a unit root			
Exogenous: Constant			
Lag Length: 0 (Automatic - based on SIC, maxlag=15)			
		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-14.23600	0.0000
Test critical values:	1% level	-3.456622	
	5% level	-2.872998	
	10% level	-2.572951	

INTERPRETATION OF UNIT TEST

In the unit root, the P value is 0.0000. It can be observed that P value is less than 0.01 at 1% of significant level.

So, in such case we reject null hypothesis and we do not reject alternate hypothesis. So, it is said that there is no unit root and the data is stationery.

5. Residual Normality Test

Hypothesis of Normality Residual: H_0: There is normal distribution
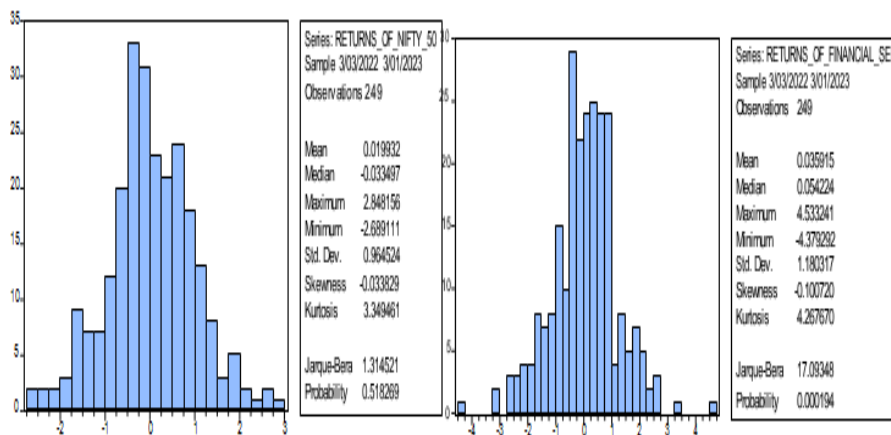
The normality of the data is tested with the above histogram. Observation of the histogram for Nifty Financial service showed that it is well distributed and forms balanced bell-shape. The Jargue-Bera test value also indicates the balanced distribution of data. However the Nifty 50 is not normally distributed which has observed high volatility during the Russia-Ukraine war period.

2. Correlation

- To study the significant relationship between Nifty 50 & Nifty Financial Service Sectoral Index during Russia-Ukraine war

	RETURNS_OF_NIFTY_50	RETURNS_OF_FINANCIAL_SERVICE
RETURNS_OF_NIFTY_50	1	0.9061563050422158
RETURNS_OF_FINANCIAL_SERVICE	0.90615630504 22158	1

The correlation indicates the relationship among the variables. These relationships can be positive or negative. If the relationship is positive then the variables are directly proportional to each other and if it is negative then the variables are inversely proportional to each other. The range of correlation falls between -1 and +1. Ideally it is expected to have correlation above 0.7 to have strong relationship between the variables.

➤ **FINDINGS AND CONCLUSION**

From the above analysis it is found that Nifty 50 and Financial Service Sectoral Index has positive and strong relationship and further it is observed that they are highly impacted among each other during Russia-Ukraine war.

The paper studies the impact of the war between Ukraine and Russia on Indian stock market that is Nifty 50 and Financial Service Sectoral Index. It is suggested to investors to pay attention towards Indian stock market if they are finding an opportunity in financial service investments.

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TRADE DYNAMICS AND ECONOMIC STABILITY: A COMPARATIVE STUDY OF CHINA AND INDIA'SMACROECONOMIC TRENDS FROM 1972 TO 2022

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INTRODUCTION

The economic trajectories of China and India have undergone significant transformations over the past five decades, making them compelling subjects for a comparative study. This investigation delves into the trade dynamics and macroeconomic trends of both nations from 1972 to 2022, unraveling the key factors that have shaped their economic landscapes and contributed to their distinct paths towards stability.

LITERATURE REVIEW

1) (Maheta, 2019) analyzed BRICS stock indices, exploring returns, relationships, and connections withexchange rates, employing statistical methods.

2) (paswan, 2022) The study employs statistical methods to analyze India's trade with BRICS, emphasizing data combinations and recommending further research for comprehensive insights.

3) (Paul, 2005) Study analyses SAARC and ASEAN trade dynamics, emphasizing potential, economic complementarities, and policy discussions using various indices.

METHODLOGY

In this study, I used three macroeconomic variables as my variable, namely:

Gross Domestic Product, IMPORTs of goods and services, EMPORTs of goods and services.

➤ The duration of the study was for 50 years from 1972 to 2022

➤ The selected country for my study was China and India The data was downloaded from World Bank website.

➤ The tools and techniques used are- ADF test to find out their stationarity, diagnostic tests, VAR Model,Johansens Cointegration to test long run association.

RESEARCH OBJECTIVES, QUESTIONS, PERIOD, TOOLS & TECHNIQUES, VARIABLESAND HYPOTHESIS OF THE STUDY

Research Objective 1: To assess the stationarity of the macroeconomic variables (Gross DomesticProduct, IMPORTs, and EMPORTs) for India and China.

Research Question 1: Are the selected macroeconomic variables stationary over the study period?

Period of the Study: 1972 to 2022 (50 Years)

Tools and Techniques Used: Augmented Dickey-Fuller (ADF) Test for stationarity, Diagnostic Tests

Research Objective 2: To analyze the interdependence between the economic variables (Gross Domestic Product, IMPORTs, and EMPORTs) of India and China over a 50-year period (1972-2022).

Research Question 2: Is there a significant long-term association between the economic variables of Indiaand China?

Period of the Study: 1972 to 2022 (50 Years)

Tools and Techniques Used: Johansen's Cointegration Test for long-run association, Vector Errorcorrection mechanism model (VECM) Model for dynamic analysis.

Ho: There is no Co integration

Research Objective 3: To explore the short-term relationships among the macroeconomic variables (Gross Domestic Product, IMPORTs, and EMPORTs) in India and China.

Research Question 3: What are the short-term links between economic variables in India and Chinaduring the study period?

Period of the Study: 1972 to 2022 (50 Years)

Tools and Techniques Used: Vector Autoregression (VAR) Model for short-term relationships.

RESEARCH METHODOLOGY
The study has used three macroeconomic variables as my variable, namely: Gross Domestic Product, IMPORTs of goods and services, EMPORTs of goods and services for period 50 years from 1972 to 2022on selected country is China and India.

DISSCUSSION AND ANALYSIS

1) JOHANSEN COINTEGRATION TEST

1. AUGMENTED DICKEY FULLER TEST

Macro-economicvariables	At level		At 1st difference	
	T-statistic	Probability	T-statistic	Probability
GDP (china)	0.420549	0.9817	-5.512645	0.0000

EMPORTS(china)	2.978004	1.0000	-4.199428	0.0018
IMPORTS(china)	2.978004	1.0000	-5.314592	0.0001
GDP (India)	7.767506	1.0000	-4.983454	0.0002
EMPORTS(India)	3.696870	1.0000	-5.950868	0.0000
IMPORTS(India)	7.767506	1.0000	-5.841973	0.0000

The results of all 3 variables proved to be significant as their p-values are less than 0.05, which states rejection of null hypothesis. Therefore, showing data to be stationery at first difference.

2) JOHANSEN COINTEGRATION

Hypothesized	Trace	0.05	Prob.	Trace	0.05	Prob.
	CHINA			**INDIA**		
None *	41.82074	29.79707	0.0013	19.68876	29.79707	**0.4442**
At most 1	9.656415	15.49471	0.3081	4.223688	15.49471	**0.8847**
At most 2	**2.348813**	**3.841466**	**0.1254**	**0.212823**	**3.841466**	**0.6446**

3) TEST

As per the output, the trace statistics it is less than the 5% critical value. it means there is one co integrating equations in China Johansen cointegration test. This means that there is no long run relationship between the variables selected and in India there is no cointegration. This means that thereis long run relationship between the variables selected. In case of China we reject the null hypothesis.

NORMALIZED CO INTEGRATING COEFFICIENTS

Normalize Cointegrating Coefficients				
	CHINA		**INDIA**	
LOGGDP	**LOGEXPORTS**	**LOGIMPORTS**	**LOGEXPORTS**	**LOGIMPORTS**
1.000000	4.766193	-5.663239	0.079665	-1.069252
	(0.77572)	(0.79907)	(0.15705)	(0.12152)
	[6.14421827]	[-6.462309]	(0.50725)	(-8.79897)

As per the above table, we have selected GDP as the dependent variable. Here, since the T statistics is more than 1.96 in India IMPORT has positive impact on India GDP,and EMPORT has negative impacton china GDP, IMPORT positively impact on GDP in the long run of China.

VECM

Error Correction:	D(LOGGDP_C HN)	D(LOGEMPO RTS_CHN)	D(LOGIMPOR TS_CHN)
CointEq1	0.039295	-0.042158	0.121982
	(0.02431)	(0.03540)	(0.04311)
	[1.61609]	[-1.19078]	[2.82974]
D(LOGGDP_CHN(-1))	0.087133	0.031082	-0.323085
	(0.17753)	(0.25849)	(0.31474)
	[0.49081]	[0.12024]	[-1.02652]

D(LOGEMPORTS_CHN(- 1))	0.337521	0.269668	0.034252
	(0.14070)	(0.20487)	(0.24945)
	[2.39881]	[1.31628]	[0.13731]
D(LOGIMPORTS_CHN(- 1))			
	-0.048033	-0.099800	0.496656
	(0.14359)	(0.20908)	(0.25458)
	[-0.33451]	[-0.47733]	[1.95091]
C	0.052550	0.105356	0.092608
	(0.02110)	(0.03072)	(0.03741)
	[2.49067]	[3.42949]	[2.47578]

VECM is used to restrict the long run behaviour of endogenous variables to converge co integrating relationships. Co integrating term is known as Error Correcting Term. The error correcting term tells us about how the speed of adjustment from disequilibrium into equilibrium. While the lags of the variables tells us about the short run relationship of the variables with each other. As per the above table, in the error correction segment, Exchange Rate and Inflation are statistically significant as their T-Statistics are more than 1.96 which indicates significance at 5%.Here only IMPORTs are statistically significant than other two variables. It shows 12% of disequilibrium will be corrected in that period only.

DIAGNOSTIC TEST

1) AUTOCORRELATION TEST

Null Hypothesis: no serial correlation at lag order h				
	India		China	
Lags	LM-Stat	Prob	LM-Stat	Prob
1	11.11370	0.2680	7.077599	0.6290

According to CLRM there must not be auto correlation. In the above output it can be seen that p value is morethan 0.05. The p value in lag 1 is 0.260. Therefore, there is no significance and we do not reject null hypothesis. Hence, there is no autocorrelation in residual.

The p-value of China Jarque bera is 0.0000, which means pvalue is less than 0.05 at 5% of significance level. Hence, we reject null hypothesis. Therefore it state that the residual are not normally distributed. India'sp- value is not significant so it states that the residuals are not normally distributed.In above India's and china's hetroskedasticity test p value is 0.0094 and 0.2739 respectively, which is more than 0.05, therefore we do not reject the null hypothesis and we reject the alternate hypothesis.so there is no arch effect.

In above graph depicts that India's GDP is continuously growing and china's GDP is continuouslyfluctuating. Similarly IMPORTs and EMPORTs are in same phase.

4)VAR

1) **AUGMENTED DICKEY FULLER TEST (India)** In this output all three variables are significantat 0.05 which is 5% of significance at level. It means the data is stationary at level.

1) **AUGMENTED DICKEY FULLER TEST (China)** In this output all three original variables aresignificant at 0.05 which is 5% of significance level. It means the data is stationary at level.

VAR MODEL (China)

•	DLOGEMPORTS_CHN	DLOGGDP_CH N	DLOGIMPORTS_CHN	DLOGEMPORTS	DLOGGDP	DLOGIMPORTS
DLOGEMPORTS_CHN(-1)	0.232386	0.426058	0.307633	0.036052	0.051917	0.188421
	(0.19595)	(0.13364)	(0.23725)	(0.20213)	(0.07307)	(0.23167)
	[1.18596]	<mark>[3.18817]</mark>	[1.29668]	[0.17836]	[0.71051]	[0.81332]
DLOGGDP_CH N(-1)	0.208719	0.266697	0.254338	0.312791	0.254148	-0.242899
	(0.28189)	(0.19225)	(0.34130)	(0.48431)	(0.17508)	(0.55509)
	[0.74043]	<mark>[1.38725]</mark>	[0.74521]	[0.64585]	[1.45161]	[- 0.43759]
DLOGI	-0.080971	-0.207026	0.003715	0.081996	-0.001847	0.129320

MPORTS_CHN(-1)						
	(0.17878)	(0.12193)	(0.21646)	(0.19366)	(0.07001)	(0.22197)
	[- 0.45290]	[- 1.69791]	[0.01716]	[0.42339]	[-0.02638]	[0.58261]
C	0.117872	0.072834	0.154406	0.097375	0.082818	0.132529
	(0.03447)	(0.02351)	(0.04174)	(0.05249)	(0.01898)	(0.06017)

	[3.41927]	[3.09790]	[3.69937]	[1.85499]	[4.36418]	[2.20272]
R-squared	0.116558	0.284621	0.239932	0.047915	0.113045	0.060504
Adj. R-squared	-0.019357	0.174563	0.122998	- 0.017000	0.052571	-0.003552
Sum sq. resids	0.601686	0.279862	0.882041	0.414970	0.054231	0.545132
S.E. equation	0.124209	0.084711	0.150388	0.097114	0.035107	0.111307
F-statistic	0.857582	2.586093	2.051865	0.738115	1.869317	0.944547
Log likelihood	34.47203	52.07711	25.67447	45.90895	94.74777	39.36125
AkaikeAIC	-1.194436	-1.959874	- 0.811933	- 1.746206	-3.781157	-1.473385
Schwarz SC	-0.916165	-1.681603	- 0.533662	- 1.590273	-3.625224	-1.317452
Mean dependent	0.136568	0.103468	0.133806	0.153944	0.121630	0.152459
S.D. dependent	0.123024	0.093239	0.160588	0.096299	0.036068	0.111110

VAR shows the short run relationship between the variables. Firstly, we check whether data is stationery or not. As for VAR, we require data to be stationery at level. If there are too many lags it tends to lose the degrees of freedom, statistically insignificant and multicollinearity and if there are few lags it leads to specification bias. Here we look for HQIC, SC, and AIC information criteria for lag selection. If there is no cointegrating equation then we can go for VAR and not VECM (Vector Error correction Model). As per the VAR Model, it can be noticed that there are 2 lag values of each macroeconomic variable and further to interpret the VAR Model t-statistics and r- square values are considered below: In the VAR Model, t- statistics tell us about the significance of the regression coefficients. The t-statistics value should be greaterthan 1.96 for the regression coefficients to be significant. As per the above output, the first period lag valueof DLOGEMPORTS (1.18596) does not have a significant impact on current value of DLOGEMPORTS),the first period lag value of DLOGDP (2.33) have a significant impact on current value of DLOGEMPORTS,, the second period lag value of DLOGIMPORTS ([-0.07430) does not have asignificant impact on the current value of DLOGIMPORTS. Hence, proving the regression coefficients of DLOGGDP to be significant with the current value of DLOGEMPORTS, DLOGGDP ANDDLOGIMPORTS. In the VAR Model, R-square is a measure of goodness of fit. As per the above table, 4%of variations are explained by independent variables in DLOGEMPORTS variable, 49% of variations are explained by independent variables in DLOGGDP and 22% of variations are

explained by independent variables in DLOGIMPORTS. Therefore, stating that higher r-square values interpret better fit of the model.

VAR shows the short run relationship between the variables. Firstly, we check whether data is stationery or not. As for VAR, we require data to be stationery at level. If there are too many lags it tends to lose the degrees of freedom, statistically insignificant and multicollinearity and if there are few lags it leads to specification bias. Here we look for HQIC, SC, and AIC information criteria for lag selection. If there is no cointegrating equation then we can go for VAR and not VECM (Vector Error correction Model). As per the VAR Model, it can be noticed that there are 1 lag values of each macroeconomic variable and further to interpret the VAR Model t-statistics and r- square values are considered below: In the VAR Model, t- statistics tell us about the significance of the regression coefficients. The t-statistics value should be greater than 1.96 for the regression coefficients to be significant. As per the above output, the first period lag value of DLOGEMPORTS does not have any impact on the current DLOGEMPORTS, DLOGGDP, DLOGIMPORTS. Similarly in the first period of lag value of DLOGGDP does not have any impact on the current DLOGEMPORTS, DLOGGDP, DLOGIIMPORTS. Also in the first period of DLOGIMPORTS does not have any impact on the current DLOGEMPORTS, DLOGGDP, DLOGIMPORTS.

CONCLUSION
To conclude there is no long term relationship between the variables of India and China as per the Johaneson cointegration. There is an upward growing trend in the India and China macro ecnomic variable that is GDP,Export and Imports.

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INTRODUCTION OF THE E-WAY BILLS: A PARADIGM SHIFT IN GOVERNANCER:

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INTRODUCTION

Whenever a platform of technology is used by the Government for governance, it not only exhibits its vision towards public administration but also reflects its perspective towards shifting its existing paradigms to the new ones. However, governance through an electronic medium is not just simple online information provision. It calls for analysing & filling the gaps in the current processes, improving & integrating various activities which are working in different directions and thereafter building a comprehensive architecture. Of late, an initiative of this kind was taken in India where through the mechanism of e-way bills through which transparency in relation to tax compliance, logistics, accountancy and governance is sought. E-way bill is one of the electronic documents generated on the Goods and Services Tax Portal, evidencing movement of goods. Five states namely Karnataka, Madhya Pradesh, Kerala, Rajasthan, Nagaland and Uttarakhand voluntarily implemented e-way bills in the month of December 2017. A 15 days nation-wide trial of e-way bill was conducted from 16th January 2018 till 31st January 2018 and after that trial, e-ways bills were made compulsory nation-wide the instance of inter-state movement of goods from 1st of February 2018 onwards. Thus, in case of movement of goods where the value of the consignment is more than Rs. 50000, every person who takes charge of movement of goods is required to generate e-way bills. For instance, Mr. A is in Uttar Pradesh and wants to transport goods value of more than Rs. 50000 to Mr. B in Delhi, since here movement of goods is involved where value of goods is more than Rs.50,000, Mr. A(in this case) is required to generate an e-way Bill. However, in certain cases even Mr. B or the transporter may have to generate E-way bills.

The literature in relation to e-way bills specifically is very limited. E-way bill is a broader concept which includes e-governance, e-taxation and streamlining of transportation and logistics. Thus, review of literature in relation to e-governance and e-invoices have been made. Mechanism of E-way bills has been implemented in a narrow sense in countries across the world. In European Countries e-taxation was implemented in the early twenty first century and in the same era e–invoice system was adopted by countries like Denmark and Taiwan. It was clearly stated by (Sheng-Chi Chen, 2015) that the adoption of an e-invoice system can enhance business

transactions and reduce operating costs. The research conducted by Cheng-Chieh Wu, Sheng-Chi Chen, and Scott, entitled Constructing an Integrated e-Invoice System: The Taiwan Experience argued that a united effort is still wanted to promote the adoption of the e-invoice system, and in depth analysis is still needed to determine how the new e-invoice platform will empower the government to become smarter. E-invoicing has the potential to substantially reduce transaction costs in the corporate and public sector. In the year 2005, Denmark's e-invoice system already accounted for roughly 90 per cent of all invoices in the public sector. (Brun, 2007). (Al-Hashmi, 2014) in his paper 'Understanding Phases of e-Government Project' stated that a 'smart government' attributes to an administration which appropriates ICT to handle planning, management, and operations within a single tier (city, state or federal) or across tiers (across state and local governments) to cause sustainable public value. In a similar way, the mechanism of e –way bills ICT in planning and administration to refine the levels of governance. (Janja Nograšek, 2014) in its paper 'E-government and organisational transformation of government: Black box revisited?' explains that the impact of ICT on the development of processes and administrative structures i.e. organisational transformation are still relatively poorly appreciated and there exist sometimes conflicting views about ICT's role. (John Carlo Bertot, 2012) in its research paper 'Promoting accountability and transparency through ICTs, social media, and collective e-government' identified potential impacts key initiatives and future challenges for collaborative e-government as a measure of transparency. (Pashev, 2007) in its research paper 'Countering cross- border VAT fraud: the Bulgarian experience' explained, that in the case of fake exports, the exporter carries the transaction on paper, applying the zero VAT rate on exports as well as claiming the tax credit on the inputs, actually while selling the products on the domestic market without the sales invoices, i.e. it amounts to without paying VAT. Confronted with the drastic increase of carousel fraud, the European Commission analysed the critical need of a consistent strategy to combat it. Earlier, neither the literature nor the practices of tax and law enforcement have labelled the threat appropriately. Tax evasion literature is focused on the deterrents of individual evasion, while studies of VAT network crime rarely consider the preventive instruments' extra compliance costs for taxpayers. Here again in the situations of tax-fraud, mechanisms like e-way bills may come to the rescue to avoid such tax evasions. (Vivek Soni, 2017) , an IITian in his paper named 'Digitizing grey portions of e-governance' explained that implementation of ICT applications to support e-governance varies from one sector to another. This type of governance involves different high degrees of complexity in driving the operations for development of respective sectors. Therefore, policymakers and the government need more flexibility to conquer present barriers of sector development.

Purpose
The purpose of this paper is to understand the mechanism of e-way bills which have been recently introduced in India, analyse the gaps/ weaknesses in the policy formulation, analyse the possible impediments/apprehensions that may arise during

implementation of e-way bills mechanism and to provide possible solutions for various practical challenges and issues that businesses may air in the implementation of e-way bills mechanism under Goods and Services Tax Act 2017.

Understanding the mechanism of e-way bill

A Way- Bill is a document issued by the carrier of the goods depicting the name of consignor, consignee, origin, destination and instructions related to shipment of consignment of the goods. E-Way Bill is a compliance mechanism in which if the value of goods exceeds Rs. 50,000, a document has to be generated electronically before the commencement of movement of goods from one place to another, if the movement is beyond 10 kilometres. This movement of the goods can be either interstate or intrastate. E-way bills can be generated after following few steps:

1. Registration must be made by logging on the E-Way Bill portal.

2. The Invoice or Bill or Delivery Challan related to the consignment of goods should have been generated.

3. By logging on to the GSTN Portal, FORM GST EWB -01 can be demanded.

4. Fill the details given in PART-A consisting of   FORM GST EWB -01.

5. If the transportation of the goods is undertaken by road, then the Transporter ID or the Vehicle number has to be mentioned under Part –B of the FORM GST EWB-01.

6. If the transportation of the goods are undertaken by air, rail or ship then the Transport document number, Transporter ID and date on the document needs to be mentioned under Part –B of the FORM GST EWB-01.

Once the e-way bill is generated by following steps mentioned above, a copy of the e-way bill number or e-way bill has to be kept by the transporter either physically or mapped to a RFID (Radio Frequency Identification Device). RFID will be fixed on the vehicle to track the location of the vehicle and goods, the details mentioned in e-way bill can be tracked with the help of RFID embedded on the vehicle.

An e-way bill once produced it will be valid for a specific time period. The validity of an e-way bill is determined on the foundation of the distance to be travelled by the goods. For a distance of less than and equal to 100 km, the e-way bill will be valid for a day from the date of generation of e-way bill. For every 100 km thereafter, the validity will be additional one day from the date of generation of e-way bill.

The E-way bill is one of the major reforms in Goods and Services Tax (GST) regime and would bring about a revolutionary change in the way movement of goods will be governed in the country. The E-way bill has replaced the way bills were physically made in the pre-GST regime. The contrast between the two mechanisms has been made in Figure 1 below:

Figure 1: Contrast between E-way Bill and Way Bill

Feature	GST e-way bill	Old way-bill
Reduction in detention time	Facility with transporters to raise complaints, in case vehicle is detained for more than 30 minutes	No such facility was available
Facilitates GSTR-1 filing	Relevant details in Form GSTR-1 gets auto-populated basis the details furnished in the e-way bill generation process	No such facility was available
Prevents double-checking	E-way bill verified once not to be checked again by another tax officer during goods movement	No explicit provision existed for prevention of double-checking by tax officers
Contents of way-bill	Harmonized system of nomenclature (HSN) to be mentioned on e-way bill, resulting in additional compliance. No clarity for small assesses who are not required to mention HSN on invoices	No requirement to mention HSN
Requirement of consignee's acceptance	Recipient's acceptance of the e-way bill required (within 72 hours of generation)	No such requirement existed for old way-bills
Registration requirement for transporters	Mandatory	Optional

Source: Pwc (Anita Rastogi, partner-GST, and Prashant Gupta, manager-GST)

Source: PWC (Anita Rastogi, partner GST, and Prashant Gupta, manager-GST)

In e-way mechanism under the GST regime, if in case the goods of the person or vehicle or transporter, is detained for more than 30 minutes by the tax officers without any proper reason, then the transporter can generate 'Report of Detention' in Form GST EWB-04 giving details of office in-charge. This provision will rule out the possibility of transporter's harassment in the hands of field officers. In the pre-GST regime, absence of such provision paved the way for manipulations by the field officials. It was also analysed that the transporter had to go for verification of the same Way bill several times in pre-GST scenario whereas under e-way bill mechanism, if the e-way bill has been once verified by an official, it will not be checked again by the officials during its entire journey. Such provisions will help streamlining the system of transportation of goods across nations.

The Harmonised System of Nomenclature was introduced by the World Customs Organisation to bring uniformity in the coding of the traded goods across the world. Harmonised System of Nomenclature (HSN) is an internationally standardized system of assigning the names and numbers to classify traded products. HSN is adopted under e-way bills mechanism, which will help to keep a check on types of goods transported.

Moreover, when an e-way bill will be generated either by consignor or the transporter, such e–way bill has to be accepted by the consignee by logging-in to Goods and Services Tax Network Portal within 72 hours from generation of such e-way bill, else, the said e-way bill will deemed to be accepted by the consignee.

Another feature of the mechanism of e-way bill is that the details furnished while generating an e–way bill will be auto populated while filing returns under GST. These all provisions will help in tax compliance, automated validation, vendor self-service, enhanced account reconciliation and enhanced governance.

Gaps/weaknesses in the Policy Formulation and their Possible Solutions

The E-way bill mechanism has its in-built advantages. However, the benefits of such mechanisms will percolate down only when the gaps in the policy formulation are bridged. Following are the gaps /weaknesses of the system which are explored through thorough analysis of the provisions of Central Goods and Services Tax (CGST) Act 2017:

1. It is mandatory to generate an e-way bill when the value of the goods exceeds Rs. 50,000. The threshold limit of Rs. 50,000 is quite low in which the majority of small businesses operate. These vendors are generally small traders and manufacturers who now have to comply with an additional plethora of formalities. These vendors usually cannot afford the technical help of an expert for filing e-way bills. Thus, the threshold limit of Rs. 50,000 should be increased to keep small dealers out of the ambit of generation of e-way bills.

2. As a corollary of the point discussed above, if the value of the single consignment of the goods by a vendor doesn't exceeds the threshold limit of Rs. 50,000 but if the total value of the all the consignments of goods intended to be transported by the transporter exceeds Rs. 50,000, in that case the transporter has to generate a consolidated e-way bill, mentioning all details pertaining to each consignment. This provision expects a lot from transporters, who in majority are uneducated. A possible solution to such a case could be, that the liability to generate an e-way bill should be made on the last consignor who should also be made liable to update the information pertaining to the rest of the consignments.

3. Practical difficulties which a person causing movement of goods may face is the case where the e-way bill has to be generated even when the goods are to be moved from factory to a weighbridge situated outside the factory. A possible solution to such a case could be that an e-way bill will be generated in void of an invoice, as invoice cannot be issued until and unless goods are weighed. Once the goods are weighed and goods are received back in the factory, then invoice can be generated and another e-way bill needs to be generated for movement of goods for sale to the customer. Even such a solution is too tedious to perform. Thus, a relaxation in generation of e-way bills in case of weighing the goods should be given.

4. In the scenarios where multiple vehicles have to be used for ease of transportation, the details in Part-B of FORM GST EWB-01 can be entered only by the transporter assigned in the EWB or generator himself. The assigned transporter cannot further re-assign the authority to update the details in Part-B to the

subsequent transporter. Whereas, in reality the assigned transporter becomes out of picture when goods are loaded to another vehicle under another

5. transporter. In the light of above circumstances, the provision of re-assigning the transporter by previous transporter must be incorporated in EWB forms.

6. The validity of e-way bills is dependent upon the distance to be travelled by the goods. For a distance of less than and equal to 100 Kms, the e-way bill will be valid for a day from the date of generation of e-way bill. For every 100 Kms thereafter, the validity will be additional one day from the date of generation of e-way bill. Now, in case of break-down of the vehicle, how the validity of e-way bills can be extended is not defined. Thus, clarity should be made in this regard under the CGST Rules 2017 related to e-way bills.

7. In case of 'Bill to' 'Ship to' transactions, two transactions take place resulting in one transaction. If a certain invoice is raised in the name of one person (here 'Bill to'), whereas the goods are to be delivered to another person (here 'Ship to') and if the legal addresses of both the parties are different. In this case, two e-ways bills have to be generated by the transporter to show the short-cut movement of goods, whereas the goods are moving directly from the person generating invoice to the person whom goods are to be shipped.

This system would have a lot of practical challenges and implementation issues. A lot of real-time coordination is sought prior to the movement of goods.

1. There is no recourse available in CGST Rules 2017 pertaining to e-way bills regarding the situation, where if the other party wrongly rejects the E-Way Bill after the goods have commenced movement. The solution to this problem could be to stop the transportation of the goods then and there, as the e-way bill is wrongly cancelled. And to generate a new e-way bill in relation to the goods in transportation. However, guidelines in relation to this problem are expected from the Central Board of Excise and Customs. Delay in the same will cause serious hardships to all the parties involved in the transaction and transportation.

2. Ideally, Part-A of an e –way bill has to be filled before movement of goods from the place of origin. Part –A asks for details related to the transporter document number. But in cases where the goods are transported through railways or air or ship i.e. where mode of transportation is otherwise than by road, transportation document number is generated only when the goods are submitted to the concerned authority. The e-way bill generator will definitely face problems in resolving this issue. The solution to this problem is not provided in the law. People generating e-way bills must find the probable suitable answers in the frequently asked questions issued by the Central Board of Excise and Customs for this.

3. Some goods are still kept out of the preview of Goods and Services Tax Act 2017. These goods are namely petrol, diesel, alcohol for human consumption, turbine fuel etc. No clarity is given in the rules that whether an e-way bill has to be

generated in the transportation of the said goods which are out of the purview of GST.

Rule 138(14) of CGST Rules, 2017 provides the list of the goods for which no e-way bill is required to be generated. In the said list the goods mentioned above are not mentioned. Thereby bringing a state of confusion as the two provisions of the GST Act 2017 are in contradiction. An immediate action is requested from the Central Board of Excise and Customs in this regard.

- When a job worker completes his job work and returns the goods back to the Principal, in that case he is required to generate an e-Way Bill on the basis of delivery challan. The basic concept of GST gets violated here as in e-way bills when the job worker will fill Part-A of the e-way bill, he will show the value of goods returned. Whereas, there must be a provision in e-way bill to show the value of the job work services in e-way bill on which GST is chargeable by the Job worker. Another probable solution to this problem could be that the value of goods could be shown inclusive of job work charges.

Possible impediments/apprehensions that may arise during implementation of E-way bills mechanism

1. The mechanism may face the bottlenecks during its practical implementation. Industry and trade, along with a section of analysts have the opinion that this mechanism is a 'cumbersome' process that could lead to supply chain bottlenecks. In the opinion of the trade analysts, small businesses such as small transporters may find the entire process difficult to comply with because e-way bills add another layer of compliances for GST payers.

2. The biggest hurdle in implementing e-way bills is the lack of reliability of the Information Technology Infrastructure. E-Way Bill portal has been developed by National Informatics Centre (NIC) which is one of the country's premier informatics services organisations, but the kind of magnitude of transactions that take place in an hour, in a day, in India is huge. The experts believe that the portal will not be able to handle the traffic once e-way bills will be made compulsory in case of both intra-state and inter-state movement of goods.

3. Small transporters are wary that the e-way bill system would encourage harassment of the small transporters and will help big transporters create a monopoly at the cost of small ones. As small transporters cannot afford the technical expert help to generate e-way bills, they will end up losing big clients. The big transporters on other hand will be able to entertain all the consignments which are of the value above Rs. 50,000.

4. Trade and industry have raised concerns about the system being a possible route of giving discretionary power to tax officials leading to undue harassment of the traders, as the tax officials can keep a track of the location of the vehicle/ goods in the movement. Inspectors have the right to unload the entire consignment to check compliance. Since, there are no guidelines provided for genuine randomness as

against "targeted" checks, the transporters may become victims in the hands of the officials.

5. The transporters are of the view that Inspector Raj will return as the RTO and sales tax check posts are still there.

6. Transporters who do transportation of heavy cargos argue that heavy cargos take a long time to transport because it takes a lot of time to lift these heavy cargos, such cargos even have other related logistics issues and there is requirement of multiple permissions while in transit of heavy cargos. In such scenarios if, for some reason, the validity of e-way bills expires, it would invite penalties for these transporters.

7. Low literacy levels and poor technology awareness among a majority of truck owners could also create a stumbling block in the implementation of e-way bill mechanism.

These possible impediments and apprehensions raised by the trade experts and IT experts should be taken into consideration for the smooth implementation of the e-way bills mechanism.

CONCLUSION

The adoption of an e-way bill mechanism has the potential of changing the ways of governance, tax compliance and streamlining the logistics and transportation operations, in the long run. The movement of the goods will be unobstructed as there will be no physical checks- points at the entry of each state. At present, as the mechanism is new to the nation, it will definitely face some teething issues. However, the government will start reaping the benefits of the e-way bill from the moment the e-way bills are made mandatory in the case of both inter-state supply of goods as well as intra-state supply of goods. For reaping the benefits and to percolate those benefits to the public at large, the gaps in the provisions framed under the Act, have to be filled and bridged. The resentment and the apprehensions raised by the trade representatives have to be dealt with extensive care. The basic IT infrastructure has to be made in place and tested beforehand for handling larger magnitudes of online traffic. Above all, cooperation from all the players in the mechanism of e-way bills is required to have collaborative governance.

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A STUDY OF FISH SEEDS PRODUCTION PROGRAMME

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Background:
Majority of the people in the State are non-vegetarians, non-vegetarian food contains high percentage of proteins. Besides, pulses production is not sufficient to meet requirement of the State, therefore, as alternative to pulses fish production is important.State has 720 Km long coast line from it about 3.45 lakh tonnes of fish production is available every year. There are some limitations to provide fresh fish to the people who stay away from the sea shore. Therefore, people staying in internal part of the State have to use inland fish as alternative, in this sense inland water fish production is important.

Implementing Programme:
In the State inland fish seeds were obtained from induced Breeding method. Fish seeds were imported from Calcutta and distributed among the fisherman's societies. In order to become self-sufficient in production of fish seeds, the State Govt. decided to build Hatcheries in the State to increase fish seed production and completely stopped import from the Calcutta in 1991-92.

Objectives of the Evaluation Study:
With the intention to know the progress of the Inland fish seed project from inception to the year 1993-94. The evaluaåon study was undertaken by D.E.S, Govt of Maharashtra in 1995. Following are the objects of the evaluation study.

a) To study the working of the scheme and to find out discrepancies, if any and make recommendations to study financial and physical target and achievements.

b) To study as to whether fish seeds produced in the State are sufficient to make the State self sufficient and up to what extent objects are achieved.

c) To achieve targets of the scheme, whether scheme is implemented technically and correctly.

d) Whether sufficient water is available for the centres to function properly. If water is available whether arrangements to supply the same to the centres has been made and to study independently the functioning of the centre regarding the fish seed production , fish rearing and even though water is available find out the reasons for arrangements not made to supply it to the centres and feasibility of arrangement.

e) Whether water spread areas of the centres are useful for fish farming, if not what are the difficulties.

f) Whether centre's income is sufficient to meet its incurring expenditure (including wages& salaries) and after construction of circular hatcheries, whether there is a favourable change in the situation.

Sample Selection:
Fish seed centres and districts has been selected for evaluation study as follows.

Selection of the Districts:
12 districts were selected on basis of seed production during the year 1993-94 by probability proportional to size (production) using linear systematic sampling method considering seed production of the 1993-94. Selected districts were 1) Thane 2) Ahmednagar 3) Satara 4)Parbhani 5) Nanded 6) Beed 7) Amravati 8)Akola 9)Buldhana 10)Yavatmal 11) Bhandara 12) Chandrapur.

Selection of fish seed Production Centres:
One fish seed production centre producing maximum fish seeds in the year 199394 was selected from each selected district. Selected centres were 1) Dapchari 2)

Mulanager 3) Dhom 4) Sidhshaver 5) Karadkhed 6) Manjra 7)Balasapur 8) Katepurna 9) Koradi 10) Saikheda 11) Idiadoh 12) Amalnala

Selection of Beneficiaries Societies:
From each selected fish seed centre 5 fishing societies, 3 other societies and 2 private institutes were selected by Random method from those who has purchased fish seeds from the centres in 1993-94. If selection of required number of co-operative societies and private institutes was not possible additional fishing societies were selected to fulfill required quota.

Selection of Zilla Parishad and Municipalities:
Two Z.P. and Municipalities who has purchased seed from centres in the year 1993-94 were selected by Random Method from each selected centres. If selection, required number of Z.P.and municipalities from the centres was not possible the gap was filled in by selecting additional Z.P./Muncipalities. As mentioned above, 14 beneficiary institutes were selected according to type of institutes for evaluation study.

Period of field work:
Fieldwork of this evaluation study was completed during the period from March 1995 to April 1995.

FINDINGS:
It is observed that out of total area available for Inland fish farming in the State for the year 1993-94, actually 85 per cent of area was used for fish production.Out of 31 districts in the State, the project is being implemented in 28 districts. Out of total 12,902 ponds used for inland fish, there were 428 (3.3 per cent) ponds having waterspread area more than 60 hectares and 12,474 (96.7 per cent) ponds having

waterspread area less than 60 hectares. Ponds having waterspread area more than 60 hectares had total waterspread area 2,29,112 H. (70.6 per cent) and ponds had waterspread area less than 60 hectares, has 95,297 H (29.4 per cent) total waterspread area. This indicate that ponds having less waterspread area were more in numbers than the number of ponds having more waterspread area. While big ponds are less in number but their total waterspread area more. According to ownership type Zilla Parishad has more ponds (tanks) (76.2 per cent) with 16.98 per cent waterspread area. Small Irrigation Department has 12.5 per cent ponds (lake) with 68.8 per cent waterspread area. Ponds/ lakes whose waterspread area was less than 60 hectares. Z.P. owned 9,802 (78.6 per cent) ponds with 53.8 per cent waterspread area. Ponds whose waterspread area was more than 60 hectare, S.I. Deptt. owned 87.2 per cent ponds with 81.2 per cent waterspread area. It means that Z.P. and Small Irrigation Department has more participation in fish production activities and in that Z.P.'s share was higher. Even though optimum fish seed stocking capacity of ponds used for fish production was 6012.23 lakh seeds annually actually 53.6 per cent fish seeds were stocked. According to division wise analysis except Nagpur division fish seeds were not stocked upto storing capacity in any other divisions. The three divisions namely Aurangabad, Pune and Nashik 24.9, 31.9 and 25.8 per cent seeds actually stored respectively. In the State 5870.55, 6569.65 and 8680.00 lakh spawns were produced in the year 1991-92, 1992-93 and 1993-94 respectively. Considering spawn production of the year 1991-92 as base in the year 1992-93 and 1993-94 spawn production has increased by 11.9 and 47.9 per cent respectively. In 1991-92 production of cyprincus was 20.4 per cent in 1992-93, it was 5.1 per cent and in 1993-94 it was 5.1 per cent it means that cyprincus spawn production was decreasing while that of major crop spawn production was increasing.

Capacity of Hatcheries and spawn production:
It is expected that in a year one hatchery should produce 500 lakh spawns. Considering this norm in 1993-94, 12,500 lakh spawn could have been produced by 25 working hatcheries but actually 8,680 lakh (69 per cent) spawns was produced. It is observed that hatcheries in Pune Division has produced spawn as per expected capacity but in the remaining divisions, hatcheries were not able to produce spawns as expected. Rearing of spawn and seed yield: Out of total spawns produced by centres, 35 per cent spawns were sold and remaining 65 per cent spawn were used for nursery in the centres to obtain fish seeds. It is seen that 1622.58 lakh fish seeds were produced from nursery of 7092.45 lakh spawns. Only 23 per cent of fish seed was obtained from nursery of spawns. It means that in the period from spawns nursery to fish seed production 77 per cent spawns died. This ratio was highest in the Pune and Nashik Division. In total seed production share of cyprincus seeds was very low while that of major carp was higher. It can be concluded that centres prefer to produce seeds of major carp than cyprincus seeds. Fish seed production in 1991-92 was 1314.99 lakhs. In 1992-93 it was 1414.83 lakhs and in 1993-94 it was 1632.58 lakhs. In comparison with seed production in 199192, production in 1992-93 and in 1993-94 increased by 7.6 per cent and 24.1 per cent respectively. In 1993-94 target of 55,000 lakh seed production was given but only 29.7 per cent seeds were produced.

Provision and Expenditure:

From observation of Provision and Expenditure for three years (1991-92 to 1993-94)) it was seen that expenditure was more than provision but in 1992-93 expenditure was less than provision. In 1991-92 expenditure was 116.6 per cent of provision and in 1992-93 it was 92.4 per cent and in 1993-94 it was 105.2 per cent.

Income of Centres:

Considering income of the centres from sale of spawns semi fingerlings, fingerling, in the years 1991-92, 1992-93 and 1993-94 the State received income of Rs.94.97 lakh, Rs.96.51 lakh and Rs.126.96 lakh respectively. The income received by the State from the sale of centre's product was increasing, considering income and expenditure of the centres. The State received net income of Rs.6.06 lakh in 1991-92 , in 1992-93 Rs.10.81 lakh and in 1993-94 Rs.28.59 lakh. It can be said positively that the State Governments seed producing centres are becoming more efficient day-by-day.

Import of seed before 1991-92:

Before 1991-92 domestic fish seed production was not enough to meet the needs of the State. Therefore, fish seeds were imported from Calcutta.Total 6351 lakh seeds were imported from 1986-87 to 1990-91 in a period of 5 years. In this period every year import of seed increased by 10 per cent but in 1991-92 due to State Governments decision to stop import of seeds and to build hatcheries in the State, domestic production of seeds increased substantially and the State Government was also receiving net revenue from it.

Results of the survey of fish producing centres:

For inspection of working capability of Government fish seed producing centres, 12 seed producing centres were selected from total working fish seed centres in the State.Out of 12 selected seed centres, 10 centres has hatcheries and remaining two have only fish rearing and nursery facilities The eight hatcheries were working properly and one hatchery was having technical fault in construction and other was in incomplete stage of construction.

Incubation tanks/ponds:

The four tanks are necessary to produce spawns by incubating hatchlings. It was observed that out of 10 selected hatcheries, five hatcheries were not having prescribed number of incubation tanks.

Spawns obtained:

It was expected that one hatchery should produce 500 lakh spawns in a year. Out of 10 hatcheries selected it was observed that only 4 (40 per cent) were producing expected number of spawns.

Stocking tanks:

Out of 42 stocking ponds/tanks of 10 selected hatcheries in 1993-94 only 88 per cent tanks were in use and out of the total 13.13 hectare water spread area, 92 per cent water spread area was used. Of the stocking capacity of the stocking ponds/ tanks in use, up to 134 per cent of capacity reproducing fish were stocked.

Ratio of dead spawns:
It was expected that 12,208 lakh eggs could have been obtained from 12,208 female fish kept in the stocking ponds/tanks. From these eggs 4780.50 lakh spawns were produced in 1993-94. It means that rate of spawns obtained from eggs was 38.64 per cent only.

Nursing Ponds (tanks):
The selected 12 seed centres has 490 nursery tanks with 11.32 hectares of water spread area and of these tanks 82 per cent ponds/tanks with their 81 per cent water spread area were actually in use. Even then nursing capacity of 404 nursery ponds/ tanks was 684.15 lakh spawns in 1993-94 actually about five times of nursing capacity spawns were nursered.

Rearing Ponds/tanks:
Out of 12 selected seed producing centres, 10 centres had 159 tanks with 11.59 hectare waterspread area. Remaining two centres had no rearing ponds/tanks because of lack of waterspread area. Of 159 rearing tanks 9 per cent rearing tanks, 9.66 per cent waterspread area was not used for rearing fish.

Water supply : Water supply for all the 12 months of the year was available to the10 centres but for two centres supply for all the 12 months was not available as during summer water level of the source goes down.Out of 12 selected centres 58 per cent centres had regular water supply for all the 12 months. 42 per cent centres did not have regular water supply. Out of the 12 selected centres, well water supply facility was available to 25 per cent centres.

Filter Tank: Out of 12 selected centres 11 centres' filter tank were functioning and filter tank of one centre was out of order.

Lab: Out of 12 selected centres 58 per cent of the centres had laboratory and of these only 25 per cent centres had appointed staff to run the laboratory.

Fieldmen: Out of total 58 posts of Fieldman sanctioned for selected for the 12 seed producing centres, 6 posts were vacant.

Spawns/Seeds Production: Comparisons of spawn/seed production before hatcheries were constructed and after construction of hatcheries shows that in 1993-94 production of spawns increased by 426 per cent and that of seed production increased by 609 per cent. Before construction of hatcheries cyprincus spawns and seed productions ratio was 25.3, 16.8 per cent respectively. In 1993-94 this ratio came down to 3.8, 4.2 per cent. It means that after construction of hatcheries selected centres prefer to produce major carp spawns instead of cyprincus spawns production.In comparison with spawns production of 1991-92, in 1992-93 spawns production has increased by 37.8 per cent and in 1993-94 88.7 per cent. Fish seed production also increased by 16.7 and 64.6 per cent respectively for the same years.

Harvest of Fish Seeds: In 1993-94 two centres harvested fish seed only once and seven centres harvested twice and three centres harvested thrice. In 1993-94 only 26 per cent of seeds was obtained from rearing of 3469.40 lakhs spawns. It means that in the period of nursery spawns 74 per cent spawns died.

Provision & Expenditure: Out of Provisions made for the centre for the years 1991-92, 1992-93 and 1993-94 expenditure of the centres was 104, 117 and 109 per cent respectively. In 1991-92 out of 12 centres 92 per cent centres were in loss. In 1992-93 number of centres in loss reduced to 50 per cent and in 1993-94 only 33 per cent centres had suffered loss. It means after 1991-92 number of centres in loss is reducing.

Results of Survey of Fishing Societies:
All the selected institutes had 503 ponds with their total waterspread area of 32740.56 hectares. Its optimum seed stocking capacity of fish stocking ponds was 1308.13 lakh seeds and only 53 per cent of this capacity seed was purchased by them.According to yearwise classification of rented tanks, percentage of ponds rented for 5 years was 64.4, which was highest, the percentage of Small Irrigation Department and Z.P's ponds was higher.In the duration from 1991-92 to 1993-94, 1.2 per cent cyprincus seeds and 98.8 per cent of major carp seeds were purchased by fishermen's Societies. Out of total seeds purchased, 70.9 per cent were in spawn form, 28.0 per cent were in seed form, 0.3 per cent and 0.7 per cent were in fingerling form and half-fingerling forms.

Cost of Fish Production:
Out of total expenditure for fish production the Fishermen's Societies highest expenditure was on seed purchased 46.8 per cent and on rent of lakes/ponds 23.5 per cent. Expenditure on Packing, Transport, other expenses and on employees salary was 3.4 per cent, 7.4 per cent, 11.6 per cent and 7.5 per cent respectively.

Fish Production:
In 1993-94, 5,68,439 kg. fish production was obtained from all the ponds of the institutes. By the sale of fish production institutes had received 10,872 thousand Rupees.

Profits of the Institutes:
Out of selected institutes 20 per cent institutes were in loss and 80 per cent institutes were in profit. From the point of view of loss and profit according to management of ponds, 66 per cent ponds of Nagar Parishad, 27 per cent ponds of Z.P., 17 per cent ponds of Small Irrigation Department and 10 per cent other ponds were in loss.

Summary:
Domestic fish seed production has increased appreciably after decision has been taken by the State in 1991-92 to build modern hatcheries in the State. Considering the capacity of waterspread area used for fish production, domestic seed production is not sufficient. The fish seed centres in the State have seed producing capacity to produce fish seeds requirement of the State but ratio of spawns obtained from hatchlings is very low. Production of fish seeds as per capacity is not possible. Following are the recommendations to improve the situation.

ARTIFICIAL INTELLIGENCE IN THE ACCOUNTING PROFESSION

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ABSTRACT

Over the years accounting has changed significantly by replacing the work of paper and pencil with computers, but more importantly with programmes able to decrease time spend on repetitive work that reduce the amount of errors. Artificial intelligence has great impact in every spheres of economy. The increasing role of artificial intelligence in the field of accounting has raised the question about the future of the profession. Artificial Intelligence is changing the reality of the accounting field, on a rapid way, due to the benefit of improving and reshaping the actual way of performing activities on this domain. The interest on Artificial Intelligence solutions in this domain is not new but on the last year's researchers become more focused on it. Despite the material progress there seems to be not enough data to support companies' willingness to embed Artificial Intelligence solutions into their accounting activities. Also, an important aspect of this reality is the capability of experts to adapt faster to the new status quo and to acquire the necessary skills to be able to work with Artificial Intelligence solutions and to overcome the fear of losing their jobs. This paper is focusing on understanding the impact of Artificial Intelligence solution in accounting by conducting a qualitative research. In this paper will discuss how the introduction of Artificial intelligence (AI) into accounting practices will have a significant impact on the future of accounting. Accountants should be prepared for significant changes in the industry with the introduction and adoption of AI.

Keywords: Artificial intelligence, Automation, Accounting, Digitalization.

INTRODUCTION

The main theme of artificial intelligence in accounting is to reduce repetitive work and handling big data. In Modern era AI has been implemented and going to implement in every sphere of activities. AI makes it possible for machines to learn from experience, adjust to new inputs and perform human like tasks. In business field also there are many activities where AI can be implemented. Using modern technology computers can be trained to accomplish specific task by processing large amounts of data and recognizing patterns in the data. It helps to improve in speed, rate of accuracy and better decision making. Financial reports and records can be accessed easily and stored safely. The use of Cloud based Technology, Machine Learning (ML), Block Chain enable user to have immediate access and frequent updatability, automate tedious tasks, saving accountants' hours, access fine records. Since the fourth Industrial Revolution is upon us, it will transform the industry and also the mode of accounting and reporting. Accounting process have to be modernized by using latest technology. Introduction of AI will transform the process of accounting

and made evolutionary change which did not happen before. The growth of industry 4.0 shows exponential trends of machine generated information and its ability to process that information at lightning speed to improve the quality of accounting information. Artificial Intelligence is considered as the ability of a machine to imitate human actions like communication, decision taken. Some benefits of implanting Artificial Intelligence solutions, such as the possibility of obtaining more accurate results and time saving while processing a large amount of data are already known in different fields of activity. AI is still in its very early stages of adoption for broad society changing use. This partially caused by the cost related to the adoption of the needed technologies and also lack of technical know-how within companies. However, the huge potential rewards of using AI and RPA technologies make it all worth it for the companies.

STATEMENT OF THE PROBLEM

In recent years, the rapid advancement of artificial intelligence technology has attracted worldwide attention and displayed great success. As a consequence, to this, you will find that artificial intelligence has made its impact on almost every aspect of life, ranging from the replacement of human labour to gradually becoming part of people's daily life. In the accounting industry, the evolution of the software used for accounting and the more recent inclusion of artificial intelligence has led to a complete transformation of the accounting systems. The use of the traditional accounting system has greatly faded and with the automation of the accounting process, it has led to a lot of changes but are these changes beneficial to the accounting Profession/ industry and how do accountants fit into this.

OBJECTIVE OF THE STUDY

To discuss the impact of artificial intelligence on the accounting operations.

To evaluate the automation process of the accounting system in the industry

RESEARCH QUESTIONS

What are the negative impacts of Artificial Intelligence (AI) on the accounting industry?

Does the automation of accounting process improve the accounting industry?

LITERATURE REVIEW

Artificial intelligence is mostly aimed at making intelligent machines that can respond in ways similar to humans. Artificial intelligence can be divided into four different aspects which include; intelligence, business, research, and programming dimensions (Carol and O'Leary, 2013). John McCarthy coined the name "Artificial Intelligence". (Yadav, Gupta, Sahu, and Shrimal, 2017). Artificial intelligence (AI) is the academic field of study that deals with the technical know-how on creating computers and computer software that are capable of intelligent behaviour or the study of programming computers do things better and more accurately than humans (Elaine, 2000). In another perspective, artificial intelligence can be seen as the capability of a programmable device to perform activities that can be expected of the human brain.

These activities include; knowledge and the capability to acquire it, the ability to judge, produce original thoughts, and understand relationships. Artificial intelligence: It entails constructing machines to behave as humans are expected to. Business and research dimensions: are a powerful tool used in solving human and business problems better than human solutions. Lastly, programming dimension: covers symbolic programming. Expert system software can be developed for any kind of problem that involves a selection from a group of choices especially if the decision is based on logical steps. Hence any area where a person or group of persons has special expertise needed by others is a potential area for creating an expert system.

METHODOLOGY
The study is descriptive in nature and conducted through study of various literature and published secondary data. Thus the study purely adopts secondary data source through internet and academic database like literature reviews, empirical studies, website, books, journal, reports etc.

POSSIBLE BENEFITS OF AI IMPLEMENTATION
- AI will remove the repetitive time consuming tasks performed by traditional system of accounting.

- It will reduce the possibility of financial fraud.

- AI can perform bookkeeping, maintain register, and produce financial statement through analysing the data so there exist much more accuracy and relevance.

- Through AI based software company can improve the quality of accounting information. Accounting personnel in traditional accounting take ample manpower and financial resources to check various vouchers, accounting books, statements etc.

- Implementing AI in various fields, industry can improve productivity and facilitate higher Customer services.

ARTIFICIAL INTELLIGENCE AND ITS APPLICATIONS
Artificial intelligence is the simulation of human intelligence processes by machines especially computer systems. Specific applications of artificial intelligence include expert system, Natural Language Processing, speech recognition and machine vision. Artificial intelligence requires combination of specialized hardware and software for writing and training machine learning algorithm. Artificial intelligence works by analysing large amount of data find the correlation and patterns and using this patterns to make predictions about future States. AI programming focuses on cognitive skills that include learning, reasoning, self-correction, creativity. In today's world we observe artificial intelligence Technology everywhere. In commercial and business field AI Technology will be implemented extensively. In marketing media ecommerce and entertainment AI is used to analyse customers' choices and behaviours following the pattern. Various companies like Netflix, Amazon facilitate greater customer relations. In investment field also AI system makes trading decisions

through data analysing and algorithmic pattern at greater magnitude and speed than human capabilities. The implementation of AI in the field of accounting, auditing, and finance have great impact in business environment. Especially in India there is a threat of loss of jobs and abolition of small business which cannot afford AI based Technology. The main purpose of accounting is to provide information in the most appropriate and adapted form to the appropriate user for making economics decisions internally and externally. Artificial intelligence is a Revolutionary development that could put forward the accounting profession to execute and make strategic decisions more effectively than before.

EFFECTS OF IMPLEMENTATION OF AI IN ACCOUNTING

From the above discussion it is clear that every organization should accept AI undoubtedly. The emergences of such disruptive technology always bring some problems. There are various ways to overcome these problems. There are some ethical concerns for implementation of AI. Abolition of traditional system cannot be accepted by all professionals. There are so many questions for cyber security laws. There may arise new techniques of committing frauds. So formulation of new cyber security law, Data protection laws, Artificial Intelligence law are essential and their implementation also. Policy formulation at both National and information level will be required to standardize use of cognitive technologies. Fear of unemployment is associated with the implementation of AI. In future there may exist some sorts of professional hybrids, no one will be associated with a permanent job; freelancer's opinions will be hired. So compliance towards organization and responsibilities for human resource will be neglected. The World Economic Forum (WEF) has issued numerous reports forecasting how AI will impact jobs worldwide. Automation through implementation of AI will result in an increase of 58 million jobs, two third of which will be highly skilled. In the field of accounting various types of automation has been introduced day by day. Computerized accounting system replaced the traditional paper works. Introduction of EDI Technology and various accounting software have made many dramatically shift in the work process. Initially there was a fear of loss of jobs but it will ultimately provide scope for new employment. Virtual accounting services including AI bookkeeping represent not just a threat but an opportunity. In fact most modern finance and accounting farms already use form of AI accounting software like Quickbook, Oracle, Freshbook, Zohobook and many others. Many accounting firms like Ernst & Young, Pricewaterhouse Coopers, Deloitte Touché Tohmatsu Limited has made application of AI technology.

CONCLUSION

Emergence of AI in accounting is an opportunity not a challenge for the accountant and accounting industry. Accountant should welcome AI Technology, they should improve their knowledge about it and should produce maximum output. Educationalist should improve and modernize their syllabus for students to learn the new technology. Sufficient training and skill development techniques to be implemented by the organization so that these can go with the existing work force. New rules, regulation and policies to be made by the government to provide cyber

security. Thus there should be the clear path for development with the help of modern technology.

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A STUDY ON CONSUMER BUYING BEHAVIOR OF PEOPLE IN GOA TOWARDS ELECTRIC VEHICLE

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ABSTRACT
The purpose of this paper is to examine and contrast the behavioural and psychological aspects that influence first-time Indian electric vehicle customers. Many studies have examined the variables influencing customer' decisions to buy fuel-powered and electric vehicles, but given the speed at which perceptions and behaviours are changing, new knowledge and awareness can be established. The study includes collection of information from both primary and secondary data. The primary data is collected through a structured questionnaire and through various online media the technique of data collection is done via a questionnaire that can be filled online. The sample of 54 respondents is considered for the study and method adopted for selecting these samples was Purposive Sampling Method. The data is analysed through Statistical Package of Social Sciences (SPSS) software in which Factors analysis and regression analysis test have been run to derived at the conclusion. The study have derives 3 factors which are Factor-1 Basic Features, Factor-2 Advance Features and Factor-3 Cost effective feature.

Keywords: Electric Vehicle, satisfaction, factor analysis, features

INTRODUCTION
EVs, or electric vehicles, are changing our understanding of transportation. Around the world, electric vehicles (EVs) present a sustainable substitute for conventional gas-powered cars due to the growing concerns regarding air pollution and climate change. These cars are powered by rechargeable batteries and emit no pollutants, making them a greener option for drivers. Yet, EVs offer substantially lower operating expenses, a quiet and comfortable ride, and the advantage of quick torque and acceleration in addition to being good for the environment. There is an EV alternative to meet your needs, whether you're driving to work, running errands, going on a road trip, or taking your vintage automobile on a Sunday drive. Furthermore, as technology advances, EVs are becoming more widely available and reasonably priced than in the past. There are two main categories of electric cars Battery Electric Vehicles (BEVs) and Plug-in Hybrid Electric Vehicles (PHEVs). As per mercomindia.com statistics, Electric vehicle (EV) sales in India reached a

record 1.53 million units in 2023, a jump of over 50% year-over-year (YoY) against the million units sold in 2022. Since there is an increase in this electric vehicle segment there is a need to find out the reasons for such surge in the sales, hence this research is conducted.

LITERATURE REVIEW

Umamaheswari Sankar, D. U. S., Rajasekaran, R., & Rajasekaran, R. (2019) examined customers' perception towards electric vehicles, assessed the buying behavior of customers for electric vehicles identified the factors considered by customers for electric vehicles offered suggestions and recommendation. Using KMO, Bartlett's Test, ANOVA, and Post Hoc Test to analyze primary and secondary data, the study determined the factors influencing consumers, highlighting the importance of connectivity, infrastructure for charging, availability of electricity, and support from the government. By 2030, the report recommended that the sector adjusts to the impending transition to electric vehicles.

Trivedi, J. P., & Kishore, K. (2020) explored factors influencing electric car purchase intention. Limited by metro-focused data, a broader understanding suggests a longitudinal survey with rural-urban representation and gender-based moderation. A sample of 539 respondents was collected. While Chaisamran focused on ICE vehicles, this study's unique insights highlight the significance of personal environment norms and call for further contributions to advance understanding in the evolving landscape of consumer behavior for electric cars

PANDEY, M., & MOHAN, M. (2021) examined the factors influencing the purchasing intention of electric cars. study the impact of personal innovativeness on purchasing decisions for Electric cars. consumer purchasing patterns for electric vehicles utilizing both primary and secondary data. The study used the Chi-Square test and symmetry measures to investigate the future of electric vehicles in India, examine EV awareness, and comprehend the relationship between pricing and consumer choice. The study focused on variables like income, fuel expenses, and sustainability despite its constraints, and more than 100 respondents helped to produce the results.

Mahamuni, A., & Subramanian (2021) focused on how consumer perceptions affect Indian consumers' intentions to buy electric vehicles. A sample of 30 respondents was collected They determined variables such as perceived financial and environmental rewards, perceived risk, perceived costs, and personal innovativeness using reliability statistics, multiple regression, ANOVA, and t-test. The results are noteworthy because they support the previous study by William Sierzchula et al. (2014) and indicate that personal innovativeness favorably influences decisions to purchase electric cars, while demographic characteristics do not significantly affect these decisions.

Neupane, P., & Sharma, B. K. (2023, November) explored to understand the influencing factors in purchasing an electric vehicle and analyze the change in

consumer perception regarding the electric vehicle. understand the future growth of the electric vehicle business and the role of consumer perception. Respondents viewed EVs as a developing trend with a promising future in the automotive industry. The study evolving nature of the electric car market and advocated for further research to delve deeper into factors impacting EV sales

Sousa, E. S. D. A. (2023) investigated how consumers' perceptions of electric vehicles (EVs) are influenced by online reviews. Using a non-probabilistic convenience sample and the Cronbach's Alpha test, the study used a quantitative research methodology. It focused on two message types (vehicle brand and user-generated content) and contrasted user-generated content on Facebook with reviews made by the firm. Even with certain methodological flaws, the study advanced our knowledge of how internet evaluations affect people's decisions to embrace electric vehicles.

Research Gap
The previous studies have considered perception towards electric vehicle and also factors responsible for choosing the electric vehicle over patrol based vehicle. In this study, the focus is given on features responsible for choosing the electric vehicle and also impact of features on the satisfactions level of customer of electric vehicle.

Research Questions
• Which features are responsible for choosing Electric Vehicle as a mode of transport?

• What is the impact of features on satisfaction towards Electric vehicle?

Research Objectives
• To Identify the features responsible for choosing Electric Vehicle as a mode of transport.

• To Study the impact of features on satisfaction towards Electric vehicle

Research hypothesis.
Ho – There is no impact of features on satisfaction towards Electric Vehicle

H1 – There is an impact of features on satisfaction towards Electric Vehicle

Research Methodology
Following Research Methodology have been adopted in order to study the above objectives of the research.

Sources of data
The methodology followed in the study includes collection of information from both primary and secondary data.

Primary data: Collected through a structured questionnaire.

Secondary data: Other information related to the topic is collected through internet.

Statistical Tools Used
Descriptive Statistics, Factor Analysis and Regression Analysis

Analysis of the Data
The study considered 54 respondents from which consists of male 19 and female 35 out of total respondents. Of these total respondents, 1 respondent was below 18 years of age 5 were 26 – 30 years of age, and most of the respondents i.e. 48 were between 18 – 25 years of age. Out of the total 54 respondents, 24 were Graduates, 24 were postgraduate and the remaining respondents were SSC, HSSC, and Diploma. Out of the total respondents 48 were unmarried and only 9 were married. The highest respondents which is 24 were private employees 20 were students and the remaining were Business, Government employees and unemployed. The highest 47 were from South Goa and the remaining that is 7 from North Goa.

FACTOR ANALYSIS

Table No. 1: Features responsible for choosing Electric Vehicles

Items	1	2	3
Feature - Battery Life span	.813		
Feature - Safety features	.811		
Feature - Build quality and durability	.787		
Feature - Ride Comfort	.631		
Feature - Good Range	.551		
Feature - Cruise control		.845	
Feature - Good space		.608	
Feature - No petroleum Cost			.896
KMO and Bartlett's Test	.836		
Eigen Value	2.865	2.084	1.815
Total Variance	35.814	26.049	22.683
Cumulative Variance	35.814	61.863	**84.546**

Source: Compiled from Primary Data

The above table shows the features responsible for choosing Electric. Vehicles Total 13 factors were considered for the study, out of which 3 main factors have been obtained from the factors analysis. The total variance explained is 84.546. Out of which almost 35% is explained by the first factor, 26% by the second factor and 22% by the third factor.

These 3 factors which have been derived out of the 13 variables are named as below:

Factor 1- Basic Features

Feature - Battery Life span

Feature - Safety features

Feature - Build quality and durability

Feature - Ride Comfort

Feature - Good Range

Factor 2- Advance Features

Feature - Cruise control

Feature - Good space

Factor 3- Cost effective feature

Feature - No petroleum Cost

Regression analysis

Table No.2: Regression Analysis of Impact of derived Features responsible for choosing Electric Vehicles.

Dependant Variable: Satisfaction on Electric Vechile			
Independent Variables	**Beta Coefficient**	**t-Test Value**	**P-Value**
Basic Features	.512	5.949	.000
Advance Feature	.312	3.630	.001
Cost effective feature	.228	2.648	.011
Constant	3.463		
R Square	.526		
Adjusted R Square	.498		
F Test Value	18.529		
P-Value	0.000		

Source: Compiled from Primary Data

Regression Analysis is done to know the impact of features on satisfaction towards Electric Vehicles. The R^2 obtained from the analysis is 0.526 which means the impact of all 3 factors which are Factor-1 Basic Features, Factor-2 Advance Features and

Factor-3 Cost effective feature is explained to the extent of 52% approximately . As per the p-values of all the factors, all 3 features are significant to show the impact on satisfaction of customers towards Electric Vehicle. As far as the result of hypothesis is concerned, the researcher can reject the Null hypothesis which say that there no impact of features on satisfaction towards Electric Vehicle and can conclude that there is an impact of features on satisfaction towards Electric Vehicle Factor-1 Basic Features, Factor-2 Advance Features and Factor-3 Cost effective feature on the satisfaction towards Electric Vehicle.

CONCLUSION

In conclusion, a mix of financial concerns, environmental awareness, and technological improvements impact the choice to purchase an electric vehicle. A lot of consumers find electric cars (EVs) to be an attractive and sustainable option because of their growing infrastructure, possible long-term cost savings, and desire to lessen their carbon footprint. To sum up, several factors affect how satisfied people are with electric vehicles (EVs). Key features influencing customer satisfaction include battery range, pricing, and charging infrastructure. Performance, design, and environmental awareness also make substantial contributions. Manufacturers and governments should give priority to these crucial areas for development in order to increase EV satisfaction and guarantee that users have a smooth and enjoyable transition to sustainable transportation.

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AN EMPIRICAL STUDY OF SHOPAHOLIC BEHAVIOUR OF CONSUMER TOWARDS SUPER MARKETS IN GOA

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ABSTRACT

The word shopaholic is defined as someone who is too much addictive towards shopping that the person do not have any control on himself. The purpose of this research is to identify the factors responsible for shopaholic behavior of consumer towards supermarket and to examine the impact of factors on shopaholic behavior of supermarket consumer. The study includes collection of information from both primary and secondary data. The primary data is collected through a structured questionnaire and through various online media the technique of data collection is done via a questionnaire that can be filled online. The sample of 121 respondents is considered for the study and method adopted for selecting these samples was Purposive Sampling Method. The data is analysed through Statistical Package of Social Sciences (SPSS) software in which Factors analysis and regression analysis test have been run to derived at the conclusion. The study have derives 3 factors which are Factor-1 Realising Emotional tension, Factor-2 Buying unnecessary Items and Factor-3 Buying in more quantity then required are responsible for the shopaholic behaviour and has showed the impact of these factors on the shopaholic behaviour of consumer towards supermarket.

Keywords: Shopaholic behaviour, Super market, Consumer behaviour,

INTRODUCTION

Shopaholic ward first appeared in 1977. It was formed on the model of alcoholic. Where People evidently saw a parallel between someone addicted to alcohol and someone "addicted" too shopping. Shopaholic was preceded by workaholic and chocoholic, both of which first turned up in 1968.

Shopping addiction is a behavioral addiction that involves compulsive buying as a way to feel good and avoid negative feelings, such as anxiety and depression. Like other behavioral addictions, shopping addiction can take over as a preoccupation that leads to problems in other areas of life.

Signs that a person might have a shopping addiction include, Always thinking about things they plan to purchase, Being unable to stop their compulsive shopping,

Experiencing a rush of euphoria after buying something, Feeling regret or guilt about things they have purchased, Financial problems or an inability to pay off debts, Lying about things they have bought or hiding their purchases, Opening new credit cards without paying off balances on existing cards, Purchasing things they don't need, Shopping when they are stressed or sad, and People who struggle with shopping addiction typically spend more time and money.

LITERATURE REVIEW

Hadjali, H. R., Salimi, M., Nazari, M., & Ardestani, M. S. (2012) emphasized the factors affecting impulse buying behaviors and also focuses on impulse buying behavior in the clothing market. The conclusion for the study was drawn was Gender has a significant effect on clothing purchase as impulse buying behaviour and also Being appropriated of the environment has a significant effect on clothing purchase as impulse buying behaviour and also Self-control plays an important role in the decision-making process of impulse purchase.

Foroughi, A., Buang, N. A., et al (2012), determined the influence of the time, Money, moods of buyers (positive) or influence felt the urge to buy impulsively available on impulse purchase among different ethnics. The conclusion for the study was impulse buying is influenced by various factors such as time available, money available, and the mood of buyers and to understand the influence of these variables on impulse buying among different ethnic groups where Mood of buyers (positive affect) influences impulse purchase and Impulsive buyers are more responsive to emotional conditions.

Nair, D., & Das, S. (2015) studied the impact of Emotional Intelligence also buying and feeling guilt on Impulse Buying and decision in women to not repeat use the apparel sector. The findings of the study was Emotional intelligence has a significant impact on impulse buying behavior in women, with higher emotional intelligence associated with lower impulse buying habits.Impulse buying creates a feeling of guilt, which in turn reduces the value proposition of the apparel purchased on impulse.

Omar, N. A., Rahim, & et al (2014) discovered the factors and their role in enhancing consumer impulsivity towards point of purchase factors and also to analyze the consumer impulsivity towards point of purchase factors in buying of skin care products and also to determine the influence of residential background on impulsive buying in skin care products at point of purchase. Impulsive buying is considered a significant form of consumer buying action. The conclusion for the study was drawn was the factors have a high and significant relationship and are important for managers to induce impulsive buying in their stores. Consumers tend to be most impulsive when buying skincare products in beauty and cosmetics stores, with fairness segment and facial skincare products being rated as the most important.

Kaur, A., & Jain, R. (2016) examine the relationship between visual merchandising and impulse buying behavior also determine the effectiveness of different visual merchandising techniques also identify the major factors that affect impulse buying

behavior also assess the impact of visual merchandising on impulse buying behavior in organized retail stores. The findings of the study Promotional Signage is ranked first by respondents as the major factor affecting visual merchandising. Product Self Position is ranked second by respondents as a major factor. The conclusion for the study was drawn that there is a positive impact of visual merchandising on impulse buying behaviour in organized retail stores.

Kumar, H. (2016) emphasised of the study how effective advertisement influences consumer buying behaviour and also how emotional advertisements have a greater impact on consumer's purchasing decisions. Advertisement with emotional value and message has a greater impact on consumers. Advertisement has a vital influencing power on consumer purchasing behavior. The conclusion for the study was drawn on the influence of advertisement on consumer buying behavior, specifically in Delhi and Gurgaon. There is strong and positive connection between advertisement and consumer buying behavior, with a greater impact when advertisements have emotional value and messages.

Tambuwun, M. (2016) study was intended to determine whether hedonic motive and gender have directly influence on impulse buying through shopping lifestyle of visitors of Adidas Store in Pakuwon Trade Centre Surabaya Indonesia. The conclusion of the study was drawn Hedonic motive and gender directly influence impulse buying, Hedonic motive and gender indirectly influence impulse buying through shopping lifestyle.

Orji, M. G., Sabo, B., Abubakar, M. Y., & Usman, A. D. (2017) assessed the impact of personality factors on consumer buying behavior - Provide answers to pertinent questions regarding consumer behavior - Validate null hypothetical assumptions related to consumer behaviour. The conclusion was Personality factors significantly influence consumer buying behavior towards textile materials in South Eastern Nigeria. Social character, compliance, aggressiveness, and ethnocentrism have a significant effect. Dogmatism does not have a significant effect on consumer buying behavior.

Hejase, H. J., Skaff, et, al (2018) studied the impact of personality factors on consumer buying behavior - Provide answers to pertinent questions regarding consumer behavior - Validate null hypothetical assumptions related to consumer behaviour. The findings of the study examines the effect of education on consumers' impulsive buying behavior. It was concluded that Impulsive buying behavior is influenced by factors such as education level. Emotional Intelligence moderates the relationship between education and impulsive buying. Correlation between mood and emotions on impulsive buying is inconclusive. There is a trait of buying impulsiveness related to education level.

Pradhana, F., & Sastiono, P. (2019), emphasised on those who have shopped online through e-commerce anywhere in any media, Have a minimum age of 17 years old required for bank account creation, so they have full authority to make decisions on

online shopping activities, no longer influenced by others. Conclusions for this study was drawn on online shopping frequency of women are more than men, but in terms of online shopping expenditure, there is no significant difference between men and women. Men tend to spend more than women; it means that goods purchased by men tend to have a higher value than women.

Kaur, R., & Sharma, B. (2020) understood the impulsive buying behavior for essential goods during COVID-19and also understanding the factors influencing it, and explore the relationship between consumer psychology, threat perception, and impulsive buying behaviour and. The findings and conclusion of the study was Threat perception and consumer psychology significantly influence impulsive buying behavior. Panic condition and mass media lead to threat perception. Income level of consumer's influences impulsive buying behaviour.

Pratminingsih, S. A., Hayati, et. al (2021) focused on impact of lifestyle, hedonic motivation, and sales promotion on impulse buying. The sample size is 150 respondents and the data were collected using the accidental sampling technique and were analyzed using multiple linear regression. The conclusion for the study was drawn to the lifestyle, hedonic motivation, and sales promotion are important factors that influence impulse buying behaviour.

Research gap
From the above literature survey it is noted that there are enough study conducted on Shopaholic behavior of consumer though online mode of shopping. And there is no concrete study with regards to shopaholic behaviour of consumer towards offline mode of shopping with special reference to supermarket. Hence the present study is focusing on shopaholic behaviour of consumer towards supermarket.

Research Questions
- What are the factors responsible for Shopaholic behavior of consumer towards supermarket?

- Is there any impact of derived factors on shopaholic behavior of consumer towards supermarket?

Research Objectives
- To understand the concept of Shopaholic behaviour of consumer.

- To identify the factors responsible for Shopaholic behavior of consumer towards supermarket.

- To examine the impact of derived factors on shopaholic behavior of consumer towards supermarket.

Hypothesis
Ho- There is no impact of derived factors on shopaholic behavior of consumer towards supermarket.

H1- There is an impact of derived factors on shopaholic behavior of consumer towards supermarket.

RESEARCH METHODOLOGY

The methodology followed in the study includes collection of information from both primary and secondary data. The primary data is collected through a structured questionnaire sent through various online media (chatting applications such as Whatsapp and social media). Other information related to the topic is collected through internet, magazines, etc. The state of Goa is considered as the Universe. The sample of 121 respondents is considered for the study and method adopted for selecting these samples was Purposive Sampling Method. For the Data analysis the techniques used are Factors analysis and regression analysis through Statistical Package of Social Sciences (SPSS) software.

DATA ANALYSIS

The study is considered with 121 respondents from which it consist of 73 Female and 48 Male. From the total respondents the majority respondents which is 68 are at the age group of 18- 25 years of age, 17 were in 26-30 years, 13 were in 31-35 years 10 were below 18 years , 6 were in 36-40 years and remaining 7 were 40 and above. Out of total respondents, 35 were Married and 86 respondents were Unmarried. The highest number i.e. 44 were Graduate and 38 were Post Graduate. Remaining were SCC, HSSC, Diploma, and Vocational course. . The highest 49 respondents were Students and 31 were having private job. Remaining were Business Men or Women, Government employee, profession and Unemployed. The majority of 60 respondents for the study fall under the income level of below 20,000 and 30 respondents are under 21,000-30,000. 11 respondents are falling under the income level of 31,000-40,000, 9 are under 41,000-50,000 , and remaining 11 are falling under 51,000and above.

FACTOR ANALYSIS

Table No. 1: Factors responsible for the Shopaholic behaviour of consumer towards Supermarket.

Items	1	2	3
I go shopping to release my emotional tension.	.810		
I go for shopping when I feel Stress.	.806		
I go shopping when I feel boredom or I have nothing to do.	.786		
I am always in a shopping mood.	.777		
I feel regret after buying the things which are not needed.		.806	

I normally don't make checklists for products to buy from supermarket.		.728	
I buy things when there is a discount available despite understanding the real need for the products.		.707	
I don't miss the chance when any person calls me for shopping.		.653	
When I go shopping I end up buying things which I don't need.		.633	
I buy the numbers of items more then what is required.			.920
KMO and Bartlett's Test	.914		
Eigen Value	3.243	2.916	1.231
Total Variance	32.427	29.157	12.306
Cumulative Variance	32.427	61.584	**73.890**

Source: Compiled from Primary Data

The above table shows the factors representing for shopaholic behaviour of consumer towards supermarkets. Total 10 variables were considered for the study, out of which 3 main factors have been obtained from factor analysis. The total variance explained is 73.89%. Out of which almost 32% is explained by the first factor, 29% by the second factor, and 12% by the third factor. Remaining 27% of variance is explained by the factors not considered for this study and hands forth gives scope for the further study by considering the remaining factors.

These 3 factors which have been derived out of the 10 variables are named as below:

Factor 1- Realising Emotional tension.
I go shopping to release my emotional tension.

I go for shopping when I feel Stress.

I go shopping when I feel boredom or I have nothing to do.

I go shopping when I feel boredom or I have nothing to do.

I am always in a shopping mood.

Factor 2- Buying unnecessary Items

I feel regret after buying the things which are not needed.

I normally don't make checklists for products to buy from supermarket.

I buy things when there is a discount available despite understanding the real need for the products.

I don't miss the chance when any person calls me for shopping.

When I go shopping I end up buying things which I don't need.

Factor 3- Buying in more quantity then required

I buy the numbers of items more than what is required.

Regression analysis

Table No.2: Regression Analysis of Impact of derived factors on the Shopaholic behaviour of consumer.

Dependant Variable: Shopaholic Behaviour.			
Independent Variables	**Beta Coefficient**	**t-Test Value**	**P-Value**
Realising Emotional tension	.549	8.804	.000
Buying unnecessary Items	.443	7.091	.000
Buying in more quantity then required	.314	5.027	.000
Constant	3.496		
R Square	.567		
Adjusted R Square	.556		
F Test Value	51.022		
P-Value	0.000		

Source: Compiled from Primary Data

Regression Analysis is done to know the impact of derived factors on the Shopaholic behaviour of consumer towards super market.

The R^2 obtained from the analysis is 0.567 which means the impact of all 3 factors which are Factor-1 Realising Emotional tension, Factor-2 Buying unnecessary Items and Factor-13 Buying in more quantity then required, have explained to the extent of 56% approximately. As per the p-values of all the factors, all 3 factors are significant to show the impact on the shopaholic behaviour of consumer towards Super-markets

in Goa. As far as the result of hypothesis is concerned, the researcher can reject the Null hypothesis which say that there no impact of derived factors on the shopaholic behaviour of consumer towards super-market and can conclude that there is an impact of derived factors which are Factor-1 Realising Emotional tension, Factor-2 Buying unnecessary Items and Factor-3 Buying in more quantity then required, on the shopaholic behaviour of consumer towards supermarket.

CONCLUSION

Consumers' desires The 3 factors Realising Emotional tension, Buying unnecessary Items, and Buying in more quantity than required are responsible for shopaholic behaviour and have shown the impact of these factors on the shopaholic behaviour of consumers towards supermarkets. The attractiveness of shopping satisfies emotional needs in addition to physical needs. To promote better consumption habits, it is necessary to take a comprehensive approach to understanding and addressing this behavior, taking into account the influences of society, personal motivations, and economic conditions. Several factors impact the habit of shopping behavior that consumers show towards supermarkets. These include advertising strategies, where products are placed, sales, and overall keeping the environment. By paying attention to these factors, supermarkets can improve consumer happiness and involvement by offering a more attractive shopping environment. The study explores the key components influencing supermarket shoppers' compulsive buying habits. Results bring out the importance of derived elements and provide retailers must understand these factors to comprehend and take on consumer preferences, thereby improving the overall supermarket shopping experience.

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RECENT TRENDS IN BUSINESS ETHICS: A COMPREHENSIVE REVIEW

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ABSTRACT

Business ethics has become increasingly important in contemporary corporate environments due to heightened public awareness, regulatory scrutiny, and the evolving socio-cultural landscape. This paper provides a comprehensive review of recent trends in business ethics, focusing on key areas such as corporate social responsibility (CSR), ethical leadership, sustainability, diversity and inclusion, and ethical decision-making frameworks. Drawing upon recent academic literature, industry reports, and case studies, this paper examines emerging practices, challenges, and opportunities in each of these areas. Additionally, it explores the role of technology, globalization, and stakeholder engagement in shaping ethical behavior within organizations. By synthesizing current research findings, this paper offers insights for practitioners, policymakers, and scholars to navigate the complex ethical dilemmas facing businesses today and to foster a culture of integrity and responsibility in the global marketplace.

Keyswords: Business Ethics, Risk Management, Block chain Technology, Global Reporting

INTRODUCTION

Business ethics refers to the moral principles, values, and standards of conduct that guide the behavior of individuals and organizations in the business context. It involves understanding what is right and wrong in business dealings and making decisions that are ethically sound and socially responsible. Business ethics encompasses various aspects, including honesty, integrity, fairness, transparency, accountability, and respect for stakeholders' interests. It involves not only compliance with legal requirements but also adherence to ethical norms and principles beyond legal obligations. In essence, business ethics seeks to promote ethical behavior and responsible practices in all aspects of business operations, ranging from interactions with customers, employees, suppliers, and competitors to environmental stewardship and community engagement.

OBJECTIVES

To Identify the emerging ethical issues and challenges faced by businesses in contemporary times.

To Analyze the strategies adopted by organizations to address these ethical challenges.

To Assess the impact of technological advancements, globalization, and socio-political changes on business ethics.

To Explore the role of stakeholders, including employees, consumers, investors, and regulators, in shaping ethical practices.

To Provide insights into best practices and frameworks for promoting ethical behavior in the corporate sector

RESEARCH METHODOLOGY
Conducted a thorough review of academic journals, books, industry reports, and other relevant sources to identify recent trends and developments in business ethics. This will help in understanding the current landscape of ethical issues and the strategies employed by organizations to address them.

SOME RECENT TRENDS IN BUSINESS ETHICS
Corporate Social Responsibility (CSR) Integration: There's a growing expectation for businesses to incorporate CSR principles into their core strategies. This involves considering the impact of business activities on stakeholders, communities, and the environment, and actively pursuing initiatives that contribute to social good while ensuring financial success.

Ethical Leadership: The role of ethical leadership in fostering a culture of integrity, transparency, and accountability within organizations is gaining prominence. Leaders are expected to lead by example, uphold ethical standards, and promote a values-driven approach to decision-making.

Stakeholder Engagement: Businesses are increasingly recognizing the importance of engaging with a wide range of stakeholders, including employees, customers, suppliers, investors, and communities. Meaningful stakeholder engagement involves soliciting feedback, addressing concerns, and considering diverse perspectives in decision-making processes.

Diversity, Equity, and Inclusion (DEI): There's a growing emphasis on promoting diversity, equity, and inclusion within organizations. Businesses are striving to create inclusive work environments that value and respect individuals from diverse backgrounds, and actively address systemic biases and discrimination.

Ethical Use of Technology: As technology plays an increasingly integral role in business operations, there's a heightened focus on ensuring the ethical use of technology. This includes addressing issues such as data privacy, cyber security, algorithmic bias, and the responsible development and deployment of emerging technologies.

Supply Chain Ethics: Businesses are under pressure to ensure ethical practices throughout their supply chains, including responsible sourcing of materials, labor rights protections, and environmental sustainability. This involves implementing robust supplier codes of conduct, conducting supply chain audits, and promoting transparency and accountability among suppliers.

Recent trends in business ethics have emerged due to several interconnected factors shaping the contemporary business landscape. Here are some key reasons behind these trends:

Increasing Stakeholder Expectations: Stakeholders, including consumers, employees, investors, and communities, are placing greater emphasis on ethical behavior from businesses. With the proliferation of information and social media, stakeholders are more aware of corporate practices and are holding companies accountable for their social and environmental impacts.

Globalization and Interconnectedness: Globalization has led to greater interconnectedness among economies, societies, and cultures. This interconnectedness has exposed businesses to diverse ethical norms and values, prompting them to adopt more inclusive and culturally sensitive approaches to ethics.

Technological Advancements: Technological advancements have facilitated greater transparency and accountability in business practices. With digital platforms and social media, unethical behavior can be quickly exposed and shared globally, leading to reputational damage and financial repercussions for businesses.

Environmental and Social Challenges: Increasing awareness of environmental degradation, social injustice, and inequality has prompted businesses to address these challenges through ethical and sustainable practices. Climate change, human rights abuses, and labor exploitation are among the issues driving businesses to take more responsible actions.

Regulatory Scrutiny and Legal Requirements: Governments and regulatory bodies are imposing stricter regulations and requirements on businesses to ensure ethical conduct. Non-compliance with ethical standards can result in legal penalties, fines, and reputational damage, prompting businesses to proactively adhere to ethical guidelines.

Competitive Advantage and Brand Reputation: Businesses recognize that ethical behavior can serve as a source of competitive advantage and enhance brand reputation. Consumers are increasingly favoring ethical brands, and employees are more likely to be attracted to and remain loyal to companies with strong ethical values.

Investor and Shareholder Activism: Institutional investors and shareholders are increasingly demanding that companies integrate environmental, social, and governance (ESG) factors into their business strategies. Ethical investment practices are becoming more prevalent, and shareholders are using their influence to advocate for ethical behavior and sustainability.

Employee Expectations and Retention: Employees are seeking meaningful work environments where they can contribute to positive social and environmental impacts. Businesses that prioritize ethical practices, diversity, inclusion, and employee well-being are better positioned to attract and retain top talent.

Changing Business Models and Innovation: New business models, such as the sharing economy and social enterprises, are emerging with a focus on sustainability and social impact. Ethical considerations are integral to these innovative business models, driving businesses to adopt more responsible practices.

Long-Term Value Creation: There is a growing recognition that ethical behavior is essential for long-term value creation and business sustainability. Businesses that prioritize ethics are better equipped to manage risks, build trust with stakeholders, and adapt to changing societal expectations, ultimately leading to long-term success.

CONCLUSION

In summary, recent trends in business ethics are driven by a combination of stakeholder expectations, global interconnectedness, technological advancements, regulatory requirements, competitive pressures, and a growing recognition of the importance of ethics for sustainable business practices and long-term value creation

Overall, technology plays a pivotal role in promoting transparency and accountability by enabling data-driven decision-making, enhancing citizen engagement, detecting fraud and misconduct, and facilitating open access to information. By harnessing the power of technology, organizations and governments can strengthen democratic governance, combat corruption, and build trust with stakeholders.

Recent trends in business ethics reflect a fundamental shift in how organizations perceive and prioritize ethical considerations in their operations. From increased stakeholder expectations and regulatory scrutiny to the growing emphasis on sustainability and social impact, businesses are facing evolving challenges and opportunities in navigating the ethical landscape.

The convergence of globalization, technological advancements, and societal changes has accelerated the pace of change, compelling businesses to reevaluate their practices and adopt more responsible approaches to ethics. Stakeholders are demanding greater transparency, accountability, and integrity, driving businesses to integrate ethical considerations into their core strategies and decision-making processes.

Moreover, ethical behavior is increasingly recognized as a source of competitive advantage, brand differentiation, and long-term value creation. Businesses that prioritize ethics are better positioned to build trust with stakeholders, attract and retain top talent, and adapt to changing market dynamics.

As we move forward, businesses will need to continue evolving their ethical practices to address emerging challenges such as climate change, social inequality, and technological disruption. By embracing ethical values and principles, businesses can contribute to positive societal impact, foster sustainable development, and build a more resilient and inclusive global economy.

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GLOBALIZATION AND INTERNATIONAL BUSINESS IN REAL ESTATE: A COMPREHENSIVE ANALYSIS

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ABSTRACT

This research paper aims to explore the intricate relationship between globalization and international business in the real estate sector. As the world becomes more interconnected, the real estate industry has witnessed significant transformations, influenced by global economic trends, cross-border investments, and cultural exchanges. The research methodology employed in this study involves a thorough literature review, quantitative analysis of international real estate transactions, and qualitative examination of key case studies.

Keywords: globalization, International Business, RealEstate, Comprehensive Analysis, Trends, Challenges, Cross-Border Investment, Global Real Estate Development, Internationalization Strategies, Emerging Markets, Multinational Corporations, Real Estate Portfolio Management, World Economic Forum, International Monetary Fund, Policy Implications, Global Economic Trends, Industry Leaders, Real Estate Markets, Opportunities, Risks

INTRODUCTION

1.1 Background:
Globalization has emerged as a driving force in shaping international business dynamics, transcending geographical boundaries, and impacting various industries. The real estate sector, being a vital component of the global economy, is not immune to the effects of globalization.

1.2 Objectives of the Study:
A. To analyze the impact of globalization on the internationalization of real estate markets.

B. Assess the role of cross-border investments in shaping the real estate landscape.

C. To understand how cultural factors influence international real estate transactions.

2. LITERATURE REVIEW:
The literature review provides an in-depth analysis of existing research on globalization and its implications for international business in the real estate sector. This section explores key theories and concepts, including the Uppsala model, institutional theory, and cultural dimensions theory.

3. RESEARCH METHODOLOGY:
3.1 Data Collection:
Quantitative data will be collected from reliable sources such as the World Bank, International Monetary Fund (IMF), and real estate transaction databases. This will involve analyzing trends in cross-border real estate investments, market sizes, and economic indicators.

3.2 Case Studies:
Qualitative data will be gathered through case studies of notable international real estate transactions. These case studies will provide insights into the motivations, challenges, and success factors associated with cross-border real estate ventures.

4. DATA ANALYSIS:
The collected quantitative data will be analyzed using statistical tools to identify patterns, trends, and correlations. The qualitative data from case studies will be subjected to thematic analysis to extract meaningful insights.

4.1 Findings:
The findings of this research will provide a comprehensive understanding of how globalization has influenced the internationalization of real estate markets. Key insights will be drawn from the analysis of quantitative data and case studies.

4.2 Implications for the Real Estate Industry:
The implications of this research for the real estate industry are multifaceted. Understanding the impact of globalization on international business in real estate can provide valuable insights for policymakers, investors, and industry professionals. Key implications include:

4.3 Surveys and Interviews:
Surveys and interviews will be conducted with real estate professionals, investors, and other stakeholders to gather firsthand insights into their emotional experiences. The questionnaire will address cultural sensitivities, regulatory uncertainties, the thrill of new opportunities, and the impact of globalization on community development.

5. STRATEGIC PLANNING:
Real estate developers and investors can utilize the findings to inform strategic planning processes. Insights into cross-border investment trends and cultural factors influencing transactions can guide decision-making in selecting target markets and developing effective market entry strategies.

5.2. Risk Mitigation:
Identifying the challenges and success factors highlighted in the case studies can contribute to risk mitigation strategies for international real estate ventures. A nuanced understanding of the factors influencing project outcomes can help stakeholders navigate complex global markets more effectively.

5.3. Policy Recommendations:

Governments and regulatory bodies can benefit from this research by gaining a deeper understanding of the role of globalization in shaping their real estate markets. This insight can inform the development of policies that foster international investment while safeguarding national interests.

6. FUTURE RESEARCH DIRECTIONS:

While this research provides a comprehensive analysis of the current state of globalization and international business in real estate, there are avenues for further exploration. Future research could delve into emerging trends, technological advancements, and evolving geopolitical landscapes that may impact the industry.

7. LIMITATIONS OF THE STUDY:

It is essential to acknowledge the limitations inherent in this research. While efforts have been made to provide a comprehensive analysis, certain constraints may impact the generalizability of the findings. Limitations include potential biases in available data, variations in regulatory frameworks across different regions, and the evolving nature of global economic conditions.

7.1 Recommendations for Practitioners:

Building upon the insights garnered from this study, recommendations for practitioners in the real estate industry are crucial. These recommendations aim to enhance the effectiveness of international business strategies and mitigate potential challenges:

8. CONTINUOUS MONITORING:

Given the dynamic nature of global markets, practitioners are advised to engage in continuous monitoring of economic indicators, policy changes, and geopolitical developments. Staying abreast of these factors can inform timely adjustments to business strategies and risk management approaches.

8.2. Cultural Competence:

Cultural understanding is paramount in international real estate transactions. Practitioners should invest in cultural competence training for their teams to navigate diverse business environments successfully. This can foster stronger relationships with local stakeholders and contribute to the overall success of ventures.

8.3. Technology Integration:

The integration of technology, such as data analytics and artificial intelligence, can enhance decision-making processes. Practitioners should leverage technological tools to analyze market trends, assess risks, and identify investment opportunities in real time.

9. FUTURE RESEARCH DIRECTIONS:

Identifying potential gaps in the current research, this section suggests avenues for future exploration. Potential areas include a deeper examination of the emotional impact on specific real estate market segments, the role of emerging technologies, and the evolving dynamics of global economic and political landscapes on international

real estate. By charting these paths, researchers can contribute to a more nuanced understanding of the emotional dimensions of globalization in real estate.

10. IMPLICATIONS FOR POLICY AND PRACTICE:

Drawing on the research findings and recommendations, this section outlines potential implications for policymakers and industry practitioners. Policymakers can use insights to shape regulations that facilitate cross-border transactions and promote cultural understanding. Industry practitioners, on the other hand, can adopt suggested strategies to enhance their global competitiveness and contribute positively to the communities they engage with.

11. LIMITATIONS OF THE STUDY:

Acknowledging the inherent limitations of any research endeavor, this section discusses potential constraints such as sample size, geographical scope, and the subjective nature of emotional responses. Understanding these limitations is crucial for interpreting the findings accurately and provides a foundation for refining research methodologies in future studies.

CONCLUSION:

This section will summarize the key findings of the study and their implications for the real estate industry. It will also highlight potential areas for future research.

In conclusion, this research paper has delved into the intricate relationship between globalization and international business in the real estate sector. The research methodology employed, combining quantitative analysis and qualitative case studies, has provided a nuanced understanding of the multifaceted influences shaping the industry.

As globalization continues to redefine the contours of international business, the real estate sector stands at the crossroads of new opportunities and challenges. This study contributes to the ongoing discourse by offering valuable insights that can guide stakeholders in navigating the complexities of the globalized real estate landscape.

The implications discussed underscore the importance of strategic planning, risk mitigation, and informed policy decisions in the face of an increasingly interconnected world. As the industry adapts to these global dynamics, ongoing research will play a pivotal role in ensuring its resilience and sustainability in the years to come.

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A comprehensive list of references is provided, ensuring the credibility and academic rigor of the research. These sources have been instrumental in shaping the theoretical framework, methodology, and analysis presented in this paper.

This research endeavors to advance the scholarly discourse on globalization and international business in real estate, offering a foundation for further exploration and refinement of strategies in the ever-evolving global marketplace.

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RECENT TRENDS IN BUSINESS ADMINISTRATION

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ABSTRACT

Business Administration is continuously evolving, driven by technological advancements, globalization, and changing consumer behaviors. Recent trends highlight a shift towards more agile and data-driven decision-making processes, the integration of artificial intelligence (AI) and machine learning (ML) in various business functions, and an increased emphasis on sustainability and corporate social responsibility (CSR).

INTRODUCTION

Recent trends in Business Administration reflect a dynamic landscape shaped by technological advancements, shifting consumer behaviors, and evolving global markets. Here's an introduction to some key trends .Businesses are increasingly leveraging digital technologies such as AI, machine learning, and big data analytics to enhance operational efficiency, customer experience, and decision-making processes. The COVID-19 pandemic accelerated the adoption of remote work models, leading businesses to reevaluate traditional office setups and embrace flexible work arrangements to attract and retain talent. There's a growing emphasis on sustainability practices and CSR initiatives among businesses, driven by consumer demand for ethical and environmentally responsible products and services. The rise of e-commerce platforms and the shift towards Omni channel retailing have compelled businesses to rethink their distribution strategies and enhance their online presence to reach a broader audience. With increasing concerns about data breaches and privacy violations, businesses are focusing on implementing robust cyber security measures and complying with data protection regulations to safeguard customer information. In a rapidly changing business environment, companies are prioritizing agility and adaptability to respond effectively to market disruptions, economic uncertainties, and emerging trends. There is a growing recognition of the importance of fostering diverse and inclusive workplaces, not only to promote social justice but also to drive innovation and improve organizational performance. Leadership styles are evolving towards collaboration and inclusivity, with a greater emphasis on empowering teams, fostering creativity, and promoting a culture of continuous learning and development. Beyond crypto currencies, block chain technology is being explored for its potential applications in supply chain management, financial transactions, and digital identity verification, promising increased transparency and security. Employee well-being programs and initiatives focused on mental health support have gained prominence as businesses recognize their role in promoting a healthy work-life balance and improving productivity.

These trends illustrate the transformative nature of Business Administration in adapting to technological innovations, societal changes, and regulatory developments to stay competitive and sustainable in today's interconnected global economy.

Recent trends in business management reflect ongoing shifts towards sustainability, digital transformation, and employee well-being. Some recent trends

Sustainability and ESG (**Environmental, Social, and Governance) Practices**: There is a growing emphasis on businesses adopting environmentally sustainable practices, addressing social issues such as diversity and inclusion, and enhancing corporate governance. Investors, consumers, and regulators are increasingly prioritizing companies that demonstrate strong ESG commitments.

Digital Transformation: Accelerated by the COVID-19 pandemic, digital transformation continues to reshape business operations. This includes automation, AI-driven decision-making, remote work capabilities, and digital customer engagement strategies. Companies are investing in cloud computing, cyber security, and data analytics to remain competitive.

Agile and Remote Work: The pandemic necessitated widespread adoption of remote work, leading to a shift towards more flexible work arrangements. Agile methodologies, originally popular in software development, are now being applied across various functions to enhance responsiveness and innovation.

Employee **Well-being and Mental Health**: Employers are increasingly recognizing the importance of supporting employee well-being and mental health. Initiatives include flexible work hours, mental health resources, and wellness programs aimed at improving productivity and reducing burnout.

Supply **Chain Resilience**: Disruptions caused by the pandemic highlighted vulnerabilities in global supply chains. Companies are now focusing on building more resilient and adaptive supply chains, incorporating technologies like block chain for transparency and predictive analytics for risk management.

Customer Experience Optimization: With increasing competition, companies are prioritizing personalized customer experiences. This involves leveraging data analytics to understand customer preferences, adopting Omni channel strategies, and enhancing digital interactions.

Diversity, Equity, and Inclusion (DEI): There is a growing recognition of the business benefits of fostering diverse and inclusive workplaces. Companies are implementing policies to promote diversity in hiring and leadership, as well as creating inclusive cultures that support belonging and equity.

Circular Economy Initiatives: Businesses are exploring circular economy models aimed at minimizing waste and maximizing the use of resources. This includes product lifecycle management, recycling programs, and designing products for longevity and recyclability.

Ethical AI and Data Privacy: As AI adoption increases, there is a focus on ethical considerations such as bias mitigation, fairness, and transparency in AI algorithms. Data privacy regulations like GDPR in Euro

Business administration plays a crucial role in ensuring the smooth operation and long-term success of organizations across various sectors. Here are some key reasons highlighting its importance:

Efficient Operations: Business administration involves overseeing day-to-day operations, optimizing processes, and ensuring efficiency in resource allocation. This leads to cost savings, improved productivity, and better utilization of company resources.

Effective Decision-Making: Administrators gather and analyze data, enabling informed decision-making by management. They provide insights into market trends, customer preferences, and financial performance, helping businesses adapt and thrive in dynamic environments.

Strategic Planning: Business administrators develop and implement strategic plans aligned with organizational goals. They set objectives, allocate resources, and define priorities to guide the company towards sustainable growth and competitive advantage.

Financial Management: Administrators manage budgets, monitor expenses, and assess financial performance. They ensure financial stability by controlling costs, optimizing revenue streams, and making prudent investments.

Human Resource Management: Administering human resources involves recruiting, training, and managing employees. Administrators foster a positive work environment, promote employee development, and ensure compliance with labor laws and regulations.

Risk Management: Administrators identify and mitigate risks that could impact the organization's reputation, operations, or financial health. They implement strategies to minimize risks and respond effectively to crises or unexpected events.

Customer Relations: Business administrators play a key role in maintaining strong customer relationships. They ensure excellent customer service, address complaints promptly, and develop strategies to enhance customer satisfaction and loyalty.

Compliance and Ethics: Administrators ensure compliance with legal and regulatory requirements. They uphold ethical standards, promote corporate social responsibility, and safeguard the organization's reputation.

Innovation and Adaptability: Administrators foster innovation by encouraging creativity, supporting research and development initiatives, and implementing new technologies. They adapt business strategies to capitalize on emerging opportunities and stay ahead of competitors.

Stakeholder Management: Administrators manage relationships with stakeholders such as investors, suppliers, and community members. They communicate effectively, build trust, and balance competing interests to maintain positive partnerships.

CONCLUSION

Overall, business administration provides the framework and expertise needed to effectively manage resources, navigate challenges, and capitalize on opportunities, thereby contributing to the sustained growth and success of organizations. Recent trends in business administration underscore a transformative shift towards sustainable practices, digital innovation, and a heightened focus on human capital and stakeholder engagement. Increasing emphasis on environmental stewardship, social responsibility, and governance practices that align with ESG criteria. Rapid adoption of digital technologies to enhance operational efficiency, customer engagement, and decision-making processes. Recognition of the importance of supporting workforce health, happiness, and professional development in fostering productivity and retention. Agile methodologies applied beyond software development to foster organizational responsiveness and adaptability in a rapidly changing market. Heightened awareness and regulation surrounding the ethical use of AI, data privacy, and cyber security. Focus on delivering personalized, seamless customer experiences through data-driven insights and omni channel strategies. Commitment to building diverse and inclusive workplaces that drive innovation, employee satisfaction, and organizational resilience. Investments in building agile, transparent supply chains capable of withstanding disruptions and meeting evolving consumer expectations.

These trends indicate a broader shift towards a more holistic and responsible approach to business management, driven by the need to navigate global challenges while seizing new opportunities. Embracing these trends not only enhances organizational competitiveness but also contributes to sustainable growth and positive societal impact. As businesses continue to evolve, embracing these trends will be crucial in shaping a resilient and future-ready business landscape

Books

"Principles of Management" by Peter Drucker
A classic book on management practices and principles, offering foundational knowledge for business administration.

"Business Administration: Theory, Practice and Application" by Jack Rudman
This book covers various aspects of business administration including theory, practical applications, and case studies.

"The Practice of Management" by Peter F. Drucker
A foundational text that covers essential management practices and principles.

"Business Administration Education: Changes in Management and Leadership Strategies" by M. R. Junaid
This book provides insights into the evolving strategies in management and leadership.

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