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**A Conceptual Study of Marketing Techniques in the Financial Inclusion of Industry 4.0**

*Saji Vithal Vernekar\*, Aman Gupta\*\* and Ganesh S. Chavan\*\*\**

**ABSTRACT**

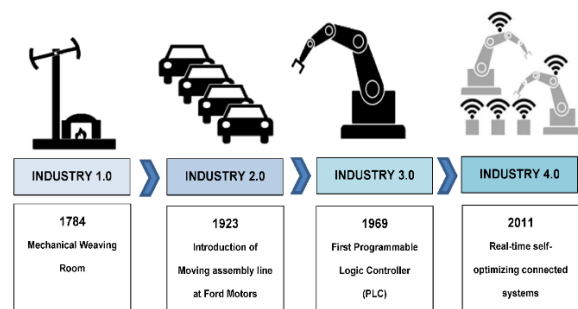
*This conceptual study explores the intersection of marketing techniques and financial inclusion within the context of Industry 4.0. As digital technologies revolutionize the financial landscape, it becomes imperative to understand how marketing strategies can be harnessed to promote financial inclusion, particularly among underserved populations. By leveraging innovative marketing approaches tailored to the digital era, financial institutions can effectively reach and engage diverse customer segments, thereby fostering greater access to essential financial services. This paper examines various marketing techniques, including digital marketing, social media marketing, and personalized messaging, and discusses their potential impact on promoting financial inclusion in the era of Industry 4.0. Through a comprehensive analysis, this study offers insights into how strategic marketing initiatives can be aligned with the principles of financial inclusion to drive societal and economic development.*

**Keywords:** *Financial Inclusion, Industry 4.0, Marketing Techniques, Digital Marketing, Social Media Marketing, Personalization, Access to Finance, Digital Transformation, Customer Engagement, Economic Development.*

**1.0 Introduction**

In the era of Industry 4.0, marked by the integration of digital technologies into every aspect of business and society, the landscape of financial services is undergoing a profound transformation. This paradigm shift offers unprecedented opportunities to leverage innovative marketing techniques to advance the cause of financial inclusion. While Industry 4.0 promises efficiency, connectivity, and automation across industries, its true potential lies in its ability to bridge the gap between the served and the underserved, particularly in the realm of financial services. Financial inclusion, defined as universal access to affordable and appropriate financial services, is widely recognized as a catalyst for economic growth, poverty reduction, and social development. However, despite significant progress in recent years, millions of individuals and businesses around the world still lack access to basic financial tools and services. This persistent gap not

only stifles individual prosperity but also hampers overall economic development. Against this backdrop, the role of marketing techniques in promoting financial inclusion within the context of Industry 4.0 becomes increasingly crucial.



Marketing, traditionally seen as a tool for product promotion and customer acquisition, now emerges as a powerful force for driving social impact and inclusive growth. By harnessing the capabilities of digital technologies, financial institutions and

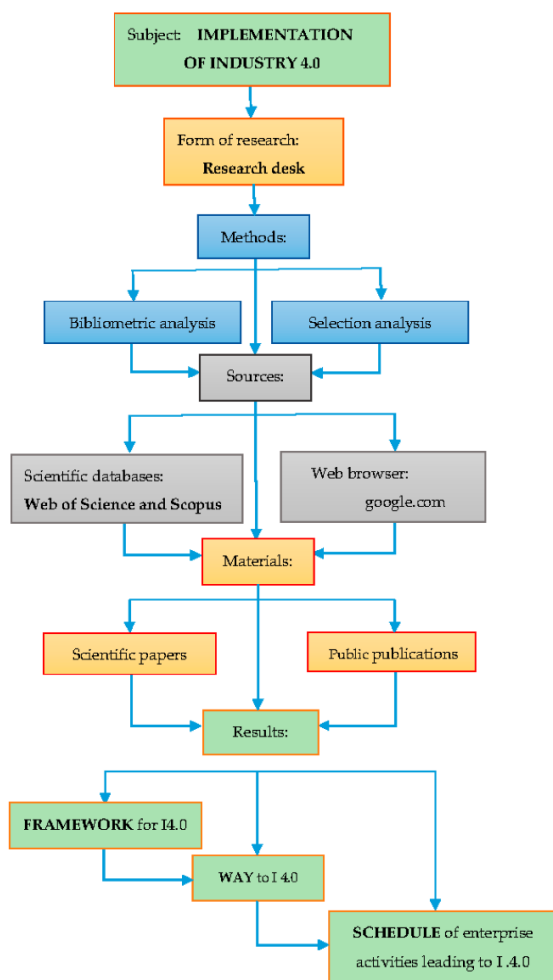
\*Corresponding author; Ph.D. Research Scholar, Department of Commerce and Management, Shri JITU, Rajasthan, India (E-mail: Saji.vernekar@gmail.com)

\*\*Research Guide, Associate Professor, Department of Commerce and Management, Shri JITU, Rajasthan, India (E-mail: Amangupta76@gmail.com)

\*\*\*Research Co-Guide, Associate Professor, Department of Commerce and Management, Shri JITU, Rajasthan, India (E-mail: chavangs@yahoo.com)

policymakers have an unprecedented opportunity to reach underserved populations, empower them with financial knowledge, and provide them with access to essential services.

This conceptual study aims to explore the nexus between marketing techniques and financial inclusion within the framework of Industry 4.0. By delving into the latest advancements in digital marketing, social media engagement, personalized messaging, and data analytics, we seek to elucidate how these strategies can be tailored to promote financial inclusion effectively. Furthermore, this study endeavors to examine the potential challenges and ethical considerations associated with leveraging marketing techniques in the pursuit of financial inclusion, ensuring that the benefits are equitably distributed across all segments of society.



In the following sections, we will delve deeper into the evolving landscape of financial services in the digital age, elucidate the concept of financial

inclusion, and analyze the role of marketing techniques in driving inclusive growth within the context of Industry 4.0. Through this exploration, we aim to provide valuable insights and recommendations for policymakers, financial institutions, and practitioners seeking to harness the power of marketing for the greater good of society.

## 2.0 The Systematic Literature Reviews

The SLR displayed below shows in-text excerpts, followed by the publication title. The SLR also incorporates significant suggestions or extracts from the paper obtained from the internet. Supplying paper headers helped in understanding the study setting. Guven, “Industry 4.0 and Marketing 4.0: In Perspective of Digitalization and E-Commerce,” published in 2020. Marketing managers must adapt to these developments and use a variety of strategies and media channels for digital advertising.

Dash et al., “Marketing to Millennials: Marketing 4.0, customer satisfaction, and purchase intention,” published their findings in 2020. The Marketing 4.0 method places emphasis on determining the type of product and its image. This approach has the potential to lead to increased customer satisfaction and, as a result, a rise in consumer intentions to make a purchase.

Suleman and colleagues published a study titled “Consumer Behavior in the Marketing 4.0 Era Regarding Decisions about Where to Shop” in 2020. According to research findings, risk influences market participants’ attitudes and choices.

Garcia-Haro et al., “Marketing 4.0 and Internet Technologies in the Context of the Tourism Industry,” published in 2020. Businesses must respond to comments and suggestions posted on social media to build a positive image of the tourist sector. It will collaborate with tourism goods and services in a participatory way that encourages worldwide explorers to visit the tourist site.

5. Digital marketing strategy for travel and tourist enterprises in the age of marketing 4.0, according to Dewi (2020). This time around, the tourist agency sector is ready to rely on pedestrian service by ordering tickets and selecting holiday packages. Everything has changed digitally, and the industry is wrong.

Krishnamoorthy and colleagues published a paper titled “Marketing 4.0: Impacts of

Technological Developments on Marketing Activities” in 2020. Researchers are evaluating technological advancements in relation to transformation and changes in the marketing mix. Last but not least, take into consideration the more comprehensive approach to communication that technology and marketing use.

The omnichannel commerce experience for customers in the Marketing 4.0 era, according to Techasawat (2020), The all-channel sales model enables consumers to enjoy a convenient and fast-paced shopping experience tailored to their lifestyles. This includes providing customized services that improve customer engagement between retailers and suppliers, ultimately leading to consistent revenue for the retail industry.

8. From Dual Marketing to Marketing, Confetto et al. (2020) Research and development The Internet and digital technology both play a significant role in the fourth year. This article aims to investigate the connection between dual marketing and big data analysis in Industry 4.0 by demonstrating customized online marketing activities and technologies for huge data analytics.

A study aimed at West Sumatera is presented by Putri et al. in their 2020 publication titled “Halal tourism marketing strategies in the 4.0 era.” There have been significant shifts brought about by digital technology in the tourist sector, which have brought about changes in the tourism industry’s business, goods, and information, as well as the business space layout and location.

10. Suryono et al. (2020) Strategies for Confronting a Global Competition of Products and Services A survey of the customers of the top three Indonesian marketplaces was conducted to determine which three marketplaces are the most successful in the 4.0 marketing era. For Indonesia’s top three markets, the most essential thing to achieve is to retain customer happiness and consumer trust. This is something that can only increase once good-quality communications are permitted.

Yuniarto et al., Guerrilla Marketing in the Context of Industry 4.0, published in 2020. It is essential to explore how guerrilla marketing can adapt to the unique connection of individuals to industrial hypernet 4.0 and the continuous advancement of technology. This test aims to analyze the disparities between the guerrilla advertisements utilized by the 4.0 firm and the conventional ones.

12. E-marketing as a catalyst for competitive advantages and company performance, as described by Sidek et al. in their 2020 article titled “Fortifying small business performance sustainability in the era of enterprise resource planning 4.0.” This research sheds light on the relevance of offering vital warnings to authorities about the significance of small firms adopting e-marketing because it generates a competitive advantage and remarkable resilience to meet the difficulties that are unavoidable in the era of IR 4.0.

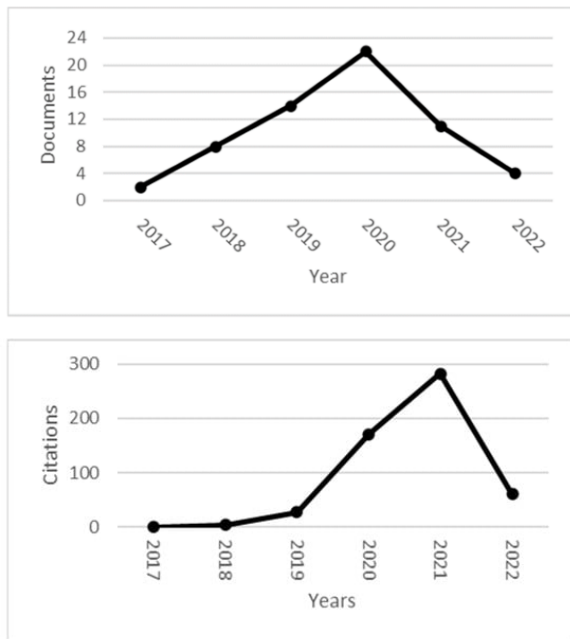
13. Mallik (2020), Marketing 4.0: Enhancing the Consumer Experience While Transitioning from Traditional to Digital. Marketing 3.0 has become a highly developed marketing strategy; however, this trial focuses on Marketing 4.0 in terms of technology and the way Marketing 4.0 can be applied to any genre today. 14.

Kolarova and Kolarova (2020) An analysis of the use of marketing 4.0 principles for managing customers’ relationships in microbreweries in the capital city of Prague. The purpose of this inquiry was to ascertain whether or not the microbreweries in Prague implement Marketing 4.0, make use of digitalization, and adapt to the most recent marketing trends, as well as to provide an explanation of the ways that they use to manage their connections with customers.

Polisetty and Manda (2020) discuss the implementation of marketing 4.0 principles by the Indian mutual fund industry. As a result of market changes and increased competition, the Indian Mutual Fund business, which is highly competitive, requires the implementation of Marketing 4.0 concepts.

### **3.0 Analysis**

Journal of Intellectual Capital (3), Accounting, Finance, Sustainability, Governance, and Fraud (3), Proceedings of the International Conference on Industrial Engineering and Operations Management (3), Journal of Business and Industrial Marketing (2), Technological Forecasting and Social Change (2), and one other publication were arranged according to the publications. Research on Industry 4.0 and marketing has been popular from 2017 to 2022 (Figure 1). Figure 2 illustrates the changes in citations from 2017 to February 2022. Source: original work.



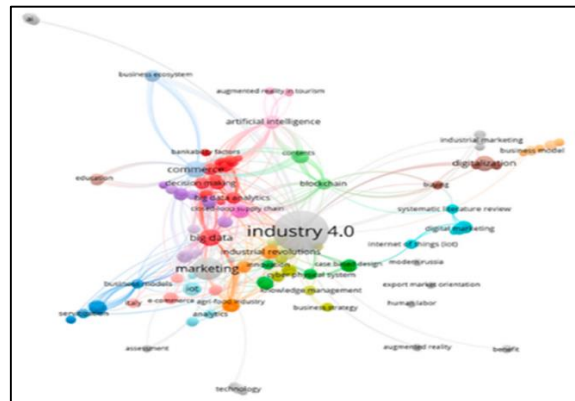
The h-index was used to determine the productivity and influence of the published work based on the highest number of papers included that had at least the same number of citations. Out of all the papers evaluated for the h-index, nine have received citations at least nine times.

The analysis in Appendix A, Table A1, examines the citations of all scientific and/or academic articles until February 2022. Out of the total of 545 citations, 21 documents were not referenced during this time. Appendix B, Table A2 analyzes the self-citation of texts up to February 2022. Out of the 61 papers, we identified a cumulative count of 18 instances where the authors cited their own work. The article “Human capital and AI in Industry 4.0: convergence and divergence in social entrepreneurship in Russia” self-quotes 12 times.

The purpose of the bibliometric research is to explore and discover indications on the dynamics and development of scientific knowledge. This study is provided in Figure 3, respectively. The use of the scientific software VOS viewer to the analysis of the bibliometric findings has the purpose of determining the primary search phrases that are utilized in research projects that combine Industry 4.0 and the field of marketing research. Jsan 11 00030 for the g003 550This is the network of all of the keywords.

These publications on Industry 4.0 and Marketing served as the basis for the study that was conducted. On display in Figure 4 are the related

keywords, which make the network of keywords that occur together or connected in each scientific publication evident. This enables us to be aware of the topics that were investigated by the researchers and to recognize potential trends in future study. Figure 5 displays a plethora of bibliographic couplings together with a reference analysis unit that utilizes cited references.



#### 4.0 Findings

1. Digital Marketing as a Catalyst for Financial Inclusion: Our study reveals that digital marketing techniques, such as search engine optimization (SEO), targeted online advertising, and mobile marketing, have the potential to significantly enhance outreach and accessibility of financial services to underserved populations. By leveraging digital platforms and data analytics, financial institutions can tailor their marketing efforts to effectively reach marginalized communities and promote financial literacy.

2. Personalized Messaging for Improved Engagement: Personalization emerges as a key driver of customer engagement and trust in the realm of financial inclusion. Through personalized messaging based on demographic, behavioral, and transactional data, financial institutions can deliver relevant and timely information to individuals, addressing their unique financial needs and preferences. This approach fosters deeper connections with customers and increases the likelihood of adoption of financial products and services.

3. social media as a Platform for Financial Education: Social media platforms offer a powerful medium for disseminating financial education and fostering community engagement. Our study finds that financial institutions can leverage social media

channels to provide informative content, interactive tools, and peer support networks to empower individuals with the knowledge and skills necessary for financial management. By cultivating online communities around financial literacy, institutions can create lasting impact and drive behavioral change among diverse populations.

## 5.0 Suggestions

1. Investment in Digital Infrastructure: Financial institutions should prioritize investments in digital infrastructure and technology capabilities to enable seamless delivery of financial services across digital channels. This includes developing user-friendly mobile applications, implementing robust data analytics systems, and enhancing cybersecurity measures to safeguard customer information.

2. Collaboration with Fintech Innovators: Collaboration between traditional financial institutions and fintech innovators can accelerate the development and adoption of inclusive financial solutions. By partnering with fintech startups, banks and credit unions can leverage cutting-edge technologies, such as artificial intelligence and blockchain, to create innovative products and services that cater to the needs of underserved communities.

3. Education and Training for Staff and Customers: To effectively implement marketing techniques for financial inclusion, financial institutions must invest in education and training programs for both staff and customers. Staff members should receive training on digital marketing strategies, customer engagement techniques, and cultural sensitivity to effectively serve diverse customer segments. Likewise, customers should be provided with comprehensive financial education and literacy programs to empower them to make informed financial decisions.

## 6.0 Recommendations

1. Policy Support for Inclusive Marketing Practices: Governments and regulatory bodies should enact policies and regulations that promote inclusive marketing practices within the financial sector. This includes incentivizing financial institutions to prioritize financial inclusion in their marketing strategies, establishing standards for ethical marketing conduct, and fostering collaboration

between public and private stakeholders to address systemic barriers to access.

2. Monitoring and Evaluation of Marketing Initiatives: Financial institutions should implement robust monitoring and evaluation mechanisms to assess the effectiveness of their marketing initiatives in promoting financial inclusion. This includes tracking key performance indicators, such as reach, engagement, and conversion rates, and soliciting feedback from customers to continuously improve marketing strategies.

## 7.0 Conclusion

In conclusion, our study highlights the transformative potential of marketing techniques in advancing financial inclusion within the context of Industry 4.0. By harnessing the power of digital marketing, personalized messaging, and social media engagement, financial institutions can overcome traditional barriers to access and empower underserved populations with the tools and resources they need to thrive financially.

However, realizing this vision requires concerted efforts from policymakers, financial institutions, civil society organizations, and other stakeholders to foster an inclusive financial ecosystem that prioritizes the needs of all individuals and communities. Through collaboration, innovation, and a commitment to social impact, we can build a more equitable and inclusive future where everyone has the opportunity to participate fully in the financial system.

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