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Antecedents of Online Impulsive Buying Among Social Media Users: A Bibliometric Analysis

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Abstract

This research paper aims to conduct a bibliometric analysis of the antecedents of online impulsive buying among social media users. The study investigates the occurrence of keywords related to impulsive buying behavior in academic databases and identifies the most frequently occurring keywords to gain insights into the research trends in this area. The results indicate that the most common keywords related to impulsive buying behavior are "impulsive buying," "consumer behavior," "electronic commerce," and "compulsive buying." The study also finds that researchers are interested in understanding the psychological mechanisms that drive impulsive buying behavior, as evidenced by the frequency of keywords such as "behavioral research" and "psychology." The analysis includes a co-occurrence analysis of keywords and a cluster analysis of authors, institutions, and countries. The study also identifies several emerging trends in the literature, including the impact of social media influencers, the role of mobile devices, and the influence of cultural factors. The findings of this study provide valuable insights into the antecedents of online impulsive buying behavior and can inform future research in this area. Overall, the study provides a valuable overview of the research trends and antecedents related to online impulsive buying behavior among social media users. The findings can help researchers and practitioners to better understand this phenomenon and develop strategies to mitigate its negative consequences.

Keywords:[Impulsive Buying, Impulses, Social Media, Sustainability, Bibliometric Analysis]

Introduction

The rise of communication technology has significantly altered daily life, bringing with it several contemporary innovations including social networking websites (Khokhar et al., 2019). People are increasingly inclined to migrate their social engagements to online spaces like Facebook, Instagram, LinkedIn, and Twitter, considering social media apps to be an essential part of their daily lives (Alalwan et al., 2017). In addition to being places for socializing, they provide a forum for people to share and express their opinions and experiences concerning a certain commodity or service. This trend has been correctly identified by smart entrepreneurs and businessmen who have incorporated social media as their efficient marketing tool. There is no wonder in the fact that there exist several vibrant businesses only through social media platforms and running them successfully.

Entrepreneurs are putting a wide range of products and services in front of people via social media. Customers are drawn to advertisements, messages, reviews, or photographs regarding a certain product as they scroll through the pages, triggering desires in their minds that prompt and encourage them to make purchases. Many purchases made by consumers are spontaneous, unplanned, made on the spur of the moment, and motivated by strong desires, pleasant sentiments, and enthu-

siasm.(Khokhar et al., 2019). These types of purchases without thoughtful consideration of the need and necessity of the product are termed Impulsive Buying. Thus impulsive buying is the result of unplanned stimuli (H. Stern,1962), Unintended(S. Mittal et., al 2016), On spot hedonic, thoughtless, and unreflective.

The influence of social media marketing on impulsive buying is significant. Social media marketing has led to a rise in unplanned purchases, resulting in an increase of up to 40 percent in extra expenses attributed to social media factors (Bansal & Kumar, 2018). Several factors have contributed to social media becoming a haven for impulsive purchasing. The constant barrage of advertisements, promotions, and time-limited deals on social media can incite a sense of urgency and scarcity, which can result in impulsive purchases. Second, the existence of influencers on social media who promote goods and services may lead some consumers to make hasty purchases in response to their suggestions. Thirdly, impulsive purchasing might result from the social impact that comes from other people's favorable experiences with a good or service, known as social proof. Furthermore, social media platforms have increased accessibility, convenience, and speed of buying like never before. E-commerce has been seamlessly incorporated into social media platforms, allowing users to make purchases without leaving the platform and without visiting other

websites. This user-friendliness and practicality may encourage impulsive purchasing even more.

The rate of internet users and social media users has shown a tremendous increase in the last decade. As per the statistics of 2023 January, out of the 5.16 billion internet users 4.76 billion are social media users (Nagabhushanam & Dumasia, 2023). Social media has become a daily affair of the population. It has grown in such a way that it can affect our lifestyle, behavior, and even our personality. Even while internet shopping and impulsive purchases are hot topics right now, they will never lose their freshness because new social media sites, businesses, and ideas are constantly emerging. For business owners and consumers, this research is necessary. Therefore, the purpose of this study is to perform a bibliometric analysis to gain insight into the number of papers published, significant contributors, significant contributing countries, most frequently used phrases, and most referenced articles. The following research questions were developed to determine the primary objective of the study:

1. What is the current trend in the publishing of research about impulse buying among social media users?
2. What are the most reputable sources for studying impulse buying in this field?
3. Who are the most important, influential, and significant authors, organizations, and countries in the body of research on impulse buying in this field?
4. What are the most influential co-authors and co-citation networks in the field of impulse buying among social media users?
5. What are the current popular research topics in the area of impulse buying on social media platforms?

Theoretical Background

This session provides an overview of Social Media Marketing and Impulsive Buying

Social Media Marketing

An online platform or program that enables users to create, share, and exchange text, images, and videos with other users in their network or with the general public is referred to as social media. Usually, social media networks provide user interactions through a variety of tools like comments, likes, shares, and direct messaging. These platforms, which have billions of users worldwide and enable connections and communication with others from anywhere in the world, have permeated every aspect of contemporary life. Facebook, Twit-

ter, Instagram, TikTok, LinkedIn, and YouTube are just a few of the well-known social networking sites. Communication, marketing, politics, and social contact have all been significantly impacted by social media, which is still swiftly evolving thanks to the ongoing development of new features and applications.

Social media marketing is a type of digital marketing that makes use of social media websites to advertise a company, brand, item, or service. The basic goal of social media marketing is to connect with and interact with potential customers by producing and disseminating content that speaks to their interests and needs.

Social media marketing entails developing and putting into action a social media strategy that is in line with a company's overarching marketing objectives. This entails deciding which social media channels to employ, figuring out who the target audience is, and creating a content strategy that takes into account their interests and behaviors. The capacity to gauge and monitor a campaign's efficacy in real-time is one of the main advantages of social media marketing. To achieve better results, this enables marketers to make data-driven decisions and optimize their plans.

The subject of social media marketing is always changing, with new platforms, fads, and best practices appearing all the time. As a result, it necessitates a commitment to lifelong learning and a readiness to change. However, social media marketing can be a potent tool for increasing brand exposure, engagement, and sales when done well.

Impulsive Buying

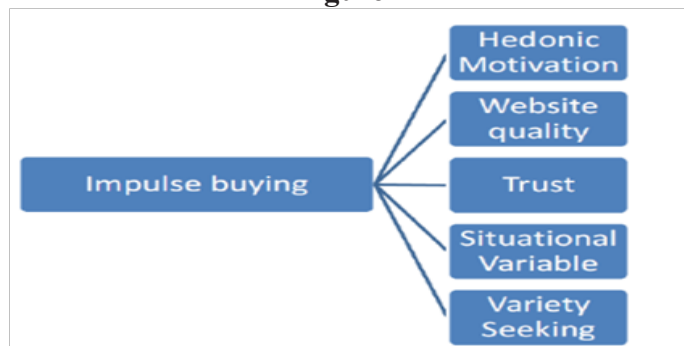
The act of buying something on a whim without giving it much thought or thinking about the possible implications is known as impulsive buying. It frequently involves a quick urge or desire to purchase something, motivated by feelings like excitement, pleasure, or fulfillment rather than by a process of deliberation. Impulsive purchasing can happen both offline and online, and it can be impacted by a variety of things, including individual preferences, environmental cues, peer pressure, and marketing strategies. It is frequently linked to impulsive spending, unanticipated purchases, and a propensity to buy more than one had intended. Depending on the situation and the individual, impulsive buying can result in both positive and negative effects. While it might result in joy and satisfaction right away, in the long run, it might also bring about regret, financial pressure, and buyer's remorse.

Impulsive purchase behavior is affected by several

things. Researchers have categorized it as situational, psychological, social, and situational elements, as well as internal and external factors. A model for analyzing online impulsive purchases has been developed

by Bansal and Kumar (2018). It takes into account five variables: Hedonic motivation, website quality, trust and ethical ideals, situational variables, and diversity seeking.

Figure 1



Source: Bansal and Kumar (2018)

Hedonic motivation is the study of how a person’s response to pleasure and pain influences their willingness to pursue an objective. The quality of a website includes factors including design, functionality, usability, and search engine optimization. The ethical and secure procedures that businesses employ when dealing with clients are referred to as “trust and ethical values.” Situational factors have to do with the circumstances in which a customer makes a purchase. Variety seeking is the practice of comparing several possibilities for a certain commodity on social media.

Data and Methods

Bibliometric analysis is a powerful and widely used method for studying patterns and trends in scholarly literature. It involves the quantitative analysis of bibliographic records, such as publications, citations, co-authorships, and keywords, to gain insights into the structure, impact, and evolution of a research field. In this study, we are conducting a bibliometric analysis with the available secondary data in the Scopus database using VOSviewer and BiblioShiny to solve the research question.

Table 1: Selection Criteria of Data from the Scopus Database

election Criteria	Scopus	
	Exclude	Include
Search Date: 11/05/2023 Database: Scopus Search Terms: Impulsive buying, impulsive purchase, unintentional purchase, window shopping	-	711
Subject Area: Business Management and Accounting, Social Sciences, Economics, Econometrics, Finance, Arts, and Humanities	352	359
Document type: Articles, Review, conference proceedings	14	338
Language: English	15	323
Erroneous Record Refinement	2	321

Source: Scopus Database

This table represents the results of a search conducted on the Scopus database on May 12, 2023, using the search terms “impulsive buying,” “impulsive purchase,” “unintentional purchase,” and “window shopping.” The search yielded 711 results in total. To refine the search

results, certain criteria were set to exclude or include certain records. In this case, 359 records were included that fell under the subject area of Business Management and Accounting, Social Sciences, Economics, Econometrics, Finance, Arts, and Humanities and, excluded

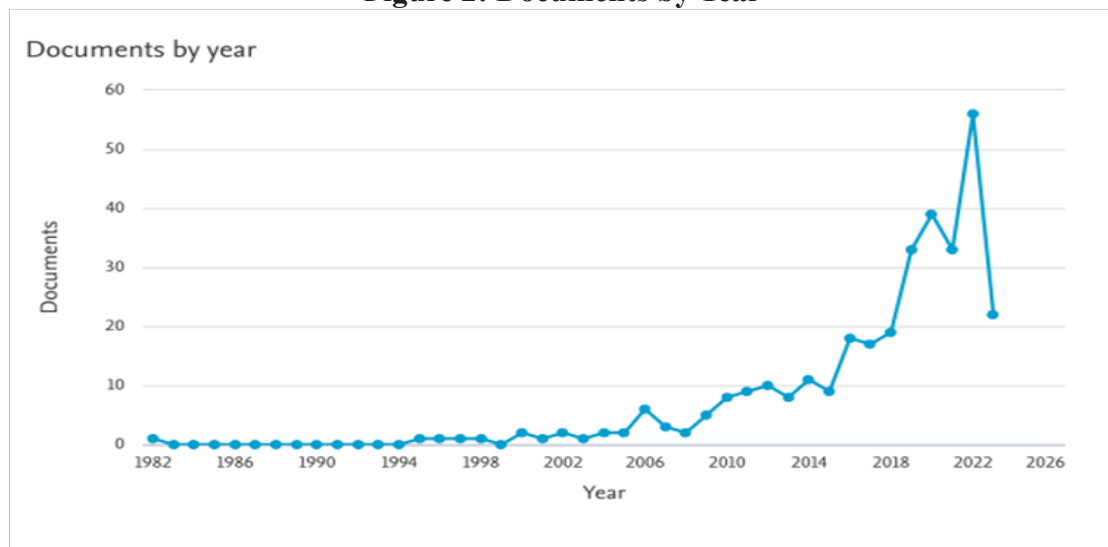
352 results. Additionally, only articles, reviews, and conference proceedings were included, resulting in the inclusion of 338 records and further removed 14 items. Finally, the language of the records had to be English, which resulted in a further refinement to 323 records after removing 15 articles. After these refinements, only two erroneous records were identified and excluded,

leaving a final total of 321 records that met all the selection criteria and were included in the study.

Results and Discussions

1. What is the current trend in the publishing of research about impulse buying among social media users?

Figure 2: Documents by Year



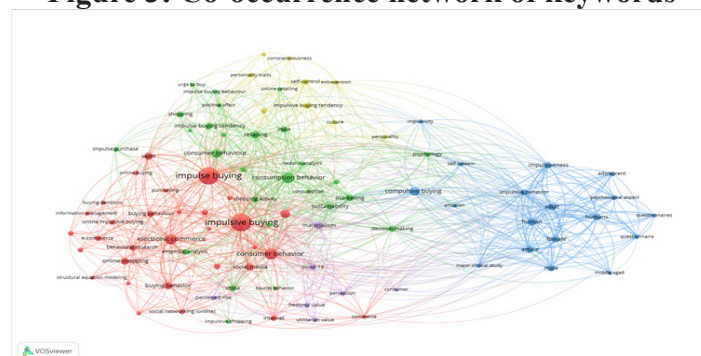
Source: Scopus database

The table provides information on the number of articles published in each year from 1982 to 2023. The table shows that there were no articles published from 1983 to 1994, except for a single article in 1982. The first significant increase in the number of articles published was in 1995, with one article being published, followed by one article per year until 1998. No articles were published in 1999. The number of articles published per year then fluctuated between 1 and 2, with two articles being published in 2000. The number of articles published increased to 6 in 2006 and then fluctuated between 2 and 5 until 2010.

From 2010, there was a significant increase in the num-

ber of articles published per year. The number of articles increased from 8 in 2010 to 10 in 2012, and then to 11 in 2014. From 2015 to 2018, the number of articles published fluctuated between 9 and 19. In 2019, there was a significant increase in the number of articles published, with 33 articles being published. This trend continued in 2020, with 39 articles being published, and 33 articles being published in 2021. In 2022, the number of articles published increased significantly to 56, and in 2023, it decreased to 22. Overall, the trend shows a significant increase in the number of articles published in recent years, with fluctuations in the number of articles published per year.

Figure 3: Co-occurrence network of keywords



Source: Scopus database elaborated with Vosviewer

The figure shows the nodes and clusters in a network analysis of the keywords often used in papers in the area of impulsive buying. The nodes are the individual concepts or ideas being studied, while the clusters represent groups of related concepts.

In this case, all the nodes appear to be related to the field of consumer behavior and retailing, with concepts such as “consumption behavior”, “impulse buying”, “consumer behavior”, “buying behavior”, “sales”, “marketing”, “retailing”, “shopping activity”, and “behavioral research” all appearing in the table. The top two keywords are “impulsive buying” and “impulse buying”, which occur 76 and 72 times, respectively. The table suggests that these concepts are all closely related, as they are grouped in the same cluster (cluster 1). This implies that research in this field tends to focus on these interrelated concepts and that they are often studied together to better understand consumer behavior and shopping patterns. The fact that all the nodes appear in the same cluster also suggests that there may be a high degree of overlap and interdependence between these concepts. For example, research on “impulse buying” may also involve the study of “shopping activity”, “sales”, and “marketing”. Overall, the table provides insight into the structure and interrelatedness

of concepts within a specific field of study and suggests that research in this area tends to focus on a core set of closely related ideas.

“Consumer behavior” and “consumption behavior” occur 29 and 27 times, respectively, indicating that the behavior of consumers is an important topic in the literature related to impulsive buying. “Electronic commerce” and “online shopping” occur 26 and 12 times, respectively, suggesting that the rise of e-commerce has affected impulsive buying behavior. “Compulsive buying” and “impulsive behavior” occur 18 and 9 times, respectively, indicating that there is some overlap between the concepts of compulsive and impulsive buying. “Sustainability” occurs 10 times, suggesting that researchers are interested in understanding how impulsive buying behavior may affect sustainability efforts. “China” and “India” occur 9 times each, suggesting that there is interest in studying impulsive buying behavior in these countries specifically. “Behavioral research” occurs 8 times, indicating that researchers are interested in understanding the underlying psychological mechanisms that drive impulsive buying behavior.

2. What are the most reputable sources for studying impulse buying in this field

Table 2: Most Relevant Sources

Sl. No	Sources	Articles
1	Journal of Retailing and Consumer Services	18
2	International Journal of Retail and Distribution Management	8
3	Sustainability (Switzerland)	8
4	Journal of Business Research	7
5	Asia Pacific Journal of Marketing and Logistics	6
6	Journal of International Consumer Marketing	6
7	Journal of Internet Commerce	6
8	Psychology and Marketing	6
9	British Food Journal	5
10	Journal of Distribution Science	5

Source: Scopus database

The table provides information on the number of articles published in different sources. The sources with the highest number of articles published are the “Journal of Retailing and Consumer Services” with 18 articles, followed by the “International Journal of Retail and Distribution Management” with 8 articles and “Sustainability (Switzerland)” with 8 articles. The “Journal of Business Research” had 7 articles published, making it the fourth highest source. The “Asia Pacific Journal of Market-

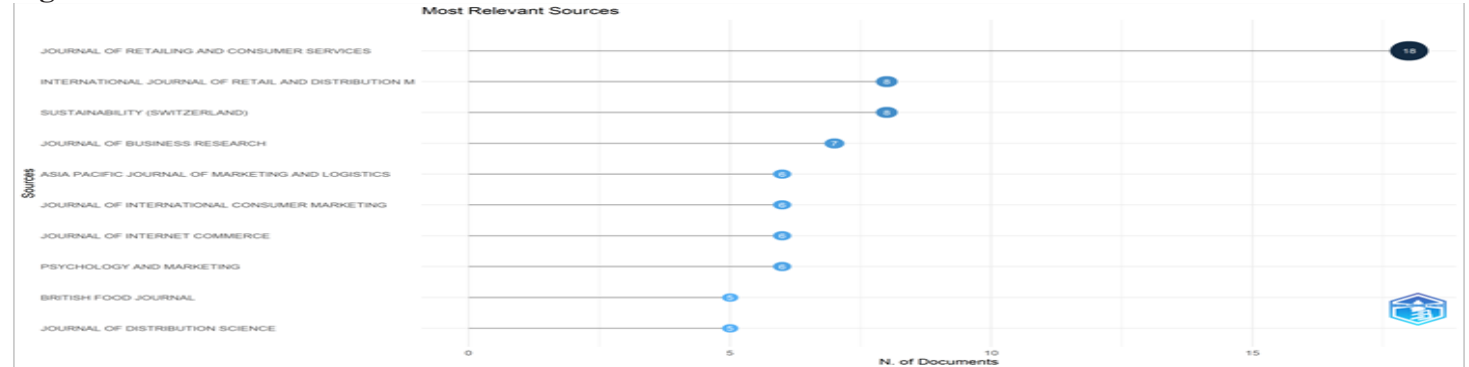
ing and Logistics,” “Journal of International Consumer Marketing,” “Journal of Internet Commerce,” and “Psychology and Marketing” all had 6 articles published, tying for the fifth position. The “British Food Journal” and the “Journal of Distribution Science” both had 5 articles published, which ties them in the sixth position. The data suggests that the “Journal of Retailing and Consumer Services” is the most popular source among the authors, followed by the “International Journal of

Retail and Distribution Management” and “Sustainability (Switzerland)”. These sources are the top three sources with the highest number of articles published.

Overall, the data reveal the sources that are the most

popular among the authors, and it shows the relative popularity of different sources in the field of retail and distribution management, consumer marketing, internet commerce, and food industry research.

Figure 4: Most relevant sources



Source: Scopus database elaborated with biblioshiny

3. Who are the most important, influential, and significant authors, organizations, and countries in the body of research on impulse buying in this field?

Table 3: Influential Authors, Institutions, and Countries in the Study Area

Author	TP	TC	Organisation	TP	TC	Country	TP	TC
Potenza M.N.	2	1612	Boehringer Ingelheim (Canada) Ltd., Burlington, On, Canada	1	1055	United States	55	5571
Siderowf A.D.	2	1612	Boehringer Ingelheim Pharma Gmbh And Co. Kg, Ingelheim, Germany	1	1055	United Kingdom	28	2287
Weintraub D.	2	1612	Boehringer Ingelheim Pharmaceuticals Inc., Ridgefield, Ct, United States	1	1055	Germany	12	1502
Koester J.	1	1055	Duke University Medical Center, Durham, Nc, United States	1	1055	Canada	3	1097
Lang A.E.	1	1055	Philadelphia Veterans Affairs Medical Center, Philadelphia, Pa, United States	1	1055	India	53	981
Stacy M.	1	1055	University Of Cambridge, Cambridge, United Kingdom	1	1055	Taiwan	24	641
Voon V.	1	1055	University Of Pennsylvania School Of Medicine, Philadelphia, Pa, United States	1	1055	Australia	12	478
Whetteckey J.	1	1055	University Of Toronto, Toronto, On, Canada	1	1055	China	36	449
Wunderlich G.R.	1	1055	Yale University School Of Medicine, New Haven, Ct, United States	1	1055	Pakistan	11	379
Vohs K.D.	1	588	Department Of Advertising And Mass Communication, 111 Murphy Hall, University Of Minnesota, Minneapolis, Mn 55455, United States	1	588	South Korea	19	371

Source: Scopus database

Figure 6: Influential Institutions



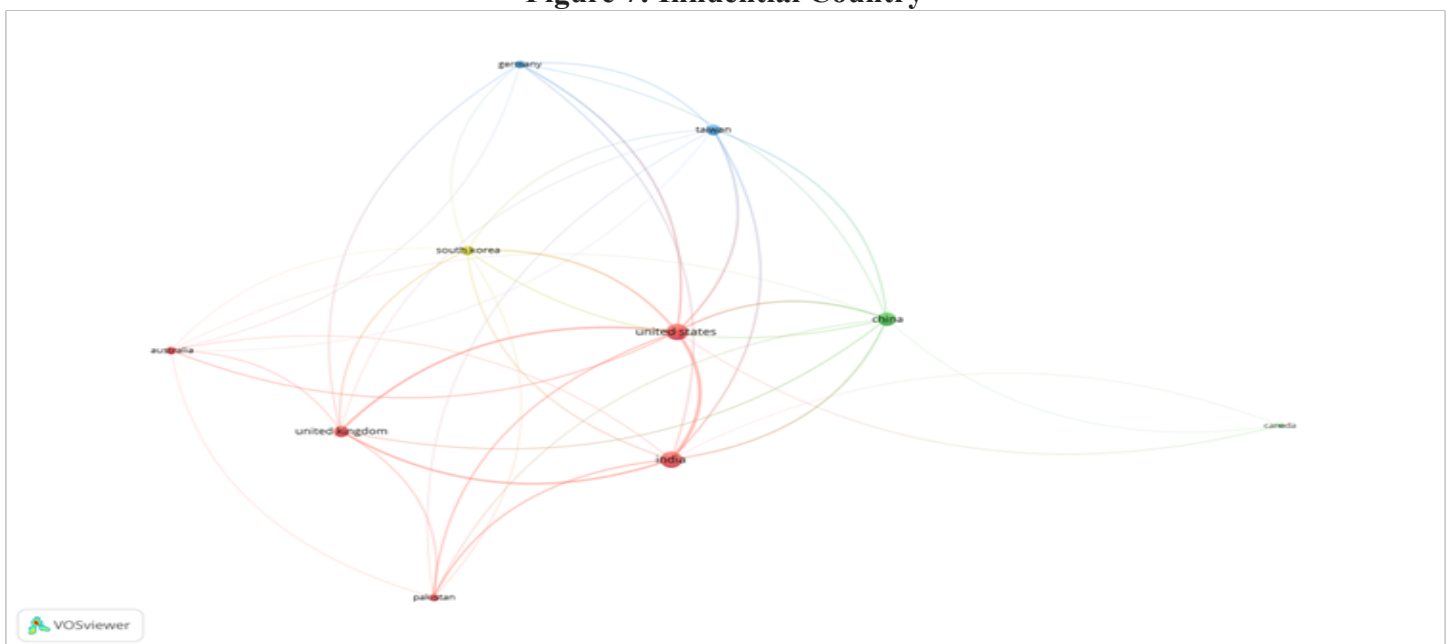
Source: Scopus database elaborated with Vosviewer

Influential Country

This table shows the total number of publications and citations for each country in the dataset. The data indicates that the United States has the highest number of publications and citations, with 55 publications and 5571 citations. The United Kingdom comes in second, with 28 publications and 2287 citations. Germany has the third-highest number of citations with 1502, followed by Canada with 1097. India has the highest num-

ber of publications with 53, while Taiwan has 24 publications and 641 citations. Australia has 12 publications and 478 citations, while China has 36 publications and 449 citations. Pakistan has 11 publications and 379 citations, and South Korea has 19 publications and 371 citations. Overall, the data suggests that the United States and the United Kingdom are the most productive countries in terms of research output and impact, while India and Taiwan are also significant contributors to the field.

Figure 7: Influential Country



Source: Scopus database elaborated with Vosviewer

4. What are the most influential co-authors and co-citation networks in the field of impulse buying among social media users?

Table 4: Influential Co-Authors

Author	TP	TC
Potenza M.N.	2	1612
Siderowf A.D.	2	1612
Weintraub D.	2	1612
Koester J.	1	1055
Lang A.E.	1	1055
Stacy M.	1	1055
Voon V.	1	1055
Whetteckey J.	1	1055
Wunderlich G.R.	1	1055
Faber R.J.	1	588

Source: Scopus database

This table lists the authors, their total publications (TP), and total citations (TC) in a given database or dataset. The authors are listed in descending order of their total citations. The first three authors, Potenza M.N., Siderowf A.D., and Weintraub D., have the same number of total publications and total citations, which indicates

that their research output has been highly cited in the given database or dataset. The remaining authors in the list have fewer total publications but still have a significant number of total citations. The author Faber R.J. has the least number of total citations among the authors listed.

Figure 8: Influential Co-Authors



Source: Scopus database elaborated with Vosviewer

Table 5: Co-citation Networks

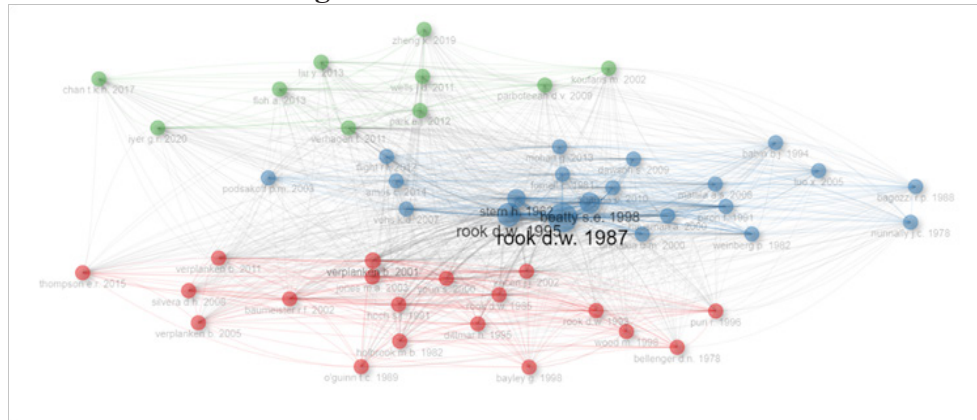
Node	Cluster
verhagen t. 2011	3
floh a. 2013	3
iyer g.r. 2020	3
liu y. 2013	3
parboteeah d.v. 2009	3
wells j.d. 2011	3
park e.j. 2012	3
koufaris m. 2002	3
chan t.k.h. 2017	3
zheng x. 2019	3

Source: Scopus database

This table appears to show a cluster analysis of authors, with each node representing an author and each cluster grouping together authors with similar characteristics or connections. The numbers next to each node indicate the cluster number to which the author belongs. In this particular analysis, there are three clusters, and all of the authors listed are assigned to cluster 3. This

suggests that these authors are connected in some way, possibly through their research interests or the journals they publish in. It's worth noting that the specific methodology used to conduct this analysis is not provided, so it's difficult to draw more detailed conclusions about the nature of the clusters or the relationships between authors.

Figure 9: Co-citation Networks



Source: Scopus database elaborated with Vosviewer

5. What are the current popular research topics in the area of impulse buying on social media platforms?

Table 6: Trending Topics

Item	Frequency
Consumption Behavior	26
Electronic Commerce	26
Adult	20
Impulse Buying	16
Human	14
Article	11
Humans	11
Adolescent	10
Retailing	10
Impulsive Behaviour	9
Impulsiveness	9
Decision Making	9
Shopping Activity	9
Behavioural Research	8

Source: Scopus database

The table lists items and their frequencies in a given dataset. Here's an interpretation of the items and their frequencies:

Consumption Behavior: This item appears 26 times in the dataset, indicating that the concept of how consumers behave when making purchasing decisions is a significant focus of the research.

Electronic Commerce: This item also appears 26 times,

suggesting that online shopping and e-commerce are important aspects of the research.

Adult: This item appears 20 times, suggesting that the research may focus on adult consumers rather than children or teenagers.

Impulse Buying: This item appears 16 times, indicating that the researchers are likely studying the phenomenon of impulsive buying behavior.

Human: This item appears 14 times, indicating that the researchers are studying consumer behavior from a human perspective, as opposed to studying animal behavior or artificial intelligence.

Article: This item appears 11 times, suggesting that the dataset may consist of articles or academic papers related to consumer behavior.

Humans: This item appears 11 times, indicating that the researchers are studying consumer behavior from a human perspective.

Adolescent: This item appears 10 times, indicating that the research may focus on how consumer behavior changes during adolescence.

Retailing: This item appears 10 times, suggesting that the research may focus on the retail industry and how it affects consumer behavior.

Impulsive Behavior: This item appears 9 times, indicating that the researchers may be studying various forms of impulsive behavior in addition to impulsive buying.

Impulsiveness: This item appears 9 times, further supporting the idea that the researchers are studying various forms of impulsive behavior.

Decision Making: This item appears 9 times, indicating that the researchers may be interested in how consumers make decisions when it comes to purchasing products or services.

Shopping Activity: This item appears 9 times, suggesting that the research may focus on consumer behavior related to various shopping activities.

Conclusions

Impulsive buying and consumer behavior are the most frequent keywords in the literature related to impulsive buying. The rise of e-commerce has impacted impulsive buying behavior, with electronic commerce and online shopping being frequently mentioned. Researchers are interested in studying differences in impulsive buying behavior between males and females and there is interest in studying impulsive buying behavior in specific countries, such as China and India. Sustainability is an important consideration in understanding how impulsive buying behavior may affect sustainable efforts. The researchers are interested in understanding the underlying psychological mechanisms that drive impulsive buying behavior. Understanding the broader psychological context of impulsive buying behavior is also an important area of research.

In conclusion, the bibliometric analysis of the antecedents of online impulsive buying behavior among social media users reveals several interesting findings. The study reveals that impulsive buying behavior is a wide-

ly researched topic, with a strong focus on the concepts of impulsive buying, consumer behavior, and electronic commerce. There is also a growing interest in understanding the impact of recent events such as COVID-19 and the role of sustainability in impulsive buying behavior. The study also highlights the importance of understanding the underlying psychological mechanisms that drive impulsive buying behavior, as indicated by the frequency of keywords such as behavioral research and psychology. Moreover, the study suggests that researchers are interested in studying the differences in impulsive buying behavior between males and females.

Overall, the findings of the study suggest that impulsive buying behavior among social media users is a complex phenomenon that is influenced by several factors. Understanding the antecedents of this behavior can help businesses and marketers develop effective strategies to encourage impulse buying while ensuring the sustainability of their business practices. Further research is needed to explore this area in more detail, including the specific factors that influence impulsive buying behavior among social media users and how these factors vary across different cultures and regions.

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Bibliometric Analysis of Supply Chain Finance: A Systematic Review and Trend Analysis

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Abstract

Supply chain finance (SCF) is critical for streamlining financial flows and increasing efficiency within complex supply chains. This study presents a comprehensive bibliometric analysis of the existing supply chain finance literature to identify key themes, influential authors, and emerging trends in the field. We examined various scholarly publications using bibliometric techniques, including document analysis, citation analysis, and co-author analysis. Our analysis shows that the field of supply chain finance has experienced steady growth in research output over the last decade, indicating its increasing importance in both academic and practical settings. The findings highlight several key research themes, including supplier finance, buyer-led finance, risk management, information technology applications, and sustainability issues within supply chain finance.

In addition, our study identifies key influential authors and research institutions that have made significant contributions to the field. Analysis of citation patterns reveals the most influential publications and journals in the field of supply chain finance. It reveals intellectual underpinnings and knowledge dissemination channels within the field. In addition, the co-author networks shed light on joint research efforts and new research clusters. Based on bibliometric analysis, we provide insights into the evolving trends and possible future directions of supply chain finance research. The results provide valuable guidance for researchers, practitioners, and policymakers seeking to deepen their understanding of supply chain finance dynamics, foster collaboration, and address critical challenges in this field. Overall, this bibliometric analysis contributes to the existing body of knowledge on supply chain finance by providing a comprehensive overview of the research landscape and by highlighting key areas. This study serves as a basis for future research efforts and facilitates the development of sound strategies to advance supply chain finance theory and practice.

Keywords: [Supply Chain Finance, Buyer-Led Finance, Risk Management, Bibliometric Analysis]

Introduction

Supply Chain Finance (SCF) is a financial solution that allows suppliers to access funding based on their buyers' creditworthiness. The goal of SCF is to improve the efficiency of the supply chain funding, which is needed because suppliers often give their customers payment terms. (Hofmann & Zumsteg, 2015)

Supply chain finance, also known as supplier finance or reverse factoring, is a monetary strategy that optimizes the flow of capital within supply chains. It addresses the timing mismatch between payments to suppliers and receipt of client funds (Li & Fu 2022). By facilitating early supplier payments, supply chain finance enhances working capital management, improves cash flow predictability, and reduces reliance on costly, short-term financing. This reduces the risk of late payments or disruptions in the supply chain, fostering collaboration and trust between buyers and suppliers (Obaid et al. 2022). SCF can help suppliers access financing at lower costs and improve their cash flow, whereas buyers can extend their payment terms and improve their working capital management. (Camerinelli, 2009). Buyers need help to persuade suppliers to adopt SCF. One of the primary challenges is the successful onboarding of suppliers on an SCF platform. Even if buyers estimate substantial

reductions in financing costs, this does not necessarily lead to supplier adoption. Additionally, buyers should only sometimes offer SCF to their largest supplier first because smaller suppliers are generally quicker to adopt (Wuttke, D et al 2019, Li, L et al 2023).

Supply chain finance involves various stakeholders and activities that work together to optimize financial operations within the supply chain. Suppliers, manufacturers, logistics providers, and financial institutions play significant roles in this process (Olan et al 2021, Li, X., Yan, J., Cheng, J., Li, J. 2023).

Suppliers benefit from supply chain finance by accessing primary payment options, improving cash flows, and reducing financial strain. Manufacturers or buyers leverage their creditworthiness to offer initial payment arrangements to suppliers, resulting in improved relationships and reduced supply chain disruptions (Olan et al. 2021).

By collaborating effectively, these stakeholders can enhance working capital, improve cash flow predictability, mitigate risks, and strengthen relationships within the supply chain. Their collective efforts contribute to the overall optimization and success of supply chain finance operations (Chen et al. (2013).

Supply chain finance is crucial for improving work-

ing capital management for businesses by providing liquidity and optimizing cash flows. By offering early payment options to suppliers, businesses can access liquidity and address cash-flow constraints. This allows them to invest in growth opportunities and manage their working capital effectively (Wen et al. (2022)). Supply chain finance also helps optimize cash flows by aligning payment terms between buyers and suppliers, allowing businesses to balance cash outflows and inflows efficiently. This leads to improved cash conversion cycles and enhanced working capital efficiency. In addition, supply chain finance mitigates financial risks by ensuring timely supplier payments and fostering trust and collaboration within the supply chain. Supply chain finance helps businesses enhance their financial positions, strategically allocate funds, and strengthen their overall fiscal health(Hofmann & Kotzab 2010).

Supply chain finance is the key to fostering stronger relationships between buyers and suppliers by enhancing financial collaboration and trust. It provides enhanced cash flow visibility, improves payment terms, reduces financial risk, and promotes collaborative problem-solving.

Supply chain finance gives buyers and suppliers better visibility into cash flow dynamics, allowing for more informed decision making. By aligning payment terms and offering early payment options, buyers demonstrate their commitment to timely payments, whereas suppliers gain greater monetary stability and planning capabilities. This transparency builds trust and promotes collaboration between parties(Dong et al. (2022)).

Through supply chain finance, buyers can negotiate favorable payment terms and extend payment terms, while still providing suppliers with the option of immediate payment. This fairness in payment terms strengthens the buyer-supplier relationship and fosters trust, as suppliers have greater control over their cash flow and financial stability.

Supply chain finance also mitigates financial risk by reducing the likelihood of payment delays or defaults. Suppliers are confident in receiving timely payments, enhancing their financial stability, and decreasing liquidity concerns. This reduction in financial risk fosters trust and strengthens partnerships between the buyers and suppliers (Huo 2023).

Moreover, supply chain finance encourages collaborative problem solving between buyers and suppliers. They can work together to solve financial challenges such as exploring alternative financing options or providing prompt payment arrangements. This cooperative

approach builds a sense of shared responsibility and long-term partnerships (Deng et al. 2018).

There is a research gap in bibliographic studies focusing on supply chain finance. Although studies have explored various aspects of supply chain finance, a comprehensive bibliographic analysis that captures the breadth and depth of research in this domain is lacking. Conducting a bibliographic study of supply chain finance would provide insights into publication patterns, authorship, citation networks, and research trends. It identifies key contributors to the field, analyzes publication trends, and highlights emerging research themes and gaps in existing literature. Such a study would contribute to a deeper understanding of supply chain finance, guide future research, and facilitate knowledge dissemination within the scholarly community.

A study covering 2018 to 2023 would fill this gap by providing an up-to-date analysis of advancements, emerging trends, and research directions in supply chain finance.

This specific timeframe has a research gap that needs to be addressed. This would help researchers and practitioners to learn the latest developments in supply chain finance, determine the limitations of existing studies, and inspire more research and innovation.

This would enhance the understanding of the difficulties and prospects in supply chain finance and promote progress in the field.

Objectives of the Study

The study offers the opportunity to answer the following research objectives.

1. To identify the key authors and institutions contributing to the field of supply chain finance through a bibliographic analysis.
2. To analyze the publication trends and patterns in supply chain finance research, including the growth rate of publications over time.
3. To identify the most cited articles and influential journals in supply chain finance.
4. To examine the collaboration networks among researchers and institutions in supply chain finance research.
5. To provide insights and recommendations for future research directions and areas of further investigation in supply chain finance.

These research objectives aim to conduct a comprehensive bibliographic study on supply chain finance, providing a detailed analysis of publication trends, influential authors and journals, collaboration networks,

research themes, and emerging trends. The study would help to better understand the current state of supply chain finance research, identify research gaps, and guide future research efforts within the field.

Research Methodology

Bibliometric analysis uses statistical methods to examine and identify publication patterns in research products (Bui et al. 2020). Pritchard (1969) introduced this concept. Bibliometric analysis can provide a comprehensive overview of a research area, reveal connections between research studies, identify the most influential authors and collaborations between countries in a research field, and suggest future research directions. Bibexcel, CiteSpace, Gephi, GraphPad Prism, Netdraw, Pajek, Sci2, SciMAT, SITKIS, VOSviewer, and UCInet are tools that can support bibliometric analyses. This study used VOSviewer (Godzien et al., 2018) to perform a supply chain finance bibliometric analysis. Bibliometric mapping allows the visualization and identification of relationships between articles, authors, organizations, countries, citations, and keywords. (Van Eck et al., 2010)

This study investigates the supply chain finance research field using quantitative methods to analyze publications, citations, and collaborations. This will help to reveal research patterns, influential authors, and fundamental research topics in the field. The main source of literature for this study is the Dimensions database, which covers a broad range of disciplines associated with supply chain finance. This study focuses on publications from 2020 to 2023.

Data Collection

Dimensions are a comprehensive research database that includes scholarly articles, conference papers, reprints, and other research outputs from various disciplines, such as business, finance, economics, and related areas. Its comprehensive coverage makes it suitable for conducting quantitative analyses of the literature in the field of supply chain finance.

Criteria for Inclusion

The criteria for selecting articles from the Dimensions database were as follows.

The articles were published between 2020 and 2023 and considering only articles in English were considered.

Search Strategy

The search strategy utilized relevant keywords and

phrases related to supply chain finance. Search terms are “supply chain finance” and “Logistics,” logistics’. Boolean operators (AND, OR) combined the keywords and refined the search results.

Data Analysis

The selected articles were analyzed using appropriate software or tools to measure the following aspects:

Authorship analysis: Identifying the most productive authors, their affiliations, and their contributions to the field of supply chain finance (Misini & Kadriu (2022)).

Publication analysis: Examining publication patterns, including the most active journals, conference proceedings, and publishing countries.

Citation Analysis

Analyzing citation patterns to identify the most cited articles and influential authors.

Co-authorship network analysis: Mapping collaborative networks among authors and institutions to identify strategic collaborations in the field (Osareh et al. (2022)).

Interpretation and Reporting

Quantitative and content analysis findings were interpreted to draw meaningful insights and conclusions. The results are presented clearly and concisely using visualizations, such as charts, graphs, and network diagrams, to present the findings effectively. The research methodology, including the search strategy and analysis techniques, is detailed to ensure transparency and reproducibility.

It is important to recognize the potential limitations of this research methodology. Limitations may include language bias owing to the exclusion of non-English publications and any limitations inherent to the Dimensions database. These limitations should be considered when interpreting the findings and generalizing the results.

This research methodology provides a comprehensive understanding of the current state of research in supply chain finance, identifies research patterns, and highlights the influential authors and institutions in the field.

Results and Discussions

Citations based on Document

To ensure a reliable evaluation, a minimum document set of 100 is essential. In the case of the total of 533 documents examined, it was found that only 47 of them met the specified thresholds.

Table 1: Top documents with 150 citations.

Sl No.	Document	Citations	Links
1	Geissdoerfer (2018)	547	2
2	Pieroni (2019)	456	1
3	Rosati (2019)	285	1
4	chan (2018)	262	0
5	Jia (2020)	218	0
6	Chen (2018)	215	0
7	Upadhyay (2021)	202	0
8	Khan (2021)	201	0
9	Ruiz (2020)	199	0
10	Aboelmaged (2019)	191	0
11	Heyes (2018)	189	0
12	Gandhi (2018)	183	0
13	Kazancoglu (2018)	180	0
14	Kumar (2020)	179	0
15	Mavi (2018)	178	0
16	Caldera (2019)	173	0
1	Hossain (2020)	170	0
7	Ikram (2019)	158	0
18	Bórawski (2019)	156	0
19	Wang (2021)	153	0
19	Ranta (2018)	153	0
20	Yazdani (2021)	153	0
21	Niaki (2019)	150	0

The dataset in Table 1 contains a list of documents with their citation and link counts. The main findings are:

“Geissdoerfer (2018)” is the most cited and linked document, showing its high relevance and influence in the research field.

“Pieroni (2019)” is the second most cited document, reflecting its popularity among researchers.

“Rosati (2019)” has fewer citations than the top-ranked papers, indicating a lower impact or awareness.

Some documents have no citations or links, suggesting a lack of interest or novelty, or are new in the research area.

The number of citations decreases as we go down the list, implying that older papers have more citations or cover more interesting topics.

Some recent papers are in the dataset, with low citation and link counts, indicating they may need more time to gain recognition.

The summary shows different documents’ citation and link counts, revealing the differences in impact, visibil-

ity, and attention in the research community.

Citations in term of Authors

To determine citations based on authors, a Minimum number of documents is set as three.

Furthermore, it was found that out of 853 authors, only 25 meet the criteria.

Table 2 and Figure 1 show that there are four clusters. Cluster 1 Consist Of Garza-Reyes, Jose Arturo, Govindan, Kannan, Kazancoglu, Yigit, Mangla, Sachin Kumar, Mardani, Abbas

The data analysis for Cluster 1 reveals the following:

All authors in this cluster have published three documents each, showing a similar research output.

The citation counts for these authors vary from 399 to 593. Garza-Reyes, Jose Arturo, Pigosso, and Daniela C.A. are the most cited (593), while Mardani Abbas is the least cited (413). These authors have a high citation impact.

The total link strength for this cluster is 12, indicating

the combined influence of their citations.

The data suggest Cluster 1 includes authors with moderate to high research productivity and citation impact. They have comparable numbers of publications and a reasonable link strength through their citations. They may be researching related or similar fields, engaging with the scholarly community, and possibly collaborating or citing each other's work.

Cluster 2 Consist Of Jugend, Daniel, Mcaloone, Tim C., Pigosso, Daniela C.A., Salvador, Rodrigo

The data analysis for Cluster 2 reveals the following:

All authors in this cluster have published three documents each, showing a similar research output.

The citation counts for these authors vary from 106 to 150. Mcaloone, Tim C., Pigosso, Daniela C.A., Goni, FeybiAriani, and Salvador, Rodrigo is the most cited (150), while Jugend, Daniel is the least cited (106). These authors have a moderate citation impact.

The total link strength for this cluster is 12, indicating the combined influence of their citations.

The data suggest Cluster 2 includes authors with moderate research productivity and citation impact. They have comparable numbers of publications and a reasonable link strength through their citations. They may be researching related or similar fields, engaging with the scholarly community, and possibly collaborating or citing each other's work.

Cluster 3 comprises three authors: Elisa Arrigo, Lujie Chen, and Fu Jia. This cluster demonstrates vary-

ing levels of research productivity and citation impact among its members. Each author in Cluster 3 has published three documents, suggesting a similar research output within the cluster. However, the citation counts for these authors range from 142 to 288. Fu Jia has the highest number of citations, with 288, while Elisa Arrigo has the lowest, with 38.

Consequently, there are notable differences in their research's citation recognition and impact. The total link strength for all authors in this cluster is 14, representing the combined influence of the citations received by their published documents. In summary, authors within Cluster 3 exhibit varying levels of research productivity and citation impact, despite publishing the same number of documents. Although their research may be related or similar, their contributions and citation recognition differ significantly.

Cluster 4 is comprised of a single author, Julian Kirchherr. This author has a relatively higher research output within the cluster, as indicated by the publication of five documents. However, Kirchherr has received a moderate number of citations, with a count of 182. The total link strength for Kirchherr is 0, suggesting a lower level of influence than other clusters. Despite their relatively higher research output, Kirchherr's research has not garnered significant recognition or impact within their field. Further analysis is required to delve into the specific research focus and potential reasons behind the limited influence of Kirchherr's work within Cluster 4.

Table 2: Top Author with 3 Documents.

Sl No.	Author	Documents	Citations	Total Link Strength
1	Mcaloone, Tim C.	3	593	12
2	Pigosso, Daniela C.A.	3	593	12
3	Mardani, Abbas	3	413	2
4	Kazancoglu, Yigit	3	399	1
5	Jia, Fu	4	318	1
6	Govindan, Kannan	5	290	3
7	Chen, Lujie	3	288	1
8	Tseng, Ming-Lang	5	222	5
9	Kirchherr, Julian	3	194	8
10	Klemeš, Jiří Jaromír	5	182	0
11	Mangla, Sachin Kumar	4	174	2
12	Wu, Kuo-Jui	3	159	4
13	Chofreh, AbdoulmohammadGholamzadeh	3	150	0
14	Goni, FeybiAriani	3	150	0
15	Kang, Kai	3	142	0

16	Liu, Yang	5	136	0
17	Sarkar, Biswajit	4	135	1
18	Huisingh, Donald	3	116	0
19	Salvador, Rodrigo	3	106	6
20	Garza-Reyes, Jose Arturo	4	104	2
21	Dawkins, Elena	4	102	0
22	Sadiq, Rehan	3	89	0
23	Arrigo, Elisa	3	38	3
24	Fernández, Roberto Álvarez	3	21	0
25	Jugend, Daniel	3	6	5

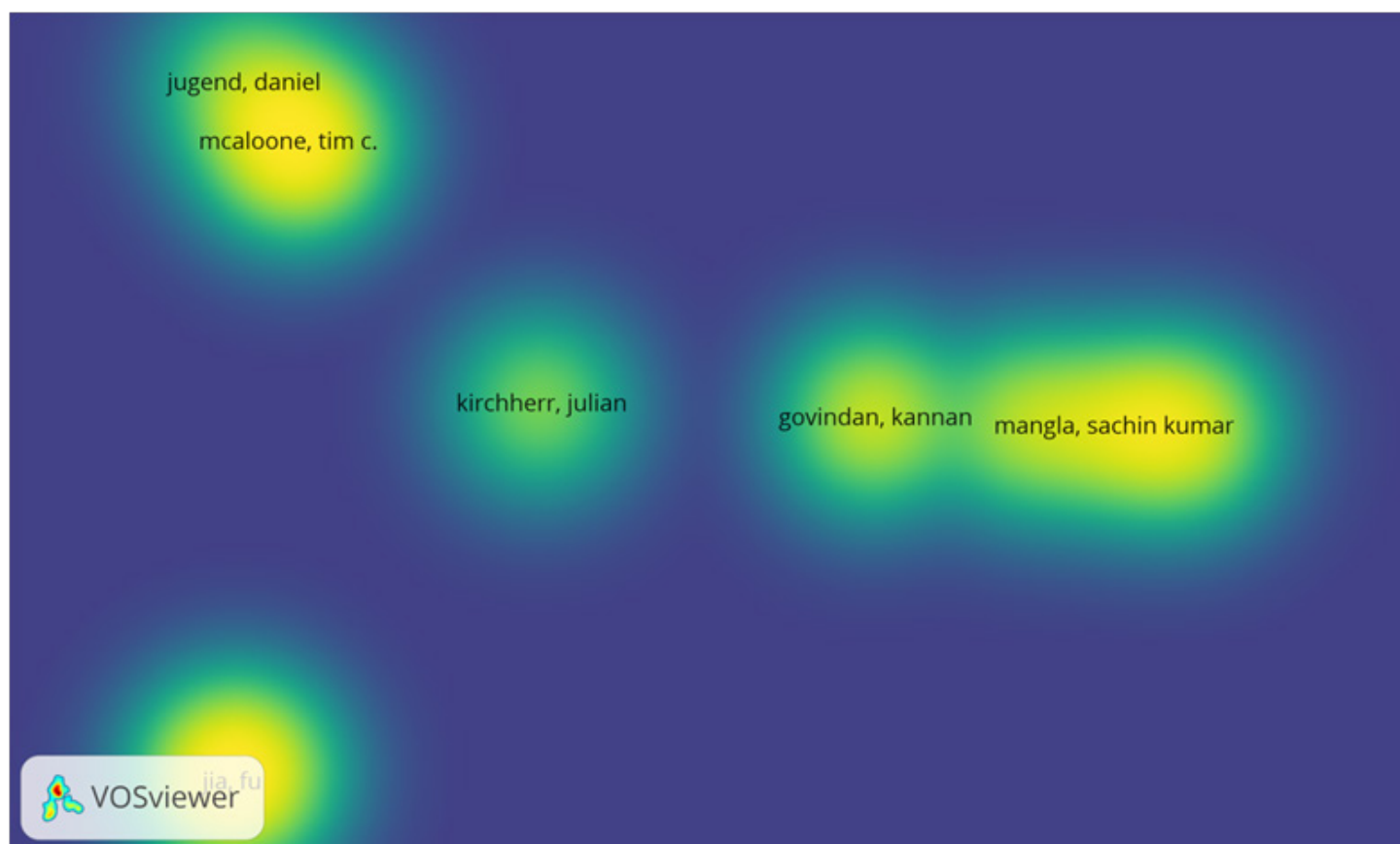


Figure 1: Density Visualization for Citations in term of Authors

Citations based on Organizations

For determining Citations Based On Organizations, a minimum number of documents is selected as five, and it was found that out of 733 organizations, 34 meet the thresholds.

Figure 2 shows the ranking of organizations by their citations and total link strength values based on the given data. Here are some key points:

The Technical University of Denmark ranks first in citations (882) among the organizations. Utrecht University ranks first in total link strength (20) among the organizations. Universidade de São Paulo ranks sec-

ond in citations (631) and third in total link strength (7). Hong Kong Polytechnic University ranks third in citations (599) and fourth in total link strength (3). Curtin University ranks fifth in citations (443) and total link strength (9). The University of Southern Denmark ranks sixth in citations (430) and total link strength (12). UNSW Sydney ranks seventh in citations (391) and total link strength (5). University of Technology Sydney ranks eighth in citations (383) and total link strength (6). Shanghai Maritime University ranks ninth in citations (381) and total link strength (9). Chang'an University ranks tenth in citations (331) and total link strength (9).

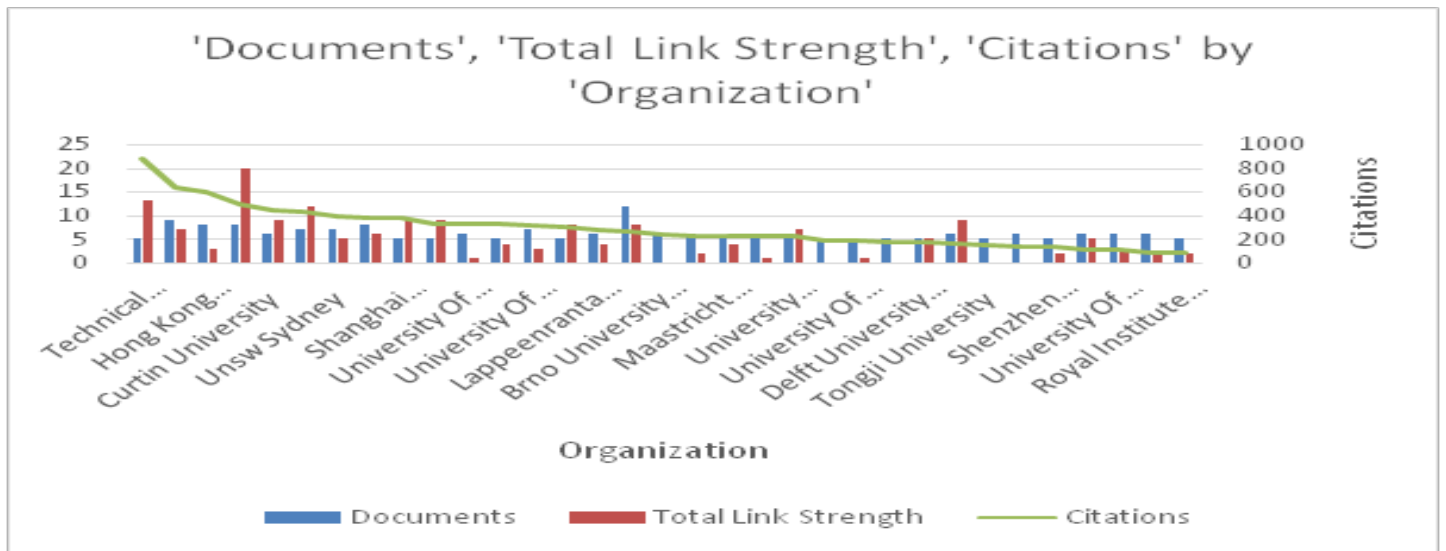


Figure2:Citations based on Organizations

Citations based on Countries.

When investigating citations based on countries, a minimum document selection of 5 was utilized. The findings indicate that out of the 76 countries examined, 35 of them satisfy the established thresholds.

Table 3 and Figure 3 reveal that there are 6 clusters.

Cluster 1, represented in red, consists of nine countries: Belgium, France, Germany, Iran, Japan, Malaysia, Pakistan, Turkey, and Vietnam. This cluster exhibits several notable characteristics. Firstly, it showcases a diverse geographical representation, encompassing countries from Europe (Belgium, France, Germany) and Asia (Iran, Japan, Malaysia, Pakistan, Turkey, and Vietnam). This diversity suggests a range of research perspectives and contributions within the cluster.

Secondly, there is variation in research output among the countries in Cluster 1. Germany and France have higher document counts, indicating more scientific publications than others. In contrast, Japan has a relatively lower document count within this cluster.

Moreover, the citation counts within Cluster 1 reflect variations in research impact. Belgium, France, Germany, and Japan have higher citation counts, indicating that their research has been cited more frequently, thus demonstrating a potentially greater research impact. On the other hand, Iran, Malaysia, Pakistan, Turkey, and Vietnam have lower citation counts, suggesting a potentially smaller research influence on other studies.

The diversity of research strengths and expertise within Cluster 1 presents opportunities for research collaboration and knowledge exchange among the countries involved. Collaborative efforts can leverage the different strengths and contribute to scientific advancements

across various disciplines. Lastly, the countries in Cluster 1 exhibit distinct research focus areas. For instance, Japan is renowned for advancements in technology and engineering, while Germany is recognized for its contributions to various scientific fields. Conversely, France has a strong presence in arts, humanities, and social sciences. This diversity in research focus areas adds richness and depth to Cluster 1.

Cluster 1 comprises geographically diverse countries with varying research output, impact, and focus areas. This cluster presents opportunities for collaboration and knowledge sharing while showcasing each country's unique contributions and strengths within the research landscape.

Cluster 2, represented in green, consists of Brazil, Canada, India, Indonesia, Saudi Arabia, South Korea, and Taiwan. This geographically diverse cluster showcases varied research output and impact. Countries like India, Canada, and Saudi Arabia exhibit higher citation counts, indicating significant research influence. India, Indonesia, and South Korea are emerging research hubs, while Brazil and Canada have regional research influence. Collaboration opportunities exist within this cluster, fostering scientific advancements and interdisciplinary research.

Cluster 3, represented in violet colour, comprises six countries: Chile, Colombia, Spain, Switzerland, the United Kingdom, and the United States. This cluster demonstrates geographic diversity, including the representation of South America, Europe, and North America. The countries within Cluster 3 exhibit high research output, with the United States leading in document count, followed by the United Kingdom and

Spain. Moreover, these countries have a strong research impact, particularly the United States and the United Kingdom. The presence of Spain, Switzerland, and the United Kingdom highlights European research excellence. Cluster 3 offers potential collaborative opportunities among these research powerhouses, fostering advancements and knowledge exchange. However, it is important to note that these inferences are based solely on the given data. Further analysis is needed to understand the research activities and collaborations within Cluster 3 fully.

Cluster 4, represented in yellow color, consists of Finland, Italy, the Netherlands, Norway, Portugal, and Sweden. In this cluster, the countries exhibit similar research impact, as indicated by their comparable total link strengths. There is potential for research collaboration and knowledge exchange within Cluster 4, leveraging each country's strengths. These countries represent European research excellence and offer opportunities for interdisciplinary collaborations. Further analysis of document counts and citations would provide more insights into the specific research outputs of each country within the cluster. However, it is important to consider that these inferences are based on the given data and additional domain-specific knowledge is required to fully understand the research activities and collaborations within Cluster 4.

Cluster 5 (Violet Red) comprises four items: Australia, Czechia, Denmark, and Thailand.

The organizations included in this cluster are Curtin University, Technical University of Denmark, Brno University of Technology, and Asian University.

These organizations have varying numbers of documents, citations, and total link strength.

The Technical University of Denmark has the highest number of documents (5) and citations (882) among the organizations in this cluster.

Utrecht University has this cluster's highest total link strength (20).

This cluster represents a diverse group of organizations from different countries.

Cluster 6 (Blue) consists of three items: China, Egypt, and the United Arab Emirates.

The organizations included in this cluster are Chang'an University, Shanghai Maritime University, Tianjin University of Finance and Economics, Zhejiang University of Finance and Economics, Shenzhen University, and Tongji University.

These organizations also have varying numbers of documents, citations, and total link strength.

Chang'an University has the highest number of documents (5) and citations (331) among the organizations in this cluster.

Tongji University has this cluster's highest total link strength (5).

This cluster represents organizations from China, Egypt, and the United Arab Emirates, indicating a geographical diversity within the cluster.

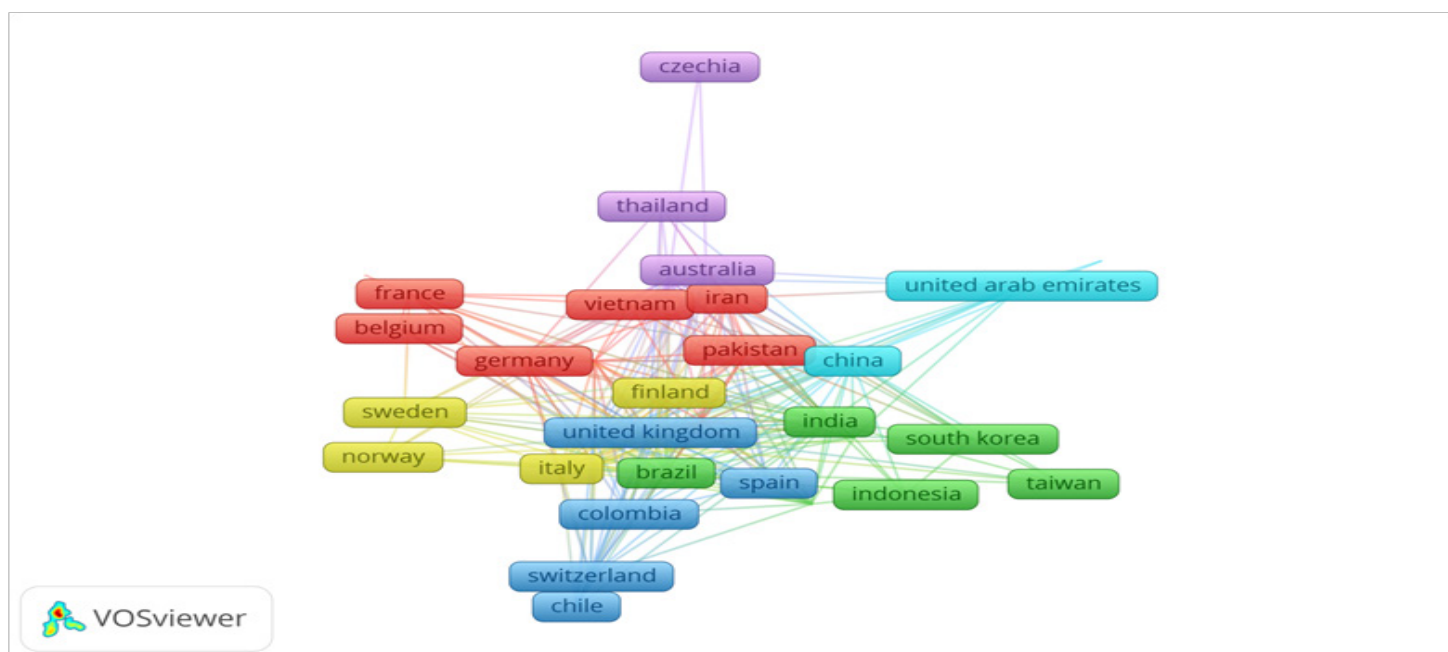


Figure 3: Network Visualization of Clusters.

Table 3: Top Country with 5 Documents.

Sl No.	Country	Documents	Citations	Total Link Strength
1	China	135	5207	155
2	United Kingdom	73	3634	163
3	Australia	55	2707	105
4	United States	49	2436	100
5	India	47	1750	119
6	Brazil	43	1574	90
7	Denmark	17	1362	105
8	Netherlands	30	1277	85
9	Iran	18	955	28
10	Italy	32	938	67
11	Malaysia	21	859	35
12	Finland	19	822	45
13	Spain	21	816	23
65	Sweden	26	700	33
14	Portugal	14	686	62
15	United Arab Emirates	11	650	24
16	Germany	22	637	32
17	Turkey	10	596	25
18	South Korea	14	538	25
19	Pakistan	16	529	42
20	Vietnam	6	458	10
21	Canada	18	445	34
22	Taiwan	9	364	13
23	Saudi Arabia	6	349	16
24	Egypt	6	307	2
25	Czechia	8	301	2
26	France	12	281	19
27	Colombia	6	234	18
28	Norway	8	222	17
29	Thailand	5	218	11
30	Indonesia	5	213	8
31	Switzerland	9	211	24
32	Japan	5	174	1
33	Belgium	5	116	5
34	Chile	5	17	13

Conclusions

Firstly, the study reveals the existence of collaborative clusters, indicating groups of researchers who frequently work together in supply chain finance. These clusters highlight research communities or teams actively engaging in collaborative research efforts and knowledge

sharing.

Furthermore, the analysis identifies influential authors or nodes within the collaboration network. These authors have a higher degree of collaboration, indicating their pivotal role in connecting different research groups and facilitating knowledge exchange. Their con-

tributions play a vital role in fostering collaboration and driving supply chain finance research advancement.

This analysis of citations based on documents shows how citation and link counts of documents reflect their impact and visibility. The most influential document was “Geissdoerfer (2018)”, which had the most citations and links. The most popular document was “Pieroni (2019)”, ranked second in citations. The least impacting document was “Rosati (2019)”, which had fewer citations. Papers with no citations had limited interest. Citations were higher for older papers and lower for fresh ones, which may need more time to be recognized.

The analysis of citations based on authors identifies four clusters of authors based on their research productivity and citation impact.

Cluster 1 has Garza-Reyes, Jose Arturo, Govindan, Kannan, Kazancoglu, Yigit, Mangla, Sachin Kumar, and Mardani Abbas. They have similar numbers of publications and citations and a good link strength among them.

Cluster 2 has Jugend, Daniel, Mcaloone, Tim C., Pigosso, Daniela C.A., and Salvador, Rodrigo. They also have similar numbers of publications and citations and a valuable link strength among them. Cluster 3 has Arriago, Elisa, Chen, Lujie, and Jia, Fu. They have different levels of publications and citations and degrees of influence and recognition. Cluster 4 has simply Kirchherr, Julian. He has more publications but fewer citations and links than other clusters. His work is analyzed to understand its impact on his field.

Additionally, the study discusses the geographical distribution of collaboration in supply chain finance. It identifies patterns of regional collaboration, highlighting the presence of research collaborations within specific countries or regions. This suggests the existence of localized research communities and the importance of regional networks in advancing knowledge in supply chain finance.

Moreover, the study assesses the interdisciplinary nature of collaboration in supply chain finance. It identifies collaborations between researchers from different disciplinary backgrounds, such as finance, operations management, logistics, and economics. This interdisciplinary collaboration signifies the multidimensional nature of supply chain finance research and its integration with various fields of study.

Overall, this bibliographic study on collaboration in supply chain finance provides insights into the collaborative networks, influential authors, geographical

distribution, and interdisciplinary research within this field. These findings increase our understanding of the collaborative dynamics in supply chain finance, facilitating future collaborations, knowledge sharing, and interdisciplinary research efforts.

Limitations

Another limitation of the study is its temporal scope, focusing solely on 2020 to 2023. Consequently, the findings may not capture the broader context or long-term trends in the field under investigation.

Furthermore, it is crucial to acknowledge that the study exclusively employs bibliographic analysis as the evaluation method, potentially overlooking other valuable approaches for assessing research impact or quality. Alternative methods, such as qualitative assessments or expert opinions, could provide additional insights not captured by bibliographic analysis alone.

Moreover, the study’s analysis is restricted to publications in the English language, neglecting research published in other languages. This exclusion may result in an incomplete understanding of the research landscape, particularly considering that constructive contributions can emerge from non-English language journals.

These limitations should be considered when interpreting the study’s findings, as they may impact the generalizability and comprehensiveness of the results within the scientific community.

Future Research Direction

Using the current web page context, I can rewrite your summary as follows:

The following topics are suggested as possible avenues for future research in the field of supply chain finance using bibliographic methods:

Comparative analysis: Explore the differences and similarities of supply chain finance practices in diverse sectors, regions, or countries and their implications for financial performance and supply chain efficiency.

Emerging research areas: Identify and monitor the development of new topics or subfields within supply chain finance, which is a primary consideration in future research and collaborations.

Integration of qualitative approaches: Complement bibliographic analysis with qualitative research methods to gain more in-depth insights into supply chain finance initiatives’ practical implementation and outcomes.

Sustainability focus: Examine the incorporation of environmental, social, and governance (ESG) factors in

supply chain finance practices and their impact on sustainability and sustainable supply chain management.

Network analysis: Use network analysis techniques to understand collaboration patterns among researchers, institutions, and industries in supply chain finance.

Evaluation of program effectiveness: Perform a systematic review and meta-analysis of studies assessing the effectiveness of specific supply chain finance programs, measuring their impact on various outcomes.

Comparative analysis of finance models: Compare diverse supply chain finance models, such as factoring, platforms, or discounting, to understand their advantages, limitations, and adoption trends.

These future research directions will enhance knowledge and provide valuable insights for researchers, practitioners, and policymakers in supply chain finance.

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The Effect of Organisational Attendance Norms, Supervisor Support on Presenteeism: A Study of the Banking Sector of Uttarakhand Region

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Abstract

The objective of the study is to examine the effect of Organisational attendance norms and supervisory support on presenteeism and to investigate their impact on productivity. We collected data for the study from 350 bank employees in the Uttarakhand region. To analyze the data, Smart PLS 4.0 was applied. Results of the study found a positive and statistically significant link between presenteeism and organizational factors (organizational attendance norms and supervisory support), as well as between presenteeism and lower productivity. The study findings help organizations improve their policies to encourage employee performance, and organizations should prioritize health by understanding the consequences of presenteeism.

Keywords: [Presenteeism, Organizational Attendance Norms, Supervisory Support, Productivity]

Introduction

Absenteeism and presenteeism are two critical phenomena in the field of organizational behavior. Absenteeism is when an employee is absent from the workplace, whereas presenteeism is the opposite of absenteeism. Many researchers observe these two phenomena as interrelated (Caverley et al., 2007; Deery et al., 2014; Garrow, 2016; Christensen et al., 2013). If an employee is ill and must choose between staying home and coming in, the expectation is for them to report to work, which leads to organizational and personal repercussions. Presenteeism is showing up to work while being sick, whereas absenteeism is absent from work (Muchinsky, 1977; Johns, 2010). The phenomenon, known as “presenteeism,” has gained more attention and significance over the past two decades (Ruhle et al., 2020). Scholarly curiosity about the concept of “presenteeism” is fueled by several factors (Johns, 2010). Another contributing element is that presenteeism worsens health and increases the chances of absenteeism in the long run (Bergstrom et al., 2009). Presenteeism, defined as “showing up to work while feeling sick” (Johns, 2010), was commonplace before the pandemic, but now employees are under increased scrutiny due to the company’s response to the crisis and the effect of a pandemic. Market fluctuations, employment insecurity, and the pace of economic development all stress an individual’s life (Sverke et al., 2002), which means that in today’s cutthroat business environment, individuals are still coming to work despite feeling ill. By definition, presenteeism is the antithesis of absenteeism. Literature suggests this is a recent phenomenon and a globally observed idea (Johns, 2010; Lohaus et al., 2020). Demer-

outi et al. (2009) state that presenteeism can adversely affect individuals and organizations.

Presenteeism has two meanings: employees going to work while sick (Johns, 2010; Gilbreath & Karimi, 2012; Navarro et al., 2016; Lohaus & Habermann, 2019); or having a negative impact on productivity due to not being fully functional at the workplace because of their sickness (Karanika & Cooper, 2018). Many studies show a negative impact of presenteeism on an individual’s health, productivity, and organization (Hemp, 2004; Hansen & Andersen, 2008; Taloyan et al., 2012; Navarro et al., 2018; Zhu et al., 2018). Presenteeism has a hidden cost that employer has to bear (Quazi, 2013). According to Bae et al. (2021), the cost associated with absenteeism is 40%, whereas the cost of presenteeism is 60%, which includes indirect costs such as reduced work ability. Researchers identified that presenteeism is more costly than absenteeism (Hemp, 2004). According to a survey by the Chartered Institute of Personnel and Development, the number of employees who experienced presenteeism in the workplace has more than tripled since 2010. According to most findings, organizational or work-related factors (Bakker & Demerouti, 2007) and individual or personal factors (Johns, 2010) cause presenteeism. However, there are few studies related to organizational factors and presenteeism. More precisely, the studies focused on health, attitude, supervisory support, and replaceability (Johns, 2010). Nevertheless, previous research has identified numerous factors that influence presenteeism decisions, which include several organizational factors such as lack of staff and attendance policy as well as some personal factors such as financial difficulties, job insecurity, and com-

mitment to the organization (Miraglia & Johns, 2016; Lohaus et al., 2019). In addition, various studies on the determinants and factors of presenteeism considered it a result of employees' decisions about staying at home or attending work (Aronsson et al., 2000; Hansen & Anderson, 2008).

Presenteeism has become a global phenomenon encompassing different countries, cultures, and industries. Cooper and Lu (2016) highlight the role of culture and values in presenteeism in Asian countries. Most of the research on presenteeism comes from European countries, Canada, and Australia. Research in Asian countries is less extensive than in other regions. So, the current study explores the effect of organizational attendance norms and supervisory support on presenteeism in the banking sector of the Uttarakhand region and how this phenomenon impacts overall productivity. The current study also aims to contribute to the literature on presenteeism. By investigating significant literature and conducting empirical research, this paper seeks to provide practical recommendations for organizations to provide and promote a healthy and productive work culture and decrease the adverse effect of presenteeism on employees' well-being and health

Theoretical Background and Hypothesis Development Job-Demand Resource Model

The Job Demand Resource Model is a theoretical framework that explains various psychological factors related to the work environment (Bakker & Demerouti, 2007). The model explains two psychological factors: job demand and job resources. Job demand requires physical and mental effort; examples include time pressure, workload, and long working hours. Job resources are an individual's requirements for the job. Examples include social support, leadership, and training (Bakker & Demerouti, 2007). Various studies explained presenteeism with psychological factors and reported a significant impact on presenteeism (Hemp, 2004). Constituents of job demands and resources are associated with presenteeism (Johns, 2011; Claes, 2011). According to McGregor et al. (2018), there is an indirect link between job demand, job resources, and presenteeism. This theory explains that presenteeism may result from increased job demand, and job resources may supersede presenteeism through burnout and work engagement.

Johns Model

Presenteeism can be associated with the work environment. Johns (2010) developed a model of presenteeism.

The model assumes that primarily employees are fully engaged in their work and that their health is interrupted. With the health interruption, the employees are not able to work fully. Employees will decide whether to go to work based on the health event, such as whether the problem is acute, episodic, or chronic, as well as contextual and personal considerations. Contextual factors include job demand, security, reward systems, absence policies, teamwork, and replaceability; personal factors include personality, stress, and gender. Therefore, the main consequences of presenteeism and absenteeism were productivity, self-attribution, and downstream health. John's model of presenteeism included all factors related to presenteeism and absenteeism.

For this study, we used a combination of the JD-R model and the Johns model. In addition, we adopted organizational attendance norms from John's model and supervisor support from the job demand resource model. Figure 1 depicts the proposed framework.

Supervisory Support and Presenteeism

According to the Job Demand and Resource (JD-R) model (Bakker & Demerouti, 2007), job resources positively affect work engagement. Such physical, social, and organizational resources may reduce the allied costs related to job demands and psychological costs. In addition, job resources have a motivational aspect that leads to more work engagement and increased performance (Bakker & Demerouti, 2007; Bakker et al., 2008). Supervisory support is a job resource that positively influences work engagement and job demands (Mauno et al., 2007). According to Mayer and Gavin (2005), their relationships with supervisors or managers influenced employees' abilities. Employees' focus is affected by their interactions with their supervisors because they share emotional and cognitive behaviors with their supervisors and managers. Supervisor support influences presenteeism behavior in several ways (Wegge et al., 2014). Kinman and Wray (2018) stated that supportive supervisors encourage employee presenteeism behavior. Working while ill depends on support from supervisors (Zhou et al., 2016). According to a study by Bergstrom et al. (2009), supervisory support was positively related to presenteeism, meaning that employees whose supervisors supported them were likely to come to work even when they were not feeling well. Another study by Lohaus and Habermann (2019) also found that despite not feeling well or having any other problems, employees came to work because they felt support from their superiors.

Based on the literature, we thus hypothesized that:

H11: Supervisory support has a positive relationship with presenteeism.

Organizational Attendance Norms and Presenteeism

Organizational norms are propositions about how employees should follow those (Hammer et al., 2004). Organizational attendance norms are places where employees must attend work despite their poor health conditions (Hammer et al., 2004; Saksvik, 1996). According to Aronsson and Gustafsson (2005), work-related demands and pressures associated with a need for presence influence attendance decisions. Johns (2011) found a negative association between the absence policy and presenteeism. As a result, organizational attendance norms have been characterized as a negative presence in the workplace (Kristensen, 1991). In a study, Johns (2010) observed that employees who experienced pressure to attend work were more likely to engage in presenteeism behavior. Bergstrom et al. (2009) found that employees who had a progressive opinion about the attendance policies of the organizations were more likely to engage in presenteeism behavior. Aronsson and Gustafsson (2005) proposed a model that states that a person's decision to work when he is not well depends on the organization's attendance demands and policies. There are few studies on organizational attendance norms and presenteeism. A meta-analysis study by Miraglia and Johns (2016) investigated whether presenteeism was positively related to organizational policies. Several studies have revealed that organizational attendance norms can influence an individual's decision to come to work, even when doing so may be coun-

terproductive (Johns, 2010; Miraglia & Johns, 2016). Hansen and Andersen (2008) found that employees who felt pressured to attend work were likelier to engage in presenteeism. Based on the literature, we thus, hypothesized that:

H₁₂: Organizational attendance norms have a positive relationship with presenteeism.

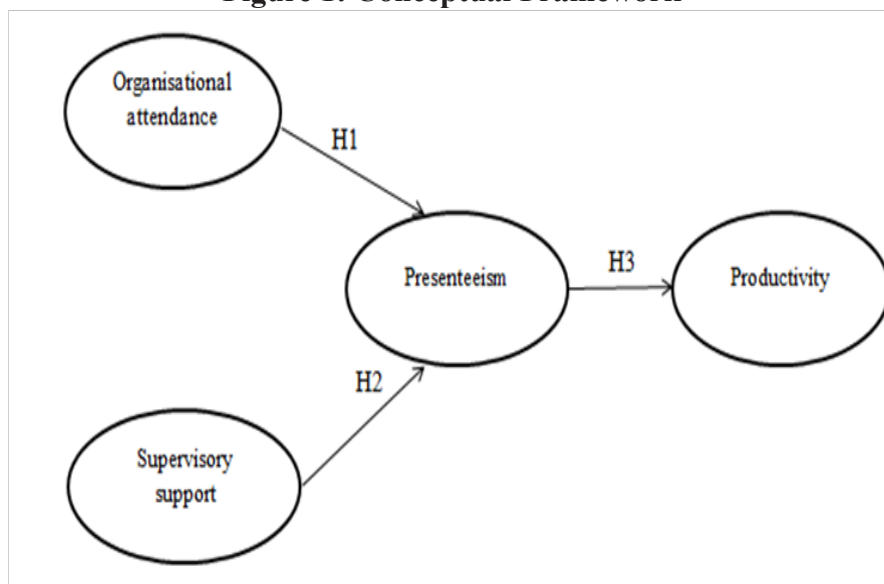
Presenteeism and Productivity Loss

Presenteeism refers to a decrease in the performance of an employee and a decrease in productivity (Roberts, 2005). Presenteeism plays an important role when it comes to the productivity level of an employee. When an employee works longer hours or attends work when he is not feeling well, it results in burnout (Bakker et al., 2008). Earlier studies (Goetzel et al., 2004) focused more on the negative impact of absenteeism on productivity and paid less attention to presenteeism. However, some studies observed that presenteeism significantly impacted organizational productivity loss (Weaver, 2010). According to Druss et al. (2001), presenteeism and productivity have a negative relationship. Yamashita and Arakida (2006) explained that productivity loss is the consequence of presenteeism. Shamansky (2002) found that when a person is not feeling well but still shows up to work, it leads to productivity losses in quantity and quality. According to Burton et al. (1999), presenteeism significantly predicted productivity loss. Based on the literature, we thus hypothesized that:

H3: Presenteeism has a positive relationship with productivity loss.

According to the hypotheses, Figure 1 depicts the proposed framework

Figure 1: Conceptual Framework



Methods

Sample and Procedure

We conducted an online survey among Uttarakhand Bank employees. However, data collection from all banking sector employees in India was impossible. So, we have confined our study to Uttarakhand only. Three public and three private banks were selected for the study because both public and private sector banks have different policies and work environments. ICICI Bank, HDFC Bank, and Axis Bank were the three private banks undertaken for the study. The study included three public sector banks: SBI, Bank of Baroda, and Punjab National Bank.

Using G*Power software (Faul et al., 2007), it was determined that a minimum sample size of 262 (at a sig-

nificance level of 0.05 and an effect size of 0.05) was required for the study. However, for Structural Equation Modeling (SEM), a minimum of 200 responses was required, according to Kline et al. (2015). As a result, while 400 questionnaires were sent, only 350 replies were considered relevant for the study, then the predicted sample size. The justification for approaching the banking sector was that it is the most active part of the Indian economy. Therefore, data was gathered using a standardized questionnaire. The respondents comprise employees aged between 20 and 30 years and above. More than half of the respondents were male (66.1%) and female (33.9%). Other details of the demographic profiles are in Table 1.

Table 1: Demographic Profiles

N=350		Frequency
Age	20-30	60.4%
	31 and above	39.6%
Gender	Male	66.1%
	Female	33.9%
Education	Undergraduate	17.5%
	Post Graduate	82.5%
	Ph.D. and Above	-
Years of Experience	<10 years	67.9%
	11-20 Years	14.2%
	21 and above	17.9%
ICICI Bank	60	
	17.14%	
HDFC Bank	50	14.28%
Axis Bank	60	17.14%
SBI	80	22.85%
Bank of Baroda	50	14.28%
Punjab National Bank	50	14.28%

Measurement

Supervisory support was measured using Quinn (1988). The questionnaire consists of six questions and uses a 5-point Likert scale ranging from 1 for “strongly disagree” to 5 for “strongly agree.” Organizational attendance norms were measured using Thun et al. (2013). The questionnaire consists of four questions and uses a 5-point Likert scale ranging from 1 for “strongly disagree” to 5 for “strongly agree.” Presenteeism was measured using Koopman et al. (2010). The questionnaire consists of six questions and uses a 5-point Likert scale ranging from 1 for “Strongly Disagree” to

5 for “Strongly Agree.” Finally, productivity loss was measured using a questionnaire (Shikiar et al., 2004). The questionnaire consists of six questions and uses a 5-point Likert scale ranging from 1 for “strongly disagree” to 5 for “strongly agree.”

Results and Analysis

The analyses comprised the measurement model, followed by the structural model. Smart PLS 4 was used to do the PLS-SEM analysis. PLS-SEM was utilized for predicting and reflecting variables. This approach is non-parametric and does not take into account data distribution. PLS-SEM is a multivariate analysis method

used to calculate variance-based models. Especially in the social sciences, PLS-SEM is appropriate for assessing quantitative data. It can be applied as a path model. The reason for applying PLS-SEM can be a scale of measurement, a minimum sample size, or non-normal data (Henseler et al., 2009). According to Garson (2013), PLS-SEM has the advantage of including multiple dependent and independent variables and can handle multicollinearity. The advantages of PLS-SEM also include path model implementation. Therefore, PLS-SEM is a more appropriate and selected method used in the social sciences and is best for multivariate analysis (Hair et al., 2013). Thus, we used PLS-SEM for our study because of its various advantages. By using SEM, we developed a model and assessed it. The analysis is followed by reliability and validity using a measurement model and then a structural model analysis.

Measurement Model

The measurement model assesses the reliability and validity of the model by evaluating factor loadings, convergent validity, discriminant validity, and composite reliability. Factor loadings signify the strength and direction of the relationships. For example, factor loadings should be greater than 0.7 (Hair et al., 2019). Apart from a few loadings, factor loadings were significantly higher than the acceptable value, i.e., 0.7. However, those values were significant, and we can retain them

to test the model. Hair et al. (2019) suggest that when loadings are below the recommended value, AVE values should be checked to decide whether to retain the item. For example, for Cronbach's alpha, the constructs' values are more than the threshold value, i.e., all values are more than 0.70 (Hair et al., 2016), with organizational attendance norms (OAN) = 0.786; productivity (PRO) = 0.87; presenteeism (PRE) = 0.866; and supervisor support (SS) = 0.821.

Convergent validity measures the degree to which different indicators of the same construct are related (Hair et al., 2019). First, convergent validity was measured by AVE (average variance extracted). For example, a value above 0.5 indicates good convergent validity. Here, all values are above the recommended value, i.e., 0.5, which explains that the construct explains at least 50% of the variance of its items (Hair et al., 2019), thus indicating good convergent validity. Next, composite reliability was evaluated. Composite reliability measures the internal consistency of the constructs. For example, values above 0.7 indicate good reliability. Here, all the values were above the threshold value, i.e., 0.7, with organizational attendance norms (OAN) = 0.864, productivity (PRO) = 0.902, presenteeism (PRE) = 0.9, and supervisor support (SS) = 0.871, indicating that all the constructs have good reliability. All the results of the measurement model are depicted in Table 2.

Table 2: Measurement Model

Constructs	Items	Loadings	Cronbach's Alpha	Rho-A	Composite reliability	Average variance extracted (AVE)
OAN	OAN 1	0.78	0.786	0.82	0.864	0.621
	OAN 2	0.578				
	OAN 3	0.813				
	OAN 4	0.938				
PRO	PRO 1	0.732	0.87	0.875	0.902	0.607
	PRO 2	0.709				
	PRO 3	0.829				
	PRO 4	0.796				
	PRO 5	0.797				
	PRO 6	0.806				
PRE	Pre 1	0.779	0.866	0.883	0.9	0.603
	Pre 2	0.667				
	Pre 3	0.795				
	Pre 4	0.685				
	Pre 5	0.808				
	Pre 6	0.901				

SS	SS1	0.783	0.821	0.837	0.871	0.532
	SS2	0.742				
	SS3	0.604				
	SS4	0.683				
	SS5	0.67				
	SS6	0.864				

Source: Author's Calculations

Further, discriminant validity was calculated both by the HTMT ratio and the Fornell-Larcker criterion. The Fornell-Larcker criterion explains that the construct should better explain the variance of its indicators than other constructs' variance (Fornell-Larcker, 1981). Un-

fortunately, the threshold value of the HTMT ratio was below 0.85 (Henseler et al., 2015). Here, all the values were below the recommended value. The results are shown in Table 3.

Table 3: Discriminant Validity

HTMT	OAN	PRO	Pre	SS
OAN	0	0	0	0
PRO	0.748	0	0	0
Pre	0.697	0.762	0	0
SS	0.77	0.826	0.67	0

Source: Author's Calculations

Fornell-Larcker Criterion

	OAN	PRO	Pre	SS
OAN	0.788			
PRO	0.628	0.779		
Pre	0.584	0.676	0.776	
SS	0.637	0.711	0.587	0.729

Source: Author's Calculations

Structural Model Assessment

The next step after validation of the measurement model is to measure the structural model. The significance of P values was measured in the structural model, and predictive accuracy was assessed through R2 and VIF values. Values of VIF should be below 3.33 (Hair et al., 2019). Through the coefficient, the hypothesis's significance was tested. The beta value of every path hypoth-

esized in the model was calculated. It indicates that the greater the beta value, the more substantial the effect of a latent variable. However, the value of beta had to be tested by T-statistics. Bootstrapping was used to evaluate the significance of the hypotheses (Chin, 1998). The results of the structural model assessment are depicted in Table 4. Path coefficient, t-statistics, and P-value results are shown in Table 4.

Table 4: Structural Model Assessment

	Original sample (O)	Sample mean (M)	Standard deviation (ST-DEV)	T statistics (O/STDEV)	P values	Decision
OAN -> Pre	0.353	0.353	0.053	6.65	0	Accepted
Pre -> PRO	0.676	0.68	0.029	23.397	0	Accepted
SS -> Pre	0.362	0.366	0.051	7.144	0	Accepted

Source: Author's Calculations

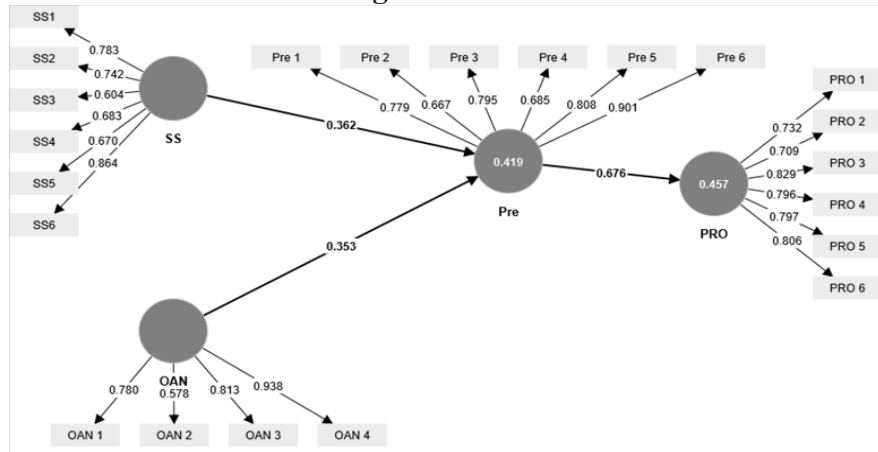
In H1, we predicted that supervisory support would affect the presenteeism decision positively. As predicted, the findings in Table 4 and Figure 2 confirmed that

supervisory support and presenteeism had a significant and positive relationship ($\beta=0.362$, $T=7.144$, $p=0.000$). Hence, H1 was supported. Furthermore, in H2, we

observed a positive relationship between attendance norms and presenteeism ($\beta=0.353$, $T=6.65$, $p<0.000$). Hence, H2 was confirmed. Furthermore, we predicted that presenteeism and productivity would have a posi-

tive relationship. As per the results in Table IV and Figure 2, we confirmed the hypothesis ($\beta=0.676$, $T=23.397$, $p<0.000$). Hence, H3 was supported.

Figure 2: Path Model



Predictive Relevance of Model

In PLS, the predictive relevance of the model refers to the level to which the model can accurately predict the outcome variable based on the predictor variable (Hair et al., 2016). Since the coefficient of determination (R²) for productivity was 45.7%, the model can explain a fair amount. However, according to Henseler et al. (2015), R² is not the only metric that should be used to estimate

the model’s power. As a result, we will also examine the Q² projection. In this particular research endeavor, Q² falls within the acceptable range. The measure Q², which Stone and Giesser created in 1974, also considers the model’s out-of-sample predictive significance. The value of Q² is provided in Table 5. The results of the Q² prediction demonstrate that the model is in good tune.

Table 5: Predictive Relevance

	R-square	R-square adjusted	Q2 Predict
PRO	0.457	0.456	0.454
Pre	0.419	0.416	0.409

Source: Author’s Calculations

Discussions

The purpose of this research was to investigate the connections that can be made between supervisory support, organizational attendance norms, presenteeism, and lost productivity among bank employees in the state of Uttarakhand, India. The findings suggest a strong positive link between supervisory support and presenteeism, consistent with earlier studies’ findings (Mauno et al., 2007; Mayer & Gavin, 2005; Kinman & Wray, 2018; Zhou et al., 2016). Mayer and Gavin (2005) found that supervisory support had a significant positive relationship with presenteeism. The findings suggest that employees who feel supported by their managers are likelier to report to work even when ill. This finding highlights the importance of a positive work environment for promoting employee engage-

ment and overall job satisfaction. Although the findings align with previous studies’ findings, other investigations have produced different results. For instance, Skagen and Collins (2016) found no correlation between supervisory support and presenteeism in their study’s participants. In another study, Hakanen et al. (2006) found a negative relationship between supervisor support and presenteeism in the workplace. Demerouti et al. (2014) also observed that employees who perceived higher support from their supervisors were less likely to involve in presenteeism. Similarly, the current study examined a positive relationship between organizational attendance norms and presenteeism, which supports the finding of Aronsson and Gustafsson (2005) that job-related demands influence attendance decisions. This finding is further

corroborated by the findings of a meta-analysis study that was conducted by Miraglia and Johns (2016). The authors discovered a favorable association between presenteeism and organizational policies. Skagen and Collins (2016) found that organisations with strict attendance norms were more likely to be involved in presenteeism behavior, leading to productivity loss. According to these findings, organizations' attendance practices had to be rethought to encourage a healthy work atmosphere while minimizing productivity losses. On the other hand, Hansen and Andersen (2008) came to the opposite conclusion and found that organizational attendance norms did not affect the presenteeism behavior of employees. These data contradict that conclusion.

In addition, the findings of this study indicate a relationship between presenteeism and decreased productivity levels. These results are consistent with those found in the investigations conducted by Roberts (2005), Druss et al. (2001), Yamashita and Arakida (2006), and Shamansky (2002). The study's findings suggested that presenteeism impacts employee health and productivity. Because of this, organizations are responsible for urging their workers to take time off from work when they are ill to prevent a loss of production. In contrast to these results, other research has shown results in the opposite direction. For example, various studies had contrasting findings that presenteeism was negatively related to productivity loss (Aronsson et al., 2000; Hemp, 2004; Ruhle, 2020). In addition, Johns (2010) found that presenteeism was a predictor of productivity loss. Employees who attend their work despite having health issues exhibit a loss of productivity.

Implications

The study's findings have a variety of implications, not only for academics but also for businesses and other groups. Firstly, the findings underline the necessity of supervisors' assistance in lowering presenteeism on the part of employees. This support might be through encouragement, feedback, or recognition. Organizations need to prioritize the provision of enough help and resources to supervisors for that person to behave appropriately and support the employees under their supervision. In addition, organizations must provide training and development courses for supervisors to improve their supportive conduct. This is necessary for supportive behavior to be improved.

The second thing that needs to be done is for organizations to review their rules and make it so that em-

ployees can call in sick when they are not feeling well. This is the second item that needs to be done. In addition, corporations should make these kinds of restrictions known to their staff members so that employees feel safe taking time off when required. This will allow companies to comply with the regulations.

Thirdly, the findings show that firms should seek to improve the health and well-being of their staff members to increase productivity and minimize absenteeism. This was found to be the case when the researchers analyzed the data. When employees are physically or mentally sick but still come for work, their performance is hampered; they cannot perform their task effectively and efficiently. Therefore, organizations must initiate wellness initiatives that promote a good work-life balance for their employees. In conclusion, the research adds to the current body of knowledge on presenteeism and has implications for conducting additional research in this area.

Limitations and Scope for Future Research

The current research has only a few limitations. To begin, the nature of the research, which is cross-sectional, makes it difficult to determine whether or not there is a causal connection among the many variables. In preparation for upcoming research, longitudinal studies may be carried out. Second, the study participants were limited to those working in the banking industry in Uttarakhand, reducing the study's generalized capacity. Finally, the study might be repeated in a new nation and within a different industry to conduct additional research, and the results could then be analyzed.

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A Study on Transphobic Outlook Among Gen-X People

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Abstract

Homosexuality has been made legal in India by the Supreme Court, but there are still issues with sexual, physical, and psychological abuse. Transphobia is a prejudice attitude on the transgender or the LGBTQIA+ community. Though our Indian laws are designed to provide equality to all community, but why there are still so many transphobes is still a puzzle. The LGBTQIA community in India needs to have its rights and obligations upheld, and revolutionary measures are being done in many places to spread awareness. For many years, there has been discrimination against the LGBTQ population among people all over the world. This study has a major impact in preventing harassment, inequality, and discrimination against the LGBTQ community. It also explains that creating a peaceful and egalitarian society requires more than just speaking out in favour of offering equal opportunity for members of the LGBTQ community. Through this study, it was clearly defined that LGBTQ people are subject to bullying and harassment just because they transform into another gender and respondents remained neutral with the statement that educational institutions must include them in mainstream education. Social media plays a major role in influencing negative attitude towards LGBTQIA+ Community.

Key Words: [LGBTQ, Trans People, Bullying, Equal Rights, Education, Inclusion]

Introduction

C Transphobia refers to a negative viewpoint of transgender people or the LGBTQIA+ community. Although the laws in India are set up to ensure their equality, it is still unclear why there are still so many people who are transphobic. The LGBTQIA community in India needs to have its rights and obligations upheld, and revolutionary measures are being done in many places to spread awareness.

LGBT stands for lesbian, homosexual, bisexual, and transgender. Since the 1990s, the initialism—along with several of its well-known variations—has been used to refer to both sexual orientation and gender identity. The initials LGB, which came to replace the term homosexual (or gay and lesbian) in relation to the larger LGBT group in the middle to late 1980s, are short for lesbian, gay, bisexual, and transgender. The acronym LGB is still used in place of LGBT when transgender people are not included.

Some lesbian organisations split up because of conflicts over whether their political goals should be feminism or homosexual rights. One such organisation was Daughters of Bilitis, which was founded by Del Martin and Phyllis Lyon but split up in 1970 because of conflicts over which goal should come first.

Differences in gender roles, such as butch and femme, were considered as oppressive by lesbian feminists since they stressed equity. Lesbian feminists disapproved of the alleged chauvinism of homosexual men as well as the gender role-playing that had been common in bars.

Many lesbian feminists therefore refused to support gay men's causes or work with them.

The term "Transphobia" is a conventional compound that was based on the word "homophobia." First, there is the neo-classical prefix trans-, which originally meant "across, on the far side, beyond," and second, there is the suffix -phobia, which comes from the Ancient Greek letter o (phóbos, which means "fear"). Along with lesbophobia, biphobia, and homophobia, Transphobia is a member of the word family used to express intolerance and prejudice towards LGBT people.

Although some sites used slightly different dates, in general, the phrase "Generation X" refers to the group of Americans who were born between 1965 and 1980. It has occasionally been referred to as the "middle child" generation because it follows the well-known baby boomer generation and comes before the millennial generation. The fact that Generation X has fewer individuals than either of those groups is one of the reasons it is thought to have been neglected or overlooked when the generations are discussed.

Since they were the first generation to have some exposure to personal computers while growing up, Gen Xers are technologically sophisticated. As children and young adults, they too experienced challenging economic times in the 1980s and 1990s. Many people describe Gen Xers as resourceful, independent, and dedicated to maintaining work-life balance. They are more ethnically diverse than baby boomers and are probably more liberal on social issues. These stereotypes of Gen

Xers as complainers or slackers have been challenged, but they were widely used in the 1990s.

Attitude Towards LGBTQ Among Gen-X People

LGBTQ+ persons are impacted by generational norms and expectations, and more lately, they have begun to embrace generational identity differently than their heterosexual colleagues. LGBTQ+ people don't necessarily "fit" into the paradigm of their birth group, in contrast to heterosexual people. The change in attitudes and beliefs towards LGBTQ+ individuals over time is one sign of how far societies have progressed in gaining equal civil rights.

The general ideas and values of the generational birth cohort are often adopted by the subsequent heterosexual generation, and this includes views and attitudes regarding LGBTQ+ people and lifestyle. These widespread beliefs surely have an impact on LGBTQ+ people.

Transgender Inclusion in Society

Transgender persons have played a significant role in Indian civilization since the dawn of time, although they are routinely disregarded and denied rights. The Indian Constitution grants fundamental rights to every citizen, some of which are even available to non-citizens; nonetheless, transgender persons are virtually denied these rights. In addition to economic issues, the community also faces legal, social, political, cultural, health, and political issues.

Transgender people have long been treated with reverence as messengers of God. They still treasure the presents they received upon marriage and conception.

Some groups now prefer the term "Trans*" over "transgender" since it is more inclusive. Trans includes all non-cisgender (gender queer) identities, including transgender, transsexual, transvestite, gender queer, gender fluid, non-binary, genderless, agender, non-gendered, and third gender, but the term "transgender" has historically been used to describe trans men and trans women. Similar to how the terms transgender and transsexual are frequently used interchangeably, some transsexuals disagree with this.

Challenges Faced by the LGBTQ Community People

Despite the fact that modern Indian teenagers are more accepting of homosexuality and queer identities than ever before, LGBT people still struggle to gain acceptance in the context of their families, homes, and educa-

tional institutions. Individuals have occasionally come forward to tell their families that they are not the individuals they were raised to be.

LGBT individuals face significant challenges every year in the form of crime, unemployment, prejudice, poverty, and access to healthcare. Those who have preconceptions find LGBT people's behaviour offensive.

Lesbian, homosexual, and transgender people have severe negative effects as a result of prejudice and discrimination. As a result, the following results have been achieved:

- Being rejected and excluded in the community,
- Unable to access a variety of services, and unaware of their rights.
- Earlier school dropout.
- Leaving the house and family.
- Having less possibilities than others.
- Travelling to many locations, including cities and urban areas.

Gay men continue to be increasingly popular among transgender lesbian women despite the fact that various organisations and social media sites sponsor pride marches and significant public awareness campaigns on LGBTQ rights. It is rising. Families in rural India responded to the various conversations about the Pride March that were filling her Twitter feed in different ways. Because of their varied gender identities, even they had the intention of killing their own sons and daughters. The villagers think that leaving home is the only way to survive in this society without financial or social assistance.

Although homosexuality has been made legal in India by the Supreme Court, there are still issues with sexual, physical, and psychological abuse. They do not yet have the legal authority to wed and adopt a relative. The government provides opportunities to community members based on quotas, despite the fact that they have historically been denied access to job, education, and healthcare. Their sexual orientation and gender expression are the main reasons why they are harassed.

Literature Review

Klemmer et al. (2018) pointed out that there is scant evidence that the association between minority stress and mental health is mediated by psychological processes among trans women. Results in terms of mental health are related to how satisfied trans women are with their bodies. This study employed a model of minority stress to investigate whether one's level of body satisfaction had any indirect effects on the relationship be-

tween victimisation based on transphobia and anxiety and depression.

Scandurra et al. (2018) explained about people who identify as transgender or gender nonconforming (TGNC) face significant censure. They might internalise the traditional gender attitudes of society as a result, leading to poor mental health results. The psychological mediation framework illuminates the psychological mechanisms by which anti-transgender prejudice may have an adverse impact on mental health as an extension of the minority stress model.

Gunjawate et al. (2020) stated that transgender people may need vocal and telephony during the transition process. Therapists are increasingly helping transgender patients with voice and communication treatment and providing therapeutic services. Past research from several nations has shown that speech-language pathologists lack the necessary skills to assist the lesbian, gay, bisexual, transgender, and queer groups. Such findings are currently unavailable in the context of India. As a result, it was felt that it was important to examine the issues surrounding the treatment of transgender people in speech-language pathology settings in India.

Omercajic & Martino (2020) conducted an analysis of Ontario's transgender affirmative policies and an examination of their effects on issues of gender equity and gender reform in the educational system. We offer a critical analysis of these policies using a case study approach, and we discuss how stakeholders who are familiar with and knowledgeable about trans-affirmative policies from two school boards in Ontario are interpreting their significance in relation to addressing trans inclusion in schools.

Aguirre-Sánchez-Beato (2020) explained that there is a lot of transphobia and prejudice towards trans persons. This paper aims to identify the theoretical perspectives and categories used in contemporary scientific research to explain discrimination against trans people. This is done in light of the growing scientific interest in understanding this type of discrimination and the fact that scientific knowledge shapes how a phenomenon is understood and addressed. Theoretical approaches from the cognitive and discursive spheres were found to be the two main categories. Regarding how the issue of transphobia and discrimination is framed, clarified, and the range of options for action provided, the limitations of the two methods are explored.

Methodology

Researcher has adopted descriptive design with an aim to accurately determine the attitude of Gen X people's attitude towards Transgender and also LGBTQIA+ Community. A self prepared interview schedule was used to collect data from the respondents. The tool contains three sections and a total of 35 items, section one focuses on the demographic details of the participants, section two focuses on perception towards inclusion of community in various aspects, and section three consists of attitude towards this community. Data were collected from Gen X People whose age category falls between 35-65 years.

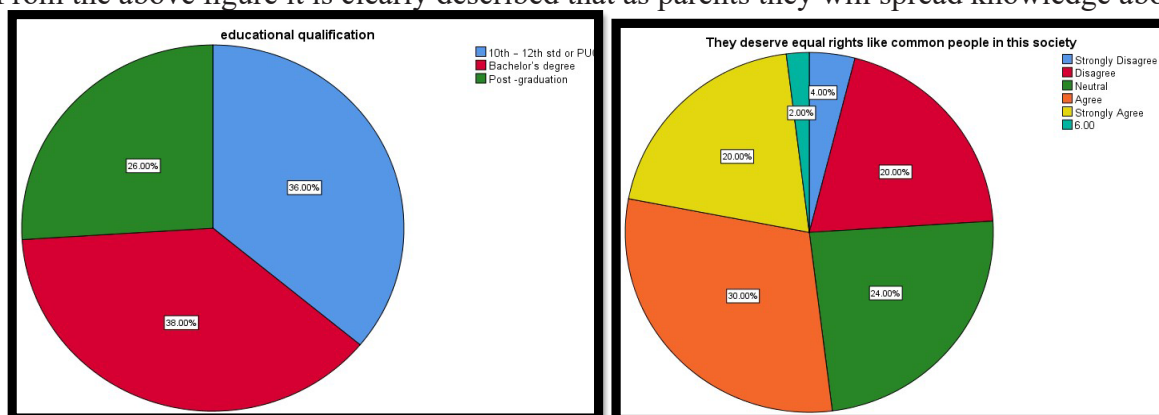
Results

1. Educational Qualification

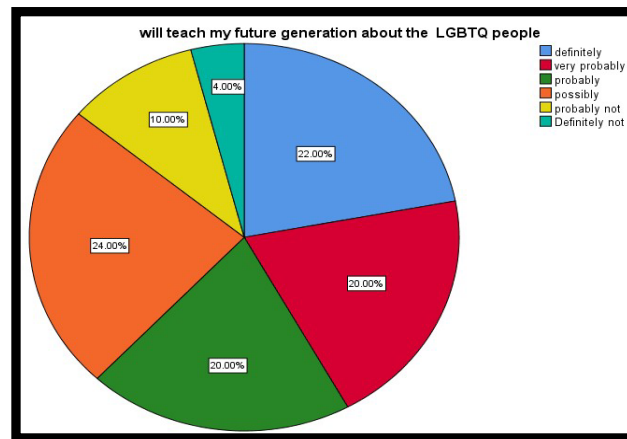
It is seen from the above figure that most of the respondents have completed their bachelor's degree. Through this it is inferred that, most of the respondents were highly educated.

2. Dessimination Of Knowledge About LGBTQIA+ Community To Future Generation

From the above figure it is clearly described that as parents they will spread knowledge about



LGBTQIA+ Community to the future generation. This would help their kids to understand about this community and curb the chance of being transphobic.



3. Perception that LGBTQ People Should Work Only As Sex Workers and Caregivers

There is a thin line between the perception of LGBTQ People should work only as sex workers and caregivers, which clearly describes that Gen X People still not sure about their attitude towards this communities occupation preferences.

4. Perception that LGBTQ People Deserve Equal Rights

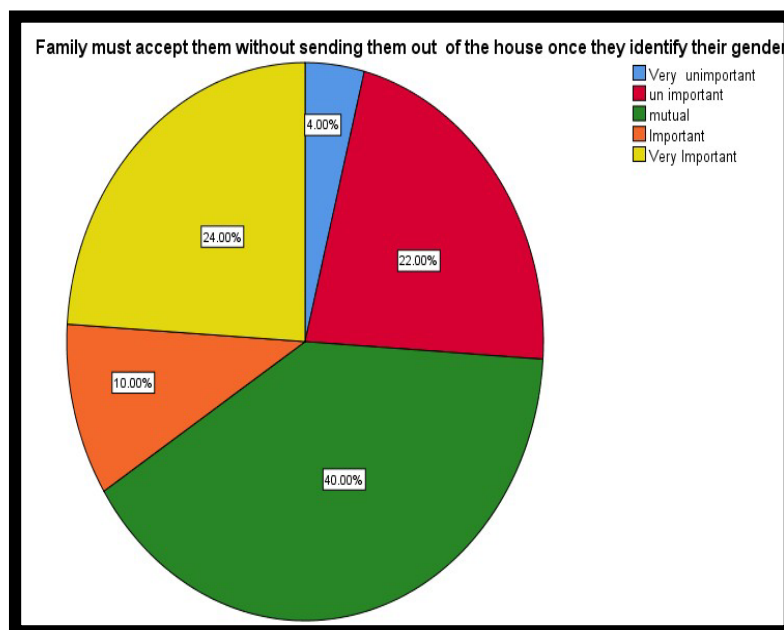
Though the respondents were not clear about their perception on preference of occupation of this community, they were imbibed with the thought that these people

should also be given equal rights as like common people in the society.

5. LGBTQ+ Subject to Bullying and Harassment Just Because they Transform into another Gender

Most of the respondents have felt that this community people should not become the victim of bullying and harassment just because they transform into another gender.

6. Respondent's Perception on Family Must Accept them without sending them out of the House once they Identify their Gender



The figure clearly describes that respondents have mutually agreed to the statement that families should accept this community once they identify their gender.

6. Statistical Analysis of Gender of the Respondent and the Importance that Society should be Aware of the Sufferings and Difficulties that LGBTQ People Undergo

T	Df	Mean Difference	Significant	
Equal Variance analysis	-.285	48	-.09615	.938

There is a statistical mean difference between gender of the respondent and the importance that society should be aware of the sufferings and difficulties that LGBTQ people undergo.

Discussions

LGBTQ individuals should have equal rights in society. To create an equal society, it is necessary to effectively include the LGBTQ community. Making the next generation aware of the rights of the LGBTQ community in our society is crucial. When the populace is prepared to adore them as gods, they ought to be prepared to accept them as regular people as well. To lessen Transphobia, it is up to individuals to welcome them as peers. The LGBTQ community is fully entitled to employment in any of the sectors in which they are interested. It's critical to treat everyone equally when it comes to employment possibilities. Families must welcome them without discrimination or domestic abuse.

Conclusions

Finding out how many people are still transphobic was the major goal of this study. Many people have learned about the LGBTQ community and are now actively supporting them in a variety of ways. The educational institutions must assert their importance and rights in the public education system. Even though there are numerous awareness campaigns and events, it is still everyone's responsibility to accept them as regular members of society. The government can take additional initiatives and actions to process LGBTQ-related programmes and policies more successfully.

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The Dynamic Relationship Between Inflation and Economic Growth – An Indian Experience

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Abstract

This study has examined the relationship between inflation and economic growth (GDP) in India. The study is applied an ex-post research design and some preliminary tests were performed to ensure data stationery, and also ascertain how well the series was distributed. Also, the Augmented Dickey-Fuller (ADF) has adopted for explaining the former and descriptive statistics. Johansson Co-Integration technique has been used to estimate macroeconomic variables like GDP, inflation dependent and independent variables. It is conformed that there is positive long run relationship between variables like GDP and inflation. Finally, the study recommended that government should adopt a tight monetary policy to maintain a low-level rate of inflation in the country from time to time. In addition, the government should maximise spending more on productive projects thanon unproductive public spending to ensure fiscal stability and sustain robust economic growth in the Indian economy.

Keywords: [Inflation Rate, India, Gross Domestic Product].

Introduction

The central aim of macroeconomic policies of country is to promote economic growth with low rate of inflation in a country. The economic performance of a country (economy) can be measured by rate of Inflation and economic growth (GDP). The both macroeconomic indicators will indicate the economy strength of the country over a period of the time. Furthermore, all the nations' macro economists, policy makers and central monetary authorities will debate and discuss about the relationship between inflation and economic growth in order to enhance the economic performance in a country. Mostly, the bone of argument macro economists is that whether inflation is mandatory for GDP as well as whether the inflation is unfavourable to economic growth of the country. The economic growth of the country will be depending on foremost on the rate of capital formation and the rate of capital formation is determined by the rate of savings (S) and investment (I) in the economy. Thus, the basic questions are that whether inflation will be influence the economic growth and whether it is disturbing the rate of savings and volume of investment.

In addition, Keynesian economists have believed that inflation will not be hurtful to economic growth. Furthermore, the low and stable inflation could promote economic growth of the country over a period of time and vice versa. Some more economists have a positive view, that there will be positive relationship between inflation and economic growth. Furthermore, the inflation is directing to redistribute incomes in favour of higher income groups whose incomes have mostly of profits and non-wage incomes. As the upper income classes

are having higher propensity to save, the induced redistribution of incomes has been enhancing the total savings. As a result, the savings will increase the supply of investible funds and lowers the rate of interest. Consequently the saving will be invigorating the investment as well as economic growth in a country. The model of Phillips curve also hypothesizes that high inflation is a positive effect on the economic growth by contributing with low unemployment rate in the economy.

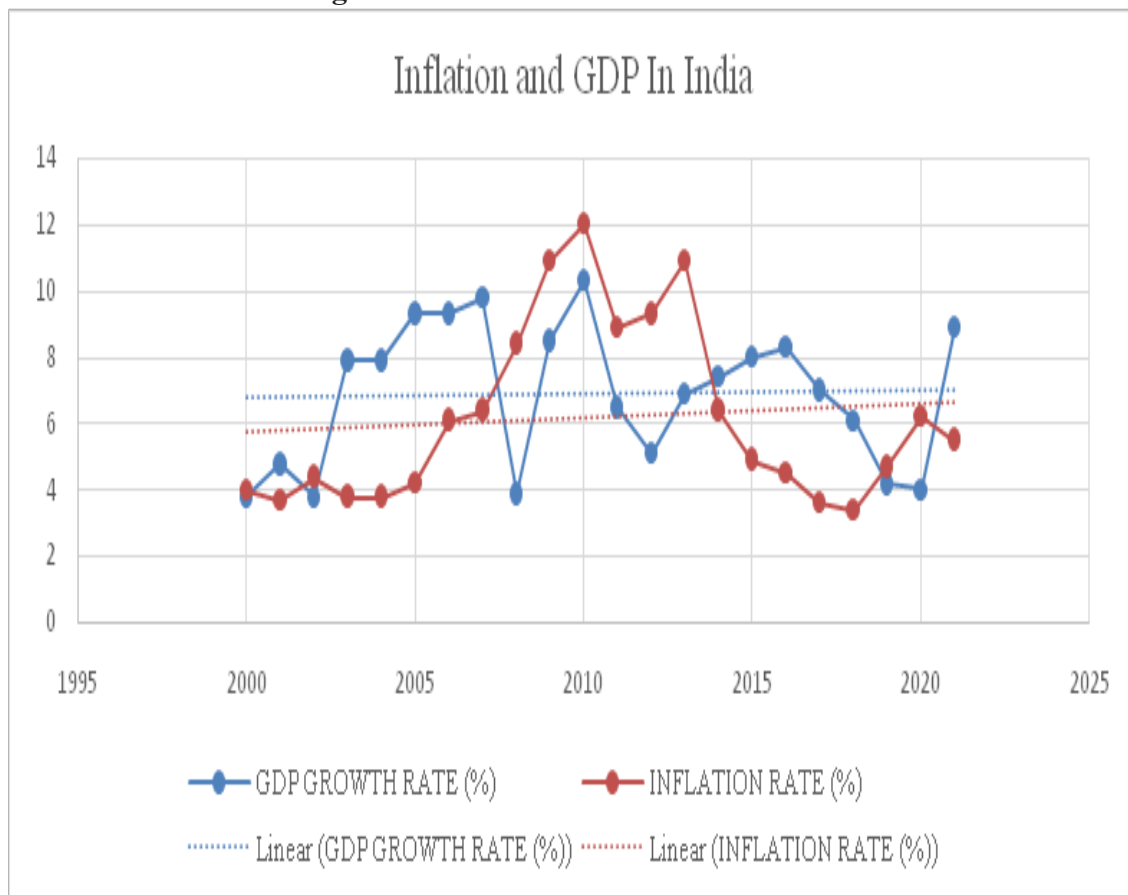
But on the other hand, the monetarist has argued that the cost of inflation on welfare in a country is that create the harmfulness to the economic growth. Particularly, monetarist such as Fischer (1981); Eckstein and Leiderman (1992); Gillman (1993); Simonsen and Cysne (1994); and Dotsey (1996) have argued that outcome of inflation will be unfavourable to the economy like the distributive effects from creditors to debtors, increasing uncertainty disturbing the consumption, savings, borrowing and investment decisions and the most significant costs associated with unanticipated inflation of distortions on relative prices of commodity. Monetarists also think that the long-run prices has been affecting by the growth of money supply with no real effect on economic growth. However, in reality the inflation makes the real harmfulness for other macro economic variables like the impact on capital accumulation, export and investment, and also negatively impact of country's growth rate.

As well as the scholars like Smyth (1992, 1994, and 1995), De Gregorio (1993), and Barro (1995) have been recently estimated that the impact of inflation on investment and productivity have small and negative in the

economy. Predominantly Smyth (1992) has established that if one percentage point increases in the USA inflation, the annual growth rate has reduced by 0.22%. Also Smyth (1994) exposed that in the USA each one percentage point increase in acceleration causing a reduc-

tion of 0.16% in growth. By this above economic controversial background, the researcher has motivated to carry out the investigation on relation between inflation and economic growth in Indian context. From figure below shows the time plot of growth and inflation.

Figure 1: Growth and Inflation in India



Authors' Computation, 2022

The graph in Figure 1 presents pictorially the trend of inflation rate (INFR) and economic growth (GDP) in India for the sampled period from 2010 to 2021

Empirical Review

A considerable number of empirical works had been reviewed in the course of this study as Encapsulated.

Madurapperuma (2016) aimed to study the impact of inflation on economic growth in Sri Lanka for the period of 1988 – 2015 by applied the framework of Johansen co integration test and Error Correction model. The study results indicate that there was a long run negative and significant relationship between economic growth and inflation in Sri Lanka during the study period.

Hussain and Kashif (2016) have studied the impact of macroeconomic indicators like inflation and GDP of Pakistan since 1980 to 2011. The data has been collected from website of the State Bank of Pakistan and the World Bank. The study is applied the Descriptive

statistics and multiple regressions for analysis. It found that inflation rate and interest rate has made a significant negative impact on GDP, though exchange rate has created significant and positive impact GDP.

Chughtai and Aftab (2015) have investigated the effects of major economic variables in Pakistan. The study has adopted the Secondary data since 1981 to 2013 and applied multiple linear regression revealed model. The researcher found that both inflation and interest rates related negatively with economic growth, whereas exchange rate has made a significant positive effect on the Pakistan economy.

Kasidi and Nwakanemela (2013) have studied the impact of inflation on economic growth in Tanzania with help of Annual time-series data form 1990 to 2011. The study has employed the Correlation coefficient and co

integration techniques to establish the relationship between inflation and GDP. It found that inflation has a negative effect on economic growth. Further, the study has proven that there is no co-integration between inflation and economic growth in Tanzania during the period of study.

Umaru and Zubairu (2012) have examined the effect of inflation on economic growth and development in Nigeria since 1970 to 2010. The study has been applied the ADF techniques to determine the stationarity of the variables and Granger causality test to find causal relationship between inflation and GDP. The study Result affirmed that there is a unidirectional causal link between GDP and inflation rather than between inflation and GDP.

Datta (2011) is made a study on the direction of causality from inflation to economic growth in Malaysia. The study has employed the ADF, PP Unit Root Test, Vector Error Correction, Vector Auto Regression, Impulse response function and Variance Decomposition test. The test result shows that in the short-run, there is causality between the variables and direction of causality inflation to economic growth but in the long-run economic growth Granger Causes inflation.

Prasanna and Gopakumar (2010) have investigated the relationship between inflation and GDP growth with the help of annual data sourced from the Reserve Bank of India in India. The study Empirical result has been established based on the co-integration and error correction tests. It indicated that there is a long-run negative relationship between inflation and GDP growth rate in India.

Based on the foregoing studies, it has appeared the following gap still exist in the literature with regard to the problem under investigation. Firstly, there were empirical results such as M. W. Madurapperuma (2016) Kasi-di and Nwakanemela (2013) Prasanna and Gopakumar (2010) indicated that there is no co-integration between

inflation and economic growth in their deferent country and deferent period of the study. Secondly, most of the study has been carried out in other jurisdictions, but just a few were conducted in India. Thirdly, in terms of data applied in the study, our study has made use of data that extended to 2021, whereas none of the studies reviewed met that standard.

Data and Methodology

The study has applied data from secondary sources that have gathered entirely from the World Bank report 2021 and www.statista.com covered the period from 2010 – 2021. The obtained data has deals with GDP and rate of inflation. Our dependant variable is the GDP, whereas the inflation rate is our independent variable. Our model was estimated using the Johansson Co-Integration method. As we are making use of annualized time-series data and the study cover a long sample period, we made sure our data set were not impaired by unit root; so we tested for stationary of the series by employing the Augmented Dickey-Fuller (ADF).

3.1 Model Specification

This study is being applied the economic model previously used by Chughtai, et al (2015) that examined the macroeconomic variable like –growth (GDP) nexus of Pakistan. The study has been reviewed in the preceding section are specified below:

$$Y = \alpha + \beta_1 X_1 + \epsilon_i \dots\dots\dots (1)$$

$$\text{The model is rewritten as } GDP = \alpha + \beta_1 INFL + \epsilon_i \dots\dots\dots (2)$$

Where GDP is Gross Domestic Product, α = Constant, β_1 and β_2 are coefficients. INFR is inflation rate and ϵ is error term.

Results and Analysis

Unit Root Test

Table 1: Augmented Dickey-Fuller (ADF) Unit Root Test Results

Variables	Level	Level	1st difference	1st difference
	C	C&T	C	C&T
GDP	0.02	0.10	0.00	0.01
Inflation	0.03	0.82	0.01	0.03
Interest	0.77	0.47	0.00	0.02

Source: Authors' Computation aided by E-views, 2022

The table 1 shows the data series of GDP at level is non –stationary whereas it is stationary at 1st deference. In the case of inflation, the data series of inflation at level is non –stationary though it is stationary at 1st deference.

Descriptive Statistics

Table 2: Descriptive statistics Test Results

Variables	GDP	Inflation	Interest
Mean	6.89	6.18	10.07
Median	7.20	5.20	10.45
Maximum	10.30	12.00	13.30
Minimum	3.80	3.40	4.00
Std.Dev.	2.13	2.6	2.4
Skewness	-0.17	0.88	-1.06
Kurtosis	1.72	2.47	3.48
Jarque-Bera	1.6	3.14	4.35
Probability	0.44	0.20	0.11
Sum	151.70	136.00	123.67
Sum Sq.Dev.	95.84	151.41	123.67
Observations	22	22	22

Source: Authors' computation aided by E-views, 2022

Table 2 shows descriptive statistics about individual characteristics of the macroeconomic variables like GDP and inflation. The mean value of GDP and inflation is 6.89 and 6.18. Whereas, the median values is 7.20 and 5.20 of inflation and economic growth. In the case of maximum, the GDP is 10.30 and inflation is 12.00. On the other hand of Minimum value, GDP has 3.80 and inflation has 3.40. It is observed that the mean and median of the variables can be observed to be approximately equal – to the series seem to be normally distributed.

Table 3: Johansson Co-Integration Test Result

Unrestricted Co-Integration Rank Test (Trace)				
Hypothesized No.f CEs	Eigen Value	Trace Statistics	0.05% Critical Value	Probability
None	0.838206	61.81516	35.01090	0.0000
Atmost 1	0.699490	27.28195	18.39731	0.0020
Atmost 2	0.208585	4.74731	3.8465	0.0350
Unrestricted Co-Integration Rank Test (Maximum Eigen Value)				
Hypothesized No. of Ces	Eigen Value	Trace Statistics	0.05% Critical Value	Probability
None	0.838206	34.60721	24.25202	0.0015
Atmost 1	0.699490	22.84322	17.14769	0.0570
Atmost 2	0.208585	4.74731	3.8465	0.0350

Source: Authors' computation aided by E-views, 2022

As per the Trace value and critical value criteria from the above table 3:if the trace statistic is greater than 0.05 critical values, then the null hypothesis will be rejected. In the above case, those values are greater than 0.05 critical values like 61.89 and 35.10, 27.28 and 18.39, 4.44 and 3.84. So, the null is being rejected and it is conformed that there is long run relationship between the dependent variable (GDP) and independent variable inflation. In addition to this, as per the Maximum Eigen-value and critical valuecriteria: Maximum

Eigen-value values are greater than 0.05 critical values like 34.60 and 24.25, 22.24 and 17.14, 4.44 and 3.84. Hence, the null is being rejected and it is conformed that there is long run relationship between the dependent variable (GDP) and independent variable such as inflation rate. Also, in terms of Probability value, the calculated value are much lesser than 5%critical value. Thus it is conformed that there is positive long run relationship between variables like GDP and inflation.

Discussion of Results

The finding of the study in Table 3 indicates that there is positive long run relationship between variables like GDP and inflation in India during the period of the study. The result shows that Maximum Eigen-value values are greater than 0.05 critical values study is conformed that there is long run relationship between the dependent variable (GDP) and independent variable such as inflation rate. Moreover, in terms of Probability value, it has confirmed that there is positive long run relationship (co-integration) between variables GDP and inflation in India. In that regard, the contradicted the study of M. W. Madurapperuma (2016) Kasidi and Nwakanemela (2013) Prasanna and Gopakumar (2010) have indicated that there is no co-integration between inflation and economic growth in their deferent country and deferent period of the study has taken in India, Pakistan, Tanzania respectively.

Conclusions and Recommendations

One of the key objectives of macroeconomic variables is to estimate the health condition of a home economy as a whole in connection with how a particular factor affects the overall performance of an economy. Therefore, the study has considered it suitably beneficial to disaggregate the factors to explore how inflation has influenced the GDP. An assorted analytical approach has been used to carry out the study objective. The inflation rate (causal variable) has all regressed on GDP (effect variable) in India. The study revealed that inflation has a positive relation on GDP in India. So, the study has concluded that a high inflation rate is unfavourable rather than beneficial to the economy. The study is suggesting that the RBI can adopt an appropriate monetary policy to maintain a low-level rate of inflation in the country from time to time. Besides, the government should maximise spending more on productive projects and minimize unproductive public spending in order to maintain fiscal stability and steady economic growth in the Indian economy.

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The Future of Money - A Study on Cryptocurrency in India

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Abstract

In an era of modern technology and moving towards a paperless economy, Cryptocurrency is the phase of the change. Cryptocurrency is a form of digital money that is designed to be secure and, in many cases, anonymous. It is a currency that uses cryptography, the process of converting legible information into an almost uncrackable code, to track purchases and transfers. Cryptocurrencies have grown and expanded significantly over the years. In a span of merely five years, the number of digital assets has emerged in the global financial market system. India's RBI has long warned cryptocurrency users and traders of its perils. Indian Prime Minister, Mr. Narendra Modi, indirectly promoted Bitcoin, on 2 July 2015, with his ambitious "Digital India" campaign. Plans included digitizing government data, improving India's digital infrastructure, and optimizing its online connectivity. Since its demonetization period of November 2016, the significant disruption to the economy occurred with more of India's largely younger population turning to digital currency. This paper aims to explore the challenges, risks and the future of cryptocurrencies in India. It also focuses on the significant benefits and the measures to bring apprehension of adapting the cryptocurrency in India.

Keywords: [Cryptocurrency, Global Financial Market, Economy, Banktech].

Introduction

Cryptocurrency is any form of currency that exists only in digital format. It usually has no central issuing or regulating authority and instead uses a decentralized system to record transactions and manage the issuance of new units. It relies on cryptography, the process of converting legible information into an almost uncrackable code, to track purchases and transfers to prevent any counterfeiting and fraudulent transactions.

One of the main factors accounting for globalization is technology. With the creation of Bitcoin and the proliferation of other cryptocurrencies, the unrestricted interaction of economies and complete financial inclusion is a possibility on a global scale.

The problems in international economies of creating and maintaining a common currency can be fixed by adoption of cryptocurrencies. By the adaptation of cryptocurrencies as legal tender, such regional organizations can bypass the tedious and never-ending bureaucratic processes involved in creating a common currency. The adaptation of cryptocurrencies on such international governmental organizations can easily have a common currency without having to discard their own national currencies. The popularity of cryptocurrencies has increased marvelously and is affecting the world economy. Though it is still not accepted as a legal medium of exchange and is still to reach the mainstream market, cryptocurrency is having significant effects worldwide.

But, in India, the case scenario seems to be a little different for digital currency. In April 2018, the Reserve Bank of India banned on dealing with virtual currencies, both cryptocurrencies and crypto assets, since such transactions

raised concerns about money laundering, consumer protection and market integrity. The current regulations clearly indicate that the ban will reduce the exposure to cryptocurrencies like Bitcoin or Ethereum and will also limit the growth in the global crypto space. After the RBI clamped down on Bitcoin, the cryptocurrency sector has been rife with challenges. India is yet to formulate any kind of rule and regulations pertaining to cryptocurrencies, and therefore they self-regulate themselves by ensuring there is a KYC compliance.

Need and Significance

In the aftermath of the 2008 economic crisis, cryptocurrency came into existence as a countermeasure to control the corruption of the centralized institutions that were 'too big to fail.' The world economy crumbled, and a group of unknown's came together to create the first iteration of the technology beginning with Bitcoin, to Ethereum, to the ICO boom. What makes digital currency stand out to the fiat currency is the technology behind it – the blockchain. Blockchain is so revolutionary because it allows exchanging value directly between parties, without the intrusion of any third parties. The internet was phase one in Globalization, but now the decentralized blockchain is phase two, where a borderless world becomes more and more possible.

Objectives

To examine the present scenario of India with respect to cryptocurrency.

To present and study the initiatives of the crypto space in India.

Research Methodology

This paper is purely based on secondary data. The aforementioned objectives of the paper will be achieved by an exploratory research based on secondary data collected from online articles, previously published journals and other relevant websites. It is primarily a theoretical research to analyze and study the need of cryptocurrency in India.

Cryptocurrency in the Indian Economy

Back in 2013, India distrusted Bitcoin as “Wild West territory”, where scams like Silk Road, a darknet market for smuggling drugs, thrived, and where greedy geeks conned gullible people into wasting their cash. Although India didn’t comprehend it at the time, its political and economic conditions created the country an ideal match for Bitcoin. But the recent developments show India poised to become the first nation to regulate cryptocurrency.

India: Demonetization

On November 8, 2016, the Reserve Bank of India (RBI) removed five hundred and one thousand Rupee notes from circulation, uncovering the state of 86% of its currency. A bigger disruption to the economy occurred with more of India’s mostly younger population turning to Bitcoin. The digital coin attracted folks in India, since it offered a safer system for his or her cash, a haven from inflation, refuge from government regulation and interference, and a system that avoids political and economic turmoil.

India’s Government:

Although India’s RBI has long warned cryptocurrency users and traders of its perils, Indian Prime Minister, Narendra Modi, indirectly promoted Bitcoin, on July, 2, 2015, together with his bold Digital India campaign. Plans enclosed digitizing government information, rising India’s digital infrastructure, and optimizing its on-line connectivity. Nevertheless, India still has a long way to go for the secure and undifferentiated flow of cryptocurrency in the Indian economy.

Cryptocurrency in India in the Present Scenario

In 2017, the price of a bitcoin, the world’s best known virtual currency, rose from around \$900 at the start of the year to nearly \$20,000 by December. This fuelled a boom in trade and a rise in the number of investors in India, subsequently appearing on the Narendra Modi government and the Reserve Bank of India’s (RBI) radar. The authorities soon made known their uneasiness with virtual currencies and cautioned investors. A few warning signals and con-

flicted statements later, the RBI finally pulled the plug on cryptocurrency exchanges.

Here’s a timeline of how India slowly but steadily choked its cryptocurrency ecosystem over the last few years:

- **November 2017:** Investors make a beeline for cryptocurrencies like never before. Fuelled by the price boom, customer registrations increase rapidly.
- **December 2017:** The RBI issues another warning against these currencies, after the first one was issued way back in December 2013. Soon, tax authorities launch probes into cryptocurrency exchanges’ modus operandi.
- **January 2018:** More government caveats are issued to clarify that cryptocurrencies are not legal tender. The income tax department reportedly begins sending tax notices to investors. Banks suspend the withdrawal and deposit facilities of some exchanges.
- **February 2018:** In his annual budget speech, finance minister Arun Jaitley once again comes down heavily on virtual currencies. The government, he says, will go all out to eliminate their use in financing illegitimate activities. They won’t be included as part of the payments system, Jaitley adds. Subhash Chandra Garg, secretary in the department of economic affairs, who is heading a committee on cryptocurrencies, says draft regulations will be out before the end of the financial year 2019.
- **March 2018:** Due to regulatory ambiguity and a correction in prices, investor interest takes a beating.
- **April 2018:** The RBI directs lenders to wind down all banking relationships with exchanges and virtual currency investors within three months. Yet, it says the feasibility of these coins is being studied and hints at launching its own digital currency. Disappointed by the blanket ban, cryptocurrency exchanges drag the central bank to court.
- **May 2018:** The Supreme Court clubs the multiple cryptocurrency cases against the RBI. It also asks the attorney general of India, KK Venugopal, to be present on the next date of hearing, July 20.
- **June 2018:** Through the end of May and the first week of June, the exchanges send detailed representations to the RBI on why this ban should be lifted. They say they’re open to more scrutiny and willing to be regulated.
- **July 2018:** Some petitioners seek a stay order from the Supreme Court on the ban at least till the next date of the hearing. Their request is denied.
- **July 6, 2018:** the cryptocurrency ban comes into effect. Pushed against a wall, the exchanges entered into

a legal tussle with the RBI and the government. The matter is now in Supreme Court. In the last hearing on **Oct. 26 2018**, the court had directed the government to clarify its stand on the matter of cryptocurrencies and to file an affidavit on it within two weeks. The outcome wasn't positive though. The date was further changed to **January 15, 2019**. In a counter affidavit to a two-judge Supreme Court bench hearing a batch of cases on the legitimacy of cryptocurrency in India, the finance ministry had defended the RBI's circular which banned banks from extending any services to crypto entities.

- **February 22, 2019:** The cryptocurrency community is coming together for the first time to raise its voice against cryptocurrency ban and discuss the possibilities of its future in India, nearly a year after the government issued a ban on the virtual currency in the country. India awaits the decision of the Supreme Court in hopes of removal of the ban on crypto assets.

Initiatives for Crypto Space in India

The Indian government could possibly legalize cryptocurrencies, but with tough terms and conditions attached.

With India as a member nation of the G20 group, any rules to govern the local crypto space may be influenced by planned regulatory guidance from the international economic forum.

A panel under India's finance ministry tasked to propose regulations for cryptocurrencies like bitcoins reportedly set to recommend a state cryptocurrency backed by the government, instead.

The development comes at a time when the central bank has admitted to exploring a central bank-issued digital currency.

The RBI's research arm, in early 2017, published a sweeping whitepaper courtesy of India's foremost banking research institute to plainly conclude that blockchain technology had "matured enough" to enable the digitization of the rupee, India's fiat currency.

It was September 2018 when RBI executive director Sudharshan Sen first hinted at a "fiat cryptocurrency."

The official's revelation came a little over a year after the Indian government enforced a controversial ban on denominations of physical cash to render 90% of India's currency notes obsolete overnight. Following the unprecedented demonetization run, the central Indian government has since announced the "Cashless India" initiative as a pivot to digital payments in the everyday economy.

Conclusions

Nischal Shetty, CEO and Founder of Indian cryptocurrency exchange Wazirx said, "We are hopeful of seeing regulations come into crypto in India sooner than later so that as a country, we can be part of this digital revolution that's taking over the world."

When thinking back at the foremost recent innovations from technology, two technologies stand out in particular — cryptocurrencies and deep learning. We are moving towards a generation, where paper currency will be replaced by cryptocurrency and national currencies will be in the form of crypto, which shall not happen without regulations. India is just getting started with cryptocurrencies, and over time we will see more and more Indians getting involved in it. This is just the beginning.

Scope for Further Research

The scope of investment in cryptocurrency is massive and the way companies are exploring blockchain reassures that the trend will only go upwards. Cryptocurrencies present a wide spectrum of applications. It provides a whole new platform to the individuals who are intrigued with the idea of crypto space.

Further research can be conducted to examine the investors, business people and the banks who are the direct and foremost harbingers of cryptocurrency and its applications in India. This paper can be continued with the inclusion of primary data and the aftermath study of these specifics collected.

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National Education Policy 2020 Ensuring Equitable, Accessible and Inclusive Higher Education in India

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Abstract

The National Education Policy 2020 (NEP 2020) is an inclusive framework for the development of education in India, including the higher education sector. While the NEP 2020 has set a roadmap for the transformation of higher education, its implementation is a complex and challenging process that requires significant resources and collaboration between stakeholders. The implementation of NEP 2020 in higher education institutions in India has highlighted some of the key challenges and opportunities. This study is based on descriptive research passed on past studies done. Some studies have found that the implementation of the policy is hindered by the lack of resources, infrastructure, and trained faculty. They have also highlighted the need for greater collaboration between government, industry, and academia to ensure the success of the policy. Other studies have highlighted the potential opportunities that the NEP 2020 offers for the transformation of higher education. These studies have emphasized the need to promote multidisciplinary education, research, and innovation, as well as the need to establish a single regulator for higher education. They have also highlighted the importance of internationalization of higher education, vocational education, and community colleges. The implementation of NEP 2020 in higher education institutions in India highlights the need for a collaborative effort to overcome the challenges and leverage the opportunities offered by the policy. The successful implementation of NEP 2020 in higher education institutions in India will require significant investments in infrastructure, faculty development, and research funding.

Keywords: [NEP 2020, Higher Education Institutions, Inclusive Education, Multidisciplinary, Research culture].

A Introduction to NEP 2020

The National Education Policy 2020 is a comprehensive framework for the development of education in India. It was approved by the Union Cabinet in July 2020 and replaces the National Policy on Education, 1986. The new policy aims to transform the education system and make it more inclusive, flexible, and holistic.

Some key highlights of the policy are:

1. The policy aims to achieve 100% Gross Enrollment Ratio in school education by 2030.
2. The policy advocates for a flexible and multi-disciplinary curriculum, allowing students to choose subjects across disciplines.
3. The policy aims to establish a National Education Technology Forum to promote the integration of technology in education.
4. The policy emphasizes the importance of early childhood care and education and proposes the establishment of a National Curricular and Pedagogical Framework for Early Childhood Care and Education.
5. The policy emphasizes the importance of vocational education and training and proposes the establishment of a National Skills Qualification Framework.
6. The policy proposes the establishment of a new apex body for higher education called the Higher Education Commission of India.
7. The policy also emphasizes the need to promote research and innovation in education and proposes the establishment of a National Research Foundation.

8. The National Education Policy 2020 has received widespread support from educationists, policymakers, and stakeholders in the education sector. However, its implementation will require significant changes in the education system and the allocation of resources to support these changes.

NEP 2020 and Higher Education in India

The National Education Policy 2020 lays down a roadmap for the revolution of higher education in India. Some of the key highlights of the policy related to higher education are:

1. The establishment of a single regulator for higher education called the Higher Education Commission of India (HECI) to replace the University Grants Commission (UGC). The HECI will focus on promoting academic quality, accreditation, and funding of universities and colleges.
2. The policy emphasizes the need to promote multidisciplinary education and research. It proposes the establishment of research universities, which will offer undergraduate, postgraduate, and PhD programs across multiple disciplines.
3. The policy recommends the establishment of National Research Foundation (NRF), which will fund research in all disciplines, including social sciences, humanities, and sciences. The NRF will have a budget of Rs. 20,000 crores over the next five years.
4. The policy advocates for the establishment of a credit-based system for higher education, which

will allow students to take courses across multiple disciplines and accumulate credits.

5. The policy emphasizes the importance of internationalization of higher education and proposes the establishment of a National Education Exchange Program (NEEP) to facilitate student and faculty exchange programs.
6. The policy recommends the establishment of community colleges and vocational education institutions to provide skills-based education and training.

Overall, the National Education Policy 2020 aims to promote quality education and research in higher education institutions in India. It recognizes the need to promote multidisciplinary education, research, and innovation to make Indian higher education globally competitive. The implementation of the policy will require significant investments in infrastructure, faculty development, and research funding, and collaboration between government, industry, and academia.

The National Education Policy 2020 has set a roadmap for the transformation of higher education in India. The policy's vision is to make India a global knowledge superpower by promoting multidisciplinary education, research, and innovation. The implementation of the policy will require significant investments in infrastructure, faculty development, and research funding.

Potential future outcomes of the NEP 2020 on higher education in India

Multidisciplinary education and research: The NEP 2020 promotes multidisciplinary education and research, which will enable students to take courses across multiple disciplines and acquire a broader skill set. This will help students to develop a well-rounded perspective and prepare them for the complex challenges of the future.

Focus on research and innovation: The establishment of the National Research Foundation and research universities will boost research and innovation in India. This will help to create a vibrant research ecosystem, which will attract top talent, foster collaboration, and promote the development of new technologies.

Internationalization of higher education: The NEP 2020 emphasizes the importance of internationalization of higher education and proposes the establishment of the National Education Exchange Program to facilitate student and faculty exchange programs. This will enable Indian students and faculty to gain exposure to global best practices, develop cross-cultural skills, and promote collaboration between institutions across the

world.

Skills-based education: The policy recommends the establishment of community colleges and vocational education institutions to provide skills-based education and training. This will help to address the skill gap in the Indian economy and prepare students for jobs that require specific skills.

Conclusions

With the introduction of NEP 2020, many changes have been made. The essence of this policy is the introduction of the multi-disciplinary, inter-disciplinary, and trans-disciplinary approaches to humanise the education with an emphasis on humanities-related subjects. Now, even a student taking a professional degree can learn some subjects of humanities, this freedom was not available in earlier policies. Besides, this policy has got an emphasis on vocational skills to meet the growing employment needs as also the focus on employability through skilling. The present policy is considering the training of teachers as an important ingredient. Along with flexibility there are some drawbacks in the new education policy, the merits are more in number. It is believed by many that by implementing these changes, the Indian academic system will be taken a step higher it will revolutionize the education scenario in the coming future and will make India a superpower in the years to come.

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Impact of Macroeconomic Variables on the Capital Adequacy Ratio of Indian Banks

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Abstract

The present study assessed the factors that have an impact on the capital adequacy ratio of Indian private banks for the period from 2014–15 to 2020–21. The study used the panel data method. Concerning the main variables, only FDI has positive and significant effect on CAR. GDP and inflation do not have any impact on the capital adequacy ratio. Policymakers and regulators, such as the Reserve Bank of India, should consider the impact of macro related variables on minimum capital requirement when developing CAR policies. The study's findings suggest that policymakers focusing on bank related determinants of CAR should also take into account the influence of macroeconomic indicators.

Keywords: [FDI, Panel Regression, Levin-Lin-Chu Test, Indian Banks, Capital Adequacy Ratio].

Introduction

After the onset of the financial crisis in 2007–2008, authorities once again turned their attention to the issue of banks' capital adequacy. Banks must maintain sound financial standing in order to maintain financial stability. Hewaidy and Alyousef (2018) argue that capital adequacy is crucial for a variety of reasons. It serves as a tool for reducing operating losses, boosting investor confidence in the bank, and showcasing the bank's capacity to fund their long-term capital investments and business endeavors. The regulator put a lot of effort into defining a ratio to maintain the banks' assets at a specific rate because of their value. The Basel Group is one of the most well-known of these.

Basel I, which was solely focused on credit risk, was first introduced by BCBS in 1988. Under the Basel I agreement, assets with various risk profiles had to make up 8% of the minimum capital requirement. In 1999, India accepted Basel I standards. In 2004, BCBS updated the Basel 1 norm and released the Basel 2 norm's rules. The Basel 2 norms had three pillars:

- Minimum capital requirement
- Supervisory review
- Market discipline

The minimum capital requirement under Basel 2 is 9 percent of RWA. Some banks in India have not yet adopted the Basel 2 standard. To address the issue of the 2008 financial crisis, Basel 3 norm guidelines were made available in 2010. The four criteria used to develop these rules were capital, funding, leverage, and liquidity. While the minimum capital requirement across the board is 10.5 percent of RWA, Indian banks are

subject to 11.5 percent. Two new ideas, referred to as the countercyclical buffer and the capital conservation buffer, were added to the Basel 3 regulation. In addition to the required minimum capital, banks are also required to maintain a capital conservation buffer. It is equal to 2.5 percent of RWA. A macro prudential banking supervisory measure called a countercyclical buffer was employed to strengthen banks' resilience during the financial crisis.

According to Swamy (2014), the capital adequacy ratio is one of the indicators for the financial soundness of the Indian banking system. Healthy banking system would help in economic growth of country e.g. more employment opportunities, capital formation to different sectors, eliminating the scarcity of capital etc. Now, the question arises that how to measure whether Indian economic system is growing or not? There are a lot of measures which include micro and macro factors. Macroeconomic factors are those that have effect on the overall economy as a whole. More studies had been conducted on the relation between bank-related factor and CRAR. But relation between macro related factors and CRAR is under researched area. Thus, this paper examines after reviewing the literature fills the gap and examines the impact of macro related factors on the CRAR of Indian banks. Indian economy has been chosen for the study as this is an emerging developing economy.

This is how the rest of the paper is structured: The succeeding section explains the review of literature. The study's methodology and sample are included in the research methodology. The findings and related discus-

sion are presented in Section 4. The results are concluded in Section 5.

Literature Review

Akhter & Daly (2009) studied the effect of changes in macroeconomic variables on the soundness of financial intermediaries in more than 50 countries. The study used the Generalised Method of Moments and concluded that inflation, size, business cycle, and the real effective exchange rate have a strong influence on the CRAR, which indicates the financial soundness of banks. It also came to the conclusion that macroeconomic factors and factors that are unique to each bank affect a bank's profitability.

Lei Xu et al. (2015) tried to find out the impact of market discipline and capital regulation on the capital adequacy ratio of Chinese banks under Basel I norms. In this study, only credit and market risks were taken into consideration. The study used disequilibrium and simultaneous tests and concluded that capital regulation is more important than market discipline. The proper implementation of capital regulation enables Chinese banks to increase their capital buffer and reduce their risk level.

Pant & Nidugala (2017) by using panel data analysis, looked at how changes in macroeconomic factors affects Indian banks' CRAR. The result showed that country-level factors like rate of inflation, GDP, rate of interest, and rate of exchange have a significant effect on a bank's ratio of capital adequacy. In contrast, money supply and FDI have an insignificant influence on the capital adequacy ratio. Thus, while making policies for the minimum capital, policymakers should consider the effect of macroeconomic variables.

Anshu & Gakher (2019) explored the relation of macroeconomic variables with the CRAR of Indian scheduled commercial banks. The study concluded that the consumer price index, exchange and interest rates are negatively affecting CAR, but GDP is not significantly affecting CAR.

Williams (2011) conducted a study to analyse the impact of macroeconomic, bank-specific, and financial structure factors on Nigerian banks' capital bases. Using cointegration analysis, the authors found that the domestic real interest rate, the exchange rate, inflation, and political stability all have a significant negative effect on the capital base, whereas the money supply has a considerable positive effect. Yet, Nigerian banks' capital bases are unaffected by investment, deposit, and liquidity risks.

Bokhari et al. (2012) investigated the determinants

affecting banks' capital adequacy ratios in Pakistan. After applying pooled regression method, the research concluded that CRAR is positively related to average CAR and CAR above regulatory requirements while negatively related to share of deposit, ROE, and portfolio risk. GDP is insignificantly related to the capital adequacy ratio.

Aktas et al. (2015) examined the CRAR in South-eastern European nations by looking at bank-related and macroeconomic aspects. The study used feasible generalised least squares (GLS). The minimum capital requirement is highly affected by bank-related variables such as size, leverage, ROA, net interest margin (NIM), risk, liquidity, and macroeconomic variables such as the rate of economic growth, the volatility index of the Eurozone stock market, the availability of deposit insurance, and the quality of governance. While macroeconomic variables like inflation and the rate of interest have an insignificant impact on the CRAR.

Dawit (2015) surveyed both macroeconomic and bank-related determinants of the capital adequacy ratio of Ethiopian commercial banks. A significant result of the capital adequacy ratio was found with bank risk, ROE, loan (LAR), economic growth (GDP), ROA, loan provision, NIM, and share of the deposit, whereas an insignificant result was found with liquidity, NPLs, inflation, and bank size.

Aryal (2016) identified the bank-related and macro related factors of minimum capital in the context of Nepalese banks. The study applied panel data analysis and depicted that total loan, total assets, deposits, NPL, and leverage negatively affect CAR. While ROE, inflation, and economic growth do not affect CAR. Thus, total loans, total assets, deposits, NPL, and leverage are considered important determinants of the Nepalese bank's CAR.

Olarewaju & Akande (2016) conducted research to identify the factors that influence bank minimum capital in Nigeria. The study depicted that ROA, credit risk, liquidity and deposit are affecting the capital adequacy ratio significantly, while ROE, bank size, GDP, and the inflation rate are affecting it insignificantly.

Badalashvili (2017) investigated the determinants of CAR at Greek banks. Using an unbalanced panel data method, the study concluded that CAR has a positive relationship with asset structure, ROE, and inflation, whereas it has a negative relationship with NPL, unemployment, and net interest margin.

Yuksel & Ozsari (2017) talked about the things that

affect Turkey's deposit banks' capital adequacy ratio. The study applied the panel data regression method and interpreted an inverse relationship between economic growth and the capital adequacy ratio. It shows that when there is an improvement in the economy, Turkish banks prefer to have a lower CRAR. The rate of inflation has a positive relation to the CAR, which means that banks increase their capital levels at times of high inflation. It was further studied that net balance sheet position and FX assets and liabilities indirectly correlate with the capital adequacy ratio.

Hewaidy & Alyousef (2018) explored the influence of macro and bank related factors on the CAR of banks in Kuwait. The study found a significant relationship between management quality, bank size, liquidity, asset quality, and capital adequacy. While an insignificant relationship was found between bank type, inflation, and capital adequacy,

Kalifa & Bektaş (2018) explored the determinants of CAR in Islamic banks. By using, it was concluded that out of bank-specific variables, leverage, ROE, ROA, bank size, and credit risk, and out of macro variables, exchange rate, inflation, and market capitalization, there is a strong relation. At the same time, all other variables do not show any strong relationship with CAR.

Zarafat & Prabhune (2018) considered the determinants that influence the total risk of the Basel III norms for Indian public and private sector banks. The researcher used a panel data regression model and concluded that there is an inverse connection between capital and ROA but a positive connection with ROE. It was also conjectured that macroeconomic variables like GDP and the inflation rate do not have any substantial relation with total risk. Proportion of TL to TA was one of the noteworthy factors in assessing risk.

Ansary et al. (2019) compared the relationship of CAR between Islamic and conventional banks in the MENA region. The study used the GMM method and depicted that in Islamic banks, variables such as bank size, deposit to assets ratio, GDP, and operational efficiency affect CAR significantly, while in conventional banks, ROA, risk-weighted assets to total assets ratio, credit risk, operational efficiency, and GDP significantly affect CAR.

Bokhari et al. (2019) looked at the variables of the CRAR of microfinance banks in Pakistan. It was depicted that ROE, portfolio risk, GDP, liquidity, and share of deposit are important determinants of CAR. ROE and portfolio risk show a positive relationship,

while GDP, bank assets, and share of deposit show a negative relationship.

Phuong et al. (2019) by using the panel Tobit model, explored the bank-related and macroeconomic factors of CAR in Vietnamese joint-stock banks. The results depicted that GDP growth rate, exchange rate, net interest margin (NIM), interest rate, and bank size are inversely related with CAR. On the other hand, deposits and leverage are good for Vietnamese banks' CAR. **Abiodun et al. (2020)** studied the elements affecting the capital adequacy ratio of banks in Nigeria. The researcher used panel data regression and explored that among macroeconomic factors, i.e., GDP (measurement of economic growth), rate of inflation, and rate of interest, only interest rate had a significant impact on the CRAR of Nigerian banks. In contrast, bank size, non-performing loans, ROA, and TL to TA influence CRAR significantly, while liquidity does not affect CRAR.

Bhattarai's (2020) research into CRAR used a sample of Nepalese commercial banks to study the role of both bank-related and macro related factors. Using pooled OLS, a significant relationship was found between inflation, bank size, and liquidity. Whereas an insignificant relation was found between GDP, credit risk, profitability, management quality, and asset quality and the capital adequacy ratio of Nepali banks.

Bogale (2020) conducted a study to find the macroeconomic and bank-related elements of CAR in the context of commercial banks in Ethiopia. By using documentary analysis, it was concluded that ROE, loan-to-asset ratio, and bank size have a positive impact. In contrast, loan loss provisions and ROA have an inverse effect on CAR. Other factors, i.e., GDP, inflation, deposit-to-assets ratio, and loan-to-deposit ratio, are not important determinants of CAR in Ethiopian banks.

Unvan (2020) tried to find the effect of macroeconomic and bank-related factors on the capital adequacy ratio of Ghanaian banks. The study used panel data analysis and depicted that money supply and ROA are positively related while leverage, bank size, and the central bank's policy rate are negatively related to the capital adequacy ratio.

Research Methodology

Sources of Data

As of 2022, there are 22 Indian private banks. Due to a lack of data, the study cannot include all financial institutions. Thus, the final sample consists of 16 Indian private banks for the financial period of 2014–15 to

2020–21, with the sample observation of 114. Many sources were tapped to extract the data. Data related to macroeconomic variables was extracted from the World Bank database and the RBI database. The CMIE Prowess database was used to extract data specific to banks.

Methodology

Descriptive statistics and panel data regression have been employed to evaluate the hypothesis. The regression equation shown below has been constructed:

$$CRAR = \alpha + \beta_1(GDP) + \beta_2(FDI) + \beta_3(INF) + \beta_4(lev) + \beta_5(ROA) + \beta_6(ROE) + \beta_7(BKSIZE) + E$$

Where;

CRAR= “Capital Adequacy Ratio”

GDP= “Gross Domestic Product”

INF= “Inflation”

FDI = “Foreign Direct Investment”

LEV= “Leverage”

ROA= “Return on Assets”

ROE= “Return on Equity”

BKSIZE= “Bank Size”

Results and Analysis

Correlation Matrix

A correlation matrix of the several variables is used by the researcher to determine the level of multicollinearity. According to the results of the correlation analysis, multicollinearity between the variables is not present when coefficient values are less than 0.70. The Hausman test is used to select the fixed and random effect models after applying both fixed and random effect models. Given that the probability value is below the 0.05 level of significance, the outcome is in favour of the fixed effect model. The Levin-Lin-Chu test was performed to determine whether all variables used in the study were stationary before using the panel regression model. All variables are stationary, according to the study, which used lags of 2. This means that all probability values are below the 0.05 level of significance. The Levin-Lin-Chu test results are shown in Table 2.

Table 1: Correlation Matrix and Variance Inflation

Factor

	GDP	INF	FDI	LEV	BKSIZE	ROA	ROE
GDP	1						
INF	-0.68181	1					
FDI	0.358163	0.062122	1				
LEV	-0.03644	-0.04394	-0.10338	1			
BKSIZE	0.174297	-0.11882	0.16574	0.403162	1		
ROA	0.014592	-0.0745	0.071056	0.067654	0.227486	1	
ROE	-0.05625	0.095232	-0.06928	-0.09013	0.268005	0.405716	1
VIF	2.362	2.307	1.486	1.160	1.139	1.261	1.365

Source: Author’s Calculations

Table 2: Levin-Lin-Chu Test

Variables	Statistics	Probability
GDP	-37.2097	0
FDI	-7.01665	0
INF	-41.3104	0
LEV	-35.8285	0
ROA	-31.6971	0
ROE	-38.554	0
BKSIZE	-24.107	0

Source: Author’s Calculations

Descriptive Analysis

Table 3 exemplifies the descriptive indicators for all the variables used in the study. Average GDP is 7.487. Mean of FDI is 45.55 which is highest among all vari-

ables. Inflation has an average of 4.937. Control variables i.e. leverage, ROA, ROE and bank size shows an average of 1.05, 0.15, -1.23 and 11.86 respectively.

Table 3: Results of Summary Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.
CRAR	13.86838	13.37	24.14	7.51	2.748251
GDP	7.487315	7.549978	7.650074	4.976458	0.275006
FDI	45.55242	44.01	64.36	28.15	8.983833
INF	4.937374	4.907	11.064	3.328	1.385517
LEV	1.052222	0.875	5.24	0	0.750928
ROA	0.150505	0.47	2.02	-34	2.674717
ROE	-1.23955	5.22	21.33	-76.14	18.64952
BKSIZE	11.86056	12.30164	15.32721	2.553739	2.231369

Source: Author's Calculations

As per the table 4. which represents the regression results, the value of adjusted r-squared is 0.431472, showing that only 43% changes in ratio of capital adequacy of Indian private banks are caused by above-mentioned macroeconomic variables. The value of Durbin-Watson statistics (1.425296) is less than 2, which depicts the non-existence of auto-correlation. The F-statistics value of 11.49235 is also significant with a P-value of zero, which indicated that variables can jointly affect the CRAR. Concerning macro related variables, only FDI has a significant impact on CRAR. This implies that a rise in foreign direct investment boosts output and employment. Again, this would raise the income of those who prefer to keep their money in bank safety

deposit boxes. More deposits raise the bank's capital, which boosts their CAR (Pant and Nidugala 2017). The result regarding FDI is similar to Ogegeet al. (2012) and Braret al. (2018). With regards to the control variables, bank size and ROE have a +ve and significant effect on the CRAR. Profitability's positive influence on CAR suggests that more successful banks continue to retain a high level of regulatory capital. The beneficial effect would suggest that Indian private banks hold income rather than invest it in order to build their capital base and satisfy the central bank's capital requirements (Unvan (2020)). The results are in line with Unvan (2020), who demonstrated that there is a positive profitability (ROA) link with the CAR bank.

Table 4: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.971248	6.870249	0.869146	0.3867
GDP	-0.56313	0.808127	-0.69683	0.4874
FDI	0.117147	0.024132	4.854335	0*
INF	0.003281	0.178902	0.018338	0.9854
LEV	-0.06857	0.334888	-0.20476	0.8382
BKSIZE	0.647393	0.286007	2.263557	0.0256*
ROA	0.079305	0.056863	1.394679	0.166
ROE	0.073669	0.016871	4.366494	0*
R-squared	0.431472	F-statistic	11.49235	
Adjusted R-squared	0.393928	Durbin-Watson stat	1.425296	
Prob(F-statistic)	0			

Source: Author's Calculations *, indicate significant at 5% significance level.

Conclusions and Policy Implications

The goal of this article is to provide an empirical evaluation of how various macroeconomic indices affect the CAR of Indian private banks. The final sample consisted of 16 Indian private banks for the financial period of 2014–15 to 2020–21, with the sample observation

of 114. The study includes GDP, FDI, and inflation as main variables and bank size, ROA, ROE, and leverage as control variables. This study's findings show that foreign direct investment is the single major factor significantly influencing the CRAR of Indian private banks. Foreign direct investment (FDI) has many positive ef-

fects on economies. These effects include the formation of new products and services, the growth of new industries, and the spread of new technologies. All of these factors contribute to increased economic growth, the most effective method for reducing poverty in developing countries like India (Braret al. 2018).

The study recommends that policymakers and regulators, such as the RBI, should consider the impact of macro related variables on CAR when developing programs and monitoring banks. The macroeconomic factors influencing banks' capital adequacy ratios should be managed with greater awareness and efficacy. The article recommends a risk-based capital maintenance system that can analyse the impact of macro related variables on minimum capital requirements, as well as a sound risk-management system, for private banks in India (Anshu&Gakher 2019). The author argues that investors should monitor the bank's financial parameters, such as the capital adequacy ratio, to protect themselves from unnecessary risk and increase their return on investment (Runtuet al. 2017).

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Gender Diversity in Leadership & Organizational Performance: an Empirical Analysis

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Abstract

Gender Diversity in leadership and organizational performance has been topic of immense interest for management research scholars and increasingly attracted the attention of academics and regulatory institutions in recent years. Gender diversity refers to the degree of heterogeneity in a gender that characterizes a work team. Effective leadership is often viewed as the foundation for organizational performance and growth. This study focuses on women leaders and their contribution towards organization performance. Open Communication, Result Focused, Talent Development, Employees' Empowerment & Equity and Fairness are taken as parameters for organizational performance. The target population limited to the leaders who are holding the designation of Senior Manager, Senior Executive, Chief Executive Officer, Chief Financial Officer, Director and their immediate subordinates. The public organizations selected under the study are mainly listed on BSE and NSE stock exchange. 480 questionnaires were fully completed and suitable for the analysis with a 43.63 percent overall response rate. A well-structured, close-ended survey instrument was used as the primary data collection tool to get data. The questionnaire started with questions to collect data on the respondent's personal, demographical information and basic information about the organization. The survey instrument adopted organization performance scale. It measured organizational performance as the effectiveness of the leader. This scale is adopted from part of a study by Singh & Bhandarker (2011) organizational performance scale and further adapted according to this study. Descriptive Statistics such as mean, standard error was also used for analysis. T- test Statistics was also used to assess the difference in the organizational performance of female leaders in compare to male leaders."Chi-Square for measurement of model for organizational performance is applied. SEM (structural equation modeling) using SPSS AMOS-24 was conducted based on this study's requirement. It is determined that in connection with the gender of the leader, there is a significant difference in the respective Organizational performance of the leaders. This study suggested that various types of organizational performance such as open communication, result-focused, talent development, employees' empowerment and equity & fairness are also better in female leaders as compare to male leaders. Finally, the study provides the important suggestion of involving the women leaders in essential decisions for better corporate governance and organizational performance.

Keywords: [Gender Diversity, Leadership, Organizational Performance, Women Leaders]

Introduction

Impact of Gender Diversity in leadership on organizational performance has become topic of vital interest for researchers, academicians, professionals and regulatory agencies. Greater female representation in boardrooms and senior management positions is being specifically urged and ensured by many governments nationally as well as internationally. Multifariousness in team of the organization on basis of gender refers to gender diversity. The main concern of gender diversity in corporate leadership is allocation of humans on basis of specific skills and talents with commercial motive. Leadership in the organizations with greater gender diversity is not the only solution and panacea. There is probability that gender diversity in top management may hinder influential teamwork due to varied values, perceptions and cognitive styles.

Powerful and effectual leadership characteristics often considered as backbone of organizational performance and growth. Organizations having influential leaders at the top enjoy competitive edge (Kim, 2007). Effectiveness in leadership are evaluated through various

parameters such as followers' attitude, level of commitment given to the organization and motivation towards the job (Howell and Costley, 2006). Performance and outcomes of the organization, or group productivity or group processes are also determinants of effective leadership (Eagly et al., 1995; Howell and Costley, 2006; Datta, 2015). Attainment of higher profitability and productivity is generally considered as outcome of effective leadership. This is specifically true when the organization attains greater heights after joining of a particular leader. Lower employee turnover and absenteeism are also parameters for evaluating leadership effectiveness. (Howell and Costley, 2006).

This study focuses on women leaders and their contribution towards organization performance.

Woman Leadership and Organization

In 2020, General Secretary Xi Jinping proposed at the United Nations General Assembly commemorating the 25th anniversary of the Beijing World Conference on Women: "Women are the pioneers of human civilization and the promoters of social progress. Let gender

equality be implemented, and women will be at the forefront of the times.”

Now days, Women are leading the corporate world and holding top management positions. Women in leadership roles provide good financial results for businesses. Studies on the relationship between woman’s leadership and the bottom line in companies have shown that “companies with a high-quartile representation of women on executive committees perform better than organizations that do not have women at the top” (Carter & Wagner, 2011). Despite this research, worldwide, women’s leadership improvement in business has been low, with an average of 24% and 33% of professions revealing a complete absence of women in their leadership structure. (Georges et al., 2010).

Jing et al. (2022), studied the relationship between female leadership characteristics and employee innovation performance through knowledge sharing as intermediary variable. Theoretical research framework is build through flexible management theory, leadership style theory and caring ethics theory. Hypothesis in the study revolves around the relationships among female leadership characteristics, knowledge sharing, and employee innovation performance. Data was collected from 300 valid questionnaires. Empirical Analysis is done by using SPSS and AMOS. The findings of the study revealed that the characteristics of female leadership help employees to actively share knowledge within the organization and also contribute to the improvement of employee innovation performance. Knowledge sharing acts as mediating variable for the improvement of employee innovation performance through female leadership traits. This research provided a new insight into female leadership traits and also provided direction support for the sustainable development of female leaders in the enterprise.

Madhumadhi & Anand (2022) highlighted that women entrepreneurship as risen remarkably around the globe. It is well established that entrepreneurship is must for economic growth and wealth. It has been witnessed that women’s participation in entrepreneurship is lower than men’s in almost all societies. Scholars from diverse disciplines have become more or less interested in the behaviour and profile of female entrepreneurs and their success stories. Various factors affecting women entrepreneurs are studied with positive and negative effects at each stage of the entrepreneur process. The factors are categorized by their impact and organized in relation to the entrepreneur process.

Alwi & Sawitri (2022) proposed a schematic research

model that shows the influence of organizational culture on organizational performance which can be moderated by the gender diversity of employees. This paper used a literature study approach by mapping previous research related to organizational culture in articles. The research papers are extracted from Scopus indexed journals and Google Scholar over the last five decades. The study found that the antecedents of organizational culture can come from internal factors and external factors such as a sense of achievement and company policies. Organizational culture contributes towards organizational performance, job satisfaction, job performance, and company strategy.

Dicknson (2019) examined women leadership behavior and organizational performance. Challenges faced by the women leaders are determined. The survey research design was adopted in this study. All commercial bank executives and top managers in Bayesla state are targeted. 95 executive officers selected from 17 commercial crops comprised sample of the study. Structured questionnaire was designed to collect data. Both primary and secondary data were used in this study. Spearman rank correlation was used for data analysis. The findings of study revealed that women leadership behaviours such as participative decision making, expectation/reward and control are significantly related to organizational performance. The study concluded that leaders who are transformational oriented irrespective of the gender could better survive in a turbulent environment than leaders who apply transactional leadership style. Therefore, it was recommended that women should be encouraged to advance their career and professional endeavors to the highest echelon of the organization.

Koburtay et al. (2019) stated that gender discrimination refers to an institutional problem that has a broader impact on individual women than the impact of individual discrimination. Women’s perception that discrimination occurs with them regardless of their personal experience in their work environment leads them to evaluate their organizations and organizational experiences more negatively than men. The examination has shown that ladies, as a rule, report their associations as being less comprehensive and less reasonable than men do.

Chadwick & Dawson (2018) examined association of women leadership in upper levels of management with organizational performance in family-controlled businesses. The study compared family and non-family businesses and also distinguished between financial

and non-financial performance outcomes. The researcher examines the relationship between female leadership and firm performance, using panel data of large public firms from the S&P 500 over a five-year period. The study found that female-led organizations outperform male-led organizations in terms of non-financial performance across family and non-family businesses. However, in financial terms, it is found a statistically significant and positive relationship between female leaders and firm performance only in non-family businesses. It is suggested that the upper echelon and double standards of competence theories may not apply in family businesses in the same way as they do in nonfamily businesses. This study has practical relevance for practitioners, especially for owners of and advisors to family businesses.

Khatri (2018) reviewed different aspects of organizational performance while studying the leadership effectiveness of gender diversity in boards or management. Cross-cultural studies in gender diversity are reviewed to assess the impact of culture on women's representation and leadership. Few studies also demonstrated that the relationship is mediated by some other factors such as women's university degrees, professional experience of women, and innovation strategy of the firm. Secondly, cultural dimensions, gender equality, low power distance, and low avoidance of uncertainty seemed to have a positive effect on women's representation in board or management, as shown in studies across the countries.

Schulz & Enslin (2014) tracked down that the results of discrimination went past ladies' admittance to formal and casual resources by impacting their workplace encounters and impression. Numerous ladies, who accept they have been victimized, or have influenced partners, have tried to ignore their work. All the more emphatically, members felt that their bosses victimized their gender or race. They encountered hierarchical level discrimination ("accepting that authoritative strategies and practices were non-prejudicial"), less happy with their positions, and less dedicated to the organization. Besides, women are less likely to participate in institutional citizenship behaviour when they experience co-worker discrimination.

Donald & Westphal (2013) strongly suggested and highlighted that historically women have been disadvantaged and given limited opportunities in terms of education and overall workplace experiences. This directly results in little opportunity to align with board member criteria and success, leading to minimal gender representation at the corporate leadership level. Authors

further emphasize that as societies continue to evolve and become more diverse in their model, this has necessitated the considerable study of women on board and the impact of inclusion on overall organizational and board outcomes.

Vasavada (2012) stated that women make up a mere 36% of the labour force; organizations employ 22.6%; 6% are in senior management, and 4.9% are on boards of directors. Despite rapid urbanization and industrialization, strong embedded religious and patriarchal influences reinforce male superiority and female inferiority. This continues to impact women's progress across the Indian workforce and in all spheres of society negatively (Rahi, 2015).

Adams et al. (2009) tested the hypothesis that female executives are over-represented in the precarious leadership position. The sample consisted of CEOs' appointments at U.S. Corporation. The data was collected from 61 women who held the position of CEO of 63 firms over the year 1992-2004 and got the daily stock returns of only 48 of these 63 firms, and these 48 firms constitute the sample under the study. To test the hypothesis that female executives are over-represented in precarious leadership position, three measures of daily stock return were taken based on the various constraints and limitations. These returns are cumulative stock returns of the respective period. Market return, systematic risk of each firm derived by adjusting the firm's daily returns considering the risk profile of the firm are used for measuring firm performance. Furthermore, from the stock return analysis to the appointment of CEOs, it was found that there is no significant difference in appointing male or female CEOs on the performance of the firm having sound financial health. The researcher also studied 31 firms that appoint female and male CEOs at different times and based on their stock returns. The results of the analysis indicated that the low-risk firm, pre-appointment returns were larger for female CEOs compared to male CEOs and vice versa.

Manning (2002) focused on the impact of the feedback process, experience and organizational status on personnel's leadership view. It was noticed that both genders behave similarly in leadership roles, but women adhere to a more "relationship-oriented" leadership style. Data collected by leadership practices inventory from the participating managers and observers. 39 managers were evaluated by 89 observers of the leaders' group of a U.S. regional health and human services agency. Structured questionnaire with 30 statements on leadership inventory was framed. Five

transformational leadership factors were measured and each of them evaluated by different behavioural qualities rated on Likert scale. t-test, MANOVA and ANOVA was adopted for data analysis. The findings of the study revealed that there is no significant difference between male and female managers on any of the five transformational leadership characteristics either self rated or observer rated. It is also found that there is no significant difference between man and women managers in the work satisfaction, whether with an aspect of the work itself or with work relationships. The study also found that top-level managers had significant higher satisfaction with job security and co-workers co-operation than middle managers. Top-level managers saw themselves as more skilled transformational leaders than middle managers. It is also found that female managers had the same work satisfaction level as their male managers equivalent level.

Objective of the Study

To access the difference in leadership behaviour and organizational performance of the female leaders as compare to male leaders.

Research Hypothesis of Study

H₁₁: "Open Communication" parameter of Organizational performance is significantly different between male leaders and female leaders as perceived by their subordinate.

H₁₂: "Result Focused" parameter of Organizational performance is significantly different between male leaders and female leaders as perceived by their subordinate.

H₁₃: "Talent Development" parameter of Organizational performance is significantly different between male leaders and female leaders as perceived by their subordinate.

H₁₄: "Employees' Empowerment" parameter of Organizational performance is significantly different between male leaders and female leaders as perceived by their subordinate.

H₁₅: "Equity and Fairness" parameter of Organizational performance is significantly different between male leaders and female leaders as perceived by their subordinate.

Brief Description of the Variable under Study Organizational Performance

- Open Communication -Open Communication in the organization alludes employees not being judged adversely for their trustworthiness and candour in

communicating.

- Result Focused -Result Focused alludes that organization puts a lot of their consideration and energy toward the result, well beyond the interaction by which the result is achieved.
- Talent Development -Talent Development in the organization, alludes to the labour force learning and instructing itself to create and grow.
- Employees' Empowerment -Employee's Empowerment includes workers in the organization conceded the power or authorization by their chiefs to settle on choices and step up and fix issues and look for opportunities.
- Fairness and Equity -Equity and Fairness address the degree to which an organization treats its representatives without incredible respect to rank chains of command and particular treatment of select individuals from the gathering.

Target Population

This study's universe is the leaders at the top management and their immediate subordinates in Indian organizations, which follows and adopted the corporate governance rules and regulations of any stock exchange, mainly BSE and NSE, located in the Haryana state of India. Banking and financial institutions were excluded from this study because of their different code of corporate governance. As per the proposed research framework and objective of the study, the target population limited to the leaders who are holding the designation of Senior Manager, Senior Executive, Chief Executive Officer, Chief Financial Officer, Director and their immediate subordinates. The target population has come under the segment of key leaders, as they are mainly responsible for adhering to good corporate governance practices in the organization. The public organizations selected under the study are mainly listed on BSE and NSE stock exchange.

Sampling Technique and Data Collection

The non-probability sampling techniques, Chain-referral sampling, Convenience sampling are used to collect the sample for the study.

For data collection, around 1100 individuals were approached to participate in the survey that holds the organization's top management. The survey was administered personally and sent by the Indian post system, with the covering letter related to the study, to the director's residence address. This list of the organization registered in Haryana is available on the official website of Registrar of Companies, Delhi and Haryana. The

information about the key managerial personnel, such as the director of the organization, was retrieved from the official website of Registrar of Companies, Delhi and Haryana and the organization's respective official website.

From 600 questionnaire sent by post, only 10 were returned by respondents, and 500 questionnaires were filled by one to one basis at the organization in field-work carried from 1st August 2019 to 31st March 2020. Furthermore, a total of 510, 30 questionnaires were discarded due to inadequate and incomplete responses. Finally, 480 questionnaires were fully completed and suitable for the analysis with a 43.63 percent overall response rate.

Nature of Data

The study is based on both secondary and primary data. Secondary data provided foundations for primary data. A well-structured, close-ended survey instrument was used as the primary data collection tool to get data. The questionnaire started with questions to collect data on the respondent's personal, demographical information and basic information about the organization. The survey instrument adopted organizational performance scale. It measured organizational performance as the effectiveness of the leader. This scale is adopted from part of a study by Singh & Bhandarker (2011) organizational performance scale and further adapted according to this study. It used five points Likert scale carried from "Very Low Extent" towards "Very High Extent", with 1 to 5 representing respectively as a part of the instrument for data collection. This part included 18 items to measure organizational performance. The variables under study are Open Communication, Result Focused, Talent Development, Employees' Empowerment, Fairness and Equity. The survey instrument were filled by the top management leader's immediate subordinate to know the leaders' actual behaviour and organizational performance. The proxy respondent (Immediate subordinate) is used in this study to avoid the leader's biased response about their behaviour and organizational performance (Furnham, 1986; Schwarz & Oyserman, 2001).

Besides, for getting responses for the leadership behaviour scale and organization performance scale, the total sample size of 480 immediate subordinates was also considered enough.

Statistical Tools & Techniques

T-test Statistics

Descriptive Statistics such as mean and standard error was also used for analysis. T- test Statistics was also used to assess the difference in the organizational performance of female leaders in compare to male leaders."DC

For measurement of model for organizational performance, chi-square is applied. SEM (structural equation modeling) using SPSS AMOS-24 was conducted based on this study's requirement. CFA used to test the hypotheses that assume the relationship between observed variables and latent constructs. In the structural model the relationship between constructs that exists or not is evaluated.

Results & Discussions

Influence of gender of leaders on organization performance

Table 3 reported the T-test results for the differences in organization performance on the basis of the gender of leaders. In this study, the researcher has compared the five indicators of organization performance between male leaders and female leaders such as open communication, result-focused, talent development, employees' empowerment, equity & fairness. T-results will reveal significant differences that arise in organization performance due to change in the gender of leaders. The results will also indicate that either organization performance is better in male leaders or in the case of female leaders.

Relationship between gender of leaders and open communication

T-test also provided significant results for differences in open communication performance of the organization on the basis of the gender of leaders and supported the H11 at 0.001. The exhibited results in Table 3 also implied that the open communication parameter of the organization is far better in the case of female leaders in comparison of male leaders, as mean values of female leaders for open communication performance is greater than 3, and male leaders' mean value is below than 3.

Relationship between gender of leaders and employees' empowerment of leaders and result-focused

The T-test's reported outcome in table 3 also suggests the significant difference in the result-focused parameter of organization performance based on the gender of leaders and supports H12 at 0.001 level. The results reported in table 2 indicated that female leaders' results-focused organizational performance is far better than the male leaders' performance. The mean values

of female leaders for results-focused are greater than 3, and male leaders' mean value is below than 3.

Relationship between gender of leaders and talent development

Table 3 also exhibits the outcome of the T-test for gender differences in the talent development parameter of organization performance. The outcome of T-test reported the significant differences in talent development parameter on the basis of the gender of leaders and supported H13 at 0.001 level. The results reported in table 2 indicated that female leaders' talent development organizational performance is better than the male leaders' performance, as mean values of female leaders

for talent development parameter is greater than male leaders' mean value

The reported outcome of T-test in table 3 also suggests the significant difference in employees' empowerment parameter of organization performance on the basis of the gender of leaders and supports H14 at 0.001 level. The results reported in table 2 indicated that female leaders' employees' empowerment organizational performance is far better than the male leaders' performance, as mean values of female leaders for employees' empowerment are greater than 3 and male leaders' mean value is below than 3.

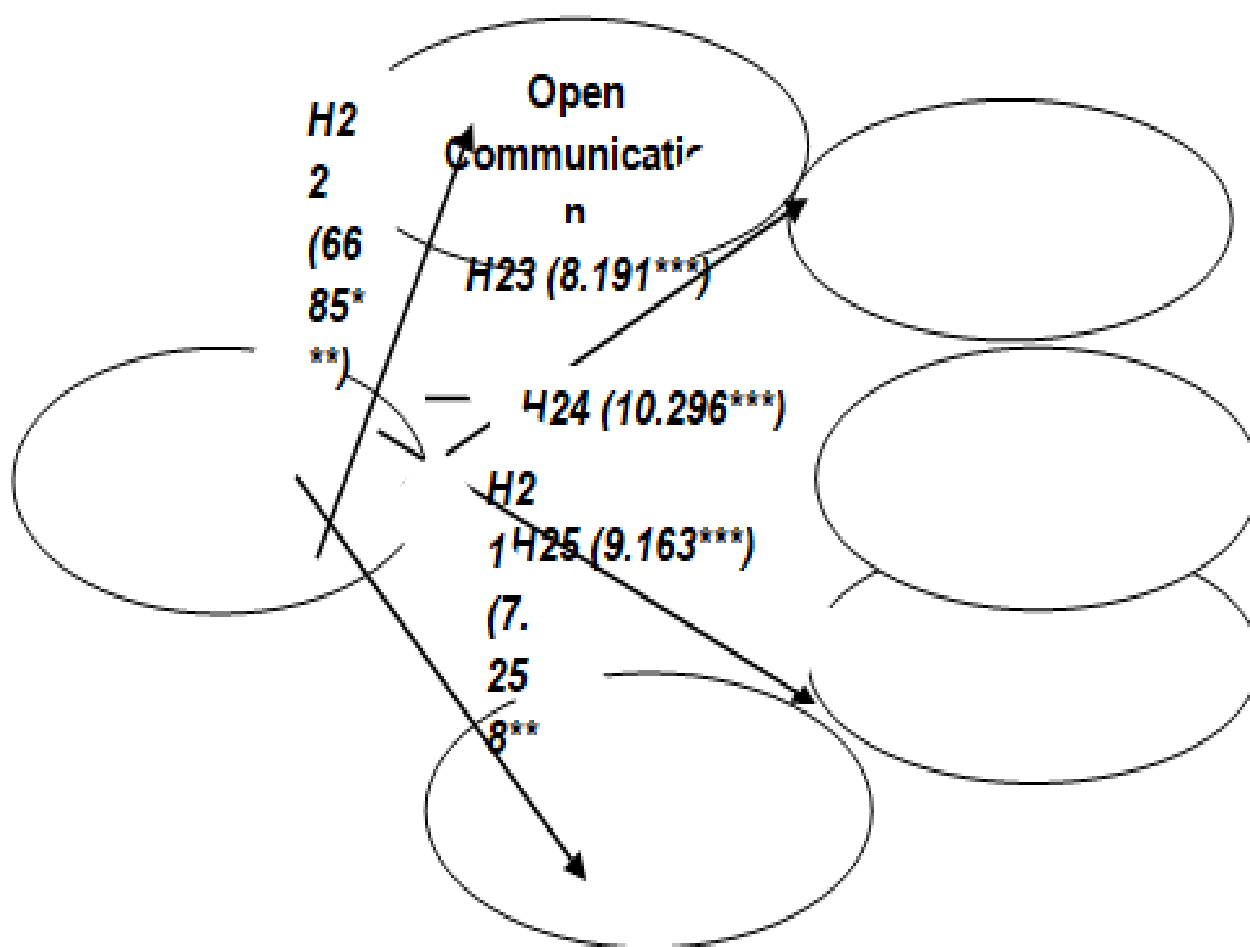


Figure 1: T-Statistics

Note: Figure shows T-statistic for a relation between gender of leaders and parameters of organization performance. *** T statistic is significant at 0.001 level.

Relationship between gender of leaders and equity & fairness

Table 3 shows the outcome of the T-test for gender differences in equity & fairness parameter of organization

performance. The outcome of the T-test reported the significant differences in equity & fairness parameter on the basis of the gender of leaders and supported H15 at 0.001 level. The results reported in table 2 indicated that "female leaders' equity & fairness" organizational performance is better than the male leaders' performance, as mean values of female leaders for equity & fairness parameter are greater than 3 and male leaders' mean value is less than 3.

Table 2: Descriptive Statistics

Construct	Gender of Leaders	Mean	Standard error of mean	N
OC	Female	3.0782	.04616	245
	Male	2.6288	.04894	235
RF	Female	3.2613	.03739	245
	Male	2.7718	.04661	235
TD	Female	3.8623	.04682	245
	Male	3.1555	.05030	235
EM	Female	3.5085	.04106	245
	Male	2.9492	.04530	235
EF	Female	3.2887	.04241	245
	Male	2.8458	.04390	235

Source: Researcher Calculations

Table indicates descriptive statistics on the basis of the gender of leaders and organization performance. OC, Open communication; RF, Result focused; TD, Talent Development; EM, Employees' empowerment; EF, Equity and fairness.

Table 3: T-Test Results

Construct	Levene's statistic	T statistic	Mean Difference
OC	.497	6.685***	.44935
RF	14.589	8.191***	.48946
TD	2.627	10.296***	.70677
EM	2.296	9.163***	.55932
EF	.145	7.258***	.44284

Source: Researcher's Calculations

Table indicates that mean differences on the basis of the gender of leaders in organization performance. OC, Open communication; RF, Result focused; TD, Talent Development; EM, Employees' empowerment; EF, Equity and fairness. *, **, *** statistics are significant at 0.05, 0.01 and 0.001 levels.

Table 4: Descriptive Statistics for Items

Variables	Items under Variable	Mean	S.D.	N
Open communication (OC)	Proper Communication and information flow	3.2458	1.17471	480
	Teamwork in the organization	3.3833	1.15180	480
	Role clarity in the organization	3.5583	1.01180	480
Equity & Fairness (EF)	Openness and transparency	3.3979	1.05486	480
	Performance-based promotion	3.3542	1.07718	480
	Nurturing innovation	3.3896	.98861	480
Employees' empowerment (EM)	Support for risk-taking	3.5000	1.03589	480
	Focus on continuous improvement	3.4521	1.04081	480
	Result oriented approach	3.4792	1.05959	480
	Performance excellence	3.4021	1.07291	480
Result focused (RF)	Process focused approach	3.4938	1.01757	480
	Trust building approach	3.4333	1.01334	480
	Ethical governance approach	3.3604	1.00172	480
	People orientation approach	3.4312	1.00700	480

Talent development (TD)	Openness to new ideas	3.6063	1.11038	480
	Encourage Participation	3.4812	1.12648	480
	Nurturing talent approach	3.4479	1.09344	480
	Global perspective approach	3.4625	1.08060	480

Source: Researcher's Calculations

Measurement Model of Organization Performance

The overall measurement model of organization performance's parameters was also good fitted, as all model fitness indices reported in Table 5 were statistically significant. The shown model fitness indices were χ^2 (CMIN) = 277.181, DF = 125, CMIN/DF = 2.217, IFI = 0.963, CFI = 0.963, RMSEA = 0.050, RMR = 0.045.

Apart from this, standardized factor loadings were significant as shown in figure 2, CR values were > 0.7 as in Table

6, AVE values were > 0.5 as in Table 6, and CR values were also > AVE values as in Table 6, which had validated the convergent validity of all constructs corresponding to organization performance. Further, AVE values of all constructs were also > ASV and MSV as shown in table 6 of corresponding constructs, which also validated the discriminant validity of constructs. In this way, a statistical fit model of organization performance's parameters was found.

Table: 5 Goodness of Fit for Measurement Model

Fit indices	Observed values	Recommended level of fit indices
CMIN	277.181	
DF	125	
CMIN/DF	2.217	<3 (Kline, 1998, 2015)
IFI	.963	>.90 (Bollen, 1990)
CFI	.963	>.90 (Hu & Bentler, 1999)
RMSEA	.050	<.10 (Schermelleh-Engel et al., 2003; Wan, 2002)
RMR	.045	<.10 (Hair et al., 2010)

Source: Researcher's Calculations

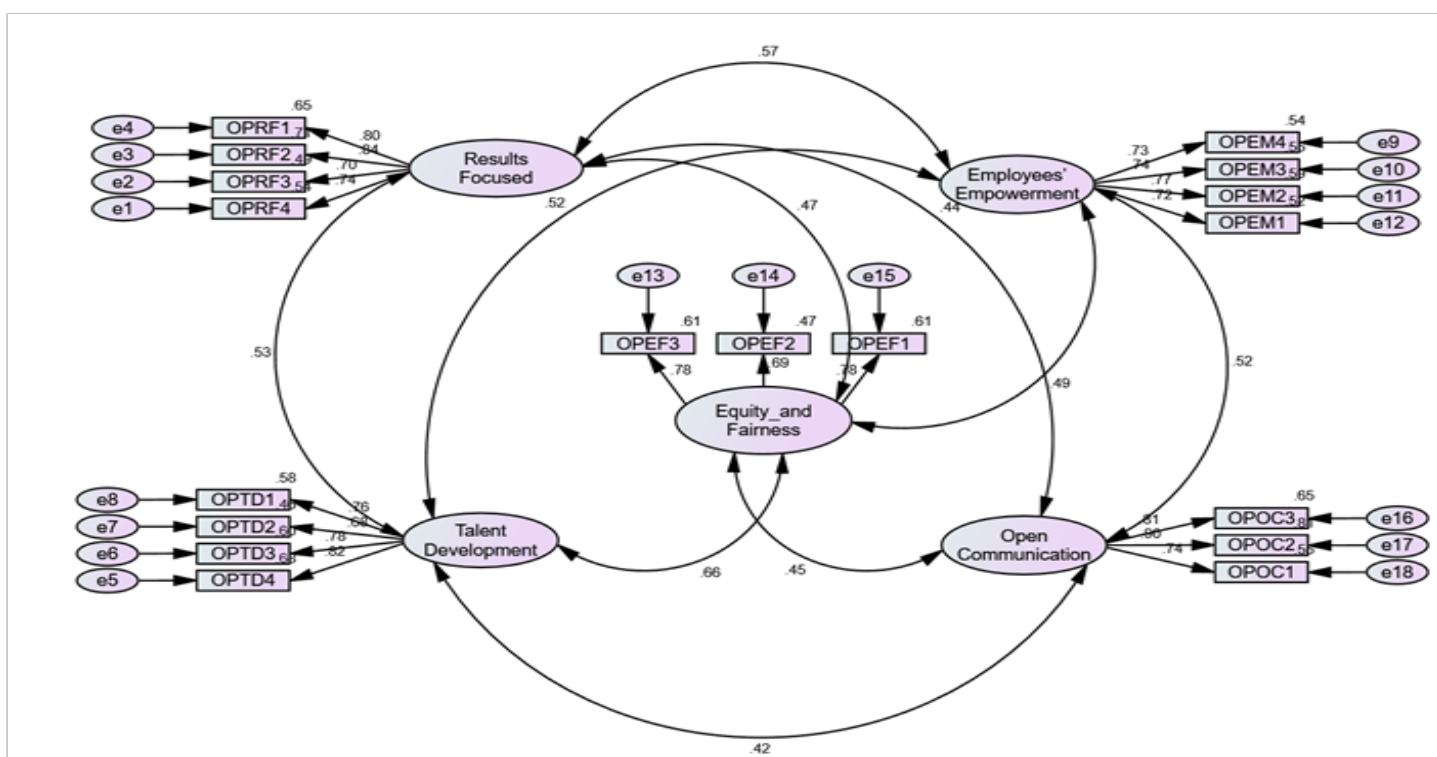


Figure 2: Measurement Model of Organizational Performance

Table 6: Convergent Validity and Discriminant Validity of Latent Variables

Latent variables	CR	AVE	MSV	ASV
Results Focused	0.856	0.599	0.321	0.254
Equity and Fairness	0.795	0.565	0.440	0.276
Open Communication	0.858	0.669	0.267	0.209
Talent Development	0.846	0.580	0.440	0.291
Employees' Empowerment	0.830	0.551	0.321	0.276

Notes: "CR, Composite reliability; AVE, Average variance explained; MSV, Maximum shared variance; ASV, Average shared variance. For convergent validity, CR should be >0.70, and AVE should be >0.50, and CR should also be > AVE. For discriminant validity, AVE should be > both MSV and ASV."

Source: Researcher's Calculations

Conclusions

This study gives information relating to Organizational performance based on the leader's effectiveness of the top management of Indian organizations. It is determined that in connection with the gender of the leader, there is a significant difference in the respective Organizational performance of the leaders.

There is a significant difference in the "Open communication" variable of Organizational performance". In women leaders' respective organizations, the Open communication variable is more visible as compared to male leaders as perceived by their immediate subordinates. There is a significant difference in the "Result focused" variable of Organizational performance". In women leaders' respective organizations, the Result-focused variable is more visible as compared to male leaders as perceived by their immediate subordinates. There is a significant difference in the "Talent Development" variable of Organizational performance". In women leaders' respective organizations, the Talent Development variable is more visible as compared to male leaders as perceived by their immediate subordinates. There is a significant difference in the "Employees' empowerment" variable of Organizational performance". In women leaders' respective organizations, the Employees' empowerment variable is more visible as compared to male leaders as perceived by their immediate subordinates. There is a significant difference in the "Equity and fairness" variable of Organizational performance". In women leaders' respective organizations, the Equity and fairness variable is more visible as compared to male leaders as perceived by their immediate subordinates.

This study suggested that various types of organizational performance such as open communication, result-focused, talent development, employees' empowerment and equity & fairness are also better in female leaders as compare to male leaders. Finally, the study provides the important suggestion of involving women leaders in essential deci-

sions for better corporate governance and organizational performance.

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Fintech- Block Chain Technology in Finance

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Abstract

Block Chain is defined as an electronic ledger that records financial transactions in such a way that makes it impossible to change and hack the system. It is a database that stores data in the form of "blocks". The block store group of financial transactions. This research paper is descriptive and is based on secondary data. In this paper, we will discuss the concept of FinTech, Cryptocurrency, and blockchain, how blockchain works, why to use blockchain, and what's the problem with using blockchain. We concluded that this technology provides an online ledger that keeps a record of every piece of data permanently and protects it from hackers, unauthorized access, and fraudulent activities.

Keywords: [FinTech, Cryptographic Hashing, Decentralization, Bitcoin, Smart Contracts].

Introduction

Blockchain technology was first invented by Stuart Haber and W. Scott Stornetta in 1991. The aim of the researchers is to design a blockchain to implement such a system through which financial transactions are made securely and without alteration. An individual company or group of companies that know its participants can set up a business blockchain. They can collect funds from business blockchains without having to do with digital currencies. According to a MarketWatch report in 2018, the total investment in blockchain by the financial services sector and banking sector amounted to \$2.3 billion. The report also forecasts that this investment will grow to \$17.47 billion by the end of 2025, with a compounded growth rate of 33.6% from 2019 to 2025.

Journey of Blockchain

1. Blockchain technology was first invented by Stuart Haber and W. Scott Stornetta in 1991. After that, some inventions are happening to bring improvements to it. The following shows the brief journey of blockchain: -Blockchain technology was first invented by Stuart Haber and W. Scott Stornetta in 1991 with a cryptographically secured chain of blocks.
2. In 1998, Nick Szabo a computer scientist works on 'bit gold' which is a decentralized digital currency.
3. In 2000, Stefan Konst introduced new ideas for the implementation of blockchain with his theory of cryptographically secured chains.
4. In 2008, a group of researchers introduced a white paper for establishing the model for a blockchain under the pseudonym Satoshi Nakamoto.

5. In 2009, Nakamoto used the initial blockchain as the public ledger for transactions made with Bitcoin.
6. In 2014, a new version namely blockchain 2.0 is born. It separated blockchain technology from currency and also search for other use of it other than financial matters.

Concept of Blockchain

Blockchain means an electronic ledger that records the financial transaction in a way that makes it impossible to change and hack the system.

It is a database that stores data as "Blocks" which stores financial transactions in groups. Blockchain systems created a new block after filling one block automatically, without the intervention of human beings. That's why it creates a transparent system.

Definition:Blockchain, is defined as Distributed Ledger Technology (DLT) that prevents any digital asset from being unalterable and transparent through the use of decentralization and cryptographic hashing.

Important Terminology

FinTech

The "Fintech" was first introduced by New York banks in 1972. Still, there is no specific definition of Fintech, but Fintech stands for Financial Technology. It includes financial services like the online market hub, mobile app, mobile wallets, artificial learning machines, financing, foreign exchange, Investments, digital currency, insurance, biometrics, and wealth management, etc.

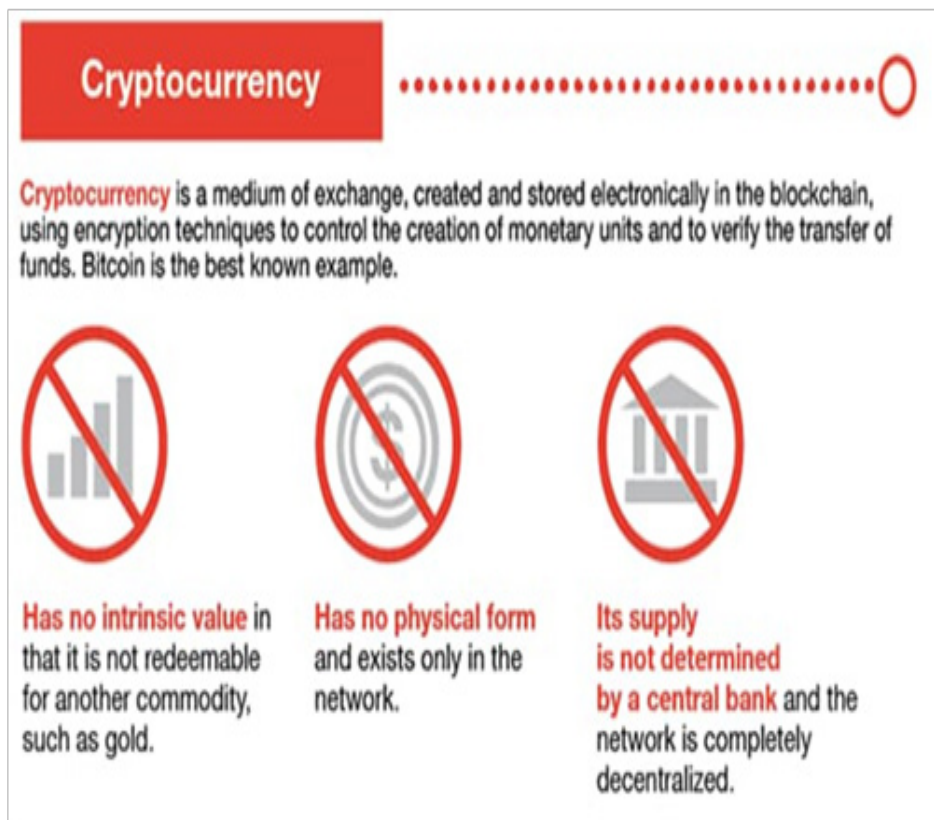
Cryptocurrency

For understanding the term of cryptocurrency, one

should divide it into two parts “Crypto+ Currency”. For understanding the term cryptocurrency, one should divide it into two parts “Crypto+ Currency”. Here term Crypto means “secret” and currency (The money used in a particular country is referred to as its currency) means “Money that is used in a particular country”. So, cryptocurrency means secret money or digital money that can be used to purchase goods

and services online. The working of cryptocurrency depends on “Blockchain” technology.

According to Oxford Dictionary, “Cryptocurrency is defined as a digital currency in which transactions are verified and records maintained by a decentralized system using cryptography, rather than by a centralized authority.



Any investor can purchase cryptocurrency through crypto exchanges like Coinbase, Cash app, and more.

Cryptographic Hashing

Hashing is a method of cryptography that converts any form of data into a unique string of text that validates data and ensures the security of the data.

Decentralization

A decentralization database means no superior or someone that has accountability.

In the sense of blockchain: it is a decentralized database that is based on block which cannot be replaceable and free from human biases.

Bitcoin

Bitcoin can be defined as cryptocurrency, virtual or digital currency that is not issued by any banks or government bodies.

The invention of Bitcoin is the result of the global crisis of 2008. It was generated by Satoshi Nakamoto in 2008 and first-time used between Nakamoto and an early adopter of Bitcoin in January 2009.

Bitcoin was legal in developed countries like the U.S., U.K., Japan, etc. from June 2021. But in India, RBI banned it in India 2018 and the Supreme Court of India lifted the 2018 RBI ban in 2020. So, The Indian government still isn't very sure about how to deal with Bitcoin.

Note: Sometimes bitcoin is treated as equal to the blockchain. The following difference clear the fact “blockchain and bitcoin are not same”:

- Blockchain is not Bitcoin, but Bitcoin is an application of blockchain technology.

Bitcoin is the digital currency and blockchain is the ledger to keep records or track digital tokens, transactions, or information.

You can't use Bitcoin without blockchain, but you can use blockchain without Bitcoin.

Smart contracts

The smart contract is a simple oracle program stored

on the blockchain that is executed automatically after fulfilling “if/then/ when...” conditions. This is mainly used to send information to all participants without the intermediary’s involvement and loss of time.

Review of Literature

Pimpalkhute and Network (2022) said that blockchain helps in increasing demand for consumers, employees, investors, suppliers, retailers, and wholesalers because it presents a transparent and visible system in the entire supply chain management. In the energy sector, it creates services for its clients through microgrids and opens the avenue of incentivizing sustainable energy.

(Yao and Qin 2021) this research paper titled “Block Chain Based Supply Chain Financial Risk Management”, said that there are four types of risk i.e., authenticity risk, payback risk, operational risk, and contingency risk in supply chain management. These can be controlled by employing actual physical sensors to respond to and monitor the data in real time, increasing the supply chain’s effectiveness through risk management.

Kumar et al.(2020) said that this technology provides a good network of big data, the Internet of Things, and machine learning. It is beneficial for improving our lifestyle and maintaining proper records of assets and transactions. It also improves the GDP of a nation and improves economic infrastructure.

Emmanuel et al. (2022) concluded that a blockchain is fruitful for keeping date-wise records of price, location, quality of product, and other relevant information in the supply chain. That’s why it increases the traceability of material, reduces the chance of counterfeit loss, and improves transparency over outsourced contract manufacturing.

Mehrotra and Kandpal (2019) determined that customers will be less inclined to adopt new technology due to their faith and trust in the conventional banking system. New technologies will not be successful until customers are satisfied with the privacy and security variable. It also requires some time to earn confidence among the customers even though it is easier and cheaper than the traditional methods.

Vijai (2019) said that the Indian fintech software market is forecasted to touch USD 2.4 billion by 2020 from a current USD 1.2 billion, as per NASSCOM. It is an emerging concept in the financial industry. Financial services can be offered at lower costs because of fintech. The Indian government also focuses on and encourages the fintech industry and promotes new ideas

and innovations referring to the fintech industry.

Ganapathy (2018) said in his article that the Indian financial services sector is making gradual progress to match steps with global peers just as the US, UK, Israel, Singapore, Hong Kong, and Sydney reflecting the growing importance of fintech across the international level. For financial inclusion, Financial Technology can be implemented anywhere. Importance needs to be taken to ensure the security of transactions.

Research Methodology

This research paper presents a conceptual framework for Blockchain in India. The research design of the study is descriptive that is based on secondary data. The secondary data is collected from different national and international research journals and various websites.

Objectives of the Study

The following are the objectives of the present study: -

1. To study the conceptual framework of FinTech, Cryptocurrency, and blockchain.
2. To discuss how the blockchain system works,
3. To study the uses of blockchain in India.
4. To study the problems faced by people while using blockchain technology.

Working of Blockchain

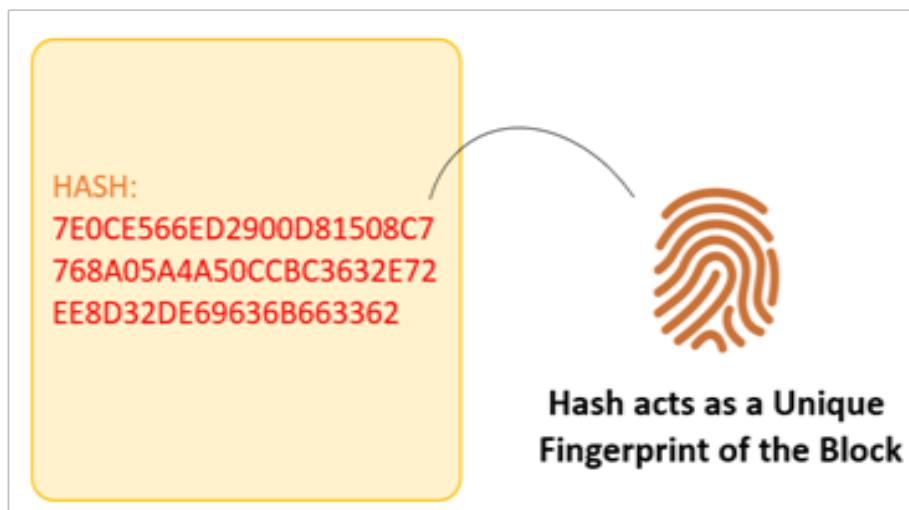
Blockchain is “Block + Chain” which means a chain of blocks that store information and a new block is generated one after one (after filling one block) automatically, without the intervention of human beings. (Soze, 2017)

A Bitcoin block, for example, has data on the sender, the recipient, and the number of bitcoins that have been transferred. Before discussing the working of blockchain, discuss the working of Blocks.

Due to Block 0, the first block in the blockchain is called the Genesis block. It is also called an ancestor block because each new block is linked to the previous block with its Hash code.

A block has Data, Hash, and Hash of the previous block: -

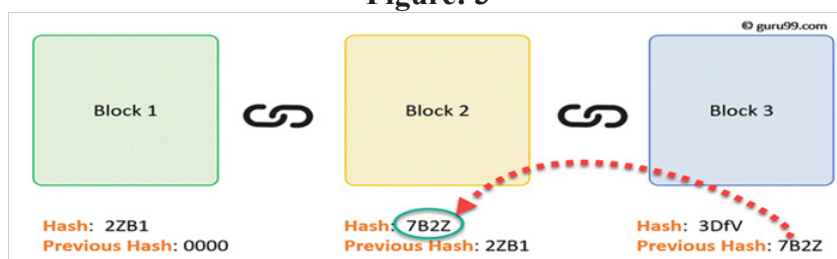
- **Data:** Data of the transactions.
- **Hash:** A block has a hash which is a unique code just like a fingerprint. This large number must start from zero (i.e., must be very small). The hash is a 256-bit number that is associated with a nonce. It identifies a block and its unique code and all other contents. It helps to protect information from alterations.



- **Hash code of the previous block:** Hash code of the previous block: In a blockchain, a new block has the hash code of the previous block after the Genesis block. In the following figure, there are 3 blocks.

Block1 is the genesis block, hence it does not have the hash code of the previous block. Block 2 has the hash code of block 1 and block 3 has block 2 and so on.

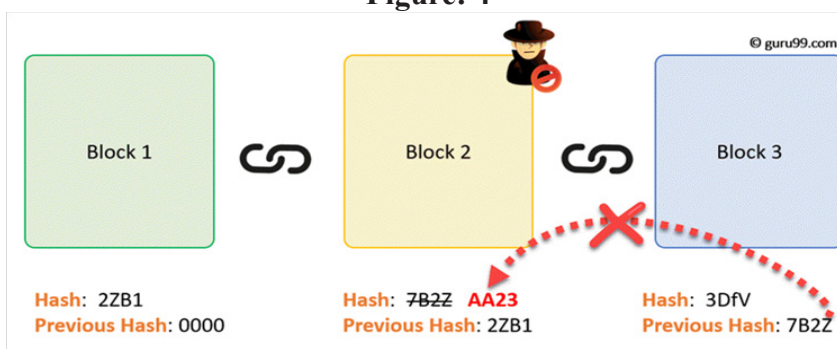
Figure: 3



Purpose of consists Hash code of the previous block: its main purpose is to keep transactions secure. Understand it's working with an example- lets a hacker wants to change the data that is stored on block 2 and is successfully able to change the hash of block 2. But,

block 3 still has the old hash code of block 2. Hence block 3 and all other succeeding blocks give invalid messages due to incorrect previous hash code just like shown in the following figure: -

Figure: 4



How blockchain works: -

Let's one person transfer money to another person following things will happen

Step 1: firstly, the request for fund transfer shows on the block itself online.

Step 2: After receiving information from the block, it sends it to the participants of blockchain users.

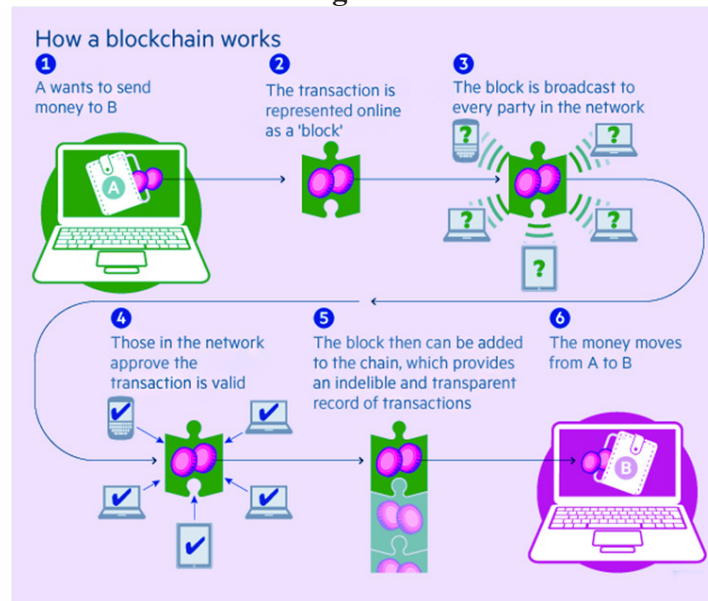
Step 3: the participants analyzed and approve the request for transfer.

Step 4: new block will be added to the blockchain after getting approval from participants.

Step 5: Money is successfully transferred to the second party when this block is added.

The following figure also shows how blockchain works:

Figure: 5



(<https://data-flair.training/blogs/working-of-blockchain/>)

Advantages of using Blockchain

Blockchain provides various benefits to businesses whether they are public or private or government institutions. It is used by businesses to share data and prepare an unaltered ledger that can be accessed only by authorized persons. It provides trust information without the intervention of human beings. The following are the main benefits of blockchain: -

1. **Trustworthy Network:** Blockchain is sometimes referred to as a “trusted” network, due to its ability to increase security, traceability, and transparency. Secondly, the data under blockchain is stored on blocks that are generated automatically by the system without the intervention of human beings. That’s why, there is no chance of human error and everyone can trust the information.
2. **Decentralized structure:** Blockchain is a decentralized structure, which has no boss and no one whom we could hold responsible or award. Blockchain runs on all computers and its process of generating blocks is unstoppable and free from human interventions. For example, all participants of the supply chain such as suppliers, manufacturers, wholesalers, and retailers need necessary information regarding their goods and no one in this chain provides reliable information about it. With the decentralized nature of blockchain, this type of problem can solve.
3. **Enhanced security and privacy:** The security and privacy of data is another benefit of blockchain. Blockchain used Cryptographic Hashing which im-

proves the security of transactions. It also used a digital ledger to keep a record of the transaction that is unalterable with end-to-end encryption, which prevents unauthorized access and fraudulent activities. Furthermore, it makes it impossible to hack from hacking activities by storing data on a computer network instead of stored on servers. Traditional computers store data together in servers that due to which the possibility of hacking increases.

4. **Reduced costs:** Blockchain is a more efficient process transactions as compared to a manual recording system. It reduces manual tasks such as collecting, recording, arranging, preparing reports, and auditing process. In addition, it reduces the cost by eliminating the role of vendors, middlemen, agents, and other third parties that have more processing cost and time which leads to inefficiency.
5. **Speedily transactions:** Due to the involvement of human beings in a manual processing system is more time-consuming. But now traditional method (paper-based) is replaced by blockchain that can proceed with transactions within seconds. However, the timing of processing depends on various factors of the blockchain-based systems. The transactions are stored automatically with details on a blockchain system which reduce the time of creating multiple ledgers, keeping records on them, clearing & settling the transaction, and exchange of papers. For example, Walmart used this technology to trace the source of sliced mangoes in seconds which process had previously taken seven days.
6. **Traceability:** Blockchain used a digital ledger that

records every transaction and exchange of goods. So, an auditor can trace the location of goods and from where the good came. It also helps to verify the authentication of traded assets of a business. Due to this benefit, it is used by medicine manufacturing industries to trace the supply chain from manufacturer to distributor. Similarly, Walmart's company used blockchain for inventory management, tracking the location of products and checking the history of its products.

7. **Immovability:** Immovability means that cannot move i.e., can't be reversible. In the sense of blockchain, a transaction that is recorded on the blockchain cannot be altered or deleted. Blockchain keeps a record of transactions chronologically i.e., transactions are recorded at the same time and date at that time they perform. No one cannot change it. This feature enhances the security and reliability of the information. For example, Sweden uses the blockchain to keep an online record of real estate so that property titles can track even as they sell the property.
8. **Individual control over data:** According to Michela Menting (A research director at ABI Research), at present data is a valuable asset and every individual or organization wants to secure or protect their data from unknown or unauthorized persons or activities. With the blockchain's smart contract technology, individuals and organization can convert their data into digital form and can decide to whom and how long they share data.

Limitations or Problem faced while using Blockchain

Since blockchain is a technology and every technology has some implementation issues as well as other challenges. The following is the problem that is faced with blockchain: -

1. **Storage capacity:** As you know blockchain stored all data on the network. The size of the online database increases, with the increasing number of transactions. There is no way to store these data on a personal computer. This is the big problem that creates hurdles to implementing blockchain.
2. **Slow processing:** No doubt, blockchain performs transactions within seconds, but when there is a large number of transactions on the network its processing slows down. It can handle seven transactions per second but Hyperledger can handle 10,000 and Visa 24,000. All participants of the blockchain

need to verify and approve each transaction which is time-consuming. Because of the time-consuming process, the practical use of blockchain becomes difficult to use it.

3. **Privacy:** Blockchain stores all data authorless on the network. All participants of blockchain have the right to access this data. When any person does transactions with this network, anyone could track the identification of a person. Therefore, blockchain does not 100 % guarantee of privacy of the data on the network.
4. **Security issue:** Bitcoin is the popular application of blockchain. Satoshi Nakamoto said that "51% attack" when he launched Bitcoin. The attack can be simply put like this – if 51% of the nodes in a network lie, the lie will have to be accepted as truth." Presently, blockchain technology also suffers from double sending of data.
5. **Implementation cost:** blockchain technology is implemented in the form of personal or rental networks. In addition to it, the cost of initial infrastructure such as computing, license, etc. is borne by the business or institution itself. The maintenance cost is also associated with blockchain technology. Hence, institutes or businesses that have no funds or budget or small size organizations cannot think about the implementation of blockchain technology.
6. **Competent staff:** to implement blockchain technology and work with this, need competent and knowledgeable staff. To train employees, they also need to arrange training programs which is costly and time-consuming. Further, if you need blockchain developers and experts, they are harder to find and will demand higher fees as compared to traditional developers.

Conclusions

Today every human being is poor of time. That's why each wants to get information quickly and accurately and blockchain technology fulfill this requirement. Blockchain provides the facility for online storage of data or transactions and the online exchange of goods and services. This technology provides an online ledger that keeps a record of every piece of data permanently and protects it from hackers, unauthorized access, and fraudulent activities. It helps in tracking any transactions, orders, accounts, products, or other things. It affects every individual as well as industries such as retailing, manufacturing, banking, transportation, insurance companies, Walmart, Nestle, Google, IBM, Microsoft,

and Intel, etc., Although, there are some limitations of blockchain technology that are discussed above. The above-discussed problems can be minimized or eliminated with the use of Hyperledger, Proof-of-Stake (PoS), and so on.

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Retraining and Reskilling the Employees- The Skills that will Count in Future

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Abstract

HR professionals are moving ahead in assisting their organizations in developing a future workforce. Faced with a tight labor market and a scarcity of staff with the appropriate variety of talent, some employers are investing in training to improve workers' skills and prepare them for new jobs with better opportunities. It's a strategy known as "up skilling" or "reskilling" that can benefit both employers and employees. In many cases, HR is taking the initiative. According to Michael Hughes, a managing director at the business consultancy, preparing existing workers to take on new challenges in higher-paying jobs can be a cost-effective way for businesses to avoid a looming staffing crisis. "Up skilling comes at a time when arising skill sets are scarce and the talent market is tight, making it prudent to retain people even if they don't have the right skills right now. It is frequently less expensive to retrain current employees than to find and hire new ones, as the consequences of turnover can be felt at the bottom line."

Keyword: [Technical Innovation, Skill Restructuring, Knowledge Rescheduling, Capacity Enhancement, Focused Application of Skills, Parameter Enhancement]

Introduction

The term "re-skilling" refers to the process of "teaching" new skills. In the current situation, there is a weird scepticism about the ability of current skill sets of employees to adapt to technological development. It results from the workforce's lack of ability to adapt to fast changing technology advancements. The world has shifted virtually overnight to new types of technology such as block chain, AI, and machine learning, which are expected to make a large number of people redundant. Banking has witnessed a smidgeon of technological change thanks to the adoption of block chain and analytics automation via AI and machine learning. Manufacturing companies have been adopting low-human-resource-intensive procedures, which has resulted in a spike in industrial automation. By applying industrial design, rigorous governance, and good process flow through automation, an automobile firm saves over 90% on manual testing expenditures. In the midst of a technological renaissance, it's become critical to "re-skill" in order to keep up with the automation of processes. In today's ever-changing world, technology becomes obsolete by the time organizations establish a full-fledged team. As a result, it's critical to provide tools to native staff as well as a welcoming agile work environment for speedy adoption. In a start-up or in the digital marketing area, re-skilling is crucial since it provides a long-term competitive edge and is far better than employing competent personnel. Invest in and capitalize on the people you already have. Another element that encourages reskilling in mid-sized enterprises is the average age of the workforce. The majority of

today's workforce is between the ages of 20 and 35, making it easier for businesses to reskill them. They are adaptable and willing to adjust and take on new jobs and opportunities that come their way. Empowering people with reskilling is an efficient strategy to construct and gear a team to campaign their way to the top of the food chain. Employees must have outstanding digital specialist skills as well as a comprehensive understanding of the functional business. They should be able to work beyond silos and within cross-functional teams, and they should get comfortable with quick turnaround cycles. Today, being able to collect and analyze data in order to draw insights about a business or a domain is the defining feature that distinguishes top-tier firms from their competitors. This is where the concept of 'reskilling' comes into play, as organizations must regularly update skilling programmes for their staff in order to stay current and relevant. We frequently observe that organizations at the top of their game place a high value on employee learning and development.

Skills Needs to Upgrade

1. New skills will be required to maintain current roles or shift into new ones Business and science skills- To keep current roles or shift into new ones, new skills will be required. Skills in business and science, such as marketing, organizational design, and finance, as well as specialized concentration areas in the physical and social sciences. New discoveries and developments are being aided by the capacity to communicate data across fields.

2. Human Soft Skills: Communication, critical thinking, flexibility, problem-solving, leadership, creativity, and invention are examples of human or soft talents. In a digital corporation, these are even more important.
3. Information technology abilities: from basic data literacy to applying artificial intelligence to real-world problems, this category includes a wide range of information technology skills. As data and analytics become increasingly democratized and helpful across enterprises, this sector is most typically recognized as a gap for mid-career individuals.

Furthermore, up skilling may aid in the advancement of racial equity by having provided career paths to workers who are overrepresented in low-skill, low-paying jobs and oppressed in higher-paying jobs. According to a recent study by The National Financing for Workforce Solutions, a nonprofit based in Washington, D.C. that funds initiatives to enhance job opportunities for low-wage workers, the concentration of people of color in low-paying jobs costs the U.S. economy \$2.3 trillion per year, primarily through lost earning power. Up skilling initiatives can help the economy by assisting low-wage workers in moving into higher-paying jobs, but such programmes must also address childcare services and other corporate methods of preventing those workers from succeeding, according to Amanda Cage, president and CEO of the National Fund. The administration's jobs plan calls for billions of dollars to be invested in so-called workforce infrastructure projects, such as apprenticeships and computer, math, and science programmes that can help prepare disadvantaged and marginalized middle and high school students for jobs in high-paying fields. The administration also wants money to train and hire people from historically disadvantaged groups, such as convicted criminals, low-income veterans, and Appalachian displaced workers. The good news is that, more than ever before, HR professionals are implementing programmes to assist their organizations in meeting their talent needs while also expanding job opportunities. According to a recent Society for Human Resource report, upwards of half of U.S. business owners (52 percent) provide up - skilling preparation so employees perform new jobs, while 73% provide initial skills training to enable workers do their current jobs (SHRM). In other words, training can open doors and have a productive, long-term impact on our employees, customers, and communities. Executives increasingly see retraining and "up skilling" cur-

rent staff as an urgent business primary consideration that businesses, not governments, must take the lead on. In terms of solutions, 82 percent of firms at industries with more than \$100 million per annum income believe that retraining and reskilling must account for at least half of the solution to their skills gap.

Employees who retrain can learn the most in-demand competencies and skills in their chosen industry, increasing their chances of advancement and future employment. Job satisfaction has increased. Employees who are retrained have the opportunity to learn and grow, which makes them feel more valued in their position. On-the-job training is a method for employees to learn a job by watching others perform daily job tasks then doing it themselves. On-the-job training is ideal for re-skilling employees in new production methods, such as constructing various types of products on a production line.

Employee retraining program can help your organization fill skill gaps and key roles, while employees can put their adaptability and adaptability to the test by learning skills for new roles while building on existing gentle skill sets, ultimately improving their career future opportunities. Employee retraining can have a variety of advantages. It can refresh an employee's recollection on how to complete specific tasks correctly, reduce accidents, and reduce turnover, among other things contribute to a stronger firm's operations. Employee development is terms that are frequently used interchangeably across industries and encompass a variety of employee learning practices. Employee training, in particular, refers to programmes that enable workers to understand specific skills or gain knowledge in order to improve job performance. Employee development is the process by which a manager and an employee collaborate to create a project proposal. This plan defines areas that need to be developed or improved, as well as what behavior or activities must be undertaken to acquire and seamlessly integrate that learning. This development plan is in line with the organization's goals and, in the end, serves as a template outlining the skills that the employee is required and how they can obtain them. Because of the impact of the Fourth Industrial Revolution and the COVID-19 pandemic, development and learning (L&D) in business is now more important than ever. One of the most significant challenges that business leaders face when driving the adoption of disruptive technology is a lack of real skills when trying to combine technology with technical proficiency. New technologies emerge as industries

innovate, having a significant impact on learning and support. The ability to combine new technology with innovative learning approaches will ensure that team members learn new skills or reskill in a dynamic manner, using a forward-thinking approach.

Reskilling allows you to keep the same loyal employees in your organization, but there are more reasons than that alone that make it important. RPA (robotics process automation), AI (artificial intelligence), and of course, the Covid-19 pandemic have changed the way we think about workers' roles. All of these things also make reskilling employees more important than ever before. Reskilling is the process of learning new skills by employees to move onto a new role within their current company. Reskilling might be a good alternative to firing current employees and hiring new ones with a different skill set. It's also a good way to move a person who fits better for another role, but for some reason ended up working in a totally different one. There might be an account manager that excels in communicating with customers, although he seems to have an interest in the sales process. As it turns out, after a trial run, he's a natural salesperson. Because he's also open to the idea of changing to a sales role, reskilling him for a sales position is a better fit for the employee, as well as the company.

Reskilling and upskilling is a top priority in 2021: The recent year has changed nearly everything about the way we work, including the roles we take at work, as seen by this statistic: According to the World Economic Forum report published in October 2020, the rapid acceleration of automation and economic uncertainty caused by the pandemic will shift the division of labor between humans and machines, leading to 85 million jobs being displaced and 97 million new ones created by 2025. However, as seen by the World Economic Forum, there are also going to be many new jobs created. We anticipate that many of these jobs will come as a result of reskilling workers that were previously replaced by automated processes. As we continue to innovate, we will need to fill new or vacated positions within the company.

Objectives

1. To identify the importance of retraining & reskilling among the employees.
2. To assess the need for reskilling among the employees.
3. To formulate the reskilling strategies among the employees.

Need of the Study

The purpose of this paper is to contribute to an informed and balanced discussion of the issues surrounding skills and lifelong learning in the changing world of work, as well as the outstanding pandemic situation. As a result, it aims to contribute to the topic on how skills development systems may adapt to today's and tomorrow's crises and difficulties in order to transfer their outcomes into decent employment, productivity, and long-term growth for everybody.

Benefits of Reskilling for an Organization

i. Reduce training and hiring costs: Hiring and training new employees is costly for businesses, and it can be considerably more costly when seeking for specialized talent. When you train new staff, you're not just teaching them how to do their job. You're also instilling in them knowledge of the company's procedures, software, and policy. Your present personnel are already familiar with all of these topics and do not need to be retrained, saving you money right now. Recruiting, interviews, background checks, and much more are all costly undertakings when it comes to hiring new staff. After all is said and done, there's no guarantee that your freshly hired personnel will be successful in their roles or won't leave for a better opportunity. According to SHRM reports from 2015 and 2016, hiring a new employee can take up to 52 days, and each new hire costs an average of \$4,000 to a company. Because of the epidemic, the time and money spent on new hiring could be considerably higher. Interviewing, background checks, and other procedures are all expensive. Another area where reskilling saves time for businesses is in the area of overall pay expenditures. New recruits are costly, and new workers in more-skilled roles require even higher wages. In fact, hiring a new employee for a skilled position might cost up to 20% more than retraining existing employees to perform the same activities. Improve time to market by retaining corporate knowledge: Your present staff is already familiar with how the company operates and what their responsibilities are. This is valuable information that can take months or years to gather, and you lose that company's knowledge and experience when an individual leaves. You may keep these knowledgeable personnel by reskilling them so they can pass on their knowledge to less experienced staff. The knowledge management article is a helpful resource for keeping organizational knowledge. This also means that the company's time to market has improved dramatically. Time to market

refers to the time it takes for a corporation to create a product, from idea to sale. Tasks are accomplished more quickly because individuals with excellent company knowledge may work without requiring as much support. As a result, you'll have higher-quality items, quicker manufacturing, and bigger earnings.

Keep your best employees: Reskilling eliminates the need to terminate otherwise brilliant workers. Talented personnel aren't always easy to come by, and it's far better to keep them on board than to lose them to a competitor. Reskilling top employees keep them in your business and simply increase their worth to you by providing them with new abilities to contribute.

Internal mobility can be aided by reskilling: The good news is that reskilling will not only help you retain your top staff, but it will also help you attract the next generation of committed workers. These new employees will want to work for a company that values its present employees and shows it by assisting them in expanding their skills and positions.

People are considerably more inclined to stay with a company that demonstrates an interest in increasing the roles of present employees.

ii. Improve employee's morale

When employees are given opportunities to advance their careers and develop their talents, they feel valued by their employers. Workers who believe their employer cares about skill development are 94 percent more likely to stay with the organization. It's not just about advancing their careers; it also ensures that employees have a sense of job stability. Employees with new abilities have the possibility to work in other jobs if their existing employment is abolished. Employees will feel valued and have a higher regard for their jobs and the organization they work for as a result of this. Of course, this instills a sense of commitment in employees, encouraging them to take pleasure in their work and produce higher-quality results.

iii. Improve company reputation

Reskilling not only enhances current employees' perceptions of the organization, but it also improves the company's reputation in the eyes of friends, family, future employees, and society at large. A firm's reputation might be tarnished by large firings, but reskilling personnel demonstrate that the company cares about the people who work for it. As a result, society, the government, and even the media have a more favorable view of the corporation.

iv. More versatile employees

Employees who reskill expand their skill set become

more versatile in their roles at work, gaining valuable insight into other areas of the company. As they gain a better understanding of the various aspects of your workflow, these employees can become some of your best problem solvers. This also allows staff to advance their careers inside the organization. An employee who is replaced by auditing software, for example, may wind up working in technical assistance. They may be able to fix intricate issues with customer accounts that software alone would not detect since they understand how the auditing process works. As a result, the employee gets promoted to be in charge of auditing reports supervision.

Global Context, Trends and Challenges

The globe is confronted with unprecedented problems that will have far-reaching consequences for people, businesses, economies, and civilizations. Skills development and lifelong learning play a critical role in enabling businesses, people, and society to adapt to and create megatrends and grab opportunities, necessitating policy and structural changes. The COVID-19 epidemic has wreaked havoc on labor markets, but it has also accelerated several longer-term megatrends, resulting in a mix of structural and crisis-related stresses, as well as tremendous problems for employment, decent work, and skilling prospects.

Conclusions

Reskilling & retraining offers many benefits for an organization and allows you to retain and make use of loyal employees in the best way possible. It will be an essential building block of any Learning & Development strategy for the new decade, so now is the time to begin thinking about how you will implement such a program for your own workforce.

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Digital Financial Inclusion in Indian Economy: A Comprehensive Review and Analysis

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Abstract

The cashless transaction system is achieving growth day by day with increased globalization markets, development of the banking sector, increasing tendency of people towards shifting to a cashless system and a powerful backing of technological advances. The emergence of new financial technologies (Fintechs), such as the Unified Payment Interface, Immediate Payment System, and Mobile Money, was enabled by new technologies like the internet, artificial intelligence, machine learning, big data, biometric identification, and blockchain technology. Overall, the trend and growth of mobile payment-based transactions in India have been on an upward trajectory since 2019. The government's initiatives, the rise of mobile wallets, increasing smartphone penetration, and the impact of the covid-19 pandemic have all played a significant role in driving the adoption of mobile payments in the country. The paper aims to study the development and adoption of financial technology and digital infrastructure in India besides its comparative situation in the global economy. It is based on secondary data sources from the World Bank, Reserve Bank of India, and Global Findex Database.

Keywords: [Digital Payments, UPI, Cashless, Financial Inclusion, Transactions.]

Introduction

The foundation of any nation's economic development is its digital finance sector. Mobile banking and mobile money are two new concepts that turn mass-produced services into specialized ones. This leads to the emergence of digital financial inclusion, which encourages effective connectivity among those involved in economic activity. When a poor, previously unbanked customer begins transacting digitally with his or her family and friends, formal banking and financial institutions, and utility companies and receives government-to-person (G2P) payments directly into his or her bank account, this is referred to as digital financial inclusion.

It takes a multifaceted approach to promote financial inclusion. In rural India, electronic banking activity results in increasing use of financial services and higher living standards thanks to technological interventions in financial inclusion. Many mobile phone users in the expanding market are still unable to access financial services and banking products. This suggests that commercial banks have a sizable untapped market. Currently in their infancy, mobile banking services in India.

Attempts to promote financial inclusion in India over the past few years have had varying degrees of success. Strong legislative and regulatory pressure has led to a significant expansion in access to bank accounts. It has been incredibly difficult to use these accounts and take advantage of official financial services outside of savings accounts. The government's most recent measures, such as the move to cashless transactions and the demonetization of currency, will further spur innovation and attract new players to the

market. The government, RBI, and financial institutions' intentions are clearly shown by the modifications to the Financial Act, which show that they want to maintain a strong BFSI while maintaining stable economic growth.

For India to continue growing, industry trust-building is crucial. Banks and regulators are faced with new problems by emerging technology, with security being a top issue. The authorities and the bankers would need to work together to guarantee that control measures are in place as cyber-frauds are on the rise. A major push from the Indian government has made it simple for those who don't use banks to get financial products. The benefits of mobile-led solutions have been proven by payment companies, and traditional banking institutions are now attempting to expand into rural India by introducing cutting-edge mobile-based banking solutions. Large technology businesses are utilizing innovative methods to reach out to rural populations and inform them about various financial products with the assistance of the government. India's progress toward financial inclusion has been amazing during the past ten years, and the Indian government has actively supported it through initiatives like the Digital India Movement and the Pradhan Mantri Jan Dhan Yojana. To build an inclusive society, reducing poverty and solving the difficulties of securing sustained income may become crucial. Information and communication technologies are gradually opening up access to the unbanked people and assisting in attracting them to the banking industry. Digital technologies are promoting usage and improving residents' quality of life.

According to the Global Findex Database from 2017,

around 1.7 billion adults worldwide do not have a bank account, meaning they cannot access mobile banking or mobile money services. China has the most unbanked people in the world, followed by India (190 million), Pakistan (100 million), and Indonesia (95 million). In addition to these four nations, Nigeria, Mexico, and Bangladesh also have large populations of unbanked people, though their percentages are lower than those of China, India, Pakistan, and Indonesia (Global Findex Database, 2017).

Indian culture discourages taking risks; hence banks are crucial financial institutions that guard the people against cash-related risks. The banking industry was able to replace physical currency with a flexible, cost-effective payment system because of technological innovation. The entire process of the banking sector has transformed as a result of new and quickly expanding innovations in banks and financial institutions.

Review of literature

Aziz and Naima (2021) looked into the discrepancy between the discourse on financial inclusion's implicit presumptions and concepts of access to and usage of digital technologies, and they intend to advance the discourse by providing a thorough framework for digital financial inclusion. Our study demonstrated that a shift away from a straightforward individualistic adopter/non-adopter binary framework and supply-oriented financial infrastructure is necessary to address the social dynamics of financial participation with new technologies. We come to the conclusion that, despite the fact that digital services have facilitated and closed the gap in physical access to financial services, these services have not been utilised because of a lack of social awareness, financial literacy, and even basic connectivity. By providing a thorough critical analysis and a fresh viewpoint on both digital and financial services, this paper theoretically contributes to the literature on the adoption of digital financial services.

Mhlanga (2020) studied discovered that AI has a strong influence on digital financial inclusion in areas related to risk detection, measurement and management, addressing the problem of information asymmetry, availing customer support and helpdesk through chatbots and fraud detection and cybersecurity. In order to ensure that vulnerable groups of people who are not financially active can participate in the formal financial market with the fewest obstacles and greatest benefits, it is advised that financial institutions, non-financial institutions, and governments around the world adopt and scale up the use of AI tools and applications.

Naumenkova (2019) examined the influence of the cur-

rent stage of economy digitalization on the financial inclusion in Ukraine. When compared to other countries in the world, the goal is to assess the level of financial inclusion in the nation, identify the dominant role of price and non-price barriers to access to financial services for the Ukrainian population, and identify the proportion of the adult population that can access the formal financial services system through the use of cutting-edge channels and financial service systems. The authors compare the genuine traditional and digital access options for the general public to financial services in Ukraine to those in other nations across the world based on the analytical methodologies suggested by the World Bank and the G20 Financial Inclusion Indicators. The elimination of current non-price barriers that prevent the formal financial inclusion of the Ukrainian population is given particular emphasis. The study's findings highlight the importance of upholding the fundamental principles of digital financial inclusion in order to control the actions of financial institutions and their agents when providing financial services online, strengthen regulatory oversight of the application of cutting-edge financial products and delivery mechanisms, and safeguard the legal rights of Ukrainian consumers of financial services.

Bourreau and Valletti (2015) studied the cooperation models that can emerge between the different firms potentially involved in a mobile payment transaction. The key competition issues that should worry public authorities and what regulatory measures they can use as a response. Access to finance for the underprivileged is being revolutionised by the growth of mobile payment platforms in developing nations. Mobile payment systems give their consumers access to various financial products, including savings accounts or insurance, in addition to letting them pay and transfer money using mobile money.

Methodology

Secondary data is information that has been gathered by someone for a different purpose or study. In terms of analysis and interpretation, these secondary data support the main source of data or primary data. A researcher can gain insight and knowledge from secondary data in a different aspect. The majority of data for this study is collected from secondary sources such as book chapters, research journals, government publications, newspapers, articles, and reports.

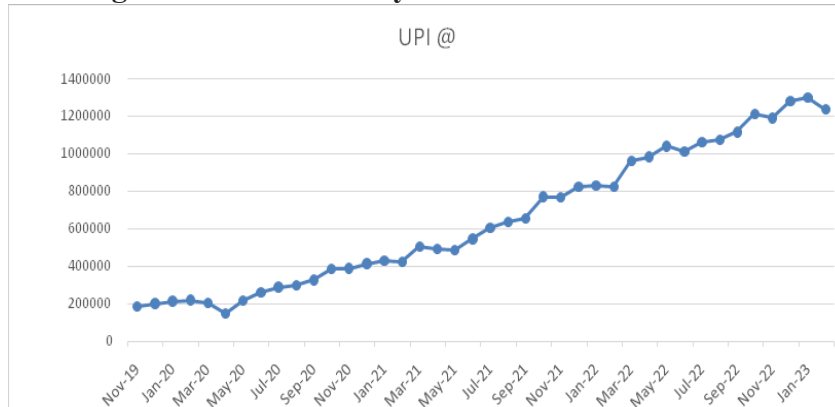
Digital financial inclusion in India

India has made significant progress in promoting digital financial inclusion over the past decade. The government's

initiatives, coupled with advancements in technology and increased smartphone penetration, have contributed to the growth of digital financial services across the country. The introduction of the Pradhan Mantri Jan Dhan Yojana (PMJDY) in 2014 was a pivotal step towards financial inclusion. The scheme aimed to provide access to basic banking services, including savings accounts, to the unbanked population. Through this program, millions of previously unbanked individuals have gained access to

formal financial services. Mobile banking and digital payment systems have witnessed significant growth in India. The Unified Payments Interface (UPI), launched in 2016, has emerged as a popular platform for instant digital payments. UPI allows users to link their bank accounts to a mobile application and make transactions easily using their smartphones. It has gained widespread adoption and is supported by numerous banking and financial technology (fintech) companies.

Figure 1: Use of UPI Payment Method for Transaction

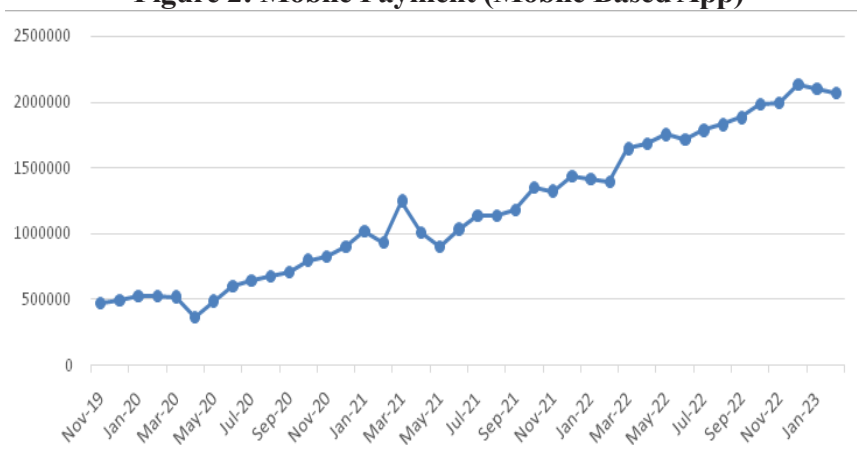


Source: RBI

Figure 1 shows increasing trend in UPI payment in India from November 2019 to January 2023. In 2019, UPI recorded around 10.8 billion transactions with a total transaction value of over ₹18 trillion (INR). By 2020, the number of transactions more than doubled to reach approximately 25.3 billion, with a total transaction value of over ₹41 trillion (INR). In 2021, the growth of UPI continued, although at a slightly slower pace compared to previous years. By September 2021, UPI had already crossed 20 billion transactions, indicating a significant increase compared to the previous year. The total transaction value for 2021 was expected to surpass

₹50 trillion (INR), showing a steady upward trend. As for the future trend and growth of UPI from 2022 to 2023, it's difficult to predict with certainty. However, given the increasing adoption of digital payments in India and the continued efforts to promote cashless transactions, it is likely that UPI will continue to witness growth during this period. Factors such as the expansion of UPI-enabled services, the integration of UPI with more platforms and apps, and the ongoing digitalization initiatives in the country will contribute to the further growth of UPI payments in India.

Figure 2: Mobile Payment (Mobile Based App)

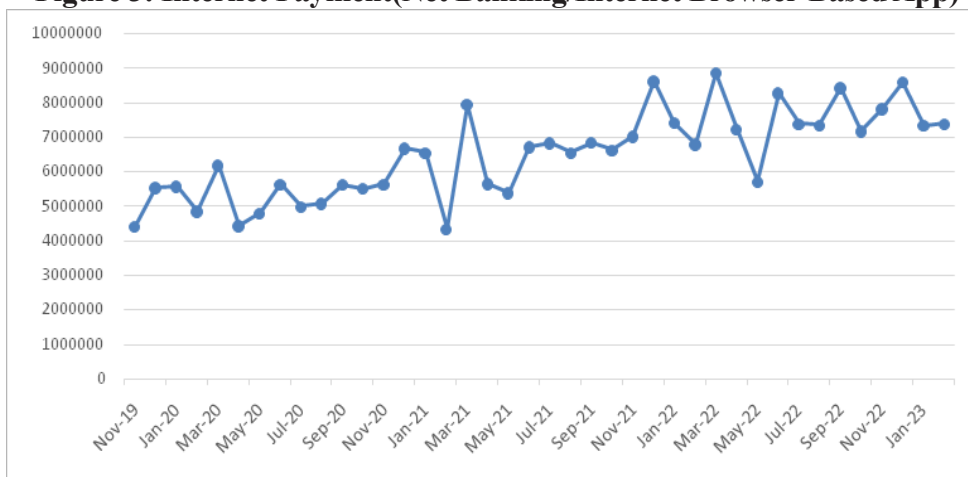


Source: RBI

Figure 2 shows an increasing trend in the use of mobile payment methods in India. Mobile payment-based transactions in India have experienced significant growth and have become increasingly popular since 2019. The adoption of mobile payment services has been driven by various factors, including the government's push for digital payments, increased smartphone penetration, and the con-

venience offered by mobile wallets and payment apps. Mobile wallet apps, such as Paytm, phone pay, google pay, and amazon pay, gained popularity during this period. These apps allowed users to store money digitally, make payments, and transfer funds to other users. They offered convenience, security, and cashback rewards, which encouraged more people to adopt mobile payments.

Figure 3: Internet Payment(Net Banking/Internet Browser-Based App)

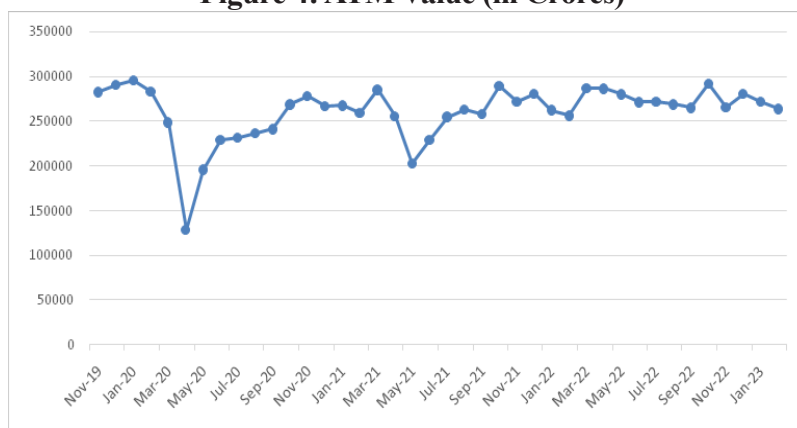


Source: RBI

Figure 3, The growth and trend of internet payment methods, specifically net banking, in India from 2019 to the present has been significant. Net banking, also known as online banking or internet banking, refers to conducting banking transactions over the internet using a bank's website or mobile application. In recent years, India has

witnessed a rapid surge in internet usage and smartphone penetration, along with the government's push for digital payments and financial inclusion initiatives. These factors have contributed to the increased adoption of net banking and other digital payment methods in the country.

Figure 4: ATM Value (in Crores)

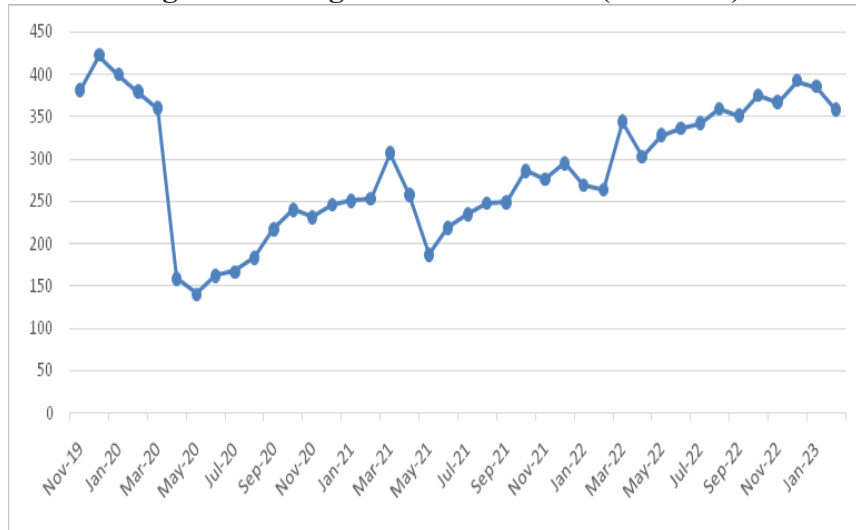


Source: RBI

Figure 4, The number of ATMs in India has been steadily increasing over the years. In 2019, the country had approximately 2.21 lakh (221,000) ATMs. This number has been rising as financial institutions and banks continue to expand their ATM networks across the country. One notable trend in India's ATM growth is the increased focus on

rural areas. The government and financial institutions have been taking initiatives to improve financial inclusion in remote regions by installing ATMs in rural areas. This expansion aims to provide banking services to underserved populations and reduce the dependency on physical bank branches.

Figure 5: Using Credit Card Value (in Crores)

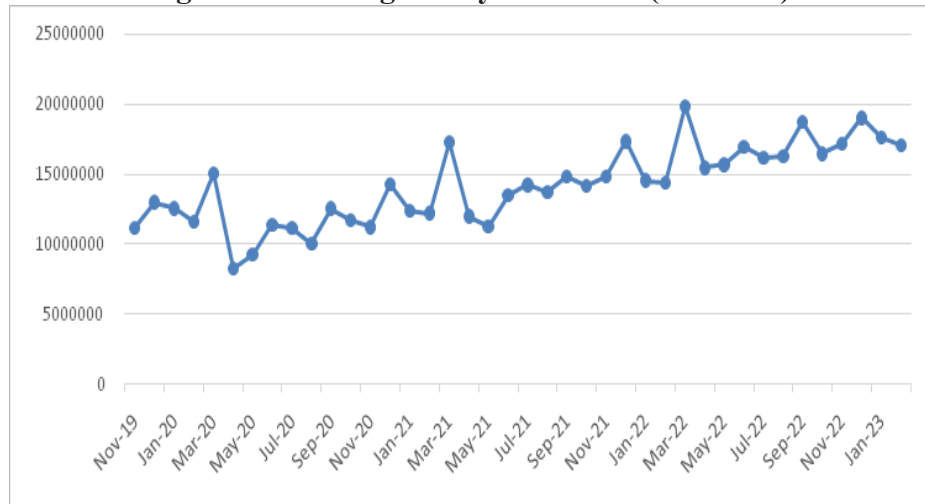


Source: RBI

Figure 5, The trend and growth of credit card payments in India from 2019 have seen significant progress. India has witnessed a substantial increase in the adoption and usage of credit cards over the past few years. The acceptance of credit cards has grown extensively across various mer-

chant establishments, both online and offline. Many small and medium-sized businesses have started accepting credit card payments, providing customers with more options for making purchases.

Figure 6: Total Digital Payment Value (in Crores)



Source: RBI

Figure 6, From 2019 to 2023, India has witnessed significant growth in digital payments. In recent years, India has been actively promoting digital payments as part of its push towards a cashless economy and financial inclusion. The government's initiatives, such as the introduction of Unified Payments Interface (UPI) and the demonetization drive in 2016, have played a crucial role in accelerating the adoption of digital payment methods. In 2019, the total digital payment value in India reached around 22.4 trillion Indian rupees (INR). This figure encompasses various forms of digital payments, including UPI transactions, mobile wallets, internet banking, and card-based payments.

Role of Fintech Firms

Since early 2015, the phrase "fintech" has become more common. This phrase is frequently taken to mean something purely technological and tech-savvy. When in fact this phrase refers to the fusion of financial services offered by numerous clients with improvements and innovations in the field of technology. The main point is that Fintech emerged more as a result of technological advancements in the financial sector and the demand for such services than as a result of any actual development. Since technology and financial services are being combined here, a number of platforms and applications are being created and de-

veloped to make it simple for you to use financial services like applying for business loans or personal loans online, among other things (Kandpal, V., & Mehrotra, R. 2019). A great way to deliver financial services is to do away with multiple levels of governance by collaborating with fintech companies that will help consumers, take advantage of digital technology, and create a better distribution infrastructure based on mobile technology that offers quality, protection, affordability, and accessibility.

The advancement of financial inclusion is continuing thanks in part to the mitigation of this slowdown by digital financial services (DFS). Withdrawals from these accounts increased as payments and benefits, such as COVID-19-related relief, were increasingly made directly to beneficiaries' PMJDY bank accounts, causing the percentage of inactive bank accounts to slightly decrease from 38 to 35 percent between 2017 and 2021. Digital financial services have seen an additional boost due to COVID-19-related health restrictions and mobility limitations. The percentage of persons aged 15 and older who have mobile money accounts climbed from 2 to 10% between 2014 and 2021, while the percentage of those who have sent or received digital payments increased from 22 to 35%. (Niyati Agrawal & Rakshith Ponnathpur.)

Conclusions

India's digital payments landscape has expanded rapidly at a CAGR of 38 per cent by volume and 7.5 per cent by value during the period ranging from 2017-18 to 2021-22. The burgeoning growth happened due to multiple factors, such as enhancements in the payment infrastructure, developments in information and communications technology, and the introduction of a responsive regulatory framework, among others. UPI recorded over 4.2 billion transactions worth ₹7.7 trillion in October 2021. Though the COVID-19 pandemic put a damper on a lot of progress over the last three years, it acted as a catalyst that drove a large increase in digital payments amid the global expansion of formal financial services. This article focuses

on Fintechs, digital finance, and their role in digital financial inclusion in India using the existing sources of the World Bank, Reserve Bank of India, National Payment Corporation of India, and United Nations Organizations. In November 2016, the Indian government demonetized high-value currency notes, leading to a surge in digital payments. This event acted as a catalyst for the adoption of net banking and other online payment methods, as people sought convenient alternatives to cash transactions.

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Corporate Governance and CSR with Specific Reference to MNC Companies in Chennai

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Abstract

Governance and corporate social responsibility are a fast picking up a concept which has become very important for carrying out business and the same is felt by the management of large international companies. This paper scrutinizes how top ten MNC companies view and conduct their CSR, finds the key CSR practices using Annual reports. This study involved secondary data collection and analysis of content to examine CSR practices of the top ten MNC Companies functioning in Chennai. This paper attempts to highlight the areas of CSR practices and analyse the chief elements of CSR practice as well as examine the significant difference and uniqueness in practicing CSR among these top ten companies.

Keywords: [Corporate Social Responsibility, Multinational Companies, Annual Report, Top Ten MNCs].

Introduction

Entity, whether, it is government, private corporation or public organisation needs to be responsible to the society where they carry out business activities using the resources available in the society. The concept of CSR increases the reputation and brand value by reducing the cost and risk involved as well as increases the effectiveness, the competence of employees, and also expands transparency and clarity in the business setting.

Governance and Corporate Social Responsibility has become a vital topic for researchers from various fields because as Porter and Kramer (2006) defined the reasons for practice of CSR, as the significance of CSR lies in what is best done to the betterment of society. The main disagreement is that businesses carry out their business activities in societies where they need these businesses that are, there is a mutual benefit. The Government's involvement in the welfare of society has been decreasing with an increase in the importance of corporate social responsibility. This significant role of being socially responsible had been realised across the world for the promotion of its brands. As stated by Korner, 2005 that the impact of Globalisation has made the organisation expand their operational area and issues relating to the operation. The prevailing trend of achieving a short-term gain has resulted in a major emphasis on shareholders. Good governance consists of moral performance, sustaining equality and providing clarity on information and guaranteeing responsibility towards all participants.

Governance and CSR are practiced in an organised fashion rather than merely as charity and donations. The Government also made it obligatory for the com-

panies to contribute a minimum of 2% of the earnings for the three former financial years. This helps the strong and able corporate companies to find out what could be contributed to bringing up knowledge, and awareness. This would be beneficial for strengthening and help organisation to calculate their contribution to build information, consciousness and understanding of people around them at the universal level.

Literature Review

Bhatia (2001) emphasized that a better work environment depends on the social responsibility of corporate. Not only their work is limited to the production of goods and services, but they also have several social responsibilities as well as ensure that they avoid performing a task that will affect the environment. The Author suggested left-over management and trash inhibition.

Waddock (2004) "Corporate responsibilities involve a company on its own or flexible relationships with its social and communal people".

Aguilera et al (2006) stated that there are diverse motives such as practical, interpersonal and good motives based on self-motives, status recognition and active interest for larger groups.

Husted and Allen, 2007; Jamali and Mirshak, (2007) Today's scenario is that CSR has transformed from a state of following few laws and ethical rules of society to more active participation in social issues.

Bhattacharya et al (2008) found that stakeholders need to be identified and their demands have to be fulfilled.

Nikko & Katamba (2010) stated that companies who are involved in CSR activities follow stringent and more expensive as well as superior environmental

controls, this helps the companies from high risk and pay heavy fines for excessive pollution.

Vishwakarma, Vijay (2019) stated that Corporate Social Responsibility was practiced only a few companies for the improvement of society. All the stakeholders are important to an organisation; hence they are served in a better way and this, in turn, will help the organisation to sustain itself.

Problem Statement

The concept of governance has been gaining much recognition due to several legal provisions relating to business responsibility that is needed under National

Voluntary Guidelines for Social and Environmental obligation and under the Companies Bill. The way and means of CSR differ from corporate to the corporate, venue to venue and overtime. The selection of CSR activities should be strategically based on the companies’ policy. The evidence of CSR practice is only in literature and theoretical. But there are no studies that throw light on the significance of socially responsible program in improvising CSR application in the organisation. Targeting at this, an attempt is made to examine the various practices of the top ten companies in Chennai.

Table 1: Ten Companies Selected for the Research

S.No	Ten major Multinational companies in Chennai
1.	Bridgestone India Automotive products private limited
2.	Cognizant Technology Solution
3.	HTC Global Services India private limited
4.	Komatsu India Private India
5.	Panasonic Appliance India Co Limited
6.	Rand Stad India Private Limited
7.	Roca Bathroom Product Private
8.	Saint Gobain India Private
9.	Sodexo Technical Services India Private Limited
10.	Zoho Corporation Private Limited

Research Objectives

This research paper throws light on investigating the CSR usage amidst Multinational Companies (MNCs) in Chennai with resulting purposes: -

1. To find the extent to which CSR is applied amidst the ten companies.
2. To examine the main elements of CSR applied amidst the ten companies.
3. To study the importance of distinctiveness in applying CSR amidst the ten companies.

Research Methodology

The research conducted was exploratory in nature, utilizing a cross sectional design. Secondary data was

collected and a content analysis technique was used to evaluate the CSR practices of different companies. Annual reports of the top ten multinational companies in Chennai were examined to get clarity on the intensity of CSR and Governance practices in all of these companies. The study is grounded on secondary data from research papers. Data was collected from internet and detailed study was carried out to find out the extent of practice of CSR in the selected MNC companies.

Limitations

Research paper is based only on annual reports and is limited to the top ten multinational companies in Chennai.

Table 2: CSR and Governance Practices of Top Ten MNCs in Chennai

S.no	Multinational companies	CSR practices
1.	Bridgestone India Automotive products private limited	<ul style="list-style-type: none"> • Transparency of decision making and management policies • Serving the society with superior quality • Continue to provide social values and customer values • Governance board and compliance committee • Conserve natural resources through our continual improvement of products and services • Health and safety matters to be integral and important parts of the company • Satisfaction of customer in terms of value, safety & trustworthiness of products and services provided after sales. • Understand the problems as well as the needs of our customers
2.	Cognizant Technology Solution	<ul style="list-style-type: none"> • Environment, Social, Governance • water conservation • Health and safety • Skills for the future • Community • Diversity and inclusion • Protecting shared natural resources enhances the quality of life for all. • Governance committee and
3.	HTC Global Services India private limited	<ul style="list-style-type: none"> • Minimize the environmental footprint • Provide for proper health, safety and welfare of all employees and visitors to the office. • Form a governance structure and team to implement functions.
4.	Komatsu India Private India	<ul style="list-style-type: none"> • Support ITI to strengthen the welding skills of students. • Contribution to Karnataka State Disaster Management • Safety, productive, smart, and clean workplaces along with customers. • Boost safety, productivity measures, and environmental performance. • Enhancing quality of life • High-performance products and services are designed in such a way reducing environmental impacts. • Various committees like Earth Environment Committee, the Risk Management Committee, and the CSR Committee are formed to make suggestions to the Strategy Review committee report. • Forest restoration projects that offset carbon emission • Growing with Society — Social Contribution Activities • Donated medical supplies during COVID-19 Pandemic Producing. • Commencement of Agricultural Support Project • Transparency and disclosure to its shareholders and investors, in a true and at the right time active promotion of investor relations • Various committees to supervise various activities
5.	Panasonic Appliance India Co Limited	<ul style="list-style-type: none"> • Green Initiative by allowing paperless compliances • Transparency of management • Environment, Social, Governance

6.	Rand Stad India Private Limited	<ul style="list-style-type: none"> • Evaluation by the Governance & Nomination Committee to make recommendations regarding the Company's corporate governance. • Randstad aims at making employees feel included and valued for their ideals. • Employees are treated equally irrespective of age, skin colour, disability, gender, marital status, nationality, race, religion, sexual orientation, or any other irrelevant or illegal characteristics
7.	Roca Bathroom Product Private	<ul style="list-style-type: none"> • Bringing an improvement in the current sanitation situation in India and fight against open defecation. • Better sanitation facilities for 14000 plus students teaching the habit hygiene messages painted on toilet walls. • Working environment characterized by quality and efficiency • Corporate programs to reduce the impact of industrial activity and logistics • Improved access to water and basic sanitation in underprivileged communities
8.	Saint Gobain India Private	<ul style="list-style-type: none"> • Provide access to housing and infrastructure • Inventing and promoting sustainable building • Limiting environmental impact • Encouraging employees' professional growth • Supporting community development • CSR steering committees uses specific objectives to monitor progress on ecological and community problems. • Transparency and disclosure
9.	Sodexo Technical Services India Private Limited	<ul style="list-style-type: none"> • Reducing famine and starvation • Environment Accountability • Provided health and wellness to people • Helping Local Communities • Preventive measures for accidents. • Giving training to employees. • Global Health, Safety and Environment as well as standards for food and policy for safety. • Reporting of happenings and accidents. • Global HSE Committee analyses the effectiveness of incidents and processes on a quarterly basis • Reducing the emissions of carbon. • representation of women in senior management • People with disabilities are also given equal chances in the workplace.
10	Zoho Corporation Private Limited	<ul style="list-style-type: none"> • Nurturing local talent • Profit in charitable donations and philanthropy • Sustainability and local communities

The above table shows that almost all companies are practicing CSR and Governance. Amidst the top ten multinational companies. Sodexo Technical Services India Private Limited is doing its best to carry out its corporate social

responsibility in an effective way to benefit the maximum. Komatsu India Private India is also doing a wonderful job in being socially responsible towards all stakeholders through wide range of activities that would up keep their

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brand value and reputation. Other MNCs like Bridgestone India Automotive products private limited, Cognizant Technology Solution, Saint Gobain India Private, Panasonic Appliance India Co Limited, HTC Global Services India private limited, Roca Bathroom Product Private and Zoho Corporation Private Limited are performing in similar means to satisfy the stakeholder. All these top ten MNCs publish to report their activities relating to the environment, social, safety, health and sanitation, training

and education of people surrounded near their business area. MNCs are more concerned about development and wellbeing of society as well as given more importance to overall development of employees. In all MNC's, CSR is practiced mostly with goals of sustainability, supporting communities by giving helping hands to the victims of natural disasters. Also taking efforts to promote and adopt environment- friendly technologies.

Table 3: Respondents Viewpoint Regarding Participation, Consensus Oriented, Accountability, Transparency & Rule of Law

Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Participation					
we are given an opportunity to participate in discussion	21	58	3	11	7
Often feedback is collected from us	9	73	3	11	4
Can express our opinions and ideas	24	49	11	13	3
Our inputs and contribution towards a decision plays a vital role	15	61	7	13	4
Consensus Oriented					
Unity not unanimity is ensured	15	60	10	12	3
Conclusion of a decision based on collective agreement	0	66	9	15	10
we have a feel of togetherness	1	75	12	12	0
All of us have the opportunity to present and amend	7	42	17	25	9
Accountability					
Everyone strive to meet the expectations and deadlines set	100	0	0	0	0
We try to do our best for whatever is assigned	65	35	0	0	0
We accept responsibility after making mistakes	20	80	0	0	0
Transparency					
Financial report is available to all	8	86	6	0	0
All information is at easy reach	0	70	7	16	7
All communication takes place in public channel	0	37	8	50	5
Rule of law					
Everyone is subject to same rules and regulation	0	74	6	12	8
Rules are fair and equal	0	69	8	22	1
All of us are accountable to the law	0	100	0	0	0

From the above table we can infer that respondents have positive view on the participation opportunity, consensus oriented, accountability, transparency and rule of law.

Table 4. Summary Statistics of the Dependent Variables (Descriptive Statistics)

	Gender	Mean	Std. Deviation	N
P1	Male	2.21	1.160	52
	Female	2.29	1.091	48
	Total	2.25	1.123	100
P2	Male	2.13	.929	52
	Female	2.44	.897	48
	Total	2.28	.922	100
P3	Male	2.12	1.041	52
	Female	2.33	1.059	48
	Total	2.22	1.050	100
P4	Male	2.35	.947	52
	Female	2.25	1.082	48
	Total	2.30	1.010	100

Source: Author's Calculations

The above table shows that females with high mean value agree that they are given an opportunity to participate in the discussion, feedbacks are collected from them,

they are allowed to express their ideas. Males agree that Our inputs and contribution towards a decision plays a vital role.

Table 5: Test for Homogeneity of Covariance in Rank Box's Test of Equality of Covariance Matricesa

Box's M	9.501
F	.908
df1	10
df2	45232.337
Sig.	.524
Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups	
a. Design: Intercept + Gender	

Source: Author's Calculations

Tests of Assumptions Pre-analysis screening procedures for examining multivariate assumptions. M test was used to find out the Homogeneity of two or more Covariance.

Box's M test is also called Box's Test for Equivalence of Covariance Matrices. It is a parametric test used to compare variation in multivariate samples.

Table 6: Multivariate Testsa

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	
Intercept	Pillai's Trace	.968	708.463b	4.000	95.000	.000	.968
	Wilks' Lambda	.032	708.463b	4.000	95.000	.000	.968
	Hotelling's Trace	29.830	708.463b	4.000	95.000	.000	.968
	Roy's Largest Root	29.830	708.463b	4.000	95.000	.000	.968
Gender	Pillai's Trace	.044	1.080b	4.000	95.000	.371	.044
	Wilks' Lambda	.956	1.080b	4.000	95.000	.371	.044
	Hotelling's Trace	.045	1.080b	4.000	95.000	.371	.044
	Roy's Largest Root	.045	1.080b	4.000	95.000	.371	.044
a. Design: Intercept + Gender							
b. Exact statistic							

From the above table it is found that since the significant value is less than .05, there is a significant relationship between males and femalestowards participation. There is a significant difference between males and females' participation.

Conclusions

Governance and corporate social responsibility of MNCs are furnished through annual reports. This study would bring profoundperceptions on CSR practices of the above companies who have started priorly to all other and the companies who have recently preparedto commence their voyage on CSR. This research paper also gives an idea of a potential range of elements of CSR activities that could be carried out by upcoming companies.

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Livelihood Promotion through National Rural Livelihood Mission: Path ahead

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Abstract

In the series of new generation development programmes, the Ministry of rural development has introduced a self-employment type programme, namely Aajeevika- National Rural Livelihood Mission (NRLM), by reconstructing the Swarna Jayanti Gram Swarozgar Yojana (SGSY). Following the strategy of Self-Help Groups (SHGs) to unite poor women, the NRLM has sought to promote such groups as the centre of its strategy for livelihood promotion through a multidimensional approach of livelihood diversification, protection, and enhancement. This approach is reflected through the components that are incorporated under NRLM, such as community institutions, livelihood promotion and financial inclusion. The paper postulated that despite the multi-facet approach and well-defined goals, the SHGs of women are destined to face challenges in livelihood promotion. The literature on livelihoods and the Sustainable Livelihood Approach is revisited in this article. Contrary to the theoretical conception of institutionalists, members of SHGs face enormous challenges in their self-reliance because only a few SHGs and a handful of collectives can avail entrepreneurship opportunities to make their mark in the business field. The paper concludes that SHGs of NRLM have a long path to cover before they can emerge as livelihood-promoting agencies. Some of the vital policy suggestions include sustained support for skill enhancement and capacity building, interactive sessions, and more significant role clarity for collectives of NRLM, along with professional support.

Keywords: [Development, Livelihood, SHGs, Federations, Social Inclusion, Marketing, Skill Development]

Introduction

According to the World Bank, nearly 65 per cent of India's population resides in rural areas, characterized by limited access to health, education, nutrition, and sources of livelihood other than farming. Lack of access to basic amenities is generally perceived as being in a state of poverty. As the problem of poverty is associated with livelihood, this has become the centre of the poverty alleviation programs in India. Due to their significant share of the rural population, they have been considered the target population of any rural development scheme. (Ahmad and Hussain, 2020).

After independence, the Ministry of Rural Development, Government of India took up many programs to deal with the problem of poverty and employment. This progression continued with various stepping stones like "Millions Wells Scheme, Ganga Kalyan Yojana (GKY), Development of Women and Children in Rural Areas, Training of Rural Youth for Self-Employment, implementation of Integrated Rural Development Programme (IRDP) in 1979" (Patnaik & Prasad, 2014). In 1999, the central government merged all these programs under a new scheme called Swarnajayanti Gram Swarozgar Yojana (SGSY). While the presence of dedicated and energetic officials contributed in effective implementation, (Arun et al., 2011; John, 2009), the need for more workforce and skilled professionals was identified as a major reason for the failure of programmes such as SGSY (Behera, 2013). Unprofessional behaviour of beneficiaries; improper utilization of funds; insufficient

investment; inadequate training, and various functional mismanagements have been identified as major shortcomings in its implementation (Kumar & Sahu, 2014; Behera, 2013; Shylendra & Bhirdikar, 2005).

A committee was formed in 2008 by the Ministry of rural development to deal with such issues. The committee recommended setting up a hybrid model of SGSY for generating self-employment and wage employment (Dasgupta, 2009).

Henceforth, SGSY was replaced by the National Rural Livelihood Mission (NRLM) on June 2010 (Ahmad and Hussain, 2020; Mishra and Debata, 2021). In 2011, the National Rural Livelihood Mission was launched as a new-generation poverty alleviation and rural development programme with the objective of reducing poverty by assisting local poor households to access skilled wage employment opportunities and gainful self-employment resulting in considerable improvements in their sustainable livelihood basis, through the establishment of strong grassroots institutions of the poor (GoI, 2011-12; Shylendra, 2022).

This mission follows an "inclusive approach strategy" which incorporates four components, namely, (i) social inclusion and building of community institutions; (ii) economic inclusion and livelihood promotion; (iii) financial inclusion; and (iv) convergence (GoI, 2017).

NRLM has a three-tier implementation structure: The Ministry of Rural Development at the national level, the Ministry of Panchayati Raj at the state level, and the District Rural Development Agency at the district level.

This mission is financed by the centre and the state in a ratio of 75:25 in all states of India except the North-eastern states, where the ratio is 90:10 (Mishra, 2017; Mishra and Debata, 2021).

DAY-NRLM has adopted an integrated (Health, Food, Nutrition, Sanitation, and Employment) approach toward the holistic development of members of SHGs. The mission aims to create awareness and develop entrepreneurial skills among rural women (World Bank, 2020).

Research Objectives

This article has two objectives. We first evaluate the literature on livelihoods with a focus on conceptualization, frameworks, and the main objections to the methodology. Then, by looking at studies on the execution of significant livelihood enhancement schemes in India, we place the approach in the Indian context by determining the extent to which sustainable livelihoods approach and frameworks have been utilized in these studies. Current studies on the implementation of sustainable livelihood programmes in the Indian context have several research gaps that need to be filled.

Research Methodology

The present study is grounded on secondary data and sources to investigate the research objectives. The secondary data is collected from Annual Reports of the concerned ministry, books and journals, and different official websites such as <https://aajeevika.gov.in/>, <https://nrlm.gov.in/>, <http://www.hsrlm.gov.in/>, etc. The current study also provides a review of earlier works done in this area and its future implications.

NRLM and Livelihood Promotion: Conceptual and Policy Challenges

Can the National Rural Livelihood Mission break the shackles of poverty by relying on collectives of people experiencing poverty as the cornerstone for the strategy for livelihood promotions? A programme like National Rural Livelihood Mission will likely face two challenges. The first and most pressing challenge is improving poor institutions' self-sufficiency. Another issue is self-help groups' ability to generate large-scale employment and sustainable livelihoods (Steger and Roy, 2010).

Evolution of the Sustainable Livelihoods Approach and Framework

Making a living is the most basic definition of a livelihood. The term livelihoods were first used in the 1940s

to describe how people make a living, primarily in economic terms. In his book "The Livelihood of Man," Polanyi was one of the first economists to propose a more holistic and human-centric concept (Kaag et al., 2003). Ecologists, agriculturalists anthropologists, and heterodox economists have been studying transitory rural systems and their development issues since the early 1970s. Scholars had to fight for their attention until the late 1980s with development theory focused on community development, sectoral methods, technology transfer, and integrated rural development (Ellis and Biggs, 2001). By the late 1980s, the limited success of such efforts at poverty alleviation had become obvious. As a result, a new school of thought emerged, drawing on Amartya Sen's work on capabilities, Brundland Commission's report on sustainable development and Robert Chambers' work on poverty. Robert Chambers and M.S. Swaminathan made the first published reference to sustainable rural livelihoods in their contribution to the Brundland Commission in 1987 (Conway, 2011). In India, livelihood discussions have been primarily driven by practitioners reflecting and theorizing on their work. The fourth version of the Livelihoods Resource Book, emphasizes livelihoods as a way of life that involves income, employment, and means of subsistence, but also gives an identity and a position in society (Datta et al. 2014). They broaden the political analysis of livelihood discourse by discussing people's movements in India. According to Haan (2012), the livelihood approach focuses on agency dealing with people living in poverty and how people organize their lives, focusing on opportunities rather than poverty conditions. Among development organizations, the Department for International Development (DFID) has promoted the sustainable livelihoods approach as a primary policy goal and the most important strategy for poverty alleviation programmes (Solesbury, 2003). Following this, organizations such as the United Nations Development Programme (UNDP), Oxfam, the Cooperative for Assistance and Relief Everywhere (CARE), the Society for International Development (SID) (Haan&Zoomers, 2005), and the International Fund for Agriculture and Development (IFAD) began to adapt the sustainable livelihoods approach to their institutional contexts.

Sustainable livelihoods Frameworks

The sustainable livelihoods approach developed with the conceptual grounding that how people strive to make a living is complex, and that development approaches should be people-centered and a constant learning pro-

cess. Sustainable livelihood frameworks strive to incorporate people's assets or resources, vulnerabilities, and coping strategies within larger PIP. These are followed by livelihood strategies and outcomes. People-centeredness, responsive and participative procedures, and multi-level partnership-based operational guidelines are the main principles emphasized by sustainable frameworks (Toner and Franks, 2006).

Several organizations have underlined several frameworks to assist them to understand, plan, and implement livelihood programmes. All the frameworks emphasize context and capital/assets. The emphasis is on assets in the Department for International Development (DFID, 1999) framework, institutions and organizations in the IDS framework. The International Fund for Agriculture and Development (IFAD) framework has captured people's aspirations and possibilities, emphasizing people's hopes and capacity to capitalize on opportunities (Hamilton and Townsley, 2004). In the early 1990s, Indian and Swiss academics investigated the Nine Square Mandala, an integrated and comprehensive method that focused on the inner realities of the home at the micro level. (Hiremath and Raju, 1999). The IFAD framework has captured people's goals and the opportunities available to them, with a focus on people's hopes and abilities to capitalize on opportunities (Hamilton and Townsley, 2004).

The evidence from various studies indicates that implementation will be complex. While some of the problems were addressed in the design of NRLM, various field reports indicate that only a few organizations have been able to work enthusiastically on the livelihoods front. Many states are still migrating from the former SGSY to the NRLM, and issues such as group formation and credit linkages. Even though enhanced livelihoods have been listed as a desired consequence of many interventions, the sustainable livelihoods framework has not guided them.

Implementation of Livelihood Programmes in India: A Critical Analysis

While the Plans focused on approaches, problems, and future strategies for improving livelihoods, research by academics, government, and non-governmental organizations have focused on the impact and elements crucial for project implementation. Improper programme design has been a major source of worry, particularly in earlier programmes, resulting in erroneous beneficiary selection and, in many cases, ignoring the poorest section (GoK, 2012; Srivastava, 2005). In implementation

studies, the gap between design and implementation is frequently mentioned. Many SHGs founded by members to acquire advantages have been victimized by elite capture, with the poor and marginalized excluded (Kumar and Sahu, 2014; Sud, 2003). The formation of poor and less effective institutions without an adequate framework has resulted in the demise of many groups (Baruah, 2012). The government has frequently predetermined the choice of livelihoods, with people experiencing poverty being excluded (Sud, 2003). The programmes are implemented from the top-down approach, ignoring the participatory strategy envisioned in the design (Shylendra and Bhirdikar, 2005). Members of SHGs have also adopted practices such as fabricating evidence and incurring costs, risks, and stress (Kalpana, 2011).

Delays in distributing funds, according to evaluation studies, have been a major institutional barrier to effective implementation (GoK, 2012; Lenka and Samantaraya, 2010). There were also constraints such as underfinancing (Baruah, 2012; Purushotham, 2009), which resulted in low investment and productivity. A recent study on Kudumbashree reveals that micro-enterprises face challenges due to a lack of awareness and cooperation among group members, poor infrastructure and marketing strategy (GoK, 2012). Political interference has also been studied, which has resulted in strained relationships between local institutions, group members and mission functionaries (Williams et al., 2011; John, 2009).

Researchers and policymakers have argued that marketing contributes to economic development. The market orientation approach helps alleviate poverty by fostering linkages between buyers and sellers. Linking producers to the markets is crucial for successful development program interventions. Excess focus on the production side rather market side of interventions leads to the failure of poverty alleviation and skill enhancement programs. Market-oriented development organizations prioritize understanding the market side interventions (front-end) before compiling the production plan (back-end). Such an approach necessitates looking for customer needs/requirements and developing an offering that meets these needs better than competitors. A large body of empirical evidence suggests that this strategy increases the likelihood of market success. Usually, the development organizations start with a product and then invest heavily in developing beneficiaries' productive capabilities before attempting to find a market for the product, which frequently results in the intervention's

limited success. According to Scoones (2009), the current drop in livelihood perspectives is due to a failure to engage with economic globalization processes, political and governance disputes, environmental sustainability issues, and fundamental transformative shifts in rural economies. Markets and their roles in livelihood development have been identified as a major gap in the understanding and application of livelihood initiatives. (Dorward et al., 2003). According to Scoones (2009), translating theory into practice is difficult due to inherited organizational forms, disciplinary biases, and financial mechanisms built on other assumptions. Haan (2012) highlighted various methodological challenges that have arisen as a result of the livelihood approach, countless studies have been conducted that show limitless variations of local lifestyles without being able to present generalized trends. This generalization should include additional livelihood concerns such as climate change, space quality, migration, and underlying power dynamics in addition to poverty levels, welfare, and well-being. makes a case for linking livelihood discourse to broader macroeconomic issues such as slowing development, lack of employment growth, inflationary pressures, income disparities, and rising political, social, and environmental problems (Nair, 2012).

Conclusions

The literature on livelihood promotion provides a much-needed corrective action in uniting individuals living in poverty, as well as their institutions, methods, and views, together in dealing with multidimensional poverty. The sustainable livelihoods framework directs policymakers' and planners' attention to developing the capacities of people experiencing poverty that are nested within bigger PIP. However, despite its depth as a framework, it faces difficulties in implementing the guidelines. In terms of policy intervention, there is a need to bridge the gap between comprehending the framework of livelihood enhancement and putting rural livelihood missions into action. In jointly comprehending rural livelihood systems, there is limited interaction between practitioners and academicians. Effective implementation is a critical component of the policy process, and learning from implementation issues can lead to a better policy structure (Birkland, 2005). There is room for improvement in terms of identifying and comprehending the problems impeding implementation. The recent expansion of livelihood missions across the country provides tremendous possibilities to examine comparative frames to better understand and appreciate

the institutions, strategic implementation, and processes of people facing poverty who are actively involved in changing their lives. Understanding these programmes through the lens of a critical sustainable livelihood framework and researching the implementation issues can provide policymakers, practitioners, and academics with fresh knowledge and insights into poverty reduction and livelihood enhancement.

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Role of National Health Mission in Human Resource Management for Health in Tamilnadu State

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Abstract

National Health Mission is a flagship health sector reform. National Health Mission is both flexible and dynamic and is intended to guide states toward ensuring the achievement of universal access to health care through the strengthening of health systems, institutions, and capabilities. By providing additional financial resources, flexibility in design, and a sharper focus on particularly marginalized and vulnerable populations, NHM's efforts to strengthen health systems in States have allowed us to achieve impressive improvements.

Human Resources is one of the fundamental elements required for accelerating, achieving, and sustaining the progress of any health program. Studying the newest ideas and methods in human resource management is crucial. Always put the management of people first. Human beings are the only source, even for the deployment of brand-new, incredibly influential technology. Any country that wants to prosper must invest in its human capital. The National Health Mission, over the 15 years, has added approximately 4.5 lakhs additional human resources in the country with the aim of providing quality healthcare services to the community. This study aims to analyze the employees of multipurpose workers Male/female, Nurses, Lab Technicians, Medical officers, and Clinical specialists. The researcher used the secondary data source from the Ministry of Family and Health Welfare and National Health Mission statistics. It is concluded that the National Health Mission has quite shortfall in Human Resources.

Keywords: [Human Capital, Human Capital Management, National Health Mission, Ministry of Family and Health Welfare]

Introduction

Our flagship program for reforming the healthcare system, the National Health Mission (NHM), offers a solid platform for the execution of a number of interventions targeted toward primary and secondary healthcare in both urban and rural areas. By providing additional financial resources, flexibility in design, and a sharper focus on particularly marginalized and vulnerable populations, NHM's efforts to strengthen health systems in States have allowed us to achieve impressive improvements. By facilitating their access to high-quality basic healthcare, NUHM aims to improve the health status of the urban population, particularly the urban poor and other vulnerable groups. A total of 863 new U-PHCs and U-CHCs have been approved for construction, and more than 4800 urban amenities have been upgraded and built-in accordance with standards. 3,400 medical officers, 400 specialists, 16,000 ANMs, 9,100 nurses, 3500 pharmacists, 3900 lab technicians, and 680 public health

managers are among the HR-approved for the program. Effective community engagement initiatives have received approval for around 74,000 ASHAs and 92,000 MAS. The Kayakalp awards were given to 439 urban health facilities.

Human capital is the life-blood of any health system. In this age of globalization and modernization, good human capital management is crucial for the administration of any firm. Recent methods and innovations have been the driving force behind both the management of human resource management and the IT sector. Studying the newest ideas and methods in human resource management is crucial. Always put the management of people first. Human beings are the only source, even for the deployment of brand-new, incredibly influential technology. Any country that wants to prosper must invest in its human capital. The present study focuses on the role of the National Health Mission in Human Resource Management in Tamilnadu.

Table 1: District wise- Sanctioned, Inplaced and shortfall count of MPW Female as of January 2022

Sl. No	Name of District	MPW Female/ ANM		
		Sanctioned (Regular+NHM)	Inplace (Regular+NHM)	Shortfall (Regular+NHM)
1	Ariyalur	329(1.89%)	282(85.72%)	47(14.28%)
2	Chengalpattu	369(2.12%)	297(80.48%)	72(19.51%)

3	Chennai	616(3.54%)	516(83.76%)	100(16.23%)
4	Coimbatore	575(3.31%)	467(81.21%)	108(18.78%)
5	Cuddalore	577(3.32%)	538(93.24%)	39(6.75%)
6	Dharmapuri	442(2.54%)	345(78.05%)	97(21.94%)
7	Dindigul	557(3.20%)	427(76.66%)	130(23.33%)
8	Erode	563(3.24%)	452(80.28%)	111(19.71%)
9	Kallakurichi	500(2.88%)	397(79.40%)	103(20.6%)
10	Kancheepuram	397(2.28%)	270(68.01%)	127(31.98%)
11	Kanyakumari	486(2.80%)	399(82.09%)	87(17.90%)
12	Karur	376(2.16%)	334(88.83%)	42(11.17%)
13	Krishnagiri	472(2.71%)	384(81.35%)	88(18.64%)
14	Madurai	544(3.13%)	488(89.70%)	56(10.29%)
15	Nagapattinam	496(2.85%)	455(91.73%)	41(8.26%)
16	Namakkal	481(2.77%)	368(76.50%)	113(23.49%)
17	Nilgiris	400(2.30%)	320(80%)	80(20%)
18	Perambalur	289(1.66%)	246(85.12%)	43(14.87%)
19	Pudukkottai	508(2.92%)	444(87.40%)	64(12.59%)
20	Ramanathapuram	489(2.81%)	422(86.29%)	67(13.70%)
21	Salem	694(3.99%)	530(76.36%)	164(23.63%)
22	Sivagangai	505(2.90%)	442(87.52%)	63(12.47%)
23	Tenkasi	387(2.22%)	324(83.72%)	63(16.27%)
24	Thanjavur	568(3.27%)	473(83.27%)	95(16.72%)
25	Theni	372(2.14%)	330(88.70%)	42(11.29%)
26	Thiruppathur	451(2.60%)	392(86.91%)	59(13.08%)
27	Tiruvallur	553(3.18%)	525(94.93%)	28(5.06%)
28	Tiruvannamalai	687(3.95%)	507(73.79%)	180(26.20%)
29	Thiruvarur	422(2.43%)	358(84.83%)	64(15.16%)
30	Thoothukudi	481(2.77%)	396(82.32%)	85(17.67%)
31	Tiruchirappalli	558(3.21%)	483(89.55%)	75(13.44%)
32	Tirunelveli	440(2.53%)	366(83.18%)	74(16.81%)
33	Tirupur	476(2.74%)	427(89.70%)	49(10.29%)
34	Vellore	454(2.61%)	400(88.10%)	54(11.89%)
35	Villupuram	526(3.03%)	493(93.72%)	33(6.27%)
36	Virudhunagar	316(1.82%)	279(88.29%)	37(11.71%)
	Total (100%)	17356	14576	2780

II.Statement of the Problem

World Health Organization reports that even having the best equipment, health systems cannot operate without enough staff, regardless of how advanced they may be. Due to continuous shortages in the health workforce, many countries' ability to provide basic healthcare services was already constrained before COVID-19. By 2030, the World Health Organization had already predicted a global shortage of 18 million healthcare

workers, especially in the regions of Africa and South East Asia. According to a 2013 report by World Health Organization and the global health workforce- shortage of skilled workforce., Attrition in the workplace. This present study analyses the Human resource facilities under National Health Mission particularly in the Tamilnadu State.

III.Methodology

The researcher collected and used secondary data for

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this present study. The secondary is collected from the Annual PIP of the National Health Mission Tamilnadu, the National Health Mission portal and National Rural Health Mission and National Urban Health Mission sta-

tistics, the Annual report of the Ministry of Health and Family Welfare, Journals, and the Ministry of Health website.

IV.Result and Discussions

Table 2: District wise- Sanctioned, Inplaced and shortfall count of MPW Male as of January 2022

Sl. No	Name of District	MPW Female/ ANM		
		Sanctioned (Regular+NHM)	Inplace (Regular+NHM)	Shortfall (Regular+NHM)
1	Ariyalur	329(1.89%)	282(85.72%)	47(14.28%)
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35	Villupuram	526(3.03%)	493(93.72%)	33(6.27%)

36	Virudhunagar	316(1.82%)	279(88.29%)	37(11.71%)
	Total (100%)	17356	14576	2780

: National Health Profile 2021

Table 1 shows that the Multipurpose worker female's Sanctioned, placed, and shortfall in Tamilnadu Districts. It infers that the percentage analysis of all the variables of sanctioned places, and shortfalls. Salem (694), Tiruvannamalai (687), and Chennai (616) have the greater number of sanctioned MPW workers in Tamilnadu. Cuddalore (93.24%), Tiruvallur (94.93%), and Tirupur (89.70%) have the greater number of in placed MPW

workers in Tamilnadu. Tiruvallur (5.06%), Villupuram (6.27%) and Cuddalore (6.75%) have the lowest shortfall rate in Overall Tamilnadu. Kancheepuram (31.98%), Tiruvannamalai (26.20%), Salem (23.63%) have the greatest shortfall rate in MPW workers. Tamilnadu has Total of 17356 MPW workers are sanctioned, 14576 MPW workers are in placed and 2780 MPW workers are shortfall.

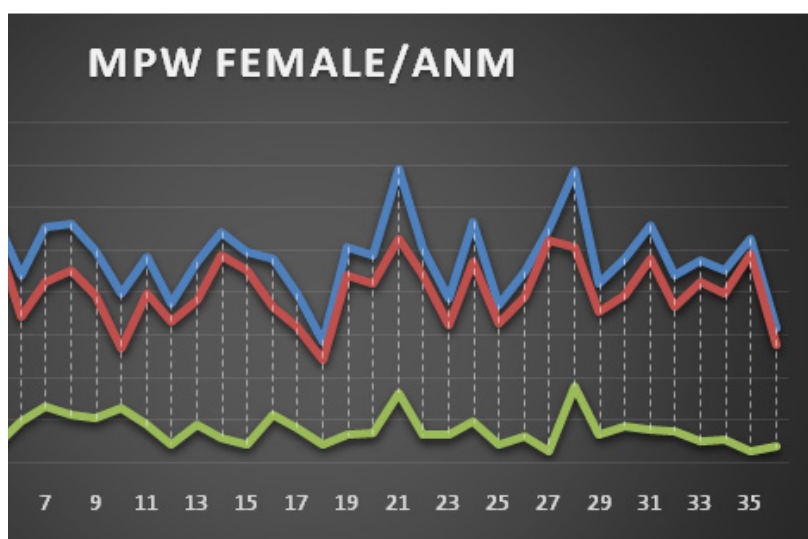


Figure 1: MPW Female/ ANM under NHM in Tamilnadu

Table 2 shows that the Multipurpose worker male's Sanctioned, placed, and shortfall in Tamilnadu Districts. It infers that the percentage analysis of all the variables of sanctioned places, and shortfalls. virudhu-

nagar (270), Ramanathapuram(268), and Coimbatore (260) have the greater number of sanctioned MPW male workers in Tamilnadu. All inplaced MPW male workers rate are 93-95%. And all the shortfall MPW male workers rate are 6-7%. Tamilnadu has Total of 7557 MPW male workers are sanctioned, 7191 MPW male workers are in placed and 366 MPW male workers are shortfall in overall.

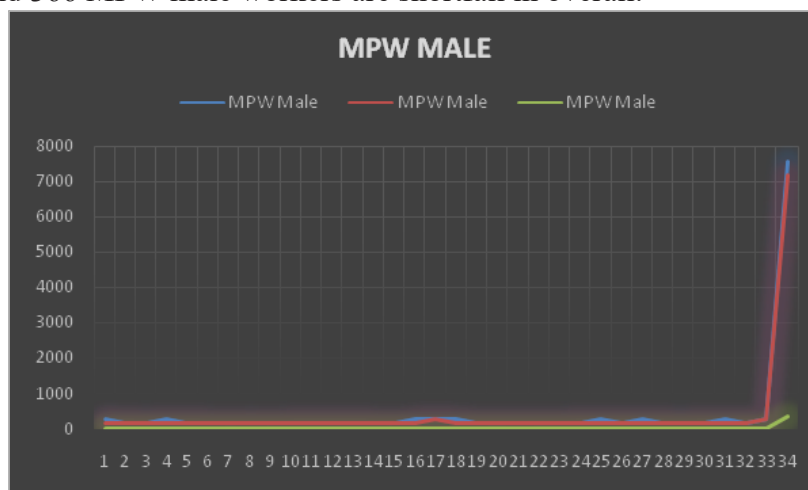


Figure 2: MPW Male under NHM in Tamilnadu

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Table 3: District wise- Sanctioned, Inplaced and shortfall count of Staff Nurse as of January 2022

Staff Nurse				
Sl. No	Name of District	Sanctioned (Regular+NHM)	Inplace (Regular+NHM)	Shortfall (Regular+NHM)
1	Ariyalur	454(1.82%)	435(95.81%)	19(4.18%)
2	Chengalpattu	566(2.26%)	554(97.87%)	12(2.12%)
3	Chennai	482(1.93%)	472(97.92%)	10(2.07%)
4	Coimbatore	870(3.48%)	848(97.47%)	22(2.53%)
5	Cuddalore	963(3.85%)	934(96.98%)	29(3.01%)
6	Dharmapuri	683(2.73%)	660(96.63%)	23(3.36%)
7	Dindigul	866(3.46%)	858(99.07%)	8(0.92%)
8	Erode	771(3.08%)	767(99.48%)	4(0.51%)
9	Kallakurichi	575(2.30%)	556(96.69%)	19(3.31%)
10	Kancheepuram	401(1.60%)	384(95.76%)	17(4.24%)
11	Kanyakumari	561(2.24%)	549(97.86%)	12(2.14%)
12	Karur	497(1.99%)	453(91.14%)	44(8.85%)
13	Krishnagiri	720(2.88%)	708(98.33%)	12(1.66%)
14	Madurai	845(3.38%)	829(98.10%)	16(1.89%)
15	Nagapattinam	752(3.01%)	744(98.92%)	8(1.07%)
16	Namakkal	712(2.85%)	695(97.61%)	17(2.38%)
17	Nilgiris	486(1.94%)	480(98.76%)	6(1.23%)
18	Perambalur	393(1.57%)	387(98.47%)	6(1.52%)
19	Pudukkottai	852(3.41%)	832(97.65%)	20(2.34%)
20	Ramanathapuram	818(3.27%)	796(97.31%)	22(2.68%)
21	Salem	1157(4.63%)	1144(98.87%)	13(1.12%)
22	Sivagangai	667(2.67%)	657(98.50%)	10(1.49%)
23	Tenkasi	557(2.23%)	542(97.30%)	15(2.69%)
24	Thanjavur	814(3.26%)	795(97.66%)	19(2.33%)
25	Theni	615(2.46%)	608(98.86%)	7(1.13%)
26	Thiruppathur	510(2.04%)	507(99.41%)	3(0.58%)
27	Tiruvallur	756(3.02%)	733(96.95%)	23(3.04%)
28	Tiruvannamalai	1023(4.09%)	993(97.06%)	30(2.93%)
29	Thiruvarur	546(2.18%)	540(98.90%)	6(1.09%)
30	Thoothukudi	617(2.47%)	603(97.73%)	14(2.26%)
31	Tiruchirappalli	854(3.42%)	850(99.53%)	4(0.46%)
32	Tirunelveli	579(2.32%)	576(99.48%)	3(0.51%)
33	Tirupur	769(3.08%)	755(98.17%)	14(1.82%)
34	Vellore	747(2.99%)	722(96.65%)	25(3.34%)
35	Villupuram	711(2.84%)	693(97.46%)	18(2.53%)
36	Virudhunagar	818(3.27%)	791(96.69%)	27(3.30%)
	Total	25007(100%)	24450	557

Source: National Health Profile 2021

Table 3 shows that the Staff Nurses Sanctioned, placed, and shortfall in Tamilnadu Districts. It infers that the percentage analysis of all the variables of sanctioned places, and shortfalls. Salem (1157), Tiruvannamalai (1023), and Cuddalore (963) have the greater number of sanctioned staff nurses in Tamilnadu. Trichy (99.53%), Tirunelveli and Erode (99.48%), and Tirupathur (99.41%) have the greater number of in placed

Staff Nurses in Tamilnadu. Erode (0.51%), Thirupathur (0.58%) and Dindigul (0.92%) have the lowest shortfall rate in Overall Tamilnadu. Karur (8.85%), Kancheepuram (4.24%), and Dharmapuri (3.36%) have the greatest shortfall rate in staff nurses. Tamilnadu has Total 25007 Staff Nurses are sanctioned, 24450 staff nurses are in placed and 557 staff nurses are shortfall.

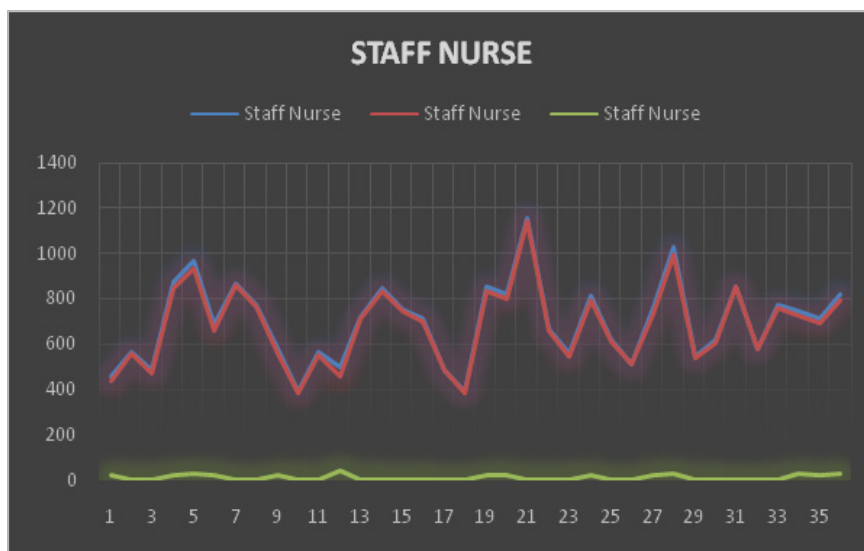


Figure 3: Staff Nurse Under NHM in Tamilnadu

Table 4: District wise- Sanctioned, Inplaced and shortfall count of Lab Technicians as of January 2022
Sl. No Name of District

Lab technicians				
Sl. No	Name of District	Sanctioned (Regular+NHM)	Inplace (Regular+NHM)	Shortfall (Regular+NHM)
1	Ariyalur	95	90(94.73%)	5(5.26%)
2	Chengalpattu	117	112(95.72%)	5(4.27%)
3	Chennai	84	78(92.85%)	6(7.14%)
4	Coimbatore	106	101(95.28%)	5(4.17%)
5	Cuddalore	128	124(96.87%)	4(3.12%)
6	Dharmapuri	117	109(93.16%)	8(6.83%)
7	Dindigul	151	138(91.39%)	13(8.60%)
8	Erode	128	120(93.75%)	8(6.25%)
9	Kallakurichi	114	106(92.98%)	8(7.01%)
10	Kancheepuram	95	84(88.42%)	9(11.58%)
11	Kanyakumari	100	93(93%)	7(7%)
12	Karur	122	116(94.26%)	7(5.73%)
13	Krishnagiri	140	133(95%)	7(5%)
14	Madurai	133	126(94.73%)	7(5.26%)
15	Nagapattinam	119	112(94.11%)	7(5.88%)
16	Namakkal	122	116(95.08%)	7(4.91%)

17	Nilgiris	105	100(95.23%)	5(4.76%)
18	Perambalur	89	79(88.76%)	10(11.23%)
19	Pudukkottai	134	124(92.53%)	10(7.46%)
20	Ramanathapuram	158	147(93.03%)	11(6.96%)
21	Salem	152	144(94.73%)	8(5.26%)
22	Sivagangai	100	93(93%)	7(7%)
23	Tenkasi	125	118(94.4%)	7(5.6%)
24	Thanjavur	135	128(94.81%)	7(5.18%)
25	Theni	117	111(94.87%)	6(5.12%)
26	Thiruppathur	127	119(93.70%)	8(6.29%)
27	Tiruvallur	161	151(93.78%)	10(6.21%)
28	Tiruvannamalai	202	193(95.54%)	9(4.45%)
29	Thiruvarur	134	129(96.26%)	5(3.73%)
30	Thoothukudi	151	144(95.36%)	7(4.63%)
31	Tiruchirappalli	119	113(94.95%)	6(5.04%)
32	Tirunelveli	114	108(94.73%)	6(5.26%)
33	Tirupur	115	108(93.91%)	7(6.08%)
34	Vellore	103	97(94.17%)	6(5.82%)
35	Villupuram	112	105(93.75%)	7(6.25%)
36	Virudhunagar	104	95(91.34%)	9(8.65%)
	Total	4428	4164	264

Source: National Health Profile 2021

Table 4 shows that the Lab Technician's Sanctioned, placed, and shortfall in Tamilnadu Districts. It infers that the percentage analysis of all the variables of sanctioned, in placed, and shortfalls. Tiruvannamalai (202), Tiruvallur (161) and Ramanathapuram (158) have the greater number of sanctioned Lab Technicians in Tamilnadu. Cuddalore (96.87%), Tiruvarur (96.26%), and Chengalpattu (95.72%) have the greater number

of in placed Lab Technicians in Tamilnadu. Cuddalore (3.12%), Tiruvarur (3.73%) and Coimbatore (4.17%) have the lowest shortfall rate in Overall Tamilnadu. Kancheepuram (11.58%), Tiruvannamalai (11.23%), Virudhunagar (8.65%) have the greatest shortfall rate in overall Tamilnadu. Tamilnadu has Total of 4428lab technicians are sanctioned, 4164 lab technicians are in placed and 264 lab technicians are shortfall.

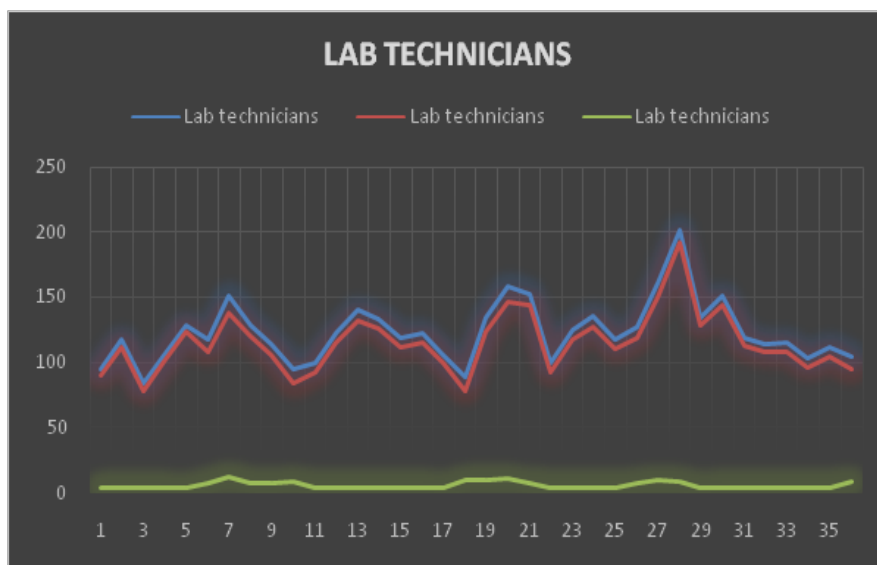


Figure 4: Lab Technicians under NHM in Tamilnadu

Table 5: District wise- Sanctioned, Inplaced and shortfall count of Medical Officer as of January 2022

Sl. No	Name of District	MO MBBS full time		
		Sanctioned (Regular+NHM)	Inplace (Regular+NHM)	Shortfall and Excess (Regular + NHM)
1	Ariyalur	87	92	+5
2	Chengalpattu	113	125	+12
3	Chennai	599	392	207
4	Coimbatore	201	210	+9
5	Cuddalore	214	201	13
6	Dharmapuri	134	142	+8
7	Dindigul	221	217	4
8	Erode	203	212	+9
9	Kallakurichi	122	117	5
10	Kancheepuram	56	65	+9
11	Kanyakumari	122	134	+12
12	Karur	94	103	+9
13	Krishnagiri	169	174	+5
14	Madurai	207	212	+5
15	Nagapattinam	157	156	1
16	Namakkal	192	190	2
17	Nilgiris	83	87	+4
18	Perambalur	58	65	+7
19	Pudukkottai	226	230	+4
20	Ramanathapuram	163	156	7
21	Salem	316	307	9
22	Sivagangai	151	156	+5
23	Tenkasi	140	151	+11
24	Thanjavur	224	225	+1
25	Theni	107	108	+1
26	Thiruppathur	164	164	0
27	Tiruvallur	200	208	+8
28	Tiruvannamalai	288	280	8
29	Thiruvarur	140	142	+2
30	Thoothukudi	175	183	+8
31	Tiruchirappalli	223	229	+6
32	Tirunelveli	142	149	+7
33	Tirupur	178	166	12
34	Vellore	150	154	+4
35	Villupuram	184	187	+3
36	Virudhunagar	176	179	+3
	Total	6379	6268	

Source: National Health Profile 2021

Table 5 shows that the Medical Officer's Sanctioned, placed, shortfall and excess of man power in Tamilnadu Districts. It infers that the percentage analysis of all the variables of sanctioned, in placed, and shortfalls. Chennai (599), Salem (316), and Tiruvannamalai (288) have the greater number of Medical Officers in Tamilnadu. Shortfall of Medical officers in the districts of Chen-

nai (207), Cuddalore(13), Dindigul(4), Kallakurichi (5),Nagapattinam(1), Namakkal(2), Ramanathapuram(7), Salem(9), Tiruvannamalai(8) and Tirupur(12). Tirupathur is the only district has zero shortfall. Other than the above districts have surplus of medical officers in Tamilnadu.

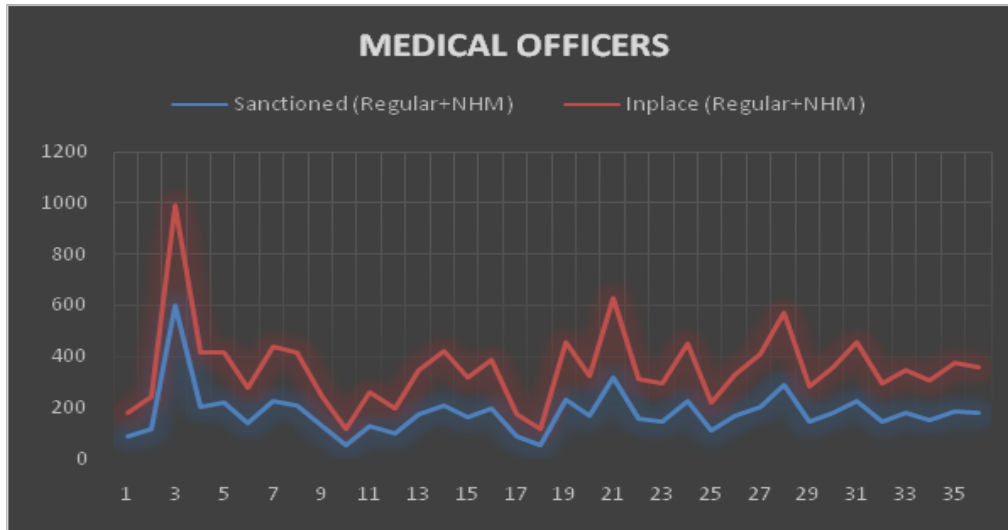


Figure 5: Medical Officers under NHM in Tamilnadu

Table 6: District wise- Sanctioned, Inplaced and shortfall count of Clinical Specialists as of January 2022

Sl. No	Name of District	Clinical Specialists		
		Sanctioned (Regular+NHM)	Inplace (Regular+NHM)	Shortfall (Regular+NHM)
1	Ariyalur	109	99(90.82%)	10(9.17%)
2	Chengalpattu	NA	NA	NA
3	Chennai	NA	NA	NA
4	Coimbatore	161	133(82.60%)	28(17.39%)
5	Cuddalore	335	302(90.14%)	33(9.85%)
6	Dharmapuri	93	77(82.79%)	16(17.24%)
7	Dindigul	208	196(94.23%)	12(5.76%)
8	Erode	201	180(89.55%)	21(10.44%)
9	Kallakurichi	NA	NA	NA
10	Kancheepuram	205	186(90.73%)	19(9.26%)
11	Kanyakumari	122	113(93.38%)	9(6.61%)
12	Karur	111	84(75.67%)	27(24.32%)
13	Krishnagiri	202	183(90.59%)	19(9.40%)
14	Madurai	155	151(97.41%)	4(2.58%)
15	Nagapattinam	173	160(92.48%)	13(7.51%)
16	Namakkal	205	189(92.19%)	16(7.80%)
17	Nilgiris	148	133(89.86%)	15(10.13%)

18	Perambalur	134	116(86.56%)	18(13.43%)
19	Pudukkottai	117	105(89.74%)	12(10.25%)
20	Ramanathapuram	155	142(91.61%)	13(8.39%)
21	Salem	189	175(92.59%)	14(7.40%)
22	Sivagangai	116	98(84.48%)	18(15.51%)
23	Tenkasi	NA	NA	NA
24	Thanjavur	171	159(92.98%)	12(7.01%)
25	Theni	144	107(74.30%)	37(25.69%)
26	Thiruppathur	NA	NA	NA
27	Tiruvallur	195	182(93.33%)	13(6.66%)
28	Tiruvannamalai	127	114(89.76%)	13(10.23%)
29	Thiruvarur	116	100(86.20%)	16(13.79%)
30	Thoothukudi	156	145(92.94%)	11(7.05%)
31	Tiruchirappalli	181	167(92.26%)	14(7.73%)
32	Tirunelveli	187	170(90.90%)	17(9.09%)
33	Tirupur	233	213(91.41%)	20(8.58%)
34	Vellore	225	215(95.55%)	10(4.44%)
35	Villupuram	178	167(93.82%)	11(6.17%)
36	Virudhunagar	214	202(94.39%)	12(5.60%)
	Total	5266	4763	503

Source: National Health Profile 2021

Table 6 shows that the Clinical Specialists Sanctioned, placed, and shortfall in Tamilnadu Districts. It infers that the percentage analysis of all the variables of sanctioned places, and shortfalls. Cuddalore (335), Tirupur (233), and Vellore (225) have the greater number of sanctioned Clinical Specialists in Tamilnadu. Madurai (97.41%), Vellore (95.55%), and Virudhunagar (94.39%) have the greater number of in-placed Clinical Specialists in Tamilnadu. Madurai (2.58%), Vellore (4.44%) and Virudhunagar (5.60%) have the lowest shortfall rate in Overall Tamilnadu. Theni (25.69%), Karur (24.32%), and Coimbatore (17.39%) have the greatest shortfall rate. Tamilnadu has Total of 5266 clinical specialities are sanctioned, 4763 clinical specialities are in placed and 503 are shortfall. Chennai, Chengalpattu, kallakurichi, Thenkasi and Tirupathur data are not available.

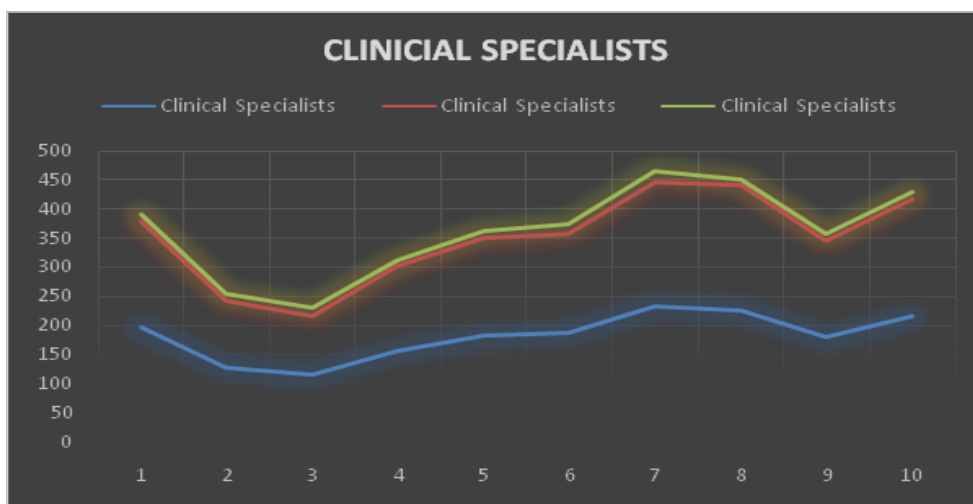


Figure 6: Clinical Specialist under NHM in Tamilnadu

Conclusions

Human Resource Management is important for Healthcare Industry. National Health Mission encourages the engagement of Human resources for support services. This helps in reducing the recruitment of personnel. This present study addresses human resource management in National Health Mission all over Tamilnadu. It concludes that the National Health Mission and the Ministry of Health and Family Welfare need a greater number of Human resources in places in the Tamilnadu State to encourage the healthcare sector.

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Women Entrepreneurship and the Role of Microcredit in the Interior India

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Abstract

In the interior regions of India, poverty is the major concern for the smooth livelihood of the people residing over there and especially women. Women have suffered more due to such conditions of the family as they are the ones who have to be devoid of basic needs in such a situation. The family will always prefer to give whatever they have to males rather than females. Women in such families are accustomed to sacrificing their needs for the sake of male members of their family. Most of such families do not even send their female children to schools as well for basic education. Therefore, such women remain illiterate and don't leave with any other options than to start their own tiny business for the sake of the sustainability of their family. For the development and entrepreneurship of such women residing in rural parts of India, Microcredit plays a very vital role to provide the utmost support to these women to do something as per their skill level. With the help of microcredit schemes, women living in the interior regions of India are able to start their own small businesses and are becoming self-reliant. Many social reformers, feminists and other NGOs are working together to enhance microcredit schemes in rural India. This article will try to explore the utmost need for microcredit in women entrepreneurship in rural parts of India.

Keywords: [Microcredit, Women Entrepreneurship, Rural India, Feminism].

Introduction

Women residing in the rural parts of India have to face a lot of discrimination at the hands of men under the patriarchal system prevailing in our societies. The struggle of women against patriarchy is an age-old issue for every woman. Many feminists came for the support of women under this cause but most of the women residing in the rural parts of India are still undergoing similar discrimination at the hands of men. The reason for the same is the dependency of women on men as most of the women either are not educated or don't have any financial support to do something for livelihood despite having good skills in any work. Therefore, to support such women who are having good skills at something and want to start a small business to be self-reliant, the government and other agencies have started up some helpful schemes and microcredit is one of those to support such women. "Microcredit for women has been a popular poverty-alleviation strategy among development agencies since the mid-1980s. It has also been considered an effective vehicle for women's entrepreneurship" (Leach and Sitaram, 2002, p. 575). Microcredit is an effective way for eliminating poverty, helping women, and support them in dealing with socioeconomic adversities. Many women have been able to use modest sums of money in innovative and effective ways to improve their livelihoods, strengthen their households' well-being, and even manage to have some savings with the help of such microcredit programmes. Grameen banks founder Mohammad Yunus claims that microcredit offers the ability to assist financially

deprived persons, especially women who have been turned down by conventional banks owing to a lack of security. As women are the largest part of the poor population in India, the microcredit schemes target them the most to support them in development and entrepreneurship. "Proponents of microcredit argue that providing credit to women 'leads to a set of mutually-reinforcing virtuous spirals' of increasing economic entrepreneurship, improved well-being and social/political/legal entrepreneurship for women" (Singh, 2018). It is with the countless efforts of Mohammad Yunus microcredit achieved popularity among people as Singh (2018) remarks:

the credit for the popularity of microcredit goes to Muhammad Yunus who experimented with microcredit in the mid-1970s and laid the groundwork for the development of microcredit in Bangladesh. His belief that access to loans would give poor people an opportunity to establish microenterprises and navigate their path out of poverty led to the emergence of the Grameen Bank in Bangladesh.

With the help of small needful support any woman can make a change in her life by empowering herself and if her business runs well can contribute to the welfare of her family and then to the overall development of the area residing in. An educated woman can go for jobs to sustain themselves but for those uneducated, these schemes are very helpful to be able to become financially independent and thereby can fight against patriarchal discrimination. Most of the uneducated women population resides in villages only, therefore, for the ru-

ral development and empowering the women residing over there microcredit is like a great lifeline. Women by availing of such loans at the lowest possible rates can fight against poverty, gender discrimination and ultimately can become financially independent people.

Research Objectives and Hypothesis

The main objective of the present research paper is to see the role microcredit plays in the women empowerment in the rural regions of India. The purpose is to identify the importance and need of such financial help in the interior regions in India. The women residing in the rural parts are being discriminated as they are not much educated and therefore, have no income source to stand on their own feet. So the microcredit plays a vital role in the upliftment of such women in India and contribute significantly towards women empowerment.

Research Methodology

Qualitative research methodology has been adopted in the present research paper. The researchers have done a close textual analysis and explored the other available secondary material online such as published research articles in various journals. Further, the information will be collected from different websites related to the objectives of the present study.

Need of Microcredit in Rural Development

As money is the single-most important aspect of every firm, some women business owners have been constrained by the absence of funds. The main reason for a shortage of liquidity came from the absence of loan guarantees. Recently, a number of federal programmes for women entrepreneurs were launched to help close this funding gap. These programmes make it simple and speedy for women to acquire finance. Furthermore, a number of credit unions have begun to provide unsecured company grants to women in order to assist them in starting their very own companies. The need and role of microcredit are to reduce poverty from the interior parts of India. As the rural areas are totally devoid of any industrial structures where the poor people can think of going for the sake of the economy. Even those working at such places have to undergo a lot of oppression and exploitation. Through the credit received from microcredit schemes, the poor people residing in the rural areas can kick off some small businesses in their area and can earn an independent income and in turn contribute towards the development of the respective region to which they belong. Microcredit is required to fight subjugation and develop confidence in the ru-

ral people, especially rural women, in order to achieve economic self-sufficiency (Kabeer, 2005, p. 4709). Micro-credit not only provide poor people with availability to loans and deposits, but they also help people around the world by connecting them with each other in multilateral organizations on a daily basis. For rural development in India, these microcredit schemes are very much required as people are devoid of any financial help. Thus, this acts as an anti-poverty vaccine for the people residing in the villages where there are not much of options available for development. In order to improve the status of their family and get above the poverty line, the poor people need some influx of money which can result in development.

Traditional banks never give loans to poor people because of a lack in having security deposit from them. Therefore, the role of microcredit programs is quite remarkable to eradicate poverty from the rural parts of India and “Eventually it would be ideal to enhance the creditworthiness of the poor and to make them more “bankable” to financial institutions and enable them to qualify for long-term credit from the formal sector” (Vetrivel and Kumarmangalam, 2010, p. 441). Further, “Microcredit institutions have a lot to contribute to this by building financial discipline and educating borrowers about repayment requirements” (Vetrivel and Kumarmangalam, 2010, p. 441). These schemes give poor people a chance to get above their poverty by doing hard work. All hard-working villagers need just a bit of financial help which these programs are providing them. In contemporary times, many people are also creating their own self-help groups in villages to provide financial help to the needy ones whenever required. The number of these self-help groups are increasing in number in the rural areas as these organizations of villagers which majority are by women give good results to everyone. The establishment of demand-oriented commodities and the hiring of its participants as banking representatives at the regional level have enhanced the breadth and reliability of financial services for self-help organizations.

How Microcredit is Contributing to Women Entrepreneurship?

In the rural parts of India, women are considered poorer as compared to men because of their vulnerable status in the family as well as in the Patriarchal System. Women are always presented as the most discriminated individuals in the interior regions of India. They have not only had to bear the poverty but also suffer inequality at the hands of the dominating males in the family. Therefore,

to prove strength to the vulnerable condition of women in society and to help them in achieving equal status in their families, women are considered more in the need of support from such schemes than men do. Women face discrimination even in their work as labourers and that forces them to look for work on the outskirts of the system, in private employment. Microcredit programs refer that the overwhelming majority of women use microcredit services and also that the loan return rate is about 98%, shoring up the discourse that microcredit empowers women to start small businesses and can accumulate enough profit to be able to repay the loan and thus achieves self-reliance. All this attracts the interest of authorities and even the international non-profit groups (Singh, 2018). As many women residing in rural regions are availing micro-financial credits to become entrepreneurs. Due to lesser interest rates and hassle-free credibility, the women are easily availing these loans to set up their small businesses to be financially independent and even to support their families.

Government of India has launched a number of schemes for women like: Mudra Loan for Women, Stree Shakti Yojana, Annapurna Scheme, Mahila Udyam Nidhi Yojana, Bhartiya Mahila Bank Business Loan, and Orient Mahila Vikas Yojana Scheme etc. These programmes have the potential to establish a chain of 'moral virtues' of financial inclusion, enhanced well-being for individuals and communities, and broader political and social equality by contributing to women's capability to produce a living. Microcredit is extremely important in India since it provides small businesses with access to money. Microcredit is an approach that is based on empowering women by providing them loans to start any business as per their skills and needs. It also serves as a mechanism for impoverished women's economic entrepreneurship by making them self-reliant, with the help of the loan they are able to sustain their families' welfare and attain the status of equality in their household. Under the patriarchal system, women have no right to say anything when it comes to decision making in the household. When women will be financially capable then only their voice will be heard in the decision making of their households. Thus, by providing loans to women to earn money, these programs are enabling women to become independent and indirectly helping them to attain equal status in society by empowering them financially. As Swapna (2017) remarks that "micro financing may not only empower the women economically but also socially" (219).

Conclusions

Microcredit cannot be regarded as just a financial system, it is a very vital way to eradicate poverty and make the villagers financially independent. When the villagers will become self-reliant then only they can contribute positively towards the overall development of that area. The main objective of microcredit schemes is to empower rural women by providing them financial credit to start something to earn money. Many banks are lending money to these micro-credit institutions in order to help poor people especially women so that they can improve their condition and status in society by becoming self-reliant and even capable of sustaining their families financially. Micro-enterprises are having a significant impact on society's social and economic growth. By providing necessary loans and helping to accumulate savings to give financial strength and boosting the confidence of the poor woman. These programs are significantly contributing towards improving the status of women in society by helping them to become financially sound and thus leading a life in which they don't need to rely on the income of their male partners. Therefore, it won't be wrong to say that microcredit schemes are quite helpful in supporting women's entrepreneurship in the rural parts of India and helping them significantly to improve their status in the male dominated societies by becoming self-reliant.

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A Study on Trends and Opportunities for Online Education Startups Post Covid 19 in India

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Abstract

Education sector has seen a tremendous turnaround post Covid 19 outbreak. Lockdown imposed for the safeguard of citizen not only halted the production and services sector but also the functioning of educational institutes also. Guidelines related to Covid 19 spring the makeshift shutdown of around 1,000 universities and 40,000 colleges which influenced around 3.75 crore students and 14 lakh faculty in education sector. This launched an urgent call for solutions which can help the students to be on track of their education. It is rightly said that every adversity will bring the opportunities with the same. Traditional method of face-to-face teaching was put back by online learning mode through various collaborating and communication platforms like Zoom, Google Classroom, Google Meet, and Microsoft Teams etc. It resulted into surge in the number of students undertaking online education. During this exigent time also, entrepreneurs sensed the opportunities to venture into education startups. This change in the unconventional method of teaching and learning brought fiscal and programme momentum from 2020-21. One of such step is to change the policy for education where technology was given the prime importance. It will enable to make the online courses in regional language and technology will be used in all facets of education like teaching, learning, evaluation, examination etc. Edu Tech entrepreneurs have a way forward to bring into normalcy in the learning segment through development of content which enables students get required knowledge and skills. Not only the students get benefited by completing their courses, but also they have now tools to upgrade their skills which help them to get placed. Though the future of the sector looks bright, but it depends on how quickly it adapts to the changing needs of various stakeholders like students, government, parents, faculties, institutions and even employers also. The present paper will discuss the trends in the funding and investment in online education industry till December 2020 and will also throw light on opportunities prevailing in the sector. It will also highlight the importance of Edu Tech Startup from the view point of latest Policy of Education (2020). Finally, the paper will also draw attention towards the comparative statistics related to enrollment of students in various online education platforms catering to different segments.

Keywords: [Covid 19, Face-to-Face Teaching, Online Learning, Edu Tech Entrepreneur]

Introduction

In India, there are at present 360 million students spanning all the age group, which is still expected to grow additional with a shoot up in school and college admissions. Traditionally, Indian education institutes are more inclined towards face-to-face type of learning and teaching but lately they have adopted a blended way of teaching as well. It was well supported by increased in the internet connectivity across the country specially tier 3 and tier 4 cities. Indian Edu Tech Market is anticipated to surge at Compounded Annual Growth Rate of 47.5% and touch 17,374.43 million in 2027. Online teaching and learning has been adopted by many institutions. Online learning can be defined as a systematic procedure of teaching, discussing, disseminating, evaluating, and providing feedback to the learner with the means of networks enabled by communication technology. It also enables the learners to learn from anywhere at any time. However, online learning was seen as an alternative to traditional form of learning. Before the outbreak of Covid 19, the Ed tech sector was estimated to be 18.66 billion USD in 2019 and was expected to increase to 350 billion by 2025. Since the month of March in the year 2020 when Indian Government was

forced to impose lockdown in the country, the online learning has seen a sharp surge. With almost every education institution closed, there exists an urgent need to provide to provide technological fix to the halted education across the country. As the date of reopening of schools were uncertain, education institutions have to make way for online teaching and learning. As a prompt step to fix the problem, these institutions started using video conferencing tools like Zoom, WebEx, Microsoft Teams etc. It has permitted the educator to record the video which can be viewed by the learner at their convenient time and place. This was seen as a launching pad for online education providers as an opportunity to pounce on. As education institutions were forced to embrace the digital learning, companies are almost equipped with tools to cater to the demands of the students and faculty fraternity in general. BARC India reported an increase in about 30% time on the online education application.

Literature Review:

Patel & Parekh (2020) compared online education platforms Swayam, NPTEL and Udemy. The study undertook the comparison these platforms by looking at

teaching pedagogy, content and various other aspects of e-learning platforms. It was found that SWAYAM lacks behind the other two counterparts in aspects like no. of courses offered, languages support available for learning.

Jindal & Chahal (2020) undertook a research to identify key factors to boost online education in India. The study also focused on identification of challenges for online education. The major challenges identified are Insufficient Digital Infrastructure, Limited Social Interaction, Questionable Degrees and Language in which course can be undertaken.

Godha & Sharma (2021) studied the opportunities prevailing in online education in India. Researchers also undertook a primary survey among 80 students regarding their perceptions towards online education.

Jhingan (2021) published a report on Online Education industry in India in the summated form of top learning platforms in the industry and their performances in the past 12 months and its future in next one year.

Objectives of Research

1. To study the overall market of Online Education in India pre and post Covid-19.
2. To identify the trends in Investment in Online Edu-

cation Startups in India post Covid-19.

3. To understand the opportunities prevailing in the Education Sector with special reference to Online Education Platform Startups.

Research Methodology

- Nature of Research: Descriptive Research
- Type of Data Used: Secondary Data through Research Papers, Reports by Research Agencies, Newspaper, Government Report etc.
- For the preparation of paper, the researcher collected the information from various sources mentioned above and prepared the summary of the same.

Edu Start Up Funding AND Investment

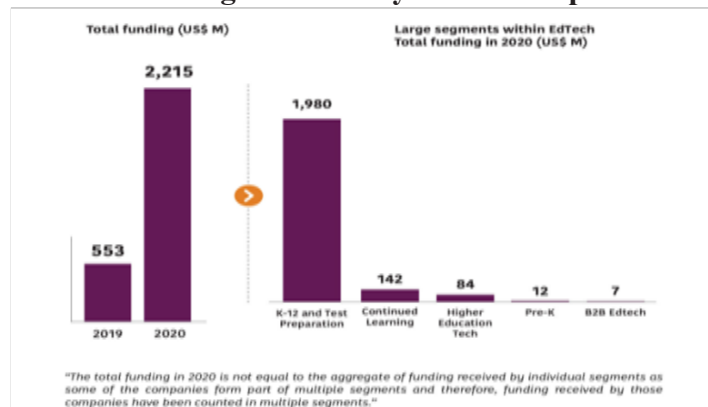
Sensing the opportunities prevailing in online education, many established firms offered free content to increase their user base. Also, India has seen significant increase in the new education startups raising huge investment post covid 19. There is a mammoth flux of investment in the sector and at the same time there are large number of mergers and acquisitions witnessed in the same. According to a report by Tracxn, as shown in Table 1 following startups have received funding since March 2020 and still continuing.

Table 1: Fundings Received By Edu Startups Since March 2020

Start Up	Funding Date	Amount
Pedagogy	April 30, 2020	USD 400,000
Expertrons	April 29, 2020	NA
Quin1	April 29, 2020	NA
GUVI	April 23, 2020	USD 788,156
Pariksha	April 20, 2020	NA
Camp K-12	April 02, 2020	USD 4 million
Callido	March 07, 2020	NA

(Source: Business Insider, May 11, 2020)

Figure 1: Total Funding Received by Edu Startups In 2020 In India



Source: *ivca.in* updated till December 10, 2020

As per the report by IVCA, Edu Startup received a mammoth amount of USD 2.22 billion in the year 2020 which is around 300% more than that in 2019. Figure 1 shows the funding received by various types of Edu Startups in India in 2020.

Online Education Prospects in India

Indian online education startup is fragmented in to vast domains ranging from Pre-K (Play School, Day Care, Language classes, Story Reading and Listening, Educational Games and Kits, and Outdoor Learning Activities), K-12 (Physical Schools, Online Schools, Supplementary Education, Out of School Learning, Assessment, Test Preparation, Career Guidance, Gamified Learning and Sports and extra-curricular), Higher Education (College/Universities, Assessment, Certification, Vocational Training, Job Search Training, Casual Learning, Education Finance), continued learning, B2B EdTech, Digital Tutoring Enablers and Parent Teacher Enabler. Table 2 highlights the various domains of online education in India where the entrepreneurial opportunities are prevailing. Table 2 mentions various do-

main, categories and a representative example of each. These domains are on the basis of the level of learner. It ranges from the pre-primary education, primary, secondary and higher secondary education. It also encompasses the Edu tech companies catering to wide spectrum of learners for test preparation, assessment, job search, vocational training, tutoring platforms, parent teacher meeting platforms etc. It also includes schools and universities providing online education only. Not only these, but it also helps learners to get educational loan through various platforms also. It also provides alumni engagement platform through which the learners can have guidance from pass out students regarding academics, job opportunities, skillset required in the market place. Skill development platform are also a part of this eco-system which enables learners to acquire various skills in an online mode. Learning by gamification is also a trend which is witnessed in the recent times. It provides learning blended with entertainment. Thus, it can be said that at present online education system offers a complete range of services which can cater to wide array of students of India.

Table 2: Opportunities for Entrepreneurs in Domains of Online Education in India

PRE-K	K-12	Higher Education	Continued Learning
Play School - Hippocampus	Online Schools – The Virtual School India	College/Universities – MANIPAL	Corporate Learning – aeon Learning
Day Care- Footprints	Supplementary Education – Byju’s	Assessment – HackerRank	Digital Tutoring Enablers
Language Classes - Culturealley	Out of School Learning – WhiteHatJr	Certification - up-Grad	Classplus
Story Reading / Listening - Pratilipi	Assessment – LogIQ-uids	Vocational Training – ESDECS	Parent Teacher Communication
Educational Games - Shifu	Test Preparation – gradeup	Job Search / Training - INTERNSHALA	Sqoolz
Connect			
Outdoor Learning Activities – Dost	Career Guidance – CollegeDekho	Casual Training - CELEBRITY-SCHOOL	
B2BEDTECH	Gamified Learning – STEPapp	Sports and extra-curricular - udaan	
WizIQ	Sports and extra-curricular – udaan	Education Finance – varthana	

Source: Author’s compilation

New Education Policy (NEP) 2020 and Boost To Digital Education Startup Entrepreneurs

With the expected number of students to be around 14 million, India will be one of the largest users of Mas-

sive Open Online Courses (MOOCs). The new education policy (NEP) 2020 has focused massively on online education where students don’t only get degree but get the skills and vocational courses. With the help of

classroom learning, flexible and collaborative environment blended with technology, NEP aims to provide quality education. It will help learners to be job ready with required skills in minimum amount of time. Government of India has framed the roadmap of education by keeping in mind needs of the 21st century where traditional classroom teaching will be replaced by online virtual learning only those aspects which are important from a career point of view. This provides enormous opportunities to the new Edu Tech startups to ponder in to the sector and create platforms which are contently relevant and recent also. It provides chance to these entrepreneurs to develop education applications which

can help the learners to gain new skills, new degree and career in long run.

Trends in the User Enrollment in Various Online Education Platforms

During the lockdown, majority of the online education providing forms offered free access to the contents on the platform. This not only resulted in the increased usage of platforms but is also behind the surge in the number of users also. Many online education platforms like Byju's, Vedantu, Unacademy, toppr, gradeup, khan academy, udemy etc has seen a steep increase in the user enrolment.

Table 3: Users of Various Online Education Platforms in India Post Covid

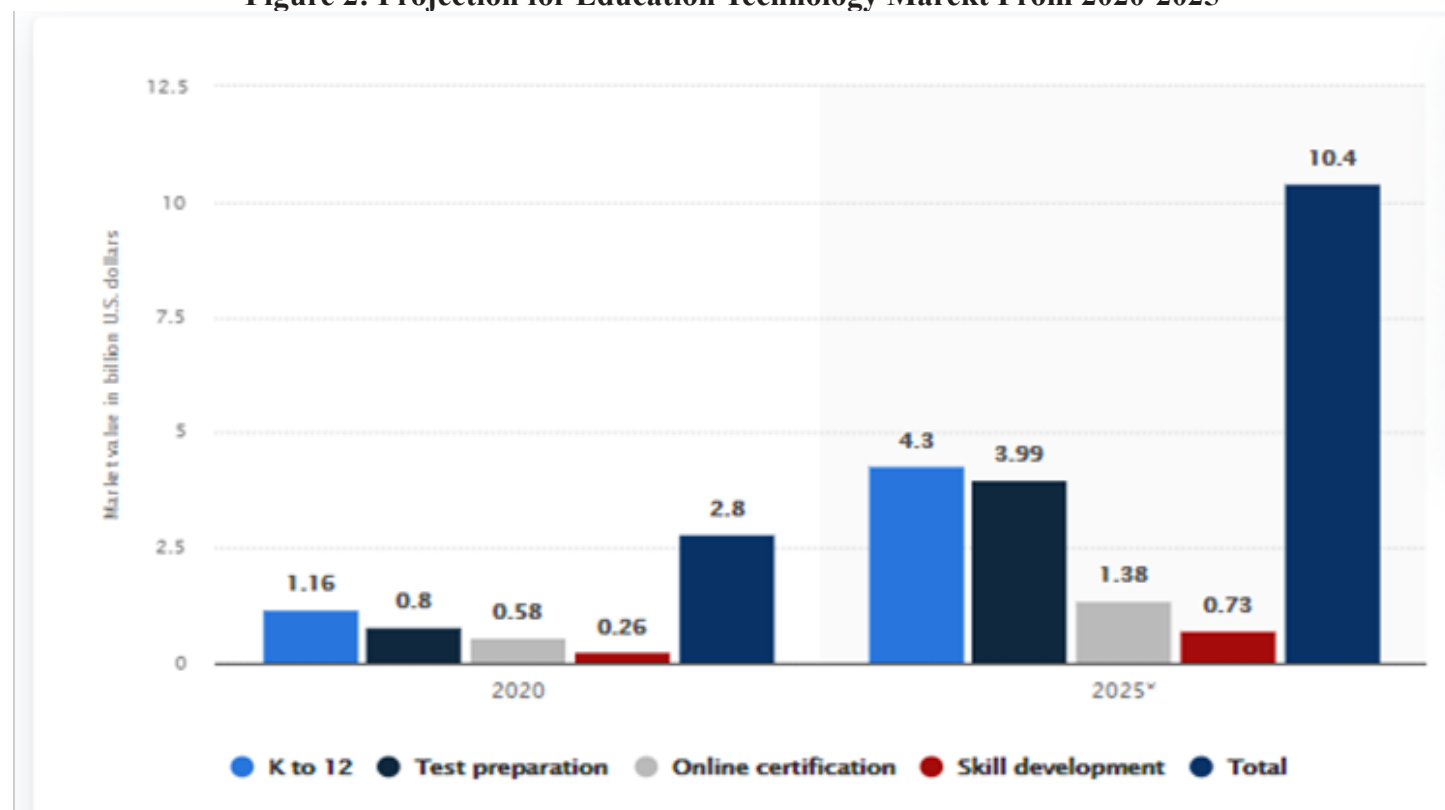
Platform	No. of User Before March 2020 (Million)	No. Of User After March 2020 (Million)	% Increase
Byju's	42	70	66.66%
Unacademy	18	30	66.66%
Vedantu	15	25	66.66%

Source: Author's Compilation

Table 3 shown above highlights the pre and post covid user enrollment in various online education platforms. It can be seen that the user base of all three Edu tech platform has increased by roughly the same percentage. These three are the most widely used and having the top

three market share Edu Tech Platform. However, there are many other platforms also like udemy, toppr, khan academy upgrade etc. Figure 2 shows the forecast for Ed Tech market size from 2020-2025.

Figure 2: Projection for Education Technology Marekt From 2020-2025



(Source: www.statista.com)

From Figure 2 it can be seen that test preparation segment is expected to surge at 398% followed by K to 12 segments which is expected to increase at around 310%. Segments of online certification and skill development also show increasing projections. Hence, we can assume that Edu tech provides ample opportunities to entrepreneurs to venture into the online education service providing business.

Results and Discussion

The growing rate of usage of online education platforms coupled with government initiatives provides a stepping stone to new age entrepreneurs to venture into technology based education business. Data highlighted in the paper also suggest that the user enrollment has increased over the past one and a half year in various Edu Tech Applications and Platforms. However, as a matter of fact there are various edu tech domains in which an entrepreneur can venture, one should be able to sense the need of various stakeholders like learners, institutions, government, parents and society at a large. Investment and funding shown in the paper are for large scale online education providers. Nevertheless, technology enabled education startup will receive government support through various schemes also as highlighted in new education policy (NEP) 2020.

Conclusions

The present paper attempted to understand the online education industry in India from the view point of various domains in which entrepreneurs can invest their fortunes. It also highlighted the government initiatives which support the startups of online learning and education sector. With largest pool of students in India, there is an abundant requirement of such startups. It will provide wide array of choices to learners to choose their online education platform. Technology driven education is the new normal post the covid 19 era and entrepreneurs should embrace the opportunities prevailing in the sector.

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A Study of the Impact of Demonetization on Real-Estate

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Abstract

Demonetization had a significant and primary unpleasant impact on the real estate industry in India, particularly in terms of housing demand. The implementation of demonetization resulted in a notable decline in property registrations, reaching upto 40%, which directly affected the regular sales of homes and raised concerns among developers. The prevalent use of real estate as a means to store unaccounted black money was a key factor contributing to this decline. However, the discontinuation of 500- and 1,000-rupee notes significantly reduced the use of cash in real estate transactions. As a result, property prices in major cities such as Mumbai, Delhi, and Bangalore experienced a downward trend. While the full impact of demonetization is yet to be fully realized, it is anticipated that the policy will bring about positive changes in the long term. These changes include the elimination of illegal money transactions within the property market. Nevertheless, it is important to note that the sale property segment is likely to be heavily impacted, and liquidity issues may arise in the cash-driven real estate market. Despite these challenges, demonetization represents a bold decision aimed at driving reform and growth in the real estate industry. Its effects are expected to give a new direction to the property market, paving the way for a more transparent and accountable real estate market in the years ahead. This research was done with the desire to examine the influence of demonetization in the real estate sector on various factors like governance, reformation, sectoral growth, and foreign direct investment (FDI). It seeks to analyze the impact of demonetization on these key aspects and provide insights into how the policy has affected the overall dynamics of the real estate industry.

Keywords: [Demonitization, Real-Estate, Illegal Money, India].

Introduction

On the night of November 9th, 2016, the Indian government implemented a discontinuation of the use of Rs. 500 and Rs 1000 bills as legal tender, resulting in the removal of major of India's monetary base. This had an immediate and profound impact on the real estate industry, given that land purchases often involve a substantial amount of unaccounted money. Cash transactions in property deals typically account for 20-30% of the total value, representing the difference between the circle rate (government-determined minimum price) and the market rate of the property.

The real estate sector holds significant importance in India's economy, contributing 11% to the country's GDP and thriving particularly in urban and semi-urban areas. However, the industry has been characterized by inflated prices and a prevalence of cash transactions. The demonetization policy is expected to bring about several effects on the real estate sector, including a decrease in land prices and a crack down on the parallel economy.

While the real estate industry may experience initial challenges as a result of demonetization, it is anticipated to witness long-term growth as property prices adjust and more individuals are able to afford homes. The government's move to demonetize the 500 and 1000-rupee notes is expected to have a major impact on the real estate sector, which has often served as a safe haven for unaccounted money

Literature Review

Square Yards (2016) The Impact of Demonetization on Indian Real Estate report that the demonetization move will lead to exponential increase in institutionalization funding i.e. banks, private equity houses. This will also result in the short to mid-term notable price correction in the secondary real estate could be seen due to higher involvement of cash. Impact on the Primary market segment: Minimal, since this market is highly consolidated of the housing department with much of the transactions requiring the support of home loan facilities.

Impact on the Resale market segment: This market will take a hit, as the prices were inflated as they involved cash transactions to minimize capital gains and tax evasions. Impact on the Land sales: The effects of demonetization should be reflected immediately due to price correction as a junk of the transactions consisted of a relatively higher percentage in the cash component.

Motilal Oswal (2016) The Impact of Demonetization on Real Estate assert that the whitepaper released by the Indian Government in 2011, real estate accounted for 11% of the nation's GDP of which consisted of 50% in black money. Therefore, a price correction of 20-30% is expected in the luxury segment. Though, projects by reputed and credible builders should not face a price or dip in the demand. With new acts like RERA (Real Estate Regulation and Development Act 2016) and Benami Transactions act, the sector will soon churn to be more transparent. This move will trouble the buyers

with a delay in delivery of the projects due to the cash crunch resulting in unproductive days.

The Indian Express (2016) Real Estate demonetization: Measuring the impact of Demonetization ascertained that it brought a lot of confusion, uncertainty along with it and, most of all, rumor-mongering especially when it came to the realty sector. Everyone was affected by this radical measure, and initially, all possible economic activities slowed down. It is important to understand how important this sector is to the Indian economy. The sector contributes 5-6 per cent of the country's GDP, and any misinformation in a sector that is largely sentiment-driven can lead to chaos.

Firstpost (2016), Demonetization Strong foundation laid for real estate but price correction could be limited emphasize that we must understand the cash-economy of real estate transactions, and, the demand-mechanism. There is a general anticipation of the removal of 20-30 percent cash dealings from the transaction process. It leads people to conclude that the prices would fall by 20-30 percent. The reason for such expectations is the climbing down of prices coupled with at least two other factors such as an eventual interest rate decline and the consequent rise in demand. There could be more factors. But even if we account for these, the anticipated price-decline of 20-30 percent will get cushioned. In the final form, the price-correction may not be more than 5-8 percent, which is evident already.

Mint (2016) Opinion divided over impact of demonetization on real estate prices think that many property advisers have predicted land and property prices, particularly that of luxury houses, could fall as much as 30% in the next three to six months. However, several

developers and brokers said there is little room for any major price cuts due to rising input costs, and given that property prices in key markets have remained stagnant due to a three-year slowdown in the real estate sector. Some other developers said as banks are awash with money following demonetization as customers deposited tones of cash, home loan rates may come down in the coming months, helping push property sales.

Objective

The Real estate industry is expected to face consequences from the Demonetization campaign due to its historical reliance on cash transactions and the prevalence of unaccounted-for money. This research aims to analyze the impact of demonetization on various aspects of the real estate sector, including governance, property prices, reforms, industry growth, foreign direct investment (FDI), social affordability, policy changes, and interest rates. It seeks to understand how demonetization has influenced these factors within the real estate sector and provide insights into the overall impact of the policy on the industry.

Governance

A major portion of our GDP comes from the real-estate sector and providing affordable housing to its population. The recent decision to demonetize is showing a great impact on this sector, given the prevalence of cash transactions and black money. However, demonetization is likely to act as a deterrent, pushing people towards non-cash methods and thereby increasing tax revenue and bringing more transparency and ethical practices to the sector.



The real estate sector is one of the most important sectors for India's economy and addresses the housing needs of millions of people, and demonetization silently promotes sustainable development. Central government has also implemented other measures such as the Benami Transactions (Prohibition) Amendment Act of 2016 and the Real Estate (Regulation & Development) Act of 2016 to regulate the sector and safeguard customers' interests.

The circulation of black money has led to speculation and inflated property prices, rendering them unaffordable for many. The government's efforts to curb black money in the real estate sector are commendable and will bring transparency, combat corruption and make property prices more realistic.

Although the transition towards a cashless economy may present some challenges, the benefits outweigh the drawbacks as it promotes transparency and reduces reliance on cash payment which is most common in the property market. While the real estate sector may experience a temporary decline, reduced cash transactions and an increased reliance on online transactions will enhance transparency, compel buyers and sellers to declare accurate costs, and boost government revenue. Streamlining the flow of funds into the sector will benefit organized developers in the long run.

Overall, the combined impact of demonetization and other regulatory measures will help cleanse the real estate sector, making affordable housing more accessible to the common people.

Prices

The current demonetization measures will severely limit the use of cash in real estate transactions, leading to a decrease in property prices. The high amount of unaccounted cash, or "black money," in the industry will be affected, resulting in lower prices for the next two years. This will benefit consumers, as debt-ridden and unorganized developers will be forced to reduce prices to boost sales. The implementation of demonetization is expected to have varying effects on the housing market. Land prices and demand for new projects are likely to decrease, impacting the overall housing market. The negative impact will be more significant on higher-end properties which are targeted by the premium class, as opposed to medium range housing aimed at first-time home buyers.

Demonetization will reduce liquidity in the real estate industry, resulting in a slow down in new construction and development. It will also curtail cash transactions,

making the sector less attractive to holders of black money and investors seeking to engage in illicit practices. As a result, prices in the market will become more realistic and affordable for honest buyers. Previously inflated prices due to the influence of black money are expected to decrease, and builders may offer discounts to attract buyers, leading to increased competitiveness within the market.

However, it is important to note that alternative methods of using black money, such as making payments in gold instead of paper currency, may emerge. This could potentially drive up gold prices and pose challenges for government policies related to gold monetization and sovereign gold bonds.

Long Term Effects

- Indeed, the increased deposits in banks resulting from these forms and measures implemented in the real estate sector can have a positive impact on lending rates. With higher deposits, banks may have more liquidity and potentially lower their lending rates.
- The boost in home sales will also generate job opportunities in various allied sectors, further benefiting the economy.
- These actions implemented in the real estate sector aim to transform it into a more efficient, organized, fair and transparent industry. These forms, regulations and initiatives introduced by the government create a framework that promotes accountability and transparency, enhances investor confidence and ensures fair practices within the sector.

Reformation

The measures being implemented will redirect property transactions towards banking channels, thereby eliminating intermediaries and brokers who previously took advantage of customers by inflating property prices significantly. Although it may have a temporary impact on retail real estate dealers who rely on cash transactions, alternative payment methods such as e-wallets and plastic payment cards may be offered. Unplanned urbanization and unchecked urban sprawl have caused problems and this move may mitigate them by affecting unorganized construction more heavily. Additionally, it will have an impact on money laundering, as investing black money in real estate will no longer be an option. The real estate sector will be cleansed of this malpractice due to the crackdown on unaccounted cash. The organized construction sector will benefit from the lower

prices, and the government will be able to provide affordable housing to the poor. Despite initial difficulties, the overall impact of this move will be positive.

Sectoral growth

The implementation of demonetization is expected to bring about varying effects on developers within the real estate sector. While cash transactions have often served as capital for construction, the move will result in greater inequality among developers. Larger market leaders are likely to experience lesser impacts compared to smaller builders, who will need to explore alternative methods of obtaining credit.

This may have negative consequences for smaller investors. However, it will also help weed out unscrupulous actors from the market and enhance industry discipline through the Real Estate Regulatory Act (RERA).

The introduction of demonetization will release black money from the sector and attract increased investment from private and foreign players, which will contribute to GDP growth and generate more employment opportunities. Developers may temporarily halt land purchases or opt for joint ventures with landowners and projects may experience disruptions as informal sources of capital become restricted. Nevertheless, there may be a greater availability of institutionalized capital, with FDI equity and debt players assuming crucial roles.

The combination of demonetization and the implementation of RERA will contribute to the elimination of black money from the real estate sector. Landbrokers, who often engage in manipulative practices with cash transactions, will face the strongest impact. The real estate market may experience decreased liquidity for a certain period due to the significant cash component involved, and home builders will face negative repercussions over the next coming years.

Foreign Direct Investment

The enforcement of demonetization has yielded several positive results, including reduced prices and advantageous circumstances for the salaried middle class, small-scale traders, and cultivators, particularly in terms of accessing affordable housing options. These groups stand to gain the most from demonetization. With the use of formal channels of transactions, the real estate sector is expected to become more ethical and stable, eliminating the practice of using it as a means to store illegally obtained funds. This development will also create opportunities for honest service providers to emerge, thereby improving the quality of services

and lowering prices. The formalization of transactions will attract more foreign direct investment, contributing to the growth of the sector. Additionally, with the prevalence of legitimate funds in the economy, there will be a more equitable environment for all individuals, leading to increased affordability of goods and services.

Social/Affordability

The implementation of demonetization is anticipated to bring about favorable outcomes in the real estate market, particularly in instances where investments were made using undisclosed funds. In the short to medium duration, there is expected to be a decline in land prices, resulting in increased affordability of housing for individuals belonging to lower and middle-income brackets. This, in turn, is likely to spur greater property acquisitions by the general public, potentially leading to a surge in the real estate sector over the next five years. Such a development would bring benefits to the entire nation as a whole.

However, the decline in property sales and prices will adversely affect investors and high-net-worth individuals. The government has lowered interest rates for housing, which could lead to even more speculation and a possible decrease in interest rates. Despite these challenges, the overall situation is favorable for customers. The decrease in real estate prices will allow medium and low-income earners to realize their dream of owning a home and the demonetization process will help to eliminate the use of black money in the market.

Policy

The liberalization of Foreign Direct Investment (FDI) norms in the real estate sector in India has the potential to bring about significant positive impacts. By attracting increased foreign investment, the government can accelerate various initiatives such as the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), the "Housing for All by 2022" program, and the development of Smart Cities. This heightened investment can contribute to the growth and development of tier II and tier III cities, creating more opportunities for affordable and sustainable housing. Furthermore, this move can effectively address the loopholes present in the recently enacted Real Estate Regulation and Development Bill. By integrating Benami transactions with the real estate bill, the government can ensure the promotion of affordable housing and the AMRUT initiative. Additionally, streamlining the real estate single window clearance process can facilitate fair property pricing, enabling ev-

ery customer to obtain properties at genuine rates, in alignment with the government's primary objective of the Housing for All by 2022 scheme.

Affordable Interest Rate

The implementation of demonetization in India aimed to change the behavior of the general public by encouraging them to shift from hoarding cash at home to keeping their money in banks. Demonetization involved the invalidation of certain currency notes, which required individuals to deposit their cash holdings into banks to exchange them for valid currency or to deposit them into their bank accounts. As a result, a significant portion of cash flow would move through the banking system, which could increase liquidity in the banking sector and reduce the cost of funds in the short run. This increased availability of funds could also enable banks to offer loans for construction activities, as they would have ample resources at their disposal. Consequently, the reduction in interest rates could incentivize consumers to invest in real estate, leading to a rise in the real estate market.

Current Problems in the Real Estate Sector

Despite the issuance of currency notes of Rs. 2000 and Rs. 500 denominations without any proper security features, there is no assurance that the accumulation of illicit funds and cash transactions in the real estate industry will cease. Historical evidence, such as the demonetization of higher denomination currency notes in 1978, indicates that while there may be a significant impact on the real estate sector initially, it eventually returned to its previous state once new currency notes were introduced.

To prevent the inflow of illicit funds into the property market through new currency notes, the RBI should implement necessary measures with the consultation of the government of India to ensure that all real estate transactions are conducted exclusively through the banking system.

Conclusions

In recent years, the government has undertaken significant measures to promote transparency in the real estate sector. These reforms include legalizing investments, introducing the Real Estate Regulation Act, implementing the Goods and Services Tax (GST), establishing

Real Estate Investment Trusts (REITs), and amending the Benami Transactions (Prohibition) Act. These initiatives are aimed at creating a more efficient, fair, and transparent real estate industry in the long term.

The government's demonetization move, coupled with the implementation of the Real Estate Regulatory Act, will further enhance transparency within the sector. Encouraging cashless transactions and reducing the circulation of currency notes are crucial steps in curbing illegal transactions and discouraging unaccounted money. The implementation of the Real Estate Act, Benami Act, GST, and REITs will not only increase transparency but also facilitate business operations and attract foreign direct investment (FDI) to the country.

While the initial impact of demonetization may affect the liquidity of the cash-driven real estate market and lead to renegotiations or cancellations of existing agreements, it will ultimately bring efficiency, transparency, and affordability to the sector. These qualities are essential for the overall welfare of the state and the country's GDP growth.

Proper implementation of the Benami Transactions Act and Real Estate Regulation Act will ensure that the sector continues to grow in the right direction. It will also necessitate a more transparent mechanism for the capital market, improve the ease of doing business, encourage FDI inflow, and support various initiatives and policies introduced by the Government of India. Overall, these measures will have a positive impact on the real estate sector. It is essential for the government to maintain strict oversight of future developments to ensure the continued progress and success of the sector.

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Impact of GST on Small Scale Sector: A Study with Special Reference to Footwear Industries

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Abstract

A inclusive dual Goods and Services Tax (GST) has substituted the complex multiple indirect tax structure from 1 July 2017. It is the major tax reform forever occurred in India. Major intent late summary of GST in India is to eliminate diversity of subsidiary taxes, flowing effect and moderate tax problem these can imaginable complete only by taxing GST. GST is a tax that desires to pay on stream of products and contributions. Any individual, who is awarding or supplying goods and services, is accountable to pay GST. The paper highlights the impact of GST on Indian SSIs. SSIs are a major driver in the Indian economy, contributing to, it accounts for nearly 40% of the country's industries production, 42% of exports and 65% of the employment opportunities.

Keywords: [GST, SSIs, Impact, Boon, Bane]

Introduction

Goods and service tax (GST) implemented by government of India on July 1st 2017. It is the one hundred and first amendment of Indian constitution. Implementation of GST replaced VAT system India. Goods and service tax is indirect taxation, which replaces existing multiple domestic taxes into unified tax. It is a "destination based tax" on manufacture, consumption and sale of goods and services throughout India unlike the previously followed origin based tax model. The motto of GST is "One nation, One tax". Already 160 have implemented GST. This includes Malaysia, Canada, France, United Kingdom, New Zealand, Singapore etc. Indian GST model contain is dual system. The major components are Central GST (CGST) which is to be levied and collected by central government of India. Second one is State GST (SGST) or Interstate GST (IGST) which is to be levied and collected by the respective states in the country. Indian GST council has finalized five tax slabs for the taxation. Those are 0%, 5%, 12%, 18% and 28% (Referencer on Goods & Service Taxes, 2017).

It will replace various indirect taxes into one umbrella. Before implementation of goods and service tax, India followed VAT (Value Added Tax) system. In this system there were somany indirect taxes like, central excise duty, service tax, interstate sales tax, Entry tax, Luxury tax, Purchase tax etc, which levied and collected by different government authorities. Through this, country faced the cascading effect of taxes. This means tax on tax. To overcome this situation, GST has implemented. This will replace all the indirect taxes together. Goods and service tax is recognized globally as a destination based tax. The major objectives behind introduction of

GST in India are to expand the tax base structure for the economic development of the country and avoidance of double taxation effects in the country. By removing these taxes, it will leads to better competitiveness of domestic industry, Imports and in International markets. Through the unified tax system across the states in the country, Indian economy will witness for great growth.

Review of Literature

Khasimpeera and Reddy (2018) titled GST and its impact on Indian economy is found out that the GST will affect Indian economy in positively and negatively. If the government taking good measure for improving the GST system, it will give more positive results to the economy. They also found out that the implementation of GST was a good way to reduce black money and good effort of Indian government after the demonetization of money.

Verma and Khandelwal (2018) in the research journal titled "Impact of GST on the regulation of small business" analyzed the effect of GST on MSME sector and also the impact of technology with respect to GST in Maharashtra. They found out that some enterprises found it beneficial but majority faced difficulties in accepting it. Even through the overall operational efficiencies were increased. In this article they conclude that this tax system have both positive and negative impact on business regulation of MSME.

Ramalingam (2018) in his paper titled "Towards Goods and service taxation- issues and concern" structured through three parts. The first part contains basic concepts in GST and its evolution, issues involved in its implementation. In second part he compared the VAT

system and GST system. The third part attempts to map the major areas of concern and level of preparedness of the state from the point view of revenue, administration and compliance. Through this paper he tried to resolved major unresolved issues regarding to the implementation from the states perspective. He suggested that each of the issues should be discussed with stakeholders at all the levels for the smooth and hassle free transition to GST.

Saradhi and Wali (2018) in their study they stated that the impact of GST in the business supply chain system. They found that GST helps fast moving of goods from one state to other states through the unified tax system. But the relative opportunities and risk of procurement from GST registered vendors and unregistered vendors are likely to affect sourcing decisions.

Jayalaxmi and Venkateswarlu(2018) in their study titled “Impact of GST on Micro, Small and Medium Enterprises” point out that marginally negative impact will be for the leather and footwear sectors. They states that GST aims to increase the taxpayer’s base and majority of the SME into its scope and will put a burden of compliance and associated cost to them. They concluded that even in short run MSMEs will face somany issues. But in long run I t will be useful for the companies. This study was conducted at Tiruppathi, Andra Pradesh.

Nedunchezian et al. (2018) conducted a study on “Analysis of impact of GST with special reference to perspective small business stakeholders”. In their study they concluded that GST is a revolutionary development for implementing the transparency system in the country. They also pointed out that the GSTIN network issues and complexities of filing the return process in new tax system for the businesses. They conclude that GST can be a good platform for the tax structure contribution for the economic development of the country.

Banik (2018) in his article he concluded that small scale industries are essential for the development of economy. Through boosting SSI sector, the economy can achieve a great contribution for growth. He also suggesting that to educate the MSME sector is essential for the utilization of optimum capability. The government supports like to procure good quality of raw materials is also essential to support for small scale businesses.

Agarwal & Sekhani (2018) in this study they provides a detailed insights about GST impact of Uttarakhand and Kerala. They found that after implementation of GST the transaction cost of the business decreased by

3.5 times than previous tax system. Another finding was the implementation of GST is formalization of the informal sector in the economy.

Khaithan (2018) in this report they explained that there will be widespread impact on Small scale Industrial Sector on GST. They observed that unorganized sectors need to be organized themselves in order to sustain under GST. Through this report they conclude that, in short run the SSI sector may face some problems. But in long run the sector will get positive impact through this GST scheme.

Basak (2018) his article said that GST is the biggest reforms in history after independence. He found out that GST will fuels inflation in short run but when taking long run the stakeholders will be benefited. He also commented that GST will transform the business as whole through decreasing the cascading effect of taxation and revenue leakage. He expressed his thought that GST will bring easy calculations and implementation. Transparent tax system will make corruption free economy.

Deivamani et al. (2018) in this article concluded that the implementation of GST have both positive and negative aspects for Small scale sectors. Small scale business cannot easily make transformation with new tax system. Through GST it became simpler for small scale industries. The reduction of tax system and uniformity of the states etc made easier. Government also doing more awareness about the newly implemented tax system for the smooth running of business. Small scale industries have a sudden transformation problem within short span of time. But they sure that in long run the small scale business can reduce the negative impact.

Statement of the Research Problem

India is second largest footwear manufacturer after china. The production in India is considered as 9 percentage of the global annual production. These 75 percentages of production is coming from the unorganised sector including small and medium enterprises. After Implementation of GST there are somany technological changes has occurred in the procedures of business. The technological change also has an important role in the business. This study examine the various technological growths happened in the small scale sector of footwear businesses with respect to Goods and service taxes.

Objectives of the Study

1. To study the socio- economic background of the Entrepreneurs in footwear industries

2. To study the problems and challenges faced by footwear Industries in Calicut district after GST Implementation.
3. To study the awareness of entrepreneurs towards the importance of GST for the growth of economy.

Scope of the Study

This study is conducted to examine the Impact of Goods and Service Taxes in small scale footwear Industries. The entrepreneurs were followed Value added tax system till 2017. GST means to bring every indirect tax into one unified tax system. Through sudden changes of tax system made somany challenges in the business for entrepreneurs. This study will review the various Impacts of footwear industries in

Calicut. Study is entirely based on the reviews collected from the entrepreneurs in Calicut city.

Research Methodology

The present study is using descriptive design. Descriptive research study by applying survey method, the data for the study have been collected from the Entrepreneurs of footwear industries in Calicut region. Instead of obtaining from each and every unit of the universe, only a small representation part is studied and the conclusion are drawn on that basis for the entire universe or whole population. For this research probability and simple random sampling was used for collecting the data. By applying lottery method (without replacement). The sample unit for the study is the Entrepreneurs in the footwear business.

Data Analysis

Table 1: Age Group of Entrepreneurs and Satisfaction Level of GST Implementation

Sl.No	Profile of the respondent	N	Mean	S.D	d.f	Chi-Square value
1.	Age Group of Entrepreneurs	114	3.39	1.043	12	26.202
2.	Satisfaction Level of GST Implementation		2.99	1.01	12	

S=Significant @ 5% level (P value \leq 0.05); NS = Not Significant @ 5% level (P value $>$ 0.05).

N = Total No of Samples, S.D = Standard deviation, d.f = Degree of freedom

Here Calculated P Value = .010

Table 2: Age Group of Entrepreneurs and Satisfaction Level of GST Implementation

Sl.No	Profile of the respondent	N	Mean	S.D	d.f	Chi-Square value
1.	Age Group of Entrepreneurs	114	3.39	1.043	12	26.202
2.	Satisfaction Level of GST Implementation		2.99	1.01	12	

S=Significant @ 5% level (P value \leq 0.05); NS = Not Significant @ 5% level (P value $>$ 0.05).

N = Total No of Samples, S.D = Standard deviation, d.f = Degree of freedom

Here Calculated P Value = .010

Chi-Square Test:

In order to find the association between the Educational Qualification of the respondents and Burden of GST, a chi-square test was performed and result of the test is shown in table 4.2.2

H0: There is no association between the Educational Qualification of the respondents and Burden of GST

1.3 Educational Qualification & Burden of GST

Sl.No	Profile of the respondent	N	Mean	S.D	d.f	Chi-Square value
1.	Educational Qualification	114	2.68	.897	12	26.116
2.	Burden of GST		3.23	1.065	12	

S=Significant @ 5% level (P value \leq 0.05); NS = Not Significant @ 5% level (P value $>$ 0.05).

N = Total No of Samples, S.D = Standard deviation, d.f = Degree of freedom

Findings

1. The table 1.1 shows that the P value is less than 0.05 (i.e, 0.010) with Age group of the entrepreneurs and Satisfaction level of GST Implementation. The results are significant at 5% level. Hence null hypothesis (Ho) is rejected. Thus it is concluded that there is association between Age groups of the respondents and Satisfaction level of GST Implementation.
2. The table 1.2 shows that the P value is less than 0.05 (i.e, 0.010) with Age group of the entrepreneurs and Satisfaction level of GST Implementation. The results are significant at 5% level. Hence null hypothesis (Ho) is rejected. Thus it is concluded that there is association between Age groups of the respondents and Satisfaction level of GST Implementation.
3. The table 1.3 shows that the P value is less than 0.05 (i.e, 0.010) Educational Qualification of the respondents and Burden of GST. The results are significant at 5% level. Hence null hypothesis (Ho) is rejected. Thus it is concluded that there is association between Educational Qualification of the respondents and Burden of GST.

Suggestions

The following suggestions may help to improve the GST problems in the business.

1. Government should take more initiatives for the growth of women entrepreneurs in the field of small scale industries. For that awareness programmes about the opportunities should be conducted in each district.
2. The function of SSI in the state is badly occurred due to inadequate and non- availability of funds in time. Existing industrial firms are suffering due to lack of working capital. The main barriers towards industrial growth which requires instant remedy.
3. In order to overcome the problems or difficulties of available loans from various commercial banks, simplifying the existing procedures of granting loans to Small Industries can be treated. Reduction of paper work, providing more authorities to branch managers and other subordinates etc are some of the other valuable measures that can be taken to solve the financial problems of SSI units in the state to a great extent.

Conclusions

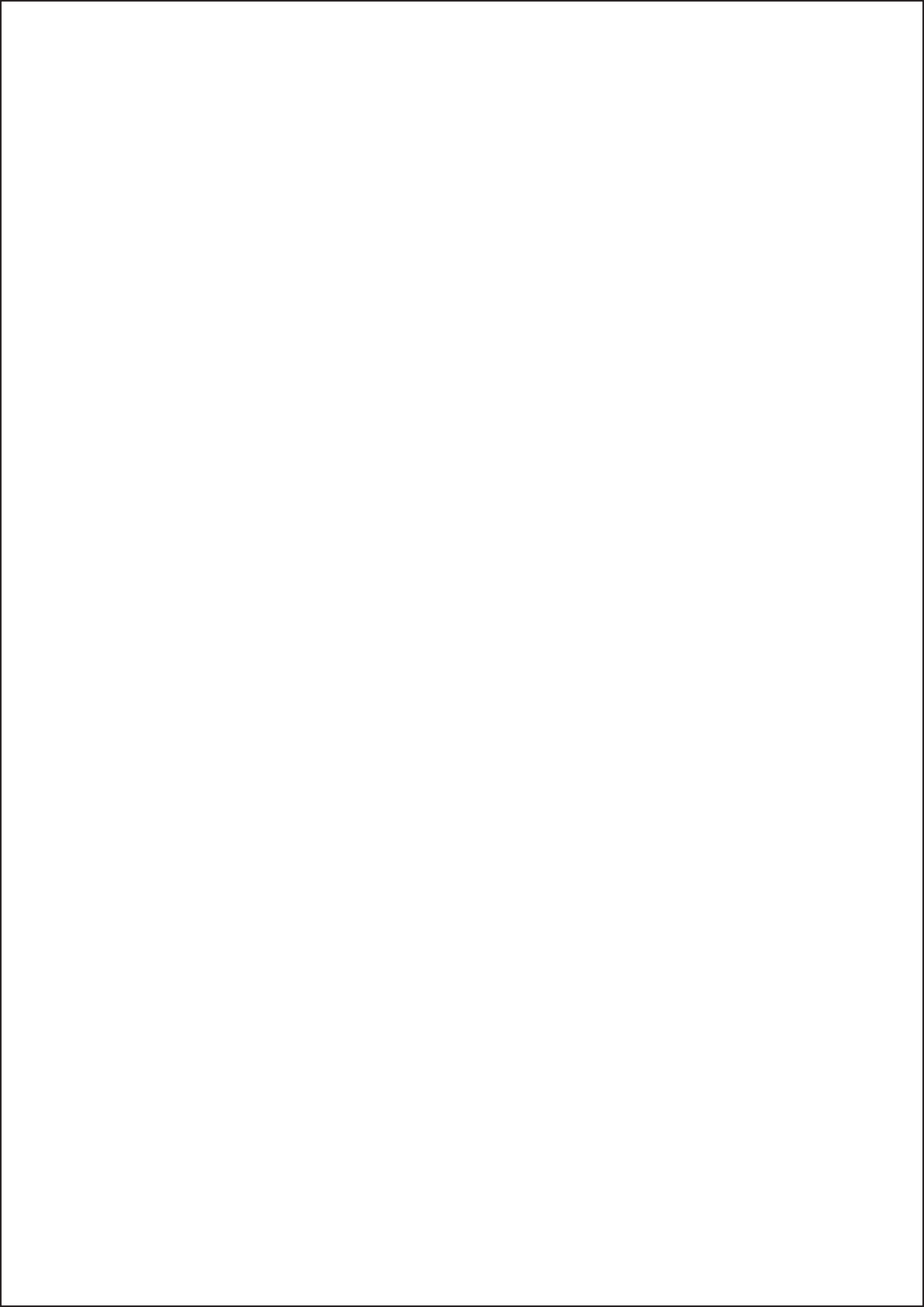
From this study, it is clear that the Implementation of goods and service tax has both positive and negative

impacts in Small scale footwear industries in Calicut. It is clear that a sudden transformation can't make with this GST in the small scale sectors. To solve the current issues, there is a need of time. Through the GST the government could make a unified tax system across the country instead of Value added tax system. The impact of Goods and Service Tax implemented in small scale footwear enterprises in Calicut is yet to be realised as the progress made is to be estimated. Yet it has the potential to go a long way in improving the business condition of the state in small and medium enterprise sector.

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