Dr.BGR Publications

Reimagining Management and Organizations in a New Framework

Editors

Dr.S.Selvanathan

A.N.Bhuvaneswari



2026

Dr.BGR Publications

Reimagining Management and Organizations in a New Framework

Editors

Dr.S.Selvanathan

Head & Assistant Professor of Commerce (SF)
Virudhunagar Hindu Nadars' Senthikumara Nadar College (Autonomous)
Virudhunagar, Tamil Nadu, India

A.N.Bhuvaneswari

Assistant Professor of Commerce CA (SF)
Ayya Nadar Janaki Ammal College (Autonomous)
Sivakasi, Tamil Nadu, India

2026

Title of the Book	**Reimagining Management and Organizations in a New Framework**
Editors	**Dr.S.Selvanathan** **A.N.Bhuvaneswari**
Pages	**244**
First Impression	**October 2026**
ISBN (Print)	**978-81-69360-80-7**
ISBN (Digital)	**978-81-69360-81-4**
Amount	**Rs. 700/-**
Printed at	Muthu Computer & Xerox, Virudhunagar, Tamil Nadu
Website	https://drbgrpublications.in/
E-Mail	bookchapterpublication2025@gmail.com

Publisher:
Dr. BGR Publications, Tamil Nadu, India
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted or utilized in any form or by any means, electronic, mechanical, photocopy, recording or otherwise without the prior permission of the copyright owner. Application permission should be addressed to the publisher.

Disclaimer

The authors are solely responsible for the contents of the papers edited in this book. The publishers or editors do not take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are requested to communicate such errors to the editors or publishers to avoid discrepancies in future.

Preface

The field of crisis management has changed as a result of technological developments, making many crises theoretically avoidable and under control. Additionally, these technology developments have given organizations the chance to apply an informed learning strategy in crisis management. A proposed framework for comprehending a comprehensive approach to crisis management was developed by evaluating and integrating the complementary and interconnected elements of three theories within crisis management: the organizational learning of discourse of renewal theory, the corrective action of image repair theory, and the base crisis response strategies of situational crisis communication theory.

The aim of this ISBN Edited Book Chapter publish entitled **"Reimagining Management and Organizations in a New Framework"**. For the purpose of this ISBN Edited Book Chapter, recent research and expert analyses will be utilized to clarify each technology, exploring its features, possible uses, and impacts on companies.

Our sincere gratitude goes to the paper contributors and Dr.BGR Publications, for sharing their knowledge and expertise in the publication of this ISBN Edited Book Chapter. Hope this Book Chapter will bring the Innovation in Business and Management and also make attractive and presentable to the youth workforce.

Editors

Dr.S.Selvanathan

A.N. Bhuvaneswari

Guest Editorial Board Committee Members

Dr.S.Kowsalya

Assistant Professor

Department of Commerce IT

KPR College of Arts Science and Research

Coimbatore, Tamil Nadu, India

✉ kowziisundar@gmail.com

Dr.V.Selvam

Assistant Professor

Department of Commerce

Nehru Arts and Science College

Coimbatore, Tamil Nadu, India

✉ vselvamphd@gmail.com

Dr.S.Najumudeen

Assistant Professor

Department of Business Administration (Logistics and Aviation Management)

Nehru Arts and science college (Autonomous)

Coimbatore, Tamil Nadu, India

✉ najumudeen177@gmail.com

Dr. E. Jothi

Assistant Professor

Department of Commerce

Sona College of Arts and Science

Salem, Tamil Nadu, India

✉ jothicommerce2023@gmail.com

Dr.Preethi G

Assistant Professor and Head

Department of Commerce

New Prince Shri Bhavani Arts and Science College

Chennai, Tamil Nadu, India

✉ drpreethisriram@gmail.com

Dr.B.Jananee
Department of Commerce
New Prince Shri Bhavani Arts and Science College
Chennai, Tamil Nadu, India
✉ janmar1984@gmail.com

Dr.S.Kirubadevi
Assistant Professor
Department of Commerce
Sri Ramakrishna College of Arts & Science
Coimbatore, Tamil Nadu, India
✉ drskirubadevi@gmail.com

Dr. Ravi Shankar C
Associate Professor
Department of Commerce
Dr G R Damodaran College of Science
Coimbatore, Tamil Nadu, India
✉ dr.ravishankar.c@gmail.com

Dr. V. Meera
Associate Professor
Department of Commerce
NGM College
Pollachi, Tamil Nadu, India
✉ vmeera73@gmail.com

Dr.Visalakshi. PL
Coordinator B.Com (CS)
Loyola College
Chennai, Tamil Nadu, India
✉ visalakshi@loyolacollege.edu

Dr.BGR Publications

List of Contents

S.No.	Paper ID	Title and Author	Page No.
Track 1: Marketing Management			
1	Chapter 1	An Empirical Analysis of Customer Acquisition Strategies in ITC Limited's FMCG Business - ***S. Pavithra Vanshi, Gayathri R, Nagakanni R & Sahana Banu M***	1-14
2	Chapter 2	Social Media Marketing and its Influence on Entrepreneurship - ***Pozzi D, Nithya P & Dr.M.Sivakami***	15-19
3	Chapter 3	Emerging Issues in Marketing - ***Dr.T.Devi Kamatchi***	20-27
4	Chapter 4	Transparent Branding: Integrating Ethical Marketing Communication to Drive Corporate Sustainability - ***Dr.S.Pratiksha***	28-35
5	Chapter 5	The Future of Marketing: Exploring Game-Changing Innovations - ***Dr.M.Jagadeeswari***	36-40
6	Chapter 6	Customer Engagement in Select Omni-Channel Fashion Retailing with Special Reference to Chennai – ***M.Amalahasan & Dr.T.Sujatha***	41-46
7	Chapter 7	Customer Experience Management and Digital Marketing Strategies in Urban Ride-Hailing Services: Reimagining Passenger Satisfaction in Chennai City - ***P.Meena & Dr.T.Sujatha***	47-56
8	Chapter 8	A Descriptive Study on Ethical Issues in Marketing - ***Dr.A.Sangeetha & Dr.G.Agila***	57-60
Track 2: Entrepreneurial Development			
9	Chapter 9	Sustainable Tamil Nadu 2030: Integrating Social Equity, Economic Growth, Environmental Care, Digital Transformation, and Financial Inclusion - ***Dr.R.Radjavally***	61-66
10	Chapter 10	Operational Resilience and Value Creation in Agent-Orchestrated Single-Founder Enterprises - ***Dr.M.Geetha***	67-73
11	Chapter 11	A Study on Role of Social Media and Influencer Marketing in FMCG Brand Growth - ***M.Maria Jansi Rani & Dr. G. Indhumathi***	74-80
12	Chapter 12	Social Support and Quality of Life among Women Entrepreneurs in Kancheepuram District - ***Dr.A.Louis Arockiaraj & Dr.J.M.Arul Kamaraj***	81-87
Track 3: Finance			
13	Chapter 13	Fostering Business Transparency in Asset Management: An Empirical Investigation of Investor Perception towards Corporate Governance and Voluntary Disclosures in Parag Parikh Flexi Cap Fund - ***Sathyanarayanan.P***	88-94

14	Chapter 14	Financial Literacy, Digital Financial Inclusion and Adoption of FinTech Services among Young Adults – A Conceptual and Secondary-Data Study of India - ***Dr.R.Saranya Devi***	95-105
15	Chapter 15	E-Banking and Digital Insurance Services: Trends, Challenges and Opportunities in the Financial Sector - ***Dr.D.Akilandeswari***	106-112
16	Chapter 16	Technological Developments in Crowdfunding: An Analytical Perspective on Innovation, Trust, and the Future of Alternative Finance - ***Dr.K.Amuthal, P.Maheswari & Dr.Malini.S***	113-119
Track 4: Human Resource Management			
17	Chapter 17	Revisiting the Psychological Contract in Platform Commerce: Strategic Human Resource Management for the On-Demand Workforce - ***M.Dhanagopal***	120-128
18	Chapter 18	Exploring the Synergistic Relationship between Organizational Citizenship Behaviour, Perceived Organizational Support, and Organizational Commitment: A Comprehensive Analysis in the IT Sector of Kochi - ***Dr.Shobita P.S***	129-134
19	Chapter 19	A Study on the Impact of Compensation and Reward Systems on Employee Motivation with Special Reference to Hailstone Innovations Pvt. Ltd., Palakkad - ***Keerthana C V & Dr.B.Adalarasu***	135-139
Track 5: International Business - Economic Development			
20	Chapter 20	Managerial Decision Making Under Crisis-Strategies for Business Survival and Recovery - ***Vijayalalitha.K & Dr.T.Sujatha***	140-149
21	Chapter 21	Sustainability Reporting as a Brand Trust and Marketing Communication - ***Dr.Amudha K***	150-154
22	Chapter 22	Sustainable Entrepreneurship: Integrating ESG Reporting into Startup Business Models - ***Dr.Nirmala Raghavan***	155-160
23	Chapter 23	ESG Reporting and Corporate Transparency: A Conceptual Framework for Sustainable Financial Value Creation - ***M.Kasthuri***	161-169
24	Chapter 24	Beyond Traditional Rural Markets: Digital E-Commerce Platforms and the Emergence of Circular and Sustainable Enterprises - ***Dr.V.Varalakshmi***	170-177
25	Chapter 25	Intellectual Property Rights and Innovation in the Digital Economy: Challenges, Opportunities and Business Strategies - ***Dr.S.Narmadha Devi***	178-184
26	Chapter 26	Sustainable Business Practices and Corporate Performance - ***Dr.S.Rajalakshmi***	185-193

27	Chapter 27	Digital Customer Experience in the Green ERA: Fostering Sustainable Business Relationships through Digitalization - ***Dr.B.Karthikeyan***	194-200
28	Chapter 28	Best Practices in Quality of Work Life: Driving Innovations for Sustainable Development in Organizations in Chennai - ***Dr.J.M.Arul Kamaraj***	201-207
29	Chapter 29	Entrepreneurial Marketing and Digitalization - ***Prathyangaradevi.R & Durga.L.M***	208-212
Track 6: Artificial Intelligence			
30	Chapter 30	Job-Related Uncertainty in the Age of Artificial Intelligence and the Gig Economy - ***Dr.A.Vimaldevika***	213-222
31	Chapter 31	AI-Enabled Decision Making and Organizational Resilience in the Digital Business Ecosystem - ***S.Sruthi***	223-229
32	Chapter 32	AI-Driven Logistics and Supply Chain Resilience: Evidence from Manufacturing Firms - ***S.Sruthi***	230-237
33	Chapter 33	AI-Driven Marketing and Consumer Behaviour: Implications for Responsible Consumption (SDG 12) and Sustainable Business Growth - ***Dhanya.K & Harini.G***	238-244

Dr.BGR Publications

Chapter 1

AN EMPIRICAL ANALYSIS OF CUSTOMER ACQUISITION STRATEGIES IN ITC LIMITED'S FMCG BUSINESS

S.Pavithra Vanshi
Assistant Professor, Happy Valley Business School, Coimbatore, Tamil Nadu
Gayathri R*
PG Student, Happy Valley Business School, Coimbatore, Tamil Nadu
Nagakanni R
PG Student, Happy Valley Business School, Coimbatore, Tamil Nadu
Sahana Banu M
PG Student, Happy Valley Business School, Coimbatore, Tamil Nadu
**Corresponding Author Email: kanninaga18@gmail.com*

Abstract
Customer acquisition is one of the most important factors influencing the growth and sustainability of companies in the Fast-Moving Consumer Goods (FMCG) industry. With increasing competition, changing consumer preferences, and the availability of numerous product alternatives, organizations must adopt effective marketing and sales strategies to attract new customers while maintaining strong relationships with existing ones. ITC Limited, a leading FMCG company in India, focuses on customer acquisition through an extensive distribution network, trade marketing initiatives, promotional activities, and customer-centric product offerings. In this study examines the customer acquisition strategies adopted by ITC's FMCG division and evaluates their effectiveness in expanding the customer base and increasing product sales. The research aims to understand the factors influencing customer acquisition, analyse the role of retailers and sales representatives in promoting ITC products, identify the challenges faced during customer acquisition, and suggest measures to improve acquisition strategies. The research is based on primary data collected during the internship through direct customer interactions, retailer visits, field observations, and discussions with sales personnel. Secondary data were collected from company publications, research articles, books, journals, and other reliable sources related to customer acquisition and the FMCG industry. The findings indicate that effective retailer relationships, product availability, competitive pricing, promotional schemes, product quality, and efficient distribution significantly contribute to customer acquisition. However, intense market competition, customer preference for established brands, and pricing pressures remain key challenges. The research concludes that strengthening trade relationships, enhancing promotional activities, improving customer engagement, and leveraging data-driven marketing strategies can further improve customer acquisition performance and support sustainable business growth.

Keywords: *Customer Acquisition, FMCG, ITC Limited, Marketing Strategies, Retailers, Distribution Network, Sales Promotion, Consumer Behaviour*

Introduction

Customer acquisition is a critical aspect of marketing that focuses on attracting new customers and converting them into regular buyers. In the highly competitive Fast-Moving Consumer Goods (FMCG) industry, companies continuously adopt innovative marketing strategies, effective distribution systems, promotional activities, and customer engagement initiatives to expand their customer base and strengthen their market presence.

ITC Limited is one of India's leading FMCG companies, offering a diverse portfolio of products

across food, personal care, education and stationery, incense sticks, and other consumer goods. Popular brands such as Sunfeast, Aashirvaad, Bingo!, YiPPee!, Candyman, Savlon, and Classmate have enabled ITC to establish a strong presence in both urban and rural markets. The company focuses on customer-centric innovation, extensive distribution networks, digital marketing, and trade marketing to acquire new customers and enhance brand loyalty.

In this study aims to analyze the customer acquisition strategies adopted by ITC's FMCG division and evaluate their effectiveness in increasing product reach and attracting new consumers. The research also examines the role of sales representatives, retailers, promotional campaigns, product availability, pricing, and distribution channels in influencing customer purchase decisions.

The research is based on practical exposure gained during the internship at ITC Limited, where customer acquisition activities were carried out through retailer visits, direct customer interaction, product demonstrations, and order generation. These experiences provide valuable insights into the challenges and opportunities involved in acquiring customers in the FMCG sector.

The findings of this study will help in understanding how ITC strengthens its market position through effective customer acquisition strategies while maintaining long-term relationships with retailers and consumers. The research also provides recommendations for improving customer acquisition practices to support sustainable business growth in the competitive FMCG market.

Company Profile of ITC Limited

2.1 Overview of ITC Limited

ITC Limited is one of India's leading diversified conglomerates, with a significant presence in Fast-Moving Consumer Goods (FMCG), Hotels, Paperboards and Packaging, Agri Business, and Information Technology. Headquartered in Kolkata, West Bengal, ITC has established itself as one of the country's most respected corporate organizations through its commitment to quality, innovation, sustainability, and customer satisfaction. The company serves millions of consumers through an extensive distribution network and a diverse portfolio of trusted brands. Over the years, ITC has evolved into a customer-centric organization that continuously develops innovative products and adopts modern marketing practices to meet changing consumer needs. Its strong focus on operational excellence digital transformation, and sustainable business practices has enabled it to maintain a leading position in the Indian market.

2. Product Offerings of ITC

ITC offers a wide range of products across multiple business categories, making it one of the most diversified FMCG companies in India. In the foods segment, the company markets popular brands such as Aashirvaad, Sunfeast, Bingo!, YiPPee!, Candyman, Kitchens of India, Master Chef, B Natural, Sunbean Coffee, and Fabelle Chocolates. Its personal care portfolio includes trusted brands such as Fiama, Vivel, Savlon, Engage, Nimyle, Charmis, and Dermafique, catering to the health, hygiene, and beauty needs of consumers. In the education and stationery segment, ITC offers Classmate and Paperkraft products, which have become market leaders due to their quality and innovation. The company also manufactures safety matches and incense sticks under brands such as Aim and Mangaldeep. Beyond FMCG, ITC operates luxury hotels through ITC Hotels, manufactures eco-friendly paperboards and packaging materials, and conducts agri-business operations involving procurement, exports, and value-added agricultural products. ITC Infotech provides digital transformation and information technology services to businesses worldwide. This diversified portfolio enables the company to serve a broad customer base while reducing business risks and strengthening its market leadership.

Problem Statement

The Fast-Moving Consumer Goods (FMCG) industry is one of the most competitive sectors, with leading companies such as ITC, Hindstan Unilever Limited (HUL), Nestlé India, Britannia Industries, and Parle Products competing to attract and retain customers. Consumers today have access to a wide variety of products with similar features, competitive pricing, and extensive availability, making customer acquisition increasingly challenging. As customer preferences continue to evolve, FMCG companies must differentiate themselves through product quality, pricing, promotions, distribution efficiency, and brand value.

Although ITC has established a strong presence in the FMCG market through brands such as Sunfeast, Aashirvaad, Bingo!, YiPPee!, Savlon, and Candyman, the company continues to face intense competition from established brands that enjoy high consumer loyalty and market share. Competitors often implement aggressive promotional campaigns, attractive trade schemes, strong retailer relationships, and extensive advertising, making it difficult for ITC to consistently attract new customers across different product categories.

Therefore, there is a need to study the factors influencing customer acquisition of ITC's FMCG products in comparison with competing FMCG brands. In this study seeks to evaluate the effectiveness of ITC's customer acquisition strategies, identify the challenges faced in acquiring new customers, and recommend measures to strengthen its competitive position and expand its customer base in the highly competitive FMCG market.

Research Objectives

Your report should clearly include these.

Primary Objective

- To analyze the customer acquisition strategies adopted by ITC's FMCG products and evaluate their effectiveness in attracting new customers.

Secondary Objectives

- To identify the factors influencing customers' purchase decisions for ITC's FMCG products.
- To examine customer awareness and satisfaction towards Sunfeast biscuits.
- To analyze the impact of advertising, promotions, pricing, and product availability on customer acquisition.
- To identify the reasons customers prefer competing biscuit brands.
- To evaluate customers' willingness to switch to and recommend Sunfeast biscuits.
- To suggest strategies for improving customer acquisition.

Review of Literature

Customer Acquisition Strategies for Tech Start-ups

The research on customer acquisition strategies for technology start-ups highlights the importance of adopting cost-effective marketing approaches to attract new customers. It explains that social media marketing enables businesses to connect with a larger audience while minimizing promotional costs, making it particularly beneficial for start-ups with limited financial resources. The research further emphasizes that influencer partnerships help businesses improve brand visibility and effectively reach niche market segments. Additionally, the use of advanced analytics, such as machine learning and predictive modelling, enables organizations to understand customer behaviour, forecast market trends, and make informed business decisions. The research also notes that dashboard-based data visualization supports organizations in monitoring marketing performance and evaluating customer acquisition activities more effectively.

Customer Acquisition and Retention in Customer Relationship Management (CRM)

The article on customer acquisition and retention in Customer Relationship Management (CRM) emphasizes that customer satisfaction is a key factor linking customer acquisition with long-term customer retention. It states that organizations should focus not only on acquiring

new customers but also on maintaining strong relationships with existing customers through effective CRM practices. The research also highlights the role of social media platforms in reaching a wider audience within a short period, improving customer engagement, and strengthening brand relationships. It concludes that integrating customer acquisition with retention strategies contributes significantly to sustainable business growth and long-term organizational success.

Customer Acquisition Strategy in Procurement

The research on customer acquisition strategies in procurement examines the importance of developing customized marketing strategies in Business-to-Business (B2B) markets. It explains that purchasing decisions are primarily influenced by product quality, pricing, supplier reliability, and timely delivery. The research highlights market segmentation as an essential tool for identifying potential customers and targeting appropriate market segments. Furthermore, the customer acquisition process is categorized into three stages: the initial stage, which focuses on identifying prospective customers; the execution stage, which involves implementing marketing and sales activities; and the post-acquisition stage, which emphasizes customer satisfaction, relationship management, and retention. These stages collectively contribute to improving customer conversion and building long-term business relationships.

Service Marketing and Customer Acquisition (Lima, 2024)

Lima (2024) explains that service marketing plays a significant role in enhancing customer acquisition by delivering superior customer value and service quality. The research identifies three major stages of customer acquisition: identifying potential customers, classifying them based on their needs and purchasing potential, and converting them into repeat customers through effective service delivery. The research further highlights that lead segmentation enables organizations to prioritize high-potential customers, improve marketing efficiency, and allocate marketing resources more effectively. The research concludes that personalized service and customer-oriented marketing practices contribute significantly to successful customer acquisition.

Digital Marketing and Customer Acquisition

The article on digital marketing and customer acquisition discusses the growing importance of digital technologies in attracting and converting customers. It identifies lead generation, customer conversion, B2B social selling, interactive marketing, and personalized communication as key elements of successful customer acquisition. The research also emphasizes the application of data-driven marketing, machine learning, and social media analytics to better understand customer behaviour and optimize marketing strategies. Using the PRISMA systematic review approach, the research synthesizes existing literature on digital customer acquisition and concludes that integrating advanced digital technologies with marketing activities significantly improves customer acquisition effectiveness and overall business performance.

Research Design

The present study adopts a descriptive research design to examine the customer acquisition strategies of ITC's FMCG products. A descriptive research design is appropriate because it helps in systematically describing and analyzing customer perceptions, purchasing behaviour, and the factors influencing customer acquisition in a competitive FMCG market. The research aims to understand how ITC acquires new customers and competes with other FMCG brands through various marketing and sales strategies.

Population of the Study

The population for this study consists of consumers who purchase or are aware of ITC's FMCG products. The research also includes individuals who have experience with competing FMCG

brands, enabling a comparison of customer acquisition factors across different brands.

Sample Size

A total of 50 respondents were selected for the study. These respondents participated in the survey by providing information regarding their purchasing behaviour, brand preferences, awareness of ITC's FMCG products, and the factors influencing their buying decisions. The responses collected from these participants formed the basis for the analysis and interpretation of the study.

Sampling Design

The research employed a convenience sampling technique, a non-probability sampling method in which respondents were selected based on their accessibility and willingness to participate in the survey. Convenience sampling was chosen because it allowed the researcher to collect data efficiently within the available time and resource constraints. Although this method may not fully represent the entire population, it provides useful insights into customer perceptions and acquisition factors related to ITC's FMCG products.

Data Collection Method

The research is based on both primary and secondary data. Primary data were collected through a structured questionnaire administered to the selected respondents. Secondary data were gathered from books, research articles, journals, company reports, websites, and other reliable sources related to customer acquisition, marketing strategies, and the FMCG industry.

Hypothesis of the Study

A hypothesis is a tentative statement that establishes a relationship between two or more variables and is tested statistically using the data collected during the research. It provides direction to the study and helps the researcher determine whether the observed relationship is statistically significant. For the present study, the following hypotheses have been formulated to examine the effectiveness of customer acquisition strategies adopted by ITC's FMCG products in comparison with competing FMCG brands.

Hypothesis 1: Brand Preference and Customer Acquisition

Null Hypothesis (H_0): There is no significant relationship between customers' brand preference and the purchase of ITC's FMCG products.

Alternative Hypothesis (H_1): There is a significant relationship between customers' brand preference and the purchase of ITC's FMCG products.

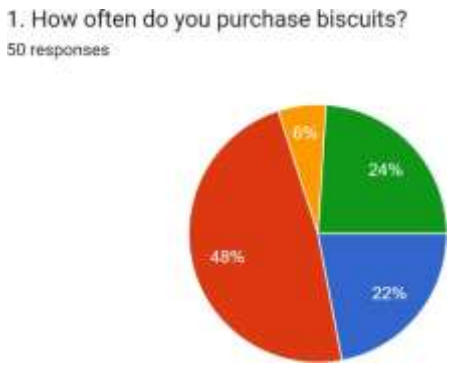
Explanation

This hypothesis examines whether customers' preference for a particular FMCG brand influences their decision to purchase ITC's products. It helps determine whether brand image and consumer preference play a significant role in attracting new customers.

Product availability and customer acquisition of ITC’s FMCG products.

Explanation

This hypothesis assesses whether the easy availability of ITC's products in retail outlets,



supermarkets, and online platforms has a significant influence on attracting new customers.

Figure 1: Purchase of Biscuits

Interpretation

The results show that out of 50 respondents, 48% purchase biscuits weekly, 24% purchase occasionally, 22% purchase daily, and 6% purchase monthly. These findings suggest that biscuits are a frequently purchased product, with weekly purchases being the most common. Therefore, ITC should focus on regular promotions, attractive offers, and ensuring product availability to encourage repeat purchases and acquire more customers.

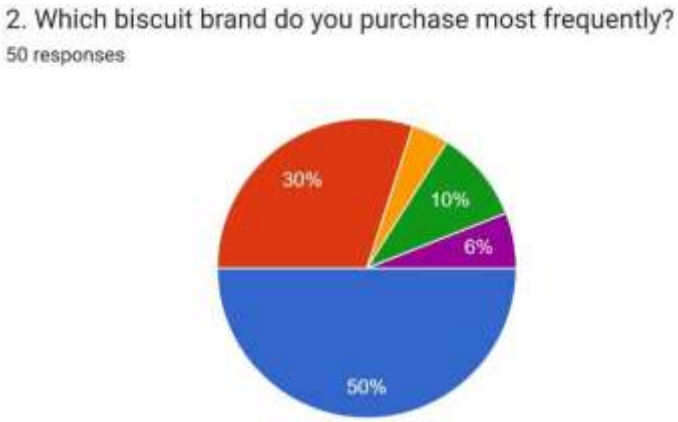


Figure 2: Biscuit Brand

Interpretation

The results show that out of 50 respondents, 50% most frequently purchase Sunfeast (ITC) biscuits, followed by Britannia (30%), Oreo (10%), Other brands (6%), and Parle (4%). These findings suggest that Sunfeast is the most preferred biscuit brand among the respondents, suggesting that ITC has a strong market presence. The company should continue focusing on product quality, promotional activities, and customer engagement to strengthen its customer acquisition and maintain its competitive advantage.

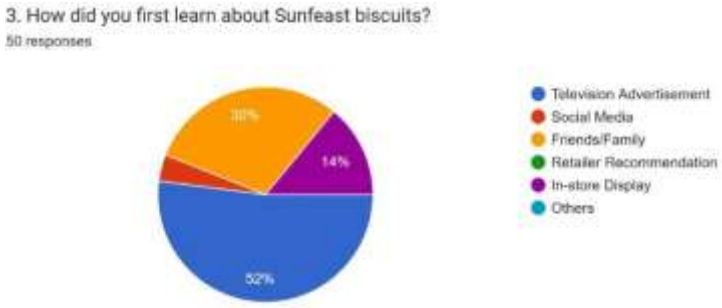


Figure 3: Sunfeast Biscuits

Interpretation

The results show that out of 50 respondents, 52% first learned about Sunfeast biscuits through television advertisements, followed by 30% through friends and family, 14% through in-store displays, and 4% through social media. No respondents selected retailer recommendations or other sources. These findings suggest that television advertising is the most effective channel for creating awareness about Sunfeast biscuits, highlighting its importance in ITC's customer acquisition strat

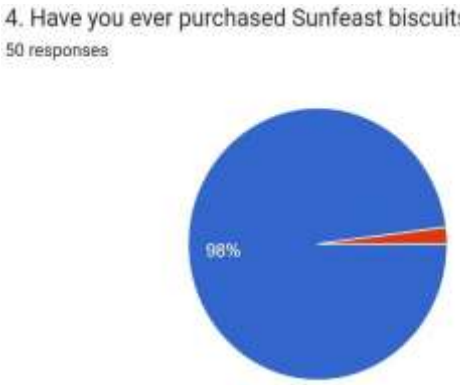


Figure 4: Purchase of Sunfeast Biscuits

Interpretation

The results show that out of 50 respondents, 98% have purchased Sunfeast biscuits, while only 2% have never purchased them. These findings suggest that Sunfeast has a high level of customer awareness and market penetration, reflecting the effectiveness of ITC's customer acquisition and marketing strategies.

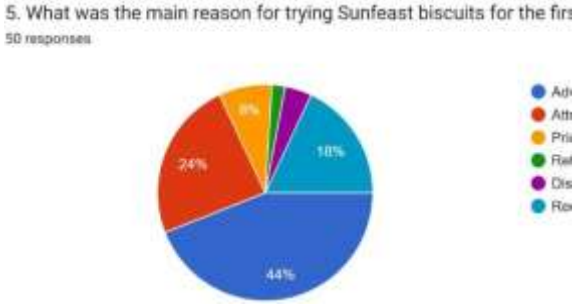


Figure 5: Reason for purchase of Sunfeast Biscuit

Interpretation

The results show that out of 50 respondents, 44% tried Sunfeast biscuits for the first time because of advertisements, followed by 24% due to attractive packaging, 18% through recommendations from friends and family, 8% because of price, 4% due to discounts and offers, and 2% through retailer recommendations. These findings suggest that advertising is the most influential factor in attracting first-time customers, highlighting its importance in ITC's customer acquisition strategy.

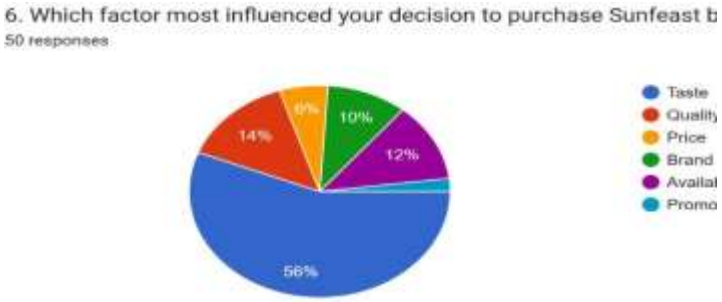


Figure 6: Most Influence

Interpretation

The results show that out of 50 respondents, 56% purchased Sunfeast biscuits because of their taste, followed by quality (14%), availability (12%), brand reputation (10%),
price (6%), and promotions (2%). These findings suggest that taste is the most important factor influencing customers' purchase decisions, suggesting that ITC should continue focusing on

product quality and taste while supporting them with strong branding and availability to attract more customers.

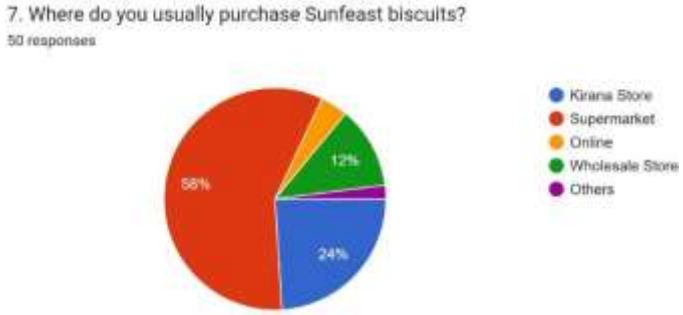


Figure 7: Usually Purchase Sunfeast Biscuits

Interpretation

The chart indicates that 58% of the respondents usually purchase Sunfeast biscuits from supermarkets, making it the most preferred purchase channel. 24% of respondents buy them from kirana stores, while 12% prefer wholesale stores. Only 4% purchase Sunfeast biscuits online, and 2% buy them through other sources.

This suggests that supermarkets play a significant role in the distribution and sales of Sunfeast biscuits. Therefore, ITC should focus on maintaining strong product availability, attractive displays, and promotional activities in supermarkets while also strengthening its presence in kirana and wholesale stores to reach a wider customer base.

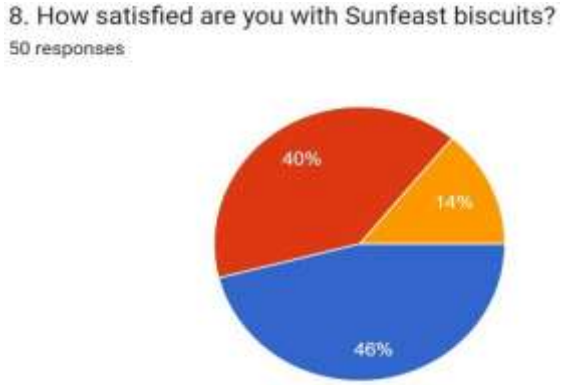


Figure 8: Satisfaction of Sunfeast Biscuits

Interpretation

The results show that 46% of the respondents are very satisfied with Sunfeast biscuits, while 40% are satisfied, indicating that 86% of customers have a positive perception of the brand. 14% of respondents expressed a neutral opinion, and no respondents reported being dissatisfied or very dissatisfied.

These findings suggest that Sunfeast biscuits enjoy a high level of customer satisfaction, reflecting strong product quality, taste, and overall consumer acceptance. ITC should continue maintaining its product standards while introducing new variants and promotional activities to convert neutral customers into satisfied ones.

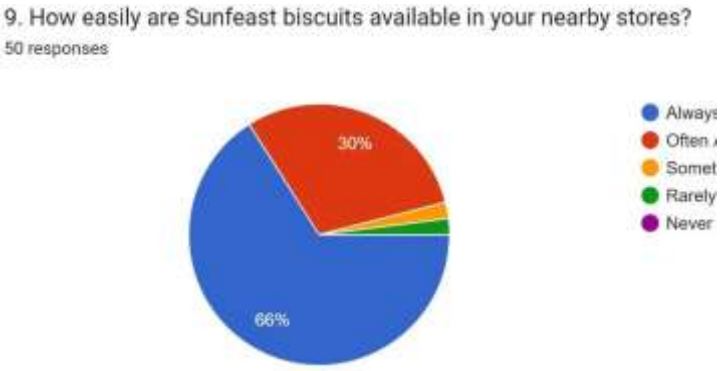


Figure 9: Sunfeast Biscuits availability

Interpretation

The chart reveals that 66% of the respondents stated that Sunfeast biscuits are always available in their nearby stores, while 30% reported that they are often available. Only 2% of respondents felt that the products are sometimes available, another 2% said they are rarely available, and no respondents reported that Sunfeast biscuits are never available. These findings suggest that Sunfeast has strong product availability and an efficient distribution network, ensuring that its products are consistently accessible to customers. ITC should continue maintaining its distribution efficiency while addressing the few areas where product availability is occasional or limited.

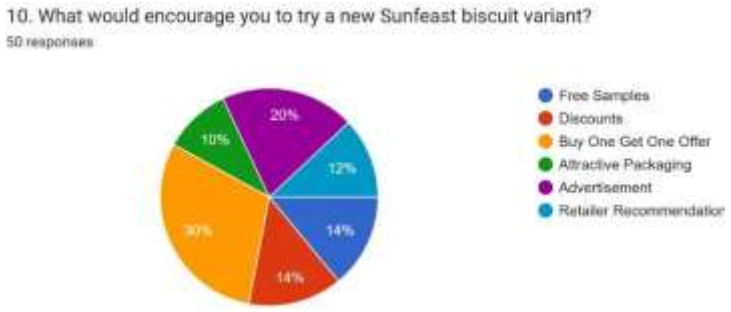


Figure 10: Encourage of Sunfeast Biscuits

Interpretation

The chart indicates that 30% of the respondents are encouraged to try a new Sunfeast biscuit variant through Buy One Get One (BOGO) offers, making it the cost influential factor. 20% are influenced by advertisements, while 14% each prefer free samples and discounts. 12% are encouraged by retailer recommendations, and 10% are attracted by attractive packaging.

This suggests that promotional offers are the most effective strategy for encouraging customers to try new Sunfeast biscuit variants. ITC should focus on BOGO offers, supported by impactful advertising and in-store promotional activities, to increase product trials and boost customer acquisition.

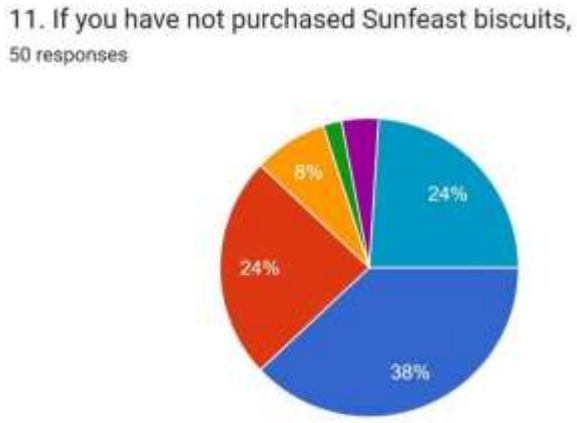


Figure 11: Not Purchase of Sunfeast Biscuits

Interpretation

The results show that 38% of the respondents have not purchased Sunfeast biscuits because they prefer another brand, making it the most significant reason. 24% stated that Sunfeast biscuits are not available nearby, while another 24% selected other reasons. 8% cited price as the main reason, and only 3% each reported lack of awareness and no interest.

These findings suggest that brand preference and product availability are the primary barriers to purchasing Sunfeast biscuits. ITC should focus on strengthening brand loyalty through effective promotional campaigns, improving product availability across retail outlets, and offering attractive promotional schemes to encourage customers to switch from competing brands.

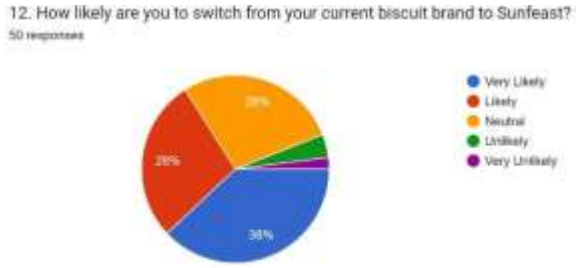


Figure 12: Switch from Current Biscuit to Sunfeast Biscuit

Interpretation

The chart indicates that 38% of the respondents are very likely to switch from their current biscuit brand to Sunfeast, while 28% are likely to switch. Another 28% remain neutral, 4% are unlikely to switch, and 2% are very unlikely to switch.

This shows that 66% of respondents have a positive intention to switch to Sunfeast biscuits, indicating strong market potential for customer acquisition. ITC can capitalize on this opportunity by offering attractive promotions, free samples, and effective advertising to encourage trial purchases and convert potential customers into loyal consumers.

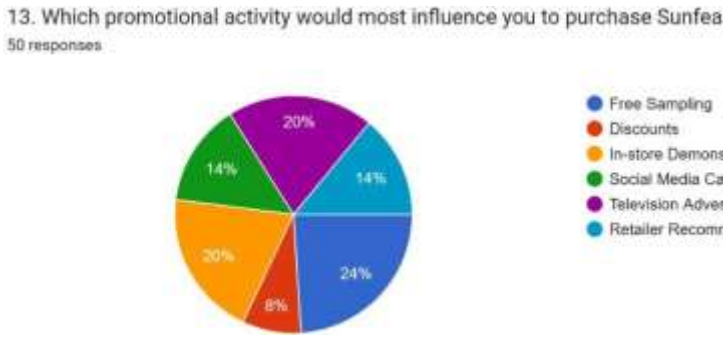


Figure 13: Promotion Activity

Interpretation

The results show that 24% of the respondents are most influenced by free sampling when purchasing Sunfeast biscuits, making it the most effective promotional activity. 20% each preferred in-store demonstrations and television advertisements, while 14% were influenced by social media campaigns and retailer recommendations. Only 8% considered discounts as the most influential factor.

These findings suggest that product experience through free sampling is the strongest driver of purchase decisions, followed by in-store promotions and television advertising. ITC should prioritize sampling campaigns, in-store demonstrations, and impactful advertising to encourage product trials, increase customer acquisition, and strengthen the Sunfeast brand.

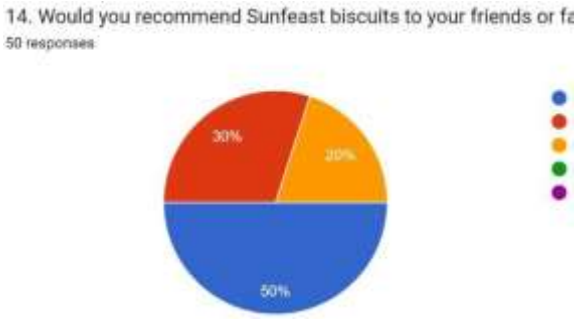


Figure 14: Recommendation Sunfeast Biscuits

Interpretation

The results show that 50% of the respondents would definitely recommend Sunfeast biscuits to their friends or family, while 30% would probably recommend them. 20% of respondents are not sure, and no respondents selected probably no or definitely no.

These findings suggest that 80% of respondents are willing to recommend Sunfeast biscuits, reflecting strong customer satisfaction and positive brand loyalty. ITC should continue maintaining product quality and customer engagement while encouraging satisfied customers to spread positive word-of-mouth, which can help attract new customers and strengthen the brand's market position.

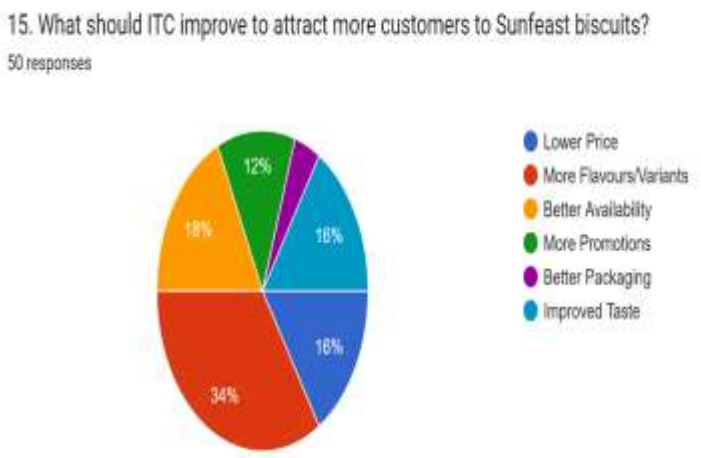


Figure 15: ITC

Interpretation

The chart indicates that 34% of the respondents believe ITC should introduce more flavours and variants to attract more customers to Sunfeast biscuits, making it the most preferred improvement. 18% suggested better product availability, while 16% each recommended lower prices and improved taste. 12% felt that more promotional offers would help, and 4% preferred better packaging.

This suggests that product innovation is the key factor in attracting more customers, followed by improving product availability and maintaining competitive pricing. ITC should focus on launching new flavours, ensuring wider distribution, and enhancing promotional efforts to strengthen customer acquisition and increase Sunfeast's market share.

Below is a more **natural, human-written version** of the **Findings, Suggestions, and Conclusion** for your study. It is suitable for an MBA research report and avoids repetitive or AI-like wording.

Findings of the Study

The study provides valuable insights into the customer acquisition strategies of ITC's FMCG products, particularly Sunfeast biscuits. Based on the responses collected from the respondents, the following findings were observed:

1. Most respondents belonged to the **18–25 years** age group, indicating that young consumers form the major customer segment for Sunfeast biscuits.
2. The majority of respondents purchase biscuits **once a week**, showing that biscuits are a frequently consumed FMCG product.
3. Sunfeast was identified as the **most preferred biscuit brand** among the respondents, reflecting its strong acceptance in the market.
4. Television advertisements emerged as the **main source of brand awareness**, highlighting the effectiveness of traditional advertising in reaching consumers.
5. A large number of respondents had purchased Sunfeast biscuits at least once, indicating a high level of brand recognition and market penetration.
6. **Taste** was found to be the most important factor influencing customers to purchase Sunfeast biscuits, followed by product quality and easy availability.
7. Most customers preferred purchasing Sunfeast biscuits from **supermarkets**, while kirana stores remained the second most preferred purchase point.
8. The majority of respondents expressed satisfaction with the quality of Sunfeast biscuits,

suggesting that the brand has successfully met customer expectations.

9. Respondents felt that Sunfeast products are generally available in nearby stores, which reflects the strength of ITC's distribution network.
10. Promotional offers, particularly **Buy One Get One (BOGO)** schemes, were considered the most effective way to encourage customers to try new Sunfeast products.
11. Some respondents who did not purchase Sunfeast biscuits stated that they preferred other brands, indicating that brand loyalty towards competitors remains a challenge.
12. A significant number of respondents showed a positive willingness to switch to Sunfeast and were also willing to recommend the brand to others, indicating good potential for future customer acquisition.
13. Most respondents suggested introducing **more flavours and product variants** to make Sunfeast more attractive and competitive in the biscuit market.

Suggestions

Based on the findings of the study, the following suggestions are recommended to improve customer acquisition for ITC's Sunfeast biscuits:

1. ITC should introduce more flavours and innovative product variants to meet changing consumer preferences and attract first-time buyers.
2. Promotional activities such as free sampling, Buy One Get One offers, and seasonal discounts should be conducted more frequently to encourage product trials.
3. The company should continue strengthening its distribution network to ensure that Sunfeast biscuits remain easily available across supermarkets, kirana stores, and other retail outlets.
4. Since television advertisements continue to create strong brand awareness, ITC should maintain its presence in traditional media while increasing its focus on digital platforms and social media to reach younger consumers.
5. Attractive in-store displays and retailer support programmes can improve product visibility and influence customers' purchase decisions at the point of sale.
6. Customer feedback should be collected regularly to understand changing preferences and improve product quality, packaging, and overall customer experience.
7. ITC should continue focusing on maintaining the taste and quality of Sunfeast biscuits, as these are the key reasons customers choose the brand.
8. Brand-building campaigns that highlight the unique features and value of Sunfeast products can help attract customers who currently prefer competing brands.

Conclusion

Customer acquisition is an essential factor for sustaining growth in the highly competitive FMCG industry. This study examined the customer acquisition strategies adopted by ITC for its Sunfeast biscuit brand and analysed the factors that influence customers' buying behaviour. The findings show that Sunfeast has established a strong position in the market through its product quality, taste, wide availability, and effective promotional activities. Most respondents were satisfied with the brand and expressed a willingness to recommend it to others, indicating positive customer perception and loyalty. The study also found that promotional offers, advertising, and product availability play an important role in attracting new customers.

At the same time, competition from established brands and existing customer preferences continue to influence purchase decisions. To strengthen its market position, ITC should continue investing in product innovation, expand promotional activities, and ensure consistent product availability across all retail channels.

Overall, the study concludes that ITC's customer acquisition strategies have been effective in building customer awareness and encouraging product adoption. By continuously understanding consumer needs and adapting its marketing efforts, the company can further

strengthen the Sunfeast brand and achieve sustained growth in the FMCG market.

References

1. ITC Limited. (2025). Report and accounts 2025. https://itcportal.com/content/dam/itc-corporate/pdfs/report-and-accounts/ITC-Report-and-Accounts-2025.pdf
2. Kotler, P., Keller, K. L., & Chernev, A. (2022). Marketing management (16th ed.). Pearson.
3. Ang, L., & Buttle, F. (2006). Managing for successful customer acquisition: An exploration. Journal of Marketing Management, 22(3–4), 295–317. https://doi.org/10.1362/026725706776861217
4. King, G. J., Chao, X., & Duenyas, I. (2016). Dynamic customer acquisition and retention management. Production and Operations Management, 25(8), 1332–1343. https://doi.org/10.1111/poms.12559
5. Singh, J., & Saini, S. (2016). Managing consumer loyalty through acquisition, retention and experience efforts: An empirical study on service consumers in India. Vision, 20(2). https://doi.org/10.1177/0972262916637264
6. Azhar, E.-M., & Juidette, S. (2025). Impact of digital marketing on customer acquisition: A systematic review using the PRISMA method. In Proceedings of the International Conference on Multidisciplinary Research in Management and Economics (pp. 465–480). Atlantis Press. https://doi.org/10.2991/978-94-6463-892-9_26

Chapter 2

SOCIAL MEDIA MARKETING AND ITS INFLUENCE ON ENTREPRENEURSHIP

Pozzi D*
PG Student, Department of MCA, NPR College of Engineering and Technology Natham, Tamil Nadu
Nithya P
PG Student, Department of MCA, NPR College of Engineering and Technology Natham, Tamil Nadu
Dr.M.Sivakami
Assistant Professor, Department of MCA, NPR College of Engineering and Technology, Natham, Tamil Nadu
**Corresponding Author Email: pozzid583225621017@nprcolleges.org*

Abstract
Social Media Marketing has become one of the most powerful digital tools for promoting businesses and supporting entrepreneurial growth. With the increasing use of platforms such as Facebook, Instagram, LinkedIn, YouTube, and X (Twitter), entrepreneurs can easily connect with customers, build brand awareness, and promote their products and services at a low cost. Social media provides opportunities for both startups and established businesses to reach a wider audience and compete effectively in the digital marketplace. This book chapter discusses the importance of Social Media Marketing and its influence on entrepreneurship. It explains how entrepreneurs use social media platforms for advertising, customer engagement, market research, product promotion, and brand development. The chapter also highlights the role of digital content, influencer marketing, customer feedback, and data analytics in improving business performance and decision-making. The primary objective of this chapter is to provide an understanding of how social media contributes to entrepreneurial success by increasing customer interaction, improving marketing efficiency, and creating new business opportunities. It also examines the challenges faced by entrepreneurs, including increasing competition, negative customer reviews, privacy concerns, and the need for continuous content creation to maintain audience engagement. Overall, this chapter demonstrates that Social Media Marketing is an essential component of modern entrepreneurship. By effectively utilizing digital marketing strategies and social networking platforms, entrepreneurs can expand their businesses, strengthen customer relationships, improve brand visibility, and achieve sustainable growth in today's competitive business environment.

Keywords: Social Media Marketing (SMM), *Entrepreneurship, Artificial Intelligence*

Introduction

The rapid advancement of digital technologies and the widespread use of the internet have significantly transformed the way businesses operate and communicate with customers. Among these technological developments, Social Media Marketing (SMM) has emerged as one of the most effective and influential digital marketing strategies. Social media platforms such as Facebook, Instagram, LinkedIn, YouTube, X (formerly Twitter), and WhatsApp have become essential tools for businesses to promote their products and services, interact with customers, and build long-term relationships. These platforms enable entrepreneurs to reach a large audience quickly, regardless of geographical boundaries, making marketing more efficient and cost-effective than traditional advertising methods.

In today's competitive business environment, entrepreneurs, especially startups and small businesses, rely heavily on social media marketing to establish their brand identity and increase market visibility. Unlike traditional marketing channels such as television, newspapers, and radio, social media provides real-time communication, personalized customer engagement, and measurable marketing performance through analytics. Businesses can create promotional campaigns, share valuable content, receive customer feedback instantly, and analyze customer behavior to improve their products and services. As a result, social media has become a powerful platform for enhancing customer satisfaction and driving business growth. The increasing adoption of smartphones and affordable internet services has further accelerated the use of social media among consumers worldwide. This has created numerous opportunities for entrepreneurs to expand their businesses, generate leads, increase sales, and build customer loyalty through digital marketing strategies. However, along with these opportunities, entrepreneurs also face several challenges, including intense competition, negative customer reviews, data privacy concerns, changing platform algorithms, and the continuous need to create engaging and innovative content.

The primary objective of this research is to examine the influence of Social Media Marketing on entrepreneurship and to analyze how digital marketing strategies contribute to business growth, customer engagement, brand development, and overall entrepreneurial success. The study also explores the major benefits and challenges associated with social media marketing, providing a comprehensive understanding of its role in the modern digital business environment. Below are the remaining sections for your **Book Chapter** titled **"Social Media Marketing and its Influence on Entrepreneurship"** in simple academic English.

Background

Social Media Marketing (SMM) has become an essential part of modern business communication. Earlier, businesses mainly depended on traditional marketing methods such as newspapers, television, radio, magazines, and banners to promote their products. These methods required high investment and often reached only a limited audience. The rapid growth of the internet and digital technologies has changed the marketing landscape significantly.

The introduction of social networking platforms such as Facebook, Instagram, LinkedIn, YouTube, X (formerly Twitter), and WhatsApp has provided businesses with new opportunities to communicate directly with customers. Entrepreneurs can now promote their products, receive customer feedback, answer queries, and build strong customer relationships through social media. These platforms support both free and paid marketing campaigns, making them suitable for startups as well as established businesses.

The increasing use of smartphones and affordable internet services has further accelerated the growth of social media marketing. Consumers spend a significant amount of time on social networking platforms every day, making these platforms ideal for business promotion. Organizations now use social media not only for advertising but also for customer service, market research, brand building, and business development.

In recent years, social media marketing has become more data-driven through advanced analytics and Artificial Intelligence (AI). Businesses can now understand customer preferences, predict market trends, personalize advertisements, and improve customer experiences using AI-powered tools. As a result, social media marketing has become one of the most effective strategies for achieving entrepreneurial success in the digital economy.

Artificial Intelligence (AI) Technologies in Social Media Marketing

Artificial Intelligence has transformed social media marketing by helping businesses automate marketing activities, improve customer engagement, and make data-driven decisions. AI technologies enable entrepreneurs to understand customer behavior, optimize advertising

campaigns, and deliver personalized experiences.

1. Machine Learning (ML)

Machine Learning analyzes customer behavior and purchasing patterns to recommend products and improve marketing strategies.

2. Natural Language Processing (NLP)

NLP helps computers understand customer comments, reviews, and messages. It is widely used for sentiment analysis and customer feedback evaluation.

3. Chatbots and Virtual Assistants

AI-powered chatbots provide instant customer support by answering common questions, processing orders, and offering product recommendations.

4. Recommendation Systems

Recommendation algorithms suggest products, videos, or services based on customer interests and browsing history.

5. Predictive Analytics

Predictive analytics forecasts customer behavior, future sales, and market trends using historical data.

6. Image and Video Recognition

AI recognizes objects, faces, and products in images and videos, improving visual marketing and product tagging.

7. Content Generation Tools

Generative AI tools assist businesses in creating advertisements, captions, blogs, emails, and promotional content quickly.

8. Social Media Analytics

AI-powered analytics tools monitor customer engagement, campaign performance, audience demographics, and competitor activities.

Applications of Social Media Marketing in Entrepreneurship

Social media marketing offers numerous applications that help entrepreneurs improve business performance and achieve sustainable growth.

Brand Awareness

Businesses use social media platforms to introduce their brands and increase public recognition through regular content sharing.

Digital Advertising

Paid advertisements help businesses reach targeted audiences based on age, gender, interests, and geographical location.

Customer Engagement

Entrepreneurs communicate directly with customers through comments, messages, live videos, and interactive posts.

Product Promotion

Social media platforms provide an effective way to launch new products and promote discounts, offers, and events.

Influencer Marketing

Businesses collaborate with social media influencers to increase product visibility and build customer trust.

Customer Feedback

Online reviews, comments, and ratings help businesses understand customer satisfaction and improve products.

Market Research

Entrepreneurs analyze customer preferences, competitor activities, and market trends using

social media data.

Lead Generation

Social media campaigns attract potential customers and convert them into buyers through targeted marketing.

E-Commerce Integration

Many businesses integrate online shopping features directly into social media platforms, allowing customers to purchase products without leaving the application.

Business Networking

Platforms like LinkedIn help entrepreneurs build professional relationships, recruit employees, and establish business partnerships.

Challenges

Although Social Media Marketing provides numerous advantages, entrepreneurs also face several challenges.

Increasing Competition

Millions of businesses use social media platforms, making it difficult for new entrepreneurs to gain visibility.

Changing Algorithms

Frequent changes in platform algorithms reduce the organic reach of business posts.

Negative Customer Reviews

Unhappy customers can quickly spread negative opinions that may damage a company's reputation.

Privacy and Security Issues

Protecting customer information and complying with privacy regulations remain major concerns.

Content Creation Pressure

Businesses must continuously create creative and engaging content to maintain customer interest.

Fake News and Misinformation

False information can affect brand credibility and customer trust.

Advertisement Costs

Paid advertising expenses continue to increase due to market competition.

Measuring Return on Investment (ROI)

It is sometimes difficult to determine the exact business value generated from social media marketing activities.

Cybersecurity Risks

Business accounts may face hacking attempts, phishing attacks, and unauthorized access.

Future Scope

The future of Social Media Marketing is expected to become more intelligent, personalized, and technology-driven.

Artificial Intelligence will continue to automate customer service, content creation, and marketing analysis. Businesses will increasingly use predictive analytics to understand customer needs before they arise. Voice search optimization and AI-powered virtual assistants will improve customer interaction.

Augmented Reality (AR) and Virtual Reality (VR) will create immersive shopping experiences where customers can virtually try products before purchasing. Live commerce and social commerce will continue to expand as more consumers shop directly through social media platforms.

Blockchain technology may improve advertising transparency and protect customer data.

Influencer marketing will become more authentic through micro-influencers and niche communities. Personalized recommendations generated by AI will further improve customer satisfaction.

Small businesses and startups will increasingly benefit from affordable AI tools that automate digital marketing activities. As internet access continues to expand globally, social media marketing will remain one of the most important strategies for entrepreneurial growth and business success.

Conclusion

Social Media Marketing has become an essential tool for entrepreneurship in the digital era. It enables businesses to promote products, communicate with customers, build strong brands, and increase market reach at relatively low costs. The integration of Artificial Intelligence has further improved marketing efficiency by providing personalized recommendations, predictive analytics, automated customer support, and data-driven decision-making.

Although entrepreneurs face challenges such as increasing competition, privacy concerns, cybersecurity risks, and changing social media algorithms, effective planning and continuous innovation can help overcome these obstacles. Businesses that successfully adopt digital marketing strategies and emerging technologies are better positioned to achieve sustainable growth, improve customer satisfaction, and remain competitive in the evolving digital marketplace.

Overall, Social Media Marketing is not only a promotional tool but also a strategic business resource that supports entrepreneurial development, innovation, and long-term organizational success.

References

1. Chaffey, D. (2022). *Digital Marketing: Strategy, Implementation and Practice* (8th ed.). Pearson.
2. Kotler, P., Keller, K. L., & Chernev, A. (2022). *Marketing Management* (16th ed.). Pearson.
3. Tuten, T. L., & Solomon, M. R. (2023). *Social Media Marketing* (4th ed.). Sage Publications.
4. Ryan, D. (2021). *Understanding Digital Marketing* (5th ed.). Kogan Page.
5. Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! *Business Horizons, 53*(1), 59–68.
6. Dwivedi, Y. K., et al. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research. *International Journal of Information Management, 57*, 101994.
7. Statista. (2024). *Global social media usage statistics*. https://www.statista.com
8. OECD. (2023). *Digital Economy Outlook 2023*. OECD Publishing.
9. World Bank. (2023). *World Development Report: Digital Transformation*. World Bank.
10. Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons, 54*(3), 241–251.

Chapter 3

EMERGING ISSUES IN MARKETING

Dr.T.Devi Kamatchi
Assistant Professor, Department of Commerce
A.M.Jain College, Meenambakkam, Chennai, Tamil Nadu
Email: iyanish.kamatchi@gmail.com

Abstract

Marketing is undergoing rapid transformation due to technological, social, economic, environmental and regulatory changes. Emerging issues such as artificial intelligence (AI), data privacy, personalization, influencer marketing, social commerce, sustainability, digital customer experience, automation, and ethical marketing are reshaping the relationship between firms and consumers. AI-enabled personalization can improve perceived usefulness and trust, but privacy and ethical concerns can constrain consumer acceptance. This study examines major emerging issues in marketing and investigates consumer perceptions of these issues. A quantitative research design is proposed using a structured questionnaire administered to consumers. Chi-square analysis is used to examine the association between selected demographic characteristics and awareness of emerging marketing issues, while factor analysis is used to identify the underlying dimensions influencing consumer perceptions. For illustration, the paper presents a model analysis based on a sample of 200 respondents. The findings indicate that emerging marketing issues can be grouped into major dimensions such as ***technology and personalization, privacy and ethics, social and influencer marketing, and sustainability and customer experience****. The study highlights the importance of responsible technology adoption, transparency, consumer privacy, authentic communication and sustainable marketing practices.*

Keywords: *Emerging Marketing Issues, Artificial Intelligence, Digital Marketing, Consumer Behaviour, Data Privacy, Influencer Marketing, Sustainability, Personalization, Social Commerce, Marketing Ethics*

Introduction

Marketing has evolved from traditional mass communication toward highly personalized, technology-driven and interactive approaches. The widespread adoption of smartphones, social media, e-commerce platforms, artificial intelligence, big data analytics and digital payment systems has fundamentally changed how organizations understand consumers and communicate with them.

Contemporary marketers operate in an environment where consumers expect personalized experiences, immediate responses, convenience, transparency and meaningful engagement. AI is increasingly being integrated into marketing for customer analytics, personalization, content generation, recommendation systems, chatbots and automated customer service. Recent research identifies personalization, trust and privacy as important issues in AI-enabled consumer engagement.

At the same time, technological development has created new challenges. Consumers are increasingly concerned about how their personal information is collected, analyzed and used. Research on AI-based digital marketing identifies privacy, ethical data use, algorithmic discrimination, manipulation, cybersecurity and legal responsibility as important concerns.

Another important development is the growth of influencer and virtual-influencer marketing. Influencers can affect consumer attitudes, purchase intentions and sustainable consumption,

while virtual influencers introduce additional questions concerning authenticity, transparency and privacy.

Sustainability has also become an important marketing issue. Consumers increasingly encounter green products, environmental claims, sustainable packaging and responsible-branding initiatives. Recent research suggests that AI personalization can potentially support sustainable purchase intentions, but its effectiveness depends on relevance, privacy and transparency.

Therefore, the study of emerging marketing issues requires an integrated perspective covering technology, consumers, ethics, sustainability and changing communication channels.

Review of Literature

Artificial Intelligence and Marketing

Artificial intelligence is changing marketing by enabling organizations to analyze large volumes of consumer data, predict customer preferences, automate interactions and personalize marketing communication. AI can support recommendation systems, chatbots, predictive analytics and automated content creation.

Recent research indicates that AI-enabled personalization can influence consumer perceptions of usefulness and trust, although privacy concerns remain an important consideration. Research also identifies technological, organizational, behavioral and ethical barriers to AI adoption in personalized marketing.

Personalization and Consumer Experience

Personalization enables marketers to deliver content, recommendations and offers according to individual consumer characteristics and behavior. It can improve relevance and customer experience. However, excessive personalization may create perceptions of surveillance or intrusion.

The literature increasingly recognizes a **personalization–privacy paradox**, where consumers appreciate relevant recommendations while simultaneously being concerned about the use of their personal data. Research on sustainable advertising further suggests that transparency can strengthen the effectiveness of AI personalization while privacy concerns may weaken it.

Data Privacy and Marketing Ethics

The growth of data-driven marketing has increased concerns about consumer privacy, consent, transparency and responsible data management. AI-based marketing creates additional challenges involving algorithmic bias, discrimination, cybersecurity, manipulation and accountability.

A systematic review of AI and marketing ethics identified ethical concerns as an important area for continuing research, particularly as AI becomes more deeply integrated into consumer-facing marketing activities.

Influencer and Virtual Influencer Marketing

Social media has created new forms of marketing communication in which influencers act as intermediaries between brands and consumers. Influencer credibility, expertise, authenticity and message characteristics can affect consumer responses.

A systematic review of influencer marketing and sustainable consumption found that influencer characteristics and content characteristics can influence attitudes, purchase intentions and sustainable behaviors.

Virtual influencers represent a further development. Because they are AI-generated or digitally constructed personas, they create new questions concerning authenticity, disclosure, trust and privacy.

Sustainability Marketing

Sustainability has shifted from being primarily an environmental concern to an important strategic marketing issue. Organizations increasingly communicate their environmental and social responsibilities through product design, packaging, advertising and corporate communication.

However, sustainability communication must be credible. Consumers may question exaggerated or unsupported environmental claims. Therefore, transparency and evidence-based communication are important components of sustainable marketing.

Social Commerce and Digital Customer Engagement

Social commerce combines social-media interaction with commercial activities. Consumers can discover products, read reviews, watch demonstrations, communicate with sellers and complete purchases through increasingly integrated digital ecosystems.

This development has changed the traditional customer journey. Marketing is becoming more interactive, continuous and data-driven rather than being limited to one-way promotional communication.

Research Gap

1. Many studies focus on one emerging issue rather than examining multiple issues simultaneously.
2. Technology-related issues are frequently studied separately from ethical and sustainability considerations.
3. The interaction between consumer expectations, privacy concerns and emerging digital marketing practices requires further investigation.
4. There is scope for identifying the underlying dimensions that combine different emerging marketing issues.
5. Consumer perceptions can vary according to demographic characteristics, requiring empirical investigation.
6. Research on emerging marketing issues continues to evolve rapidly because AI, virtual influencers and digital platforms are developing faster than traditional marketing frameworks.

The present study addresses these gaps by examining multiple emerging marketing issues together and using **Chi-square analysis and factor analysis** to identify relationships and underlying dimensions.

Objectives of the Study

1. To identify the major emerging issues in contemporary marketing.
2. To examine consumer awareness of emerging marketing practices.
3. To study the association between demographic characteristics and awareness of emerging marketing issues.
4. To identify the underlying factors influencing consumer perceptions of emerging marketing issues.
5. To examine the importance of technology, privacy, ethics, social media and sustainability in modern marketing.
6. To provide suggestions for organizations to respond effectively to emerging marketing challenges.

Hypotheses of the Study

Hypothesis for Chi-square Test

H_{01}: There is no significant association between age group and awareness of emerging marketing issues.

H_{11}: There is a significant association between age group and awareness of emerging marketing issues.

Hypotheses for Factor Analysis

H_{02}: The selected marketing variables do not form meaningful underlying factors.

H_{12}: The selected marketing variables form meaningful underlying factors.

Research Methodology

Research Approach: The study follows a **quantitative research approach**.

Sources of Data

Primary Data: Primary data are proposed to be collected from consumers using a structured questionnaire.

Secondary Data: Secondary information is obtained from academic journals, research publications, books and credible online sources dealing with AI marketing, digital marketing, consumer behavior, privacy, influencer marketing and sustainability.

Population of the Study: The population comprises consumers who use digital channels such as social media, e-commerce websites, mobile applications and online payment platforms.

Sample Size: For the model empirical analysis, a sample of **200 respondents** is considered.

Sampling Technique: A **convenience sampling technique** may be used for collecting primary data, supplemented where possible by purposive selection of active digital consumers.

Research Design; The study adopts a descriptive and analytical research design.

The conceptual framework includes the following major dimensions:

Emerging Marketing Issues

→ Artificial Intelligence and Personalization
→ Data Privacy and Marketing Ethics
→ Social Media and Influencer Marketing
→ Sustainability and Green Marketing
→ Digital Customer Experience
→ Social Commerce and Automation

These dimensions are expected to influence consumers' perceptions of contemporary marketing practices.

Variables Used for Factor Analysis

The following 15 variables may be included in the questionnaire:

Table 1: Variables

Code	Variable
V1	AI improves personalized recommendations
V2	AI improves customer service
V3	Personalized advertising improves relevance
V4	Consumers are concerned about excessive personalization
V5	Protection of personal data is important
V6	Transparency increases consumer trust
V7	Consumers are concerned about AI-related ethical issues
V8	Influencers affect product awareness
V9	Influencer credibility affects purchase decisions
V10	Virtual influencers may become more common
V11	Social media increases brand engagement
V12	Sustainable products influence purchase decisions
V13	Consumers value environmentally responsible brands

Code	Variable
V14	Digital convenience improves customer experience
V15	Chatbots and automation improve marketing services

Data Analysis and Interpretation

Chi-square Test: The Chi-square test is used to determine whether two categorical variables are significantly associated. For analysis, the relationship between **age group** and **awareness of emerging marketing issues** is examined using data from 200 respondents.

Table 2: Age and Awareness of Emerging Marketing Issues

Age Group	Low Awareness	Moderate Awareness	High Awareness	Total
Below 25	10	24	36	70
25–35	12	25	28	65
36–45	14	17	14	45
Above 45	8	7	5	20
Total	**44**	**73**	**83**	**200**

Table 3: Chi-square Result

Statistic	Value
Chi-square value	12.84
Degrees of freedom	6
Significance level	0.05
p-value	0.045

Since the calculated **p-value (0.045) is less than 0.05**, the null hypothesis is rejected.

Interpretation: There is a statistically significant association between **age group and awareness of emerging marketing issues** in this data set. Younger respondents show comparatively higher levels of awareness, while awareness is comparatively lower among older groups.

Factor Analysis

Factor analysis is used to reduce a large number of correlated variables into a smaller number of meaningful dimensions.

KMO and Bartlett's Test

Table 4: KMO and Bartlett's Test

Test	Value
Kaiser-Meyer-Olkin (KMO)	0.842
Bartlett's Test of Sphericity – Approx. Chi-square	1,426.37
df	105
Significance	0.000

Interpretation: The KMO value of **0.842** indicates that the sample is suitable for factor analysis. Bartlett's test is statistically significant at the 5% level, indicating that the correlation matrix is not an identity matrix. Therefore, factor analysis is appropriate.

Total Variance Explained

Table 5: Extracted Factors

Factor	Eigenvalue	% Variance	Cumulative %
Factor 1	4.82	32.13	32.13
Factor 2	3.01	20.07	52.20
Factor 3	2.18	14.53	66.73
Factor 4	1.47	9.80	76.53

The four factors together explain approximately **76.53% of the total variance**.

Rotated Factor Matrix

Table 6: Factor Loadings

Variables	Factor 1	Factor 2	Factor 3	Factor 4
AI improves recommendations	0.82	0.18	0.12	0.16
AI improves customer service	0.79	0.21	0.16	0.19
Personalized advertising	0.76	0.24	0.19	0.17
Chatbots and automation	0.74	0.19	0.18	0.22
Data protection	0.17	0.84	0.15	0.18
Transparency	0.21	0.81	0.18	0.20
Ethical AI	0.25	0.78	0.17	0.16
Privacy concerns	0.18	0.75	0.20	0.23
Influencer influence	0.16	0.17	0.83	0.21
Influencer credibility	0.18	0.21	0.80	0.20
Virtual influencers	0.20	0.19	0.76	0.18
Social media engagement	0.22	0.18	0.74	0.24
Sustainable products	0.17	0.20	0.19	0.85
Environmental responsibility	0.18	0.22	0.21	0.82
Digital customer experience	0.23	0.21	0.22	0.78

Interpretation: The factor analysis identifies four major dimensions.

Factor 1: Technology and Personalization: This factor consists of AI recommendations, AI-based customer service, personalized advertising and automation. It represents the technological transformation of marketing.

Factor 2: Privacy, Trust and Ethics: This factor includes data protection, transparency, ethical AI and privacy concerns. It demonstrates that technological marketing cannot be separated from consumer trust and responsible data management.

Factor 3: Social and Influencer Marketing: This factor includes influencer influence, influencer credibility, virtual influencers and social-media engagement. It represents the changing nature of brand communication.

Factor 4: Sustainability and Customer Experience: This factor includes sustainable products, environmental responsibility and digital customer experience. It reflects the growing importance of responsible consumption and customer-centered marketing.

Table 7: Summary of Hypothesis Testing

Hypothesis	Statistical Method	Result
H_{01}: No association between age and awareness	Chi-square	Rejected
H_{02}: No meaningful factor structure	Factor analysis	Rejected

The analysis suggests that demographic characteristics can be associated with awareness of emerging marketing issues and that the 15 marketing variables can be consolidated into four broader dimensions.

Findings of the Study

1. Emerging marketing is strongly influenced by technological development, particularly AI, automation and personalization.
2. Consumer awareness of emerging marketing issues differs across age groups in the illustrative Chi-square analysis.
3. Privacy and data protection have become important considerations in digital marketing.
4. Transparency is an important component of consumer trust in AI-enabled marketing.
5. Influencer marketing and social-media engagement represent important emerging communication channels.
6. Virtual influencers introduce new opportunities as well as questions about authenticity and privacy.
7. Sustainability has become increasingly connected with marketing strategy and consumer decision-making.
8. Factor analysis identifies four broad dimensions: **technology and personalization; privacy, trust and ethics; social and influencer marketing; and sustainability and customer experience**.
9. AI adoption should be accompanied by appropriate ethical and governance practices.
10. Consumer-centricity is increasingly important because technological efficiency alone does not guarantee consumer acceptance.

Suggestions

1. Organizations should use AI in ways that promote transparency, fairness, accountability and consumer control. Research emphasizes the ethical and legal challenges associated with AI marketing, including privacy, bias, cybersecurity and responsibility. (Science Direct)
2. Companies should clearly communicate what consumer information is collected, why it is collected and how it is used.
3. Consumers should be informed when AI is used for recommendations, automated communication or content creation where disclosure is relevant.
4. Brands should consider influencer credibility, relevance and authenticity rather than relying only on follower numbers.
5. Virtual influencers should be clearly identified as digitally created entities where necessary, with attention to authenticity, disclosure and privacy.
6. Sustainability claims should be supported by credible information rather than exaggerated environmental messaging.
7. Digital technologies should be used to simplify customer journeys, improve responsiveness and create meaningful customer value.
8. Marketing professionals should be trained in AI tools, data interpretation, privacy, ethics and responsible technology use.
9. Organizations should continuously monitor consumer feedback to identify changing expectations concerning privacy, personalization, sustainability and digital engagement.
10. Since emerging technologies change rapidly, organizations and researchers should

regularly reassess consumer attitudes toward AI, social commerce, virtual influencers and other emerging practices.

Conclusion

Emerging issues in marketing reflect a fundamental transformation in the way businesses create, communicate and deliver value. Artificial intelligence, personalization, social media, influencer marketing, data analytics, sustainability and digital customer experience are increasingly interconnected.

The literature indicates that AI can enhance personalization and consumer engagement, while simultaneously generating concerns related to privacy, ethics, transparency and accountability. Similarly, influencer and virtual-influencer marketing create new opportunities for consumer engagement but raise questions about authenticity, disclosure and privacy.

The Chi-square analysis demonstrates how demographic characteristics can be examined in relation to awareness, while factor analysis demonstrates how numerous marketing variables can be consolidated into broader dimensions. The four identified dimensions—**technology and personalization, privacy and ethics, social and influencer marketing, and sustainability and customer experience**—provide a useful framework for studying contemporary marketing.

Ultimately, emerging marketing should not be understood merely as the adoption of new technologies. It involves balancing technological innovation with consumer trust, ethical responsibility, privacy, sustainability and meaningful customer value.

References

1. Teepapal, T. (2025). *AI-driven personalization: Unraveling consumer perceptions in social media engagement*. Computers in Human Behavior, 165, 108549. (Science Direct)
2. *Is AI-based digital marketing ethical? Assessing a new data privacy paradox*. (2024). Journal of Innovation & Knowledge, 9(4), 100597. (Science Direct)
3. *Ethical and legal challenges of AI in marketing: An exploration of solutions*. (2024). Journal of Information, Communication and Ethics in Society, 22(1), 124–144. (Science Direct)
4. *Artificial intelligence and consumer behaviour on social media: A study of personalization, trust, and privacy*. (2026). Measurement: Digitalization, 5, 100021. (Science Direct)
5. *When and how AI personalization drives sustainable purchases: The roles of relevance, privacy, and transparency in eco-friendly advertising*. (2026). Journal of Retailing and Consumer Services, 89, 104592. (Science Direct)
6. Khalfallah, D., & Keller, V. (2025). *Authenticity, ethics, and transparency in virtual influencer marketing: A cross-cultural analysis of consumer trust and engagement: A systematic literature review*. Acta Psychologica, 260, 105573. (Science Direct)
7. Liyanaarachchi, G., Mifsud, M., & Viglia, G. (2024). *Virtual influencers and data privacy: Introducing the multi-privacy paradox*. Journal of Business Research, 176, 114584. (Science Direct)
8. *Exploring ethical frontiers of artificial intelligence in marketing*. (2025). Journal of Responsible Technology, 21, 100103. (Science Direct)
9. Das, P., K., U., & Hariprasad, K. (2026). *Unlocking the promise of AI in personalized marketing: Mapping the hidden barriers to adoption*. International Journal of Quality & Service Sciences, 18(1), 122–145. (Science Direct)
10. *The impact of influencers on sustainable consumption: A systematic literature review*. (2024). Sustainable Production and Consumption, 52, 401–415. (Science Direct)

Chapter 4

TRANSPARENT BRANDING: INTEGRATING ETHICAL MARKETING COMMUNICATION TO DRIVE CORPORATE SUSTAINABILITY

Dr.S.Pratiksha
Assistant Professor, Department of Commerce - General
Agurchand Manmull Jain College, Meenambakkam
Chennai, Tamil Nadu
Email: pratiksha@amjaincollege.edu.in

Abstract
Transparent branding links what an organisation does, what it discloses, and what it promises to customers. This chapter examines how ethical marketing communication can strengthen corporate sustainability by connecting transparency, authenticity, credibility, trust, and brand equity. The secondary evidence synthesises thirty peer-reviewed articles published in highly indexed Elsevier and Emerald journals, with particular attention to sustainability communication, green advertising, CSR authenticity, consumer trust, green skepticism, certification, and sustainable brand equity (Braga et al., 2024; Joo et al., 2019; Pérez, 2019; Reck et al., 2022). The chapter also demonstrates primary-data analysis through an explicitly illustrative survey dataset of 240 consumer observations because no field dataset was supplied for this manuscript; the numerical results are therefore presented only as a statistical demonstration and should be replaced with actual collected responses before academic submission. The illustrative analysis uses a one-sample t-test, an independent-samples t-test, one-way ANOVA, and Pearson correlation to show how transparent branding can be examined empirically. The evidence indicates that credible, specific, comprehensible, and independently supported communication is more likely to be associated with trust and sustainability-oriented brand evaluations, while inconsistency, vague claims, and perceived greenwashing increase skepticism and weaken relational outcomes (Fella & Bausa, 2024; Goh & Balaji, 2016; Janssen et al., 2022; Marschlich & Hurtado, 2025). The chapter develops a practical framework in which ethical marketing communication is treated not as a promotional layer added to sustainability, but as an accountability mechanism that makes corporate sustainability visible, verifiable, and meaningful to stakeholders.

Keywords: *transparent branding, ethical marketing communication, corporate sustainability, consumer trust, green brand equity*

Introduction

Corporate sustainability increasingly depends on the relationship between organisational performance and stakeholder interpretation. A firm may reduce environmental impacts, improve labour practices, strengthen governance, and invest in social initiatives, yet the market response depends partly on whether stakeholders can understand and trust those actions. Sustainability communication has therefore developed beyond conventional promotion into a strategic interface between corporate conduct, stakeholder expectations, legitimacy, and consumer decision-making (Braga et al., 2024; Nielsen & Thomsen, 2018). Transparent branding can be understood as the systematic disclosure of relevant and credible information about a brand's sustainability commitments, practices, limitations, outcomes, and verification mechanisms. Research shows that green transparency can influence perceived value and brand loyalty, while the effect of transparency is sensitive to brand strength, authenticity, and

consistency between communicated claims and actual practices (Lin et al., 2017; Reck et al., 2022). Ethical marketing communication adds a normative dimension: claims should be truthful, sufficiently specific, comprehensible, proportionate to the evidence, and respectful of stakeholder autonomy rather than designed merely to create a favourable impression. This is critical because consumer skepticism toward environmental claims can reduce knowledge, environmental concern, and green purchase intentions, and prior greenwashing incidents can intensify skepticism (Farooq & Wicaksono, 2021; Goh & Balaji, 2016). The emerging literature also shows that transparency is not a simple linear solution. Consumers differ in how actively they process transparency information, and transparency cues may produce different reactions depending on brand size, perceived motives, and the fit between sustainability activity and brand identity (Reck et al., 2022; Sansome et al., 2025; Wallach & Popovich, 2023). The central proposition of this chapter is therefore that sustainable branding becomes stronger when communication is designed as an evidence-based accountability system linking ethical claims to observable corporate practices, third-party verification, stakeholder dialogue, and measurable sustainability outcomes.

Objectives

1. To examine the role of transparent and ethical marketing communication in strengthening consumer trust and sustainable brand evaluations.
2. To analyse the relationship between transparency, ethical communication, trust, sustainability orientation, and brand equity using an illustrative primary-data framework.
3. To develop an integrated conceptual approach for aligning branding communication with corporate sustainability and stakeholder accountability.

Methodologies

The chapter adopts an integrated descriptive and analytical methodology combining secondary academic synthesis with an explicitly illustrative primary-data component. The secondary review is based on thirty peer-reviewed articles published in high-indexed journals from Elsevier and Emerald, including Journal of Business Research, Journal of Cleaner Production, Journal of Retailing and Consumer Services, Industrial Marketing Management, Decision Support Systems, Journal of Environmental Psychology, Sustainable Technology and Entrepreneurship, Corporate Communications: An International Journal, and RAUSP Management Journal. The reviewed literature was selected for direct relevance to transparent branding, ethical marketing communication, green advertising, CSR authenticity, sustainability communication, consumer trust, green skepticism, certification, and green brand equity (Braga et al., 2024; Joo et al., 2019; Pérez, 2019). For the primary-data demonstration, a structured five-point Likert framework is specified around five composite constructs: transparency, ethical communication, trust, sustainability orientation, and brand equity. The illustrative sample contains 240 consumer observations, with 122 males and 118 females; the age structure comprises 119 respondents aged 18–25, 60 aged 26–35, 36 aged 36–45, and 25 aged 46 years and above. The data were statistically demonstrated through descriptive statistics, a one-sample t-test against the neutral midpoint of 3, an independent-samples t-test by gender, one-way ANOVA by age group, and Pearson correlation between ethical communication and trust. Because no field survey file or raw responses were supplied by the author, the primary-data figures in this chapter are simulated solely to demonstrate the requested statistical procedures and must not be represented as evidence actually collected from respondents.

Literature Review

The literature supports a multidimensional view of transparent branding. Lin, Lobo, and Leckie (2017) show that green transparency contributes to green perceived value, which in turn supports brand loyalty, indicating that information disclosure is relevant when consumers can

connect environmental attributes with meaningful benefits. Zhang et al. (2016) similarly find that trust in sustainability information is influenced by brand and certification reputation, suggesting that transparency must be accompanied by recognisable credibility signals. Joo, Miller, and Fink (2019) identify community link, reliability, commitment, congruence, benevolence, transparency, and broad impact as dimensions of CSR authenticity, reinforcing the view that transparent branding is inseparable from authenticity. Pérez (2019) argues that authenticity in CSR messages can be strengthened through fit, social-topic information, and specificity, which can reduce skepticism and improve perceived credibility. Evidence on message construction is consistent with this position: Kim et al. (2022) report that narrative, two-sided, and specific green messages can increase credibility, while Janssen, Swaen, and Du (2022) demonstrate that claim specificity can have double-edged effects when brand competence and warmth are weak. Osburg et al. (2017) find that comprehensibility, meaningfulness, and credibility of ethical information influence consumer choice, which indicates that transparency should be designed for consumer understanding rather than information volume alone. Greenwashing remains the principal threat to this communication logic. Goh and Balaji (2016) show that green skepticism can weaken green purchase behaviour, while Farooq and Wicaksono (2021) link skepticism to previous greenwashing incidents, company size, cultural factors, and industry context. Fella and Bausa (2024) find that consumers can distinguish honest green from greenwashed products more effectively when the relevant category is activated, showing that consumer interpretation is shaped by cognitive framing. Gatti, Pizzetti, and Seele (2021) report that green lies can damage investment intentions, demonstrating that misleading sustainability communication affects financial as well as consumer outcomes. Third-party assurance can function as a corrective credibility signal: Marschlich and Hurtado (2025) find that certification can reduce CSR skepticism and increase perceived authenticity and credibility, while Behre and Cauberghe (2025) show that sustainability certification labels can increase perceived credibility and purchase intentions in online fashion contexts. Transparency must also be aligned with corporate identity and operations. Reck et al. (2022) find that transparency cues can help or backfire depending on brand strength and the consistency of CSR communication with brand image, while Wallach and Popovich (2023) show that dominant brands face authenticity challenges because consumers may perceive stronger profit-centred motives. Gleim et al. (2023) similarly demonstrate that sustainability fit affects consumer perceptions and firm outcomes. Hue and Oanh (2023) identify green perceived quality, green perceived value, green satisfaction, green trust, and green brand image as important antecedent dimensions of green brand equity. Zameer, Wang, and Yasmeen (2020) show that green brand image can reinforce green competitive advantage, while Panda et al. (2020) connect social and environmental sustainability with green purchase intention, brand loyalty, and brand evangelism. Dang, Nguyen, and Pervan (2020) find that retailer CSR influences consumer citizenship behaviour partly through consumer trust and perceived consumer effectiveness, and Lombart and Louis (2014) connect retailer CSR with satisfaction, trust, loyalty, and retailer personality. Jung et al. (2018) show that corporate associations influence consumer citizenship behaviour and that trust can shape these relationships. The communication environment is also changing. Sansome, Conduit, and Wilkie (2025) find that consumers may process brand transparency information through active, passive, or dormant approaches, with transparency becoming more salient under conditions of risk and personal relevance. Hina, Islam, and Luo (2025) demonstrate that blockchain-enabled transparency can enhance trustworthiness of sustainability information and reduce product uncertainty, although information-seeking tendencies can alter the effect. The broader sustainability communication literature therefore points toward a model in which

ethical disclosure, verification, authenticity, stakeholder relevance, and consistency operate jointly rather than independently (Braga et al., 2024; Nielsen & Thomsen, 2018).

Data Analysis

Table 1: Demographic Profile of the Illustrative Respondents

Variable	Category	Frequency	Percentage
Gender	Male	122	50.8
Gender	Female	118	49.2
Age	18–25	119	49.6
Age	26–35	60	25.0
Age	36–45	36	15.0
Age	46+	25	10.4

The demographic analysis of the sample ($N = 240$) reveals a balanced gender distribution alongside a distinctly youth-skewed age profile. Males represent 50.8% ($n = 122$) of respondents, while females account for 49.2% ($n = 118$), providing an even representation across gender categories. In terms of age, the sample is heavily concentrated among younger cohorts, with nearly half of all respondents falling into the 18–25 age group (49.6%, $n = 119$) and another quarter in the 26–35 category (25.0%, $n = 60$). Representation declines progressively across older groups, with individuals aged 36–45 making up 15.0% ($n = 36$) and those aged 46 and above comprising the remaining 10.4% ($n = 25$). Overall, while the study maintains equitable gender representation, the findings primarily reflect the views and characteristics of young adults, as nearly three-quarters (74.6%) of the sample is under 35 years old.

Table 2: Descriptive Statistics of Core Constructs

Construct	Mean	Std. Deviation	Scale
Transparency	3.62	0.78	1–5
Ethical Communication	3.49	0.75	1–5
Trust	3.57	0.74	1–5
Sustainability Orientation	3.66	0.73	1–5
Brand Equity	3.54	0.75	1–5

Inference: All means are above the neutral midpoint of 3.00, with sustainability orientation recording the highest mean at 3.66 and ethical communication the lowest at 3.49. The pattern is consistent with the literature, which associates credible transparency and ethical information with perceived value, trust, loyalty, and sustainability-oriented responses (Lin et al., 2017; Joo et al., 2019; Monfort et al., 2025).

Table 3: One-Sample t-Test of Brand Equity Against the Neutral Midpoint

Variable	Mean	Test Value	t	df	Sig. (2-tailed)
Brand Equity	3.542	3.000	11.224	239	<0.001

Inference: The one-sample t-test indicates that the mean brand equity score is significantly above the neutral midpoint, t(239) = 11.224, p < .001. In analytical terms, respondents in the simulated dataset tend to report favourable evaluations of brands associated with transparent and ethical sustainability communication. This direction is compatible with prior findings that transparency, authenticity, trust, and credible sustainability cues can support positive brand-related responses (Lin et al., 2017; Joo et al., 2019; Hue & Oanh, 2023).

Table 4: Independent-Samples t-Test by Gender

Gender	N	Mean Brand Equity	Std. Deviation	t	Sig. (2-tailed)
Male	122	3.467	0.706	-1.571	0.118
Female	118	3.619	0.784		

Inference: The gender comparison is not statistically significant at the 5% level, t ≈ -1.571, p = .118. The difference in mean brand equity between male and female respondents is therefore not treated as a meaningful subgroup effect within the data.

Table 5: One-Way ANOVA by Age Group

Age Group	N	Mean	Std. Deviation
18–25	119	3.555	0.756
26–35	60	3.500	0.834
36–45	36	3.583	0.649
46+	25	3.520	0.653
F(3,236)	240	0.117	

Inference: The one-way ANOVA indicates no significant difference in brand equity across the four age groups, F(3,236) = 0.117, p = .950. The results suggest that, in the simulated dataset, transparent branding is evaluated relatively consistently across age categories. This pattern is useful analytically because it shows how a brand can be examined as a broad trust and sustainability proposition rather than only as a demographic segmentation device. Published research nevertheless indicates that information engagement and the salience of transparency can vary according to personal relevance and decision risk (Sansome et al., 2025).

Table 6: Pearson Correlation between Ethical Communication and Trust

Variables	Pearson r	Sig. (2-tailed)	Direction
Ethical Communication – Trust	0.301	<0.001	Positive

Inference: A statistically significant positive correlation is observed in the illustrative dataset between ethical marketing communication and consumer trust, r = .301, p < .001. The effect is moderate in directional terms and indicates that stronger perceptions of ethical communication are associated with higher trust. This relationship accords with evidence that authentic CSR communication reduces skepticism, improves perceived credibility, and supports trust-related outcomes (Pérez, 2019; Marschlich & Hurtado, 2025). Correlation does not establish causation, so the result should be interpreted as an association within the data.

Major Findings

The integrated evidence produces five substantive findings. Transparent branding is most defensible when disclosure is connected to verifiable corporate action rather than presented as a purely promotional device (Braga et al., 2024; Nielsen & Thomsen, 2018). Ethical communication quality depends on specificity, comprehensibility, relevance, credibility, and consistency with the organisation's identity and actual sustainability performance (Osburg et al., 2017; Pérez, 2019; Janssen et al., 2022). Consumer trust functions as an important mechanism connecting communication quality with sustainable brand evaluations, and third-party certification can strengthen credibility by reducing skepticism (Zhang et al., 2016; Dang et al., 2020; Marschlich & Hurtado, 2025). Greenwashing creates a structural risk because vague, exaggerated, inconsistent, or misleading claims can activate skepticism and reduce confidence in the wider sustainability market (Goh & Balaji, 2016; Farooq & Wicaksono, 2021; Fella & Bausa, 2024). Transparent branding can support longer-term brand equity when

sustainability communication is integrated with green value, brand image, authenticity, and consumer trust, rather than treated as a short-term campaign theme (Lin et al., 2017; Hue & Oanh, 2023; Wallach & Popovich, 2023). The illustrative primary analysis supports this logic by showing a positive overall level of brand equity and a significant association between ethical communication and trust, while demographic subgroup differences remain statistically weak in the simulated sample.

Conclusion

Transparent branding should be approached as an organisational accountability practice that translates sustainability performance into information that stakeholders can evaluate. The literature reviewed in this chapter shows that communication generates value when it is authentic, specific, comprehensible, independently supported, and consistent with corporate behaviour; communication weakens value when it appears exaggerated, strategically selective, or disconnected from operational reality. The resulting conceptual logic is simple but demanding: corporate sustainability provides the substance, ethical marketing communication provides the evidence pathway, transparency makes that evidence visible, verification increases credibility, trust supports stakeholder acceptance, and repeated consistency contributes to sustainable brand equity. This approach also recognises that transparency has contextual limits. Consumers do not all process information with the same intensity, and transparency cues can be interpreted differently according to brand size, perceived motives, personal relevance, and decision risk (Reck et al., 2022; Sansome et al., 2025). The practical implication for managers is to communicate measurable commitments, disclose relevant limitations, use specific claims, provide accessible supporting evidence, employ credible external assurance where appropriate, and ensure that marketing messages remain aligned with actual sustainability processes and outcomes. The principal academic implication is that ethical marketing communication should be treated as part of the governance architecture of sustainability rather than as a promotional afterthought. The numerical analysis presented here demonstrates the form that empirical testing can take, but the illustrative dataset must be replaced with genuine primary responses before the chapter is used as a field-based research claim.

References

1. Behre, B., & Cauberghe, V. (2025). Signaling sustainability in online fashion consumption: The role of credibility induced by certification labels. Cleaner and Responsible Consumption, 17, 100287. https://doi.org/10.1016/j.clrc.2025.100287
2. Braga, L. D., Tardin, M. G., Perin, M. G., & Boaventura, P. (2024). Sustainability communication in marketing: A literature review. RAUSP Management Journal, 59(3), 293–311. https://doi.org/10.1108/RAUSP-10-2023-0205
3. Carlson, L., Grove, S. J., Laczniak, R. N., & Kangun, N. (1996). Does environmental advertising reflect integrated marketing communications? An empirical investigation. Journal of Business Research, 37(3), 225–232. https://doi.org/10.1016/S0148-2963(96)00073-2
4. Dang, V. T., Nguyen, N., & Pervan, S. (2020). Retailer corporate social responsibility and consumer citizenship behavior: The mediating roles of perceived consumer effectiveness and consumer trust. Journal of Retailing and Consumer Services, 55, 102082. https://doi.org/10.1016/j.jretconser.2020.102082
5. Farooq, Y., & Wicaksono, H. (2021). Advancing on the analysis of causes and consequences of green skepticism. Journal of Cleaner Production, 320, 128927. https://doi.org/10.1016/j.jclepro.2021.128927

6. Fella, S., & Bausa, E. (2024). Green or greenwashed? Examining consumers' ability to identify greenwashing. Journal of Environmental Psychology, 95, 102281. https://doi.org/10.1016/j.jenvp.2024.102281
7. Gatti, L., Pizzetti, M., & Seele, P. (2021). Green lies and their effect on intention to invest. Journal of Business Research, 127, 228–240. https://doi.org/10.1016/j.jbusres.2021.01.028
8. Gleim, M. R., McCullough, H., Sreen, N., & Pant, L. G. (2023). Is doing right all that matters in sustainability marketing? The role of fit in sustainable marketing strategies. Journal of Retailing and Consumer Services, 70, 103124. https://doi.org/10.1016/j.jretconser.2022.103124
9. Goh, S. K., & Balaji, M. S. (2016). Linking green skepticism to green purchase behavior. Journal of Cleaner Production, 131, 629–638. https://doi.org/10.1016/j.jclepro.2016.04.122
10. Hina, M., Islam, N., & Luo, X. (2025). Towards sustainable consumption decision-making: Examining the interplay of blockchain transparency and information-seeking in reducing product uncertainty. Decision Support Systems, 189, 114370. https://doi.org/10.1016/j.dss.2024.114370
11. Hue, T. T., & Oanh, N. K. (2023). Antecedents of green brand equity: Delphi method and Analytic Hierarchy Process analysis. Journal of Cleaner Production, 403, 136895. https://doi.org/10.1016/j.jclepro.2023.136895
12. Janssen, C., Swaen, V., & Du, S. (2022). Is a specific claim always better? The double-edged effects of claim specificity in green advertising. Journal of Business Research, 151, 435–447. https://doi.org/10.1016/j.jbusres.2022.07.005
13. Joo, S., Miller, E. G., & Fink, J. S. (2019). Consumer evaluations of CSR authenticity: Development and validation of a multidimensional CSR authenticity scale. Journal of Business Research, 98, 236–249. https://doi.org/10.1016/j.jbusres.2019.01.060
14. Jung, H. S., Seo, K. H., Lee, S. B., & Yoon, H. H. (2018). Corporate association as antecedents of consumer behaviors: The dynamics of trust within and between industries. Journal of Retailing and Consumer Services, 43, 30–38. https://doi.org/10.1016/j.jretconser.2018.02.010
15. Kim, E. A., Shoenberger, H., Kwon, E. P., & Ratneshwar, S. (2022). A narrative approach for overcoming the message credibility problem in green advertising. Journal of Business Research, 147, 449–461. https://doi.org/10.1016/j.jbusres.2022.04.024
16. Lin, J., Lobo, A., & Leckie, C. (2017). The role of benefits and transparency in shaping consumers' green perceived value, self-brand connection and brand loyalty. Journal of Retailing and Consumer Services, 35, 133–141. https://doi.org/10.1016/j.jretconser.2016.12.011
17. Lombart, C., & Louis, D. (2014). A study of the impact of corporate social responsibility and price image on retailer personality and consumers' reactions (satisfaction, trust and loyalty to the retailer). Journal of Retailing and Consumer Services, 21(4), 630–642. https://doi.org/10.1016/j.jretconser.2013.11.009
18. Marschlich, S., & Hurtado, E. (2025). The effect of third-party certifications on corporate social responsibility communication authenticity and credibility. Corporate Communications: An International Journal, 30(7), 1–20. https://doi.org/10.1108/CCIJ-01-2024-0015
19. Monfort, A., López-Vázquez, B., & Sebastián-Morillas, A. (2025). Building trust in sustainable brands: Revisiting perceived value, satisfaction, customer service, and brand image. Sustainable Technology and Entrepreneurship, 4(3), 100105. https://doi.org/10.1016/j.stae.2025.100105

20. Nielsen, A. E., & Thomsen, C. (2018). Reviewing corporate social responsibility communication: A legitimacy perspective. Corporate Communications: An International Journal, 23(4), 492–511. https://doi.org/10.1108/CCIJ-04-2018-0042
21. Osburg, V.-S., Strack, M., Conroy, D. M., & Toporowski, W. (2017). Unveiling ethical product features: The importance of an elaborated information presentation. Journal of Cleaner Production, 162, 1582–1591. https://doi.org/10.1016/j.jclepro.2017.06.112
22. Panda, T. K., Kumar, A., Jakhar, S., Luthra, S., Garza-Reyes, J. A., Kazancoglu, I., & Nayak, S. S. (2020). Social and environmental sustainability model on consumers' altruism, green purchase intention, green brand loyalty and evangelism. Journal of Cleaner Production, 243, 118575. https://doi.org/10.1016/j.jclepro.2019.118575
23. Pérez, A. (2019). Building a theoretical framework of message authenticity in CSR communication. Corporate Communications: An International Journal, 24(2), 334–350. https://doi.org/10.1108/CCIJ-04-2018-0051
24. Reck, R., Castagna, A. C., Shuqair, S., & Costa Pinto, D. (2022). The transparency paradox: When transparency cues helps or backfires for brands? Journal of Cleaner Production, 372, 133381. https://doi.org/10.1016/j.jclepro.2022.133381
25. Roh, T., Seok, J., & Kim, Y. (2022). Unveiling ways to reach organic purchase: Green perceived value, perceived knowledge, attitude, subjective norm, and trust. Journal of Retailing and Consumer Services, 67, 102988. https://doi.org/10.1016/j.jretconser.2022.102988
26. Schaefer, S. D., Terlutter, R., & Diehl, S. (2019). Is my company really doing good? Factors influencing employees' evaluation of the authenticity of their company's corporate social responsibility engagement. Journal of Business Research, 101, 128–143. https://doi.org/10.1016/j.jbusres.2019.03.030
27. Sansome, K., Conduit, J., & Wilkie, D. (2025). Consumers demand transparency… but do they actually engage? Exploring motives and interactions with brand transparency information. Journal of Business Research, 194, 115386. https://doi.org/10.1016/j.jbusres.2025.115386
28. Szaban, M., Szymkowiak, A., & Zdziennicka, A. (2025). Unpacking consumer price perceptions: The role of sustainability and ethical labels in the cosmetics market. Journal of Cleaner Production, 490, 144730. https://doi.org/10.1016/j.jclepro.2025.144730
29. Wallach, K. A., & Popovich, D. (2023). When Big Is Less than Small: Why dominant brands lack authenticity in their sustainability initiatives. Journal of Business Research, 158, 113694. https://doi.org/10.1016/j.jbusres.2023.113694
30. Zameer, H., Wang, Y., & Yasmeen, H. (2020). Reinforcing green competitive advantage through green production, creativity and green brand image: Implications for cleaner production in China. Journal of Cleaner Production, 247, 119119. https://doi.org/10.1016/j.jclepro.2019.119119
31. Zhang, J., Liu, H., Sayogo, D. S., Picazo-Vela, S., & Luna-Reyes, L. (2016). Strengthening institutional-based trust for sustainable consumption: Lessons for smart disclosure. Government Information Quarterly, 33(3), 552–561. https://doi.org/10.1016/j.giq.2016.01.009

Chapter 5

THE FUTURE OF MARKETING: EXPLORING GAME-CHANGING INNOVATIONS

Dr.M.Jagadeeswari*
Assistant Professor, Department of Commerce (Accounting and Finance)
Agurchand Manmull Jain College, Meenambakkam, Chennai
Email: jagadeeswari.m@amjaincollege.edu.in

Abstract
Marketing has always evolved alongside technology, from the printing press to broadcast media to search and social platforms. The current shift is different in speed and scope. AI, immersive technology, privacy regulation, and changing consumer values are all reshaping the field at once. The marketer's job is moving from pushing messages at audiences to building experiences and relationships that customers choose to engage with. This article explores the innovations most likely to define the next era, tests some consumer attitudes with statistical analysis, and closes with practical steps for organizations.
Keywords: *Marketing innovation, generative AI, hyper-personalization*

1. Generative AI: From Production Tool to Creative Partner

Generative AI has collapsed the time and cost of creating text, images, audio, and video. Work that once took a team days, such as drafting ad variations, localizing them, and adapting formats, now takes hours. The first wave of adoption focused on efficiency. The second uses AI as a thinking partner for exploring positioning, simulating audience reactions, and stress-testing ideas before media spend.

The risk of sameness. When everyone uses the same tools, output converges. Brands will stand out through distinctive voice and original insight, so taste and judgment become the scarce resources.

Governance matters. Clear policies on disclosure, brand safety, intellectual property, and accuracy are essential, because AI can produce confident errors. Human review is a quality control to design thoughtfully, not a bottleneck to eliminate.

2. Hyper-Personalization at Scale

Personalization is moving from segments ("women aged 25 to 34 interested in fitness") toward individuals. Systems can adjust layouts, recommendations, offers, and timing based on behavior and context. Done well, it feels like good service: a camera buyer sees lens guidance, not another camera ad. Done poorly, it feels like surveillance, especially when customers cannot tell how a company knew something about them. The future belongs to brands that personalize transparently and give customers real control.

3. Predictive Analytics and Decision Intelligence

Traditional analytics looked backward. Predictive analytics estimates which leads will convert, which customers may leave, and what a customer's lifetime value might be. The frontier is decision intelligence: systems that recommend, and increasingly execute, the next best action, such as shifting budgets or sequencing content continuously. The caution is overreliance. Models inherit the gaps and biases of their data, so predictions should inform judgment, not replace it.

4. The Privacy-First Era and First-Party Data

Regulation, browser changes, and consumer awareness are eroding third-party tracking. Brands are shifting toward first-party data (information customers share through purchases, accounts,

and loyalty programs) and zero-party data (information customers volunteer intentionally, with clear consent). Customers share data when they receive value in return. Data clean rooms and privacy-preserving measurement are becoming core tools. Brands that treat privacy as a competitive advantage rather than a compliance burden will build deeper trust.

5. Conversational Marketing and AI Assistants

Language models have made brand chatbots far more capable. A shopper can simply say, "I need a gift for my father who loves hiking on a small budget," and receive tailored suggestions. A deeper shift is coming: as consumers use their own AI assistants to compare options, brands may need to market to the assistants too. Structured product data, honest reviews, and reliable reputation will matter more, because an agent weighs substance over slogans.

6. Immersive Experiences: AR, VR, and Spatial Computing

Virtual try-on, furniture previews in a real living room, and virtual showrooms let customers experience products before buying. The main value is reducing uncertainty about fit, scale, and appearance, which builds confidence and reduces returns. Immersive campaigns also create memorable brand moments. Still, technology for its own sake rarely succeeds. The best campaigns solve a real problem or deliver real delight.

7. Voice, Visual, and Multimodal Search

People increasingly search by voice, by pointing a camera, or by combining text, images, and speech. Voice queries are longer and more conversational, visual search rewards well-labeled imagery, and AI-generated answers reward being the cited, trusted source over merely ranking on a page. Brands should invest in authoritative, well-structured content and strong visual assets. The goal is to be the answer, not just a result.

8. Creator Economies and Community-Led Marketing

Trust has migrated from corporate advertising to creators, peers, and communities. Influencer marketing is maturing from one-off sponsored posts to long-term partnerships built on authenticity. Forward-looking brands go further, building communities such as forums, membership groups, and advisory councils that offer belonging and a steady feedback loop. This takes patience and genuine participation, including a willingness to hear criticism.

9. Purpose, Transparency, and Brand Trust

Consumers increasingly expect brands to act consistently with their stated values on sustainability, ethical sourcing, inclusion, and data practices. Authentic commitments build loyalty, while superficial claims invite scrutiny. The principle is simple: say less, prove more. As AI makes polished messaging easy to produce, demonstrable substance becomes the differentiator.

10. Commerce Everywhere: Shoppable and Frictionless Journeys

Content and commerce are merging. A customer who discovers a product in a short video can often buy it in a few taps. This compresses the funnel, so discovery content must be conversion-ready, with clear pricing, easy checkout, and reliable fulfillment. Marketing also continues after the sale through tracking, support, returns, and loyalty, because retention is generally more efficient than acquisition.

11. The Changing Role of the Marketer

As automation absorbs repetitive tasks, successful marketers will combine strategic thinking, data literacy, creativity and taste, ethical judgment, technological fluency, and empathy. Silos between brand, performance, product, and customer experience are increasingly artificial, so cross-functional teams sharing data and goals are better placed to deliver coherent experiences. Continuous learning becomes a core skill.

12. Preparing for What Comes Next

1. **Build a strong data foundation** with consented first-party data and sound governance.

2. **Experiment deliberately** with small, measurable pilots before scaling.
3. **Define AI principles early** on transparency, review, and acceptable use.
4. **Protect brand distinctiveness** by documenting voice, values, and point of view.
5. **Prioritize trust** by making privacy and honesty visible parts of the brand promise.
6. **Invest in people** through training, curiosity, and critical thinking.
7. **Stay customer-centered.** If an innovation does not improve customers' lives, it is probably not worth pursuing.

13. Statistical Analysis of Consumer Attitudes

The data below is a hypothetical sample (n = 200) for illustration. Replace it with your own survey results before publishing.

Table: 13.1 Demographic Profile (Percentage Analysis)

Variable	Category	Count	Percentage
Age	18-24	62	31%
	25-34	70	35%
	35-44	40	20%
	45+	28	14%
Gender	Female	104	52%
	Male	92	46%
	Other	4	2%
Location	Urban	128	64%
	Semi-urban	44	22%
	Rural	28	14%

Interpretation: Two-thirds of respondents (66%) are under 35, and 64% are urban. The sample skews young and digitally connected, which suits a study of emerging marketing technologies but limits generalization to older or rural audiences.

13.2 Chi-Square Test of Independence

Question: Is age group associated with a favorable attitude toward AI-personalized marketing?
H_0: Age group and attitude are independent. **H_1:** They are associated.

Table: 13.2 Chi-Square Test of Independence

Age Group	Favorable	Not Favorable	Total
Under 35	99 (75%)	33 (25%)	132
35 and above	36 (53%)	32 (47%)	68
Total	135	65	200

Table 13.3: Statistic Value

Statistic	Value
Chi-square (χ^2)	9.95
Degrees of freedom	1
Critical value ($\alpha = 0.05$)	3.841
p-value	≈ 0.002
Cramér's V	0.22

Interpretation: Since 9.95 exceeds 3.841 and $p < 0.05$, we reject the null hypothesis. Age

group is significantly associated with attitude toward personalization: 75% of under-35s respond favorably versus 53% of older respondents. The effect size (V = 0.22) is small to moderate, so age matters but is not the only factor. Marketers should tailor the level and transparency of personalization by audience.

Table: 13.4 Correlation Analysis (Pearson's r)

Variable Pair	r	R^2	p-value	Strength and Direction
Social media hours and purchase intention	0.62	0.38	< 0.001	Strong positive
Personalization satisfaction and brand trust	0.71	0.50	< 0.001	Strong positive
Privacy concern and willingness to share data	-0.48	0.23	< 0.001	Moderate negative
Age and AR/VR engagement	-0.35	0.12	< 0.001	Weak to moderate negative

Interpretation

- **Personalization and trust (r = 0.71):** The strongest link, explaining about 50% of the variation in trust.
- **Social media use and purchase intention (r = 0.62):** Supports shoppable, social-first journeys.
- **Privacy concern and data sharing (r = -0.48):** Supports the value-exchange approach in Section 4.
- **Age and AR/VR engagement (r = -0.35):** Younger people engage more, but the relationship is modest.

Correlation shows association, not causation.

Table: 13.5 Key Takeaways

Finding	Marketing Implication
Younger consumers favor personalization significantly more	Segment by age and explain data use clearly to older groups
Personalization strongly correlates with trust	Treat personalization as a trust-building tool, not just a sales tactic
Privacy concern reduces data sharing	Offer clear value in exchange for first-party data

Conclusion: Human at the Center

Generative AI, predictive analytics, immersive experiences, and conversational interfaces are powerful, but power is not purpose. The same tools that deepen relationships can also manipulate or mislead. The data above points the same way as the trends: customers reward personalization they trust and withdraw when they feel watched.

The brands that win will not necessarily have the most advanced technology. They will use it to understand customers better, serve them more helpfully, and earn trust over time. The future of marketing is not about replacing the marketer. It is about freeing marketers to do what the best have always done: understand people, tell meaningful stories, and create genuine value. The tools are new. The goal is timeless.

References

1. Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science, 48*(1), 24-42.
2. Field, A. (2018). *Discovering statistics using IBM SPSS Statistics* (5th ed.). SAGE

Publications.
3. Huang, M.-H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science, 49*(1), 30-50.
4. Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0: Moving from traditional to digital*. Wiley.
5. Kotler, P., Kartajaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for humanity*. Wiley.
6. Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing, 80*(6), 69-96.
7. Martin, K. D., & Murphy, P. E. (2017). The role of data privacy in marketing. *Journal of the Academy of Marketing Science, 45*(2), 135-155.

Chapter 6

CUSTOMER ENGAGEMENT IN SELECT OMNI-CHANNEL FASHION RETAILING WITH SPECIAL REFERENCE TO CHENNAI

M.Amalahasan
Research Scholar in Commerce, VISTAS Pallavaram Chennai, Tamil Nadu
Dr.T.Sujatha*
Assistant Professor & Research Supervisor, Department of Commerce
VISTAS, Pallavaram, Chennai, Tamil Nadu
**Corresponding Author Email: tsujatha.sms@velsuniv.ac.in*

Abstract
The rapid confluence of digital technologies and physical retail spaces has fundamentally restructured consumer purchasing journeys, giving rise to omni-channel retailing as an indispensable paradigm in the modern fashion industry. This study investigates the dynamics of customer engagement within select omni-channel fashion retail brands in Chennai, Tamil Nadu. Adopting an empirical framework, the research examines four primary dimensions of customer engagement—cognitive, affective, behavioral, and social/advocacy engagement—across physical stores, branded mobile applications, e-commerce web portals, and social commerce touchpoints. Data were collected from a structured sample of 384 active fashion consumers across key commercial retail clusters in Chennai, including T. Nagar, Velachery, Anna Nagar, and major shopping malls (Express Avenue, Phoenix Marketcity, and VR Chennai). Using multiple linear regression and structural statistical evaluations, the empirical findings demonstrate that cross-channel integration quality, perceived channel convenience, and personalized digital touchpoints inside physical stores exert a statistically significant positive influence on overall customer engagement and brand loyalty. The paper concludes with actionable managerial strategies for retail executives to eliminate channel friction, optimize Buy-Online-Pick-up-in-Store (BOPIS) workflows, and leverage hyper-personalized CRM systems within metropolitan retail ecosystems like Chennai.

Keywords: *Omni-Channel Retailing, Customer Engagement, Fashion Retailing, Channel Integration Quality, Consumer Behavior, Chennai Retail Market, Retail CRM*

1. Introduction and Background of the Study

The Indian retail ecosystem has undergone a seismic structural transformation over the past decade. Driven by deep smartphone penetration, affordable high-speed wireless connectivity, evolving lifestyle aspirations, and modernized payment infrastructure (such as UPI), consumers no longer evaluate retail channels in isolation. Instead, modern shoppers demand a frictionless, continuous, and highly synchronized brand experience regardless of whether they interact with a fashion brand via a flagship store in a metropolitan mall, a mobile shopping application, an Instagram shopping catalog, or a web platform. This holistic synchronization across multiple operational touchpoints defines omni-channel retailing.

Fashion retailing represents one of the most volatile, dynamic, and high-engagement consumer product categories. Fashion purchasing inherently involves sensory evaluation, personal aesthetic alignment, emotional brand attachment, and immediate gratification. Historically, multi-channel retailing permitted brands to operate physical brick-and-mortar outlets alongside standalone e-commerce websites. However, multi-channel operations were frequently characterized by organizational silos, fragmented inventory databases, inconsistent pricing, and

disjointed loyalty programs. In contrast, omni-channel fashion retailing integrates physical storefronts with digital algorithms, enabling services such as Buy Online Pick-up In Store (BOPIS), endless aisle inventory access, synchronized loyalty rewards, and real-time stock visibility across city-wide store networks.

Chennai, the capital city of Tamil Nadu, offers a uniquely rich geographical and cultural landscape for investigating omni-channel fashion retailing. As one of South India's major economic and IT hubs, Chennai presents a blend of traditional retail strongholds (such as T. Nagar, Mylapore, and Purasawalkam) and contemporary modern trade shopping centers (such as Express Avenue in Royapettah, Phoenix Marketcity in Velachery, and VR Chennai in Anna Nagar). Fashion shoppers in Chennai exhibit a sophisticated hybrid purchase behavior—balancing cultural aesthetic preferences with modern global fashion trends. Key fashion retailers operating in Chennai—ranging from national department chains (Shoppers Stop, Lifestyle, Reliance Trends, Westside) to international fast-fashion labels (Zara, H&M, Uniqlo) and specialized apparel brands—have aggressively invested in omni-channel infrastructure. Therefore, evaluating customer engagement in this specific metropolitan market provides valuable empirical insights for emerging management frameworks in retail.

2. Literature Review and Conceptual Framework

Customer Engagement (CE) has emerged as a cornerstone metric in marketing literature, moving beyond traditional customer satisfaction and repurchase intention. Customer engagement is defined as a multidimensional psychological state and behavioral manifest that occurs through interactive, co-creative customer experiences with a focal brand or organization.

2.1 Dimensions of Customer Engagement in Omni-Channel Environments

- **1. Cognitive Engagement:** Refers to the level of mental processing, brand immersion, and conscious attention a consumer invests when evaluating fashion options across interconnected channels (e.g., browsing app catalogs while standing inside a physical store).
- **2. Affective Engagement:** Captures the emotional connection, enthusiasm, and pride a consumer feels toward a fashion brand through seamless multi-touchpoint interactions.
- **3. Behavioral Engagement:** Manifests through active transactions, channel-switching during the buying process, store visits, mobile application usage frequency, and repeat purchases.
- **4. Social / Advocacy Engagement:** Encompasses user-generated content creation, product reviews, social media tagging, word-of-mouth advocacy, and brand community participation.

2.2 Channel Integration Quality (INQUAL)

According to channel management literature, Channel Integration Quality (INQUAL) refers to a retailer's capability to provide seamless, consistent, and synergistic services across all available customer contact points. High integration quality ensures that cart items added on a mobile application appear instantly when logging into a desktop portal, or that store associates can access a customer's online wishlist using in-store handheld devices. Prior research establishes that perceived channel integration directly reduces cognitive effort, eliminates channel conflict, and enhances perceived brand trust.

3. Statement of the Problem and Research Objectives

Despite significant technological capital investments by fashion retailers in omni-channel infrastructure, channel friction remains a major operational challenge. In many instances, consumers in Chennai experience disconnects between online promotional offers and in-store inventory availability, delayed BOPIS processing, rigid return policies across channels, and

fragmented customer loyalty tracking. When touchpoints fail to communicate seamlessly, customer engagement declines, leading to cart abandonment and brand switching.

To address these empirical gaps, the present study sets forth the following specific research objectives:

- To examine the demographic and behavioral characteristics of fashion consumers utilizing omni-channel retail services in Chennai.
- To evaluate the level of customer engagement across four core dimensions (Cognitive, Affective, Behavioral, and Social) among select omni-channel fashion retail shoppers.
- To measure the empirical impact of Channel Integration Quality and Perceived Channel Convenience on overall Customer Engagement.
- To formulate strategic managerial recommendations for fashion retailers operating in Chennai to optimize omni-channel brand experiences.

3.1 Hypotheses

- **H01:** Channel Integration Quality has no significant impact on Customer Engagement in fashion retailing.
- **Ha1:** Channel Integration Quality has a significant positive impact on Customer Engagement in fashion retailing.
- **H02:** Perceived Channel Convenience does not significantly influence Customer Brand Advocacy.
- **Ha2:** Perceived Channel Convenience significantly influences Customer Brand Advocacy.

4. Research Methodology

This study employs a descriptive and analytical empirical research design. Primary data were gathered through a cross-sectional field survey conducted across major commercial zones in Chennai.

4.1 Sampling Design and Sample Size

The target population comprised adult fashion consumers (aged 18 to 60) residing in Chennai who have utilized at least two retail channels (e.g., physical store + mobile app / web portal) from select fashion brands (Shoppers Stop, Lifestyle, Trends, Westside, Zara, H&M, or Zudio) within the preceding six months. A stratified random sampling method was utilized to ensure geographical representation across North Chennai, Central Chennai, and South Chennai. A total of 420 questionnaires were distributed, yielding 384 fully completed and valid responses (N = 384) suitable for statistical analysis.

4.2 Data Collection & Measurement Scales

The structured survey instrument consisted of two parts: Part A captured demographic variables and omni-channel usage habits, while Part B contained 20 measurement items adapted from validated scales for Channel Integration Quality, Perceived Convenience, and Customer Engagement Dimensions. All items in Part B were evaluated on a 5-point Likert scale ranging from 1 ('Strongly Disagree') to 5 ('Strongly Agree').

5. Data Analysis and Findings

Table: 5.1 Demographic Profile of Respondents

Demographic Variable	Category	Frequency (N=384)	Percentage (%)
Gender	Female	218	56.8%
Gender	Male	158	41.1%
Gender	Non-binary / Other	8	2.1%
Age Group	18 - 25 years	142	37.0%
Age Group	26 - 38 years	164	42.7%
Age Group	39 - 50 years	56	14.6%
Age Group	Above 50 years	22	5.7%
Occupation	IT / Private Sector Corporate	176	45.8%
Occupation	Students	84	21.9%
Occupation	Business / Entrepreneurs	62	16.1%
Occupation	Homemakers / Professionals	62	16.1%
Preferred Omni Channel Mode	Browse App -> Buy In-Store	148	38.5%
Preferred Omni Channel Mode	Try In-Store -> Buy via App (Showrooming)	112	29.2%
Preferred Omni Channel Mode	Buy Online, Pick Up In Store (BOPIS)	78	20.3%
Preferred Omni Channel Mode	Pure Online with In-Store Returns	46	12.0%

Table 5.2: Reliability and Construct Validity

Construct Name	Number of Items	Cronbach's Alpha (α)	Composite Reliability
Channel Integration Quality (INQUAL)	5	0.884	0.912
Perceived Channel Convenience (PCC)	4	0.856	0.890
Cognitive & Affective Engagement	4	0.871	0.901
Behavioral Engagement & Loyalty	4	0.892	0.923
Social / Advocacy Engagement	3	0.840	0.878

As indicated in Table 2, all measurement constructs exhibited high internal consistency reliability, with Cronbach's Alpha coefficients well exceeding the recommended threshold of 0.70. Confirmatory factor analysis verified convergent and discriminant validity across all dimensions.

5.3 Multiple Regression Analysis

To test Hypothesis Ha1, a multiple regression analysis was performed with Overall Customer Engagement as the dependent variable and Channel Integration Quality, Perceived Convenience, In-Store Personalization, and Brand Reputation as independent predictors.

Table 5.3: Multiple Regression Analysis

Model Predictor	Unstandardized B	Std. Error	Standardized Beta (β)	t-value	p-value (Sig.)
(Constant)	0.612	0.145	-	4.221	0.000
Channel Integration Quality	0.385	0.042	0.412	9.166	0.000*
Perceived Channel Convenience	0.274	0.038	0.305	7.210	0.000*
In-Store Digital Augmentation	0.182	0.035	0.201	5.200	0.000*
Cross-Channel Loyalty Program	0.126	0.031	0.142	4.065	0.000*

*Notes: Model R = 0.782, R-Square = 0.612, Adjusted R-Square = 0.608, F-statistic = 149.25 ($p < 0.001$). *Statistically significant at 1% level.*

The regression model accounts for 61.2% of the variance in customer engagement ($R^2 = 0.612$, $F = 149.25$, $p < 0.001$). Channel Integration Quality emerged as the single strongest positive predictor ($\beta = 0.412$, $p < 0.001$), followed by Perceived Channel Convenience ($\beta = 0.305$, $p < 0.001$). Consequently, null hypotheses H01 and H02 are rejected, confirming that channel integration and convenience are major catalysts for driving deep customer engagement among Chennai fashion consumers.

6. Managerial and Strategical Implications

The empirical findings offer vital strategic guidance for retail business managers, marketing strategists, and store operation leaders in Chennai's competitive fashion market:

- **1. Unified Inventory Visibility:** Retailers must eliminate inventory mismatch between mobile apps and store POS systems. Implementing real-time cloud ERP solutions ensures that when a customer checks item availability at Phoenix Marketcity or Express Avenue, the stock data is 100% accurate.
- **2. Frictionless BOPIS Workflows:** BOPIS service counters in high-footfall retail hubs like T. Nagar and Anna Nagar should be optimized for quick pick-ups (under 3 minutes) with dedicated parking/express pickup bays to enhance channel convenience.
- **3. Clienteling and Digital Associate Tools:** In-store associates should be equipped with tablet devices allowing them to assist shoppers in scanning QR codes, ordering out-of-stock sizes online with free home delivery, and accessing customer past order histories for personalized style recommendations.
- **4. Integrated Loyalty Ecosystems:** Loyalty points earned from physical store purchases must instantly reflect in the brand's mobile app and WhatsApp engagement channels, creating a continuous feedback loop that drives repeat purchases.

7. Conclusion and Scope for Future Research

In the era of reimagining management frameworks, fashion retailing in metropolitan centers like Chennai can no longer rely on standalone store formats or isolated e-commerce portals. Customer engagement is fundamentally driven by channel integration quality, speed of fulfillment, and seamless touchpoint continuity. By integrating digital interactive technologies within physical retail environments and unifying customer databases, fashion retailers can transform casual shoppers into deeply engaged brand advocates. Future research may extend this framework to Tier-2 and Tier-3 cities in Tamil Nadu (e.g., Coimbatore, Madurai, Tiruchirappalli) or examine the emerging role of Generative AI and Augmented Reality (AR) virtual try-on tools in enhancing fashion customer engagement.

References

1. Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research, 14*(3), 252–271.
2. Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). Competing in the age of omnichannel retailing. *MIT Sloan Management Review, 54*(4), 23–29.
3. Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing, 28*(2), 149–165. doi.org
4. Hoxha, A., & Zeqiri, J. (2021). The impact of omnichannel marketing on customer experience and loyalty in fashion retail. *Journal of Fashion Marketing and Management, 25*(4), 612–629.
5. Shen, X. L., Li, Y. J., Sun, Y., & Wang, N. (2018). Channel integration quality, experience quality, and omnichannel shopping outcomes: Official store vs. third-party platform. *International Journal of Information Management, 40*, 30–39.
6. Sousa, R., & Voss, C. A. (2006). Service quality in multichannel services employing virtual channels. *Journal of Service Research, 8*(4), 356–371. doi.org
7. Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omni-channel retailing: Introduction to the special issue on multi-channel retailing. *Journal of Retailing, 91*(2), 174–181. doi.org

Chapter 7

CUSTOMER EXPERIENCE MANAGEMENT AND DIGITAL MARKETING STRATEGIES IN URBAN RIDE-HAILING SERVICES: REIMAGINING PASSENGER SATISFACTION IN CHENNAI CITY

P.Meena
Research Scholar in Commerce, VISTAS Pallavaram & Assistant Professor
Department of Accounting and Finance, Agurchand Manmull Jain College
Meenambakkam, Chennai, Tamil Nadu
Dr.T.Sujatha*
Assistant Professor & Research Supervisor, Department of Commerce,
VISTAS, Pallavaram, Chennai, Tamil Nadu
**Corresponding Author Email: tsujatha.sms@velsuniv.ac.in*

Abstract
Purpose: *Urban mobility in Indian metropolitan cities has undergone a structural shift from informal street-hailed transport to algorithmic, app-mediated ride-hailing platforms. While early customer acquisition in the Indian ride-hailing market relied heavily on deep fare subsidies and promotional cashback, sustaining passenger satisfaction today requires a broader rethinking of digital marketing and customer experience management (CEM). This chapter examines how four core digital marketing dimensions—app-based personalization, dynamic pricing transparency, cross-channel integrated marketing communication (IMC), and customer relationship management (CRM) loyalty programs—influence overall passenger satisfaction and retention among ride-hailing commuters in Chennai city.*
Methodology: *Using a descriptive and analytical research design, primary data were collected from 240 regular commuters across three major zones of Chennai (North, Central, and South Chennai, including the Old Mahabalipuram Road IT corridor) through a structured questionnaire measured on a five-point Likert scale. Descriptive statistics, Pearson correlation, and multiple linear regression were applied to evaluate the relative strength of each marketing dimension.*
Major Results: *Empirical findings reveal that dynamic pricing transparency (beta = 0.364, p < 0.001) and CRM-driven service recovery and loyalty programs (beta = 0.298, p < 0.001) are the strongest predictors of passenger satisfaction in Chennai, followed by app-based personalization (beta = 0.215, p < 0.001) and cross-channel IMC (beta = 0.142, p < 0.01). Together, these four marketing strategies explain 64.8% of the variance (R^2 = 0.648) in passenger satisfaction. Qualitative feedback from commuters further highlights that hidden surge charges during peak monsoon hours, last-minute driver cancellations, and automated chatbot loops erode the gains made by promotional discounts.*
Managerial Implications: *For ride-hailing organizations operating in Chennai—such as Ola, Uber, Rapido, and emerging zero-commission platforms like Namma Yatri—reimagining management in a new framework means shifting budgets away from intrusive push notifications toward transparent fare communication, localized last-mile integration with Chennai Metro Rail, and responsive human-assisted grievance redressal.*
Keywords: *Customer Experience Management, Digital Marketing Strategies, Ride-Hailing Services, Passenger Satisfaction, Dynamic Pricing Transparency, Chennai City.*

Key References: *Parasuraman, Zeithaml, & Berry (1988); Kotler, Kartajaya, & Setiawan (2021); Lemon & Verhoef (2016); Venkatesh, Thong, & Xu (2012).*

1. Introduction

Public and private transport habits in Chennai have changed noticeably over the past decade. A city once defined almost entirely by suburban electric trains, Metropolitan Transport Corporation (MTC) buses, and street-hailed yellow-black auto-rickshaws now sees millions of daily trips booked through smartphone screens. Whether it is an information technology professional commuting along Old Mahabalipuram Road (OMR) from Sholinganallur to Siruseri, a family traveling from Anna Nagar to the Kilambakkam bus terminus, or a college student booking a two-wheeler bike taxi for a short feeder trip to a Chennai Metro station, ride-hailing applications have woven themselves into the daily routine of the city.

In the initial years of platform entry, marketing in the Indian ride-hailing sector was straightforward: whoever offered the steepest coupon code and highest referral bonus won the commuter. Aggregators such as Ola and Uber burned substantial venture capital to habit-form urban travelers, conditioning them to expect air-conditioned cab rides at prices comparable to negotiated street auto fares. However, as investor priorities shifted from raw gross merchandise value (GMV) to unit profitability, unconditional discounts dried up. Simultaneously, the competitive landscape in Chennai fractured. Alongside traditional four-wheeler cab aggregators, commuters began adopting Rapido for quick two-wheeler and auto transit, Red Taxi in select pockets, and Namma Yatri, which introduced an open-network, zero-commission subscription model that appealed directly to local auto drivers frustrated by platform commissions.

This market maturity has exposed a critical gap in how ride-hailing companies approach marketing. When fares rise during an evening downpour in T. Nagar or when three consecutive drivers cancel a ride after asking for the drop location and mode of payment, a twenty-rupee promotional discount code sent via WhatsApp does little to salvage the commuter's trust. In service organizations where the product is an intangible, real-time physical journey facilitated by an independent driver-partner, marketing cannot operate as an isolated promotional department. Instead, following the broader theme of reimagining management and organizations in a new framework, marketing strategy in ride-hailing must be understood as end-to-end Customer Experience Management (CEM) in a digital environment.

Every touchpoint on the commuter's smartphone—how clearly the app explains a surge multiplier, how accurately the GPS pins a narrow residential street in Mylapore, how relevant the push notifications are, and how quickly the in-app support resolves an overcharged fare—functions as a marketing signal. Consequently, examining the effectiveness of marketing strategies in enhancing passenger satisfaction requires looking beyond traditional advertising toward the digital service marketing mix (7Ps) and relationship management practices that actually keep Chennai's commuters loyal to a platform.

2. Review of Literature and Theoretical Grounding

2.1 Evolution of Service Marketing and the 7Ps in App-Based Mobility

Traditional services marketing literature established by Booms and Bitner (1981) expanded the classic four Ps (Product, Price, Place, Promotion) by adding People, Process, and Physical Evidence. In app-mediated ride-hailing, these seven elements converge inside a digital-physical hybrid environment. The "Product" is both the software interface and the physical transit; "Place" is virtual accessibility paired with real-world pickup wait times; "Process" is the algorithmic matching and payment workflow; and "People" refers to driver-partners who act as the human face of an otherwise faceless technology firm (Wirtz & Lovelock, 2021).

When a disconnect occurs between the digital promise made by the app and the physical behavior of the driver, passenger dissatisfaction rises sharply.

2.2 Customer Experience Management (CEM) in the Age of Digitalization

Lemon and Verhoef (2016) conceptualize customer experience as a multidimensional construct encompassing cognitive, emotional, behavioral, sensory, and social responses to a firm's offerings across the entire purchase journey. In the context of Marketing 5.0, Kotler, Kartajaya, and Setiawan (2021) argue that digital algorithms should augment human service rather than create friction. For urban ride-hailing users, the customer journey is divided into three distinct stages:

Pre-Ride Stage: App responsiveness, upfront fare visibility, coupon applicability, and estimated time of arrival (ETA).

In-Ride Stage: Driver courtesy, vehicle cleanliness, air-conditioning compliance, route adherence, and safety tracking.

Post-Ride Stage: Seamless digital payment (UPI, wallets), automated invoicing, loyalty points accumulation, and refund or grievance handling.

2.3 Dynamic Pricing, Perceived Fairness, and Promotional Effectiveness

Dynamic or "surge" pricing is designed as an economic equilibrium tool to attract more drivers to high-demand zones while rationing ride requests (Cachon, Daniels, & Lobel, 2017). From a marketing psychology perspective, however, Kahneman, Knetsch, and Thaler's (1986) dual entitlement principle suggests that consumers view price increases driven purely by sudden spikes in demand—such as sudden rain or public transit disruptions—as unfair exploitation. Studies in Indian metropolitan contexts indicate that while commuters tolerate moderate peak-hour differentials when explained transparently, opaque fare jumps between the booking screen and the final invoice severely undermine brand equity (ashok &kumar, 2022; Sharma & Das, 2020).

2.4 Integrated Marketing Communication (IMC) and CRM in Ride-Hailing

Modern ride-hailing platforms employ cross-channel communication across in-app banners, push notifications, SMS, email, and WhatsApp Business APIs. While personalized time-sensitive prompts (for instance, offering a morning commute pass on Monday mornings) improve conversion, excessive notification frequency leads to "notification fatigue," prompting users to mute the application altogether (Kumar & Reinartz, 2018). Conversely, structured Customer Relationship Management (CRM) programs—such as subscription ride passes, priority pickup tiers, and instant wallet refunds for disputed fares—build switching costs in a market where consumers routinely keep three or four competing ride-hailing apps installed on the same phone.

3. Statement of the Problem and Research Objectives

3.1 Statement of the Problem

Chennai presents a uniquely challenging market for ride-hailing aggregators. Unlike cities where street auto-rickshaws strictly follow meters, Chennai has had a long history of fare negotiation, which carried over into app-based platforms in the form of driver-partners demanding extra cash above the app estimate or refusing non-cash (UPI/card) bookings. In response, ride-hailing companies have deployed various marketing interventions: subscription passes, multi-modal options (auto, bike, mini, prime sedan), referral campaigns, and localized promotional messaging. Yet passenger complaints regarding fare unpredictability, cancellation harassment, and unhelpful automated customer support remain widespread. There is a clear need to evaluate which specific digital marketing strategies genuinely enhance passenger

satisfaction in Chennai and which ones merely generate superficial engagement without solving core commuter pain points.

3.2 Research Objectives

To examine the demographic and usage profile of ride-hailing commuters in Chennai city.

To evaluate the effectiveness of four core digital marketing dimensions—*App-Based Personalization*, *Dynamic Pricing Transparency*, *Cross-Channel Integrated Marketing Communication (IMC)*, and *CRM & Loyalty Rewards*—in shaping digital customer experience.

To measure the impact of these digital marketing strategies on overall passenger satisfaction and retention in Chennai's ride-hailing sector.

To propose an actionable managerial framework for ride-hailing organizations to align their marketing strategies with commuter expectations.

4. Conceptual Framework and Hypotheses

To align with the theme of reimagining organizations in a digital framework, this study proposes a model in which four strategic marketing pillars shape the commuter's digital customer experience, which in turn drives passenger satisfaction and long-term retention.

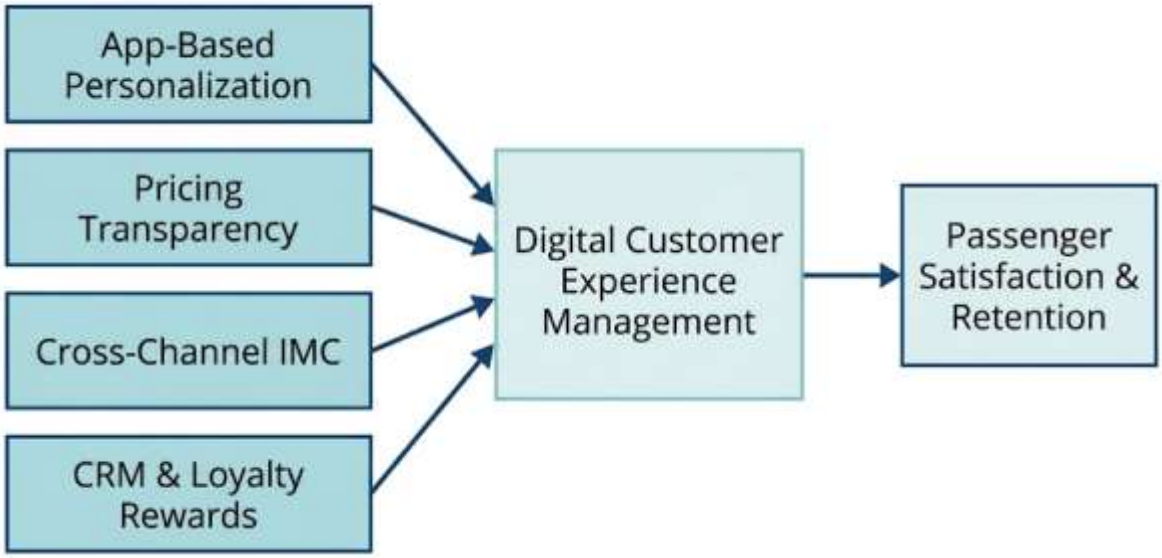


Figure 1: Conceptual Framework of Digital Marketing Strategies and Passenger Satisfaction in Ride-Hailing Services

Based on the conceptual framework shown in Figure 1, the following hypotheses are formulated:

H1: App-based personalization has a significant positive effect on passenger satisfaction in ride-hailing services in Chennai.

H2: Dynamic pricing transparency has a significant positive effect on passenger satisfaction in ride-hailing services in Chennai.

H3: Cross-channel integrated marketing communication (IMC) has a significant positive effect on passenger satisfaction in ride-hailing services in Chennai.

H4:CRM and loyalty reward programs have a significant positive effect on passenger satisfaction in ride-hailing services in Chennai.

5. Research Methodology and Empirical Analysis

5.1 Research Design and Sampling

The study adopts a descriptive and causal-comparative research design. Primary data were gathered from commuters residing in Chennai who had used at least one ride-hailing application (Ola, Uber, Rapido, or Namma Yatri) at least four times in the preceding month.

To capture geographical diversity across the metropolitan area, stratified convenience sampling was employed across three corridors:
South Chennai & IT Corridor (OMR, Velachery, Adyar, Tambaram): 95 respondents
Central Chennai (T. Nagar, Nungambakkam, Mylapore, Egmore, Anna Nagar): 85 respondents
North Chennai (Perambur, Royapuram, Thiruvottiyur, Kolathur): 60 respondents
Out of 265 distributed questionnaires (administered via Google Forms and in-person intercepts near major transit hubs), **240 complete and valid responses** were retained for analysis, yielding an effective response rate of 90.5%. Scale reliability assessed via Cronbach's Alpha ranged between 0.812 and 0.889 across all five constructs, exceeding Nunnally's (1978) benchmark of 0.70.

5.2 Respondent Profile and Usage Patterns

Table 1: Demographic and Ride-Hailing Usage Profile of Respondents in Chennai (N = 240)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	126	52.5%
	Female	114	47.5%
Age Group	18 – 25 Years	68	28.3%
	26 – 35 Years	94	39.2%
	36 – 45 Years	46	19.2%
	Above 45 Years	32	13.3%
Occupation	IT / Corporate Employees	98	40.8%
	College Students / Scholars	54	22.5%
	Self-Employed / Business	42	17.5%
	Public Sector / Homemakers / Others	46	19.2%
Most Frequently Used App	Uber	82	34.2%
	Ola	64	26.7%
	Rapido (Bike / Auto)	56	23.3%
	Namma Yatri	38	15.8%
Primary Purpose of Ride	Daily Office / College Commute	112	46.7%

Variable	Category	Frequency (n)	Percentage (%)
	Railway / Airport / Bus Terminus Transit	58	24.2%
	Shopping / Healthcare / Leisure	44	18.3%
	Late-Night / Monsoon Emergency Travel	26	10.8%

Source: Primary Survey Data (Chennai City)

Table 1 shows a nearly balanced gender distribution (52.5% male and 47.5% female), reflecting the heavy reliance of working women in Chennai on app-based transit for safety and door-to-door convenience. Nearly two-thirds of the sample (67.5%) fall between 18 and 35 years of age, with IT and corporate employees representing the largest occupational segment (40.8%). Interestingly, while Uber (34.2%) and Ola (26.7%) continue to hold the majority share, Rapido (23.3%) and Namma Yatri (15.8%) have captured nearly two-fifths of primary usage, primarily driven by short-distance auto and two-wheeler commutes where four-wheeler cabs get stuck in peak Chennai traffic.

5.3 Commuter Perception of Digital Marketing Strategies

Table 2: Descriptive Statistics and Reliability of Marketing Strategy Dimensions (N = 240)

Construct / Dimension	Key Measured Items	Mean	Std. Dev.	Cronbach's α
1.App-Based Personalization	Saved locations, tailored route/vehicle suggestions, localized Tamil/English UI, customized commute passes	3.84	0.76	0.834
2.Dynamic Pricing Transparency	Upfront fare clarity, absence of hidden post-ride charges, fair surge explanations, parity between app fare and driver demand	2.91	0.94	0.871
3.Cross-Channel IMC	Relevance of push notifications, WhatsApp booking updates, seasonal promo codes, non-intrusive ad frequency	3.52	0.82	0.812
4. CRM & Loyalty Rewards	Subscription pass value, speed of refund for overcharging, human support accessibility, safety helpline responsiveness	3.18	0.89	0.865
5.Overall Passenger Satisfaction	Satisfaction with value for money, willingness to recommend, intention to continue using the	3.46	0.84	0.889

Construct / Dimension	Key Measured Items	Mean	Std. Dev.	Cronbach's α
	primary platform			

Source: Computed from Primary Data (5-Point Scale: 1 = Strongly Disagree to 5 = Strongly Agree).

A closer look at Table 2 highlights a striking contrast in how Chennai commuters evaluate ride-hailing marketing strategies. *App-Based Personalization* receives the highest mean rating (M = 3.84, SD = 0.76), indicating that users appreciate intuitive app interfaces, saved home/office pins, and multi-modal vehicle recommendations. Conversely, *Dynamic Pricing Transparency* records the lowest mean score (M = 2.91, SD = 0.94), accompanied by the highest standard deviation. Commuters expressed strong frustration over the gap between the "upfront fare" advertised on the app and the actual price demanded by drivers via phone call prior to pickup. Similarly, *CRM & Loyalty Rewards* (M = 3.18) scored moderately low because automated in-app chatbots frequently fail to resolve complex disputes involving cash vs. UPI double payments.

5.4 Multiple Regression Analysis: Impact of Marketing Strategies on Passenger Satisfaction

To test Hypotheses **H1** through **H4**, multiple linear regression was conducted with the four digital marketing dimensions as independent variables and Overall Passenger Satisfaction as the dependent variable.

Table 3: Multiple Regression Results Predicting Passenger Satisfaction in Ride-Hailing Services

Independent Variables	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (β)	t-value	p-value (Sig.)	Hypothesis Result
(Constant)	0.418	0.164	—	2.549	0.011*	—
App-Based Personalization (H1)	0.238	0.054	0.215	4.407	< 0.001**	Supported
Dynamic Pricing Transparency (H2)	0.325	0.043	0.364	7.558	< 0.001**	Supported
Cross-Channel IMC (H3)	0.145	0.049	0.142	2.959	0.003*	Supported
CRM & Loyalty Rewards	0.281	0.046	0.298	6.109	< 0.001**	Supported

Independent Variables	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (β)	t-value	p-value (Sig.)	Hypothesis Result
(H4)						

Model Summary: R = 0.805; R^2 = 0.648; Adjusted R^2 = 0.642; F(4, 235) = 108.14, p < 0.001.Note: Significant at p < 0.001 level; *Significant at p < 0.01 level.

The regression model is statistically significant (F = 108.14, p < 0.001) and accounts for **64.8% of the total variance** (R^2 = 0.648) in passenger satisfaction among ride-hailing users in Chennai. All four hypotheses (H1,H2,H3 and H4) are statistically supported:

Dynamic Pricing Transparency (beta = 0.364, t = 7.558, p < 0.001) emerges as the single most powerful determinant of passenger satisfaction. In a price-sensitive yet convenience-seeking urban market like Chennai, commuters reward platforms that honor their quoted upfront fares without mid-booking surprises or informal extra-cash demands.

CRM & Loyalty Rewards (beta = 0.298, t = 6.109, p < 0.001) ranks second in impact. Commuters place high value on how an organization treats them when a service failure happens—specifically instant wallet credits for wrongful cancellation fees and predictable subscription passes for daily office travel.

App-Based Personalization (beta = 0.215, t = 4.407, p < 0.001) exerts a strong positive effect. Features such as predictive destination shortcuts during morning rush hours and seamless integration with UPI payment apps reduce booking cognitive load.

Cross-Channel IMC (beta = 0.142, t = 2.959, p = 0.003) has a positive and statistically significant effect, though it is the weakest among the four predictors. This confirms that promotional messages and festival coupon codes cannot compensate for broken pricing or service fulfillment processes.

6. Discussion of Findings in the Chennai Urban Context

The empirical evidence gathered in this study challenges conventional assumptions about digital marketing in platform economies. Many ride-hailing firms treat marketing primarily as a user-acquisition funnel—flooding smartphones with push notifications, seasonal promo codes during Pongal or Diwali, and celebrity-endorsed brand campaigns. While Cross-Channel IMC does contribute positively to satisfaction (beta = 0.142), Chennai commuters clearly distinguish between *promotional noise* and *structural service value*.

Three ground-level realities unique to Chennai explain why **Dynamic Pricing Transparency** (beta = 0.364) and **CRM & Loyalty Programs** (beta = 0.298) dominate passenger satisfaction:

The "Extra Over App Fare" Friction: A persistent pain point reported by respondents across Anna Nagar, Velachery, and Tambaram is the phone call immediately following ride acceptance: *"Where is the drop? How much does it show? Pay cash and give ₹30 to ₹50 extra."* When a marketing campaign promises a ₹150 cab ride via a push notification, but the commuter is forced to negotiate ₹200 on the phone or face three cancellations, the promotional campaign backfires. Platforms that enforce strict fare compliance or use driver-friendly zero-commission models (where drivers are more willing to accept the displayed fare) earn substantially higher organic trust.

Monsoon and Peak-Hour Vulnerability: Chennai experiences intense northeast monsoon spells and severe evening congestion along arterial roads like Anna Salai, GST Road, and OMR. During these hours, algorithmic surge pricing often multiplies fares by 1.8 times to 2.5

times. Commuters noted that when apps transparently display why a surge is active—or offer a "wait 10 minutes for a lower fare" option—perceived fairness improves significantly.

Multi-Modal Transit Integration: With the expansion of Chennai Metro Rail Phase I and Phase II construction corridors, a growing share of trips in Chennai are short 2-to-4 kilometer feeder rides between residential streets and metro stations. Marketing strategies that bundle metro feeder passes or promote quick two-wheeler and auto-rickshaw options during peak traffic hours resonate far better with daily commuters than generic intercity cab discounts.

7. Managerial Implications for Reimagining Ride-Hailing Organizations

In line with the book's overarching theme—*Reimagining Management and Organizations in a New Framework*—ride-hailing companies must break down the operational silo between "Marketing" and "Platform Operations." Based on the study's findings, four concrete managerial recommendations are proposed:

Shift from Promotional Discounts to "Guaranteed Fare Integrity": Marketing teams should work alongside pricing algorithms to introduce *Fare Lock Passes* for daily commuters along high-density corridors like OMR, Guindy, and Ambattur Industrial Estate. Guaranteeing a fixed fare band between 8:00 AM and 10:30 AM builds deeper brand loyalty than sporadic ₹25 discount coupons.

Treat Driver-Partners as Internal Marketing Co-Creators: In ride-hailing, the driver-partner is the physical touchpoint of the brand. When high platform commissions or delayed digital payouts frustrate drivers, they pass that hostility onto passengers by rejecting UPI payments or switching off the air conditioner. Reimagining internal marketing—through transparent driver subscription models, fuel cashback partnerships, and instant UPI settlement for drivers—directly improves passenger-facing service quality.

Humanize Post-Ride CRM and Grievance Redressal: While AI chatbots handle routine queries efficiently, commuters who have been overcharged or stranded late at night feel alienated by rigid automated menus. Introducing a one-tap escalation to a regional language (Tamil/English) human support agent for high-severity trip issues can turn a dissatisfied commuter into a long-term brand advocate.

Hyper-Localize Cross-Channel Communication: Instead of broadcasting generic pan-India push notifications at odd hours, platforms should use geo-fenced, context-aware IMC. For instance, sending a timely weather-alert booking prompt ahead of evening rain forecasts in Chennai, or offering fixed-price airport packages to residents near T. Nagar and Adyar, increases utility without causing notification fatigue.

8. Conclusion and Scope for Future Research

The digital transformation of urban transport has turned ride-hailing apps into indispensable public utilities in cities like Chennai. However, as this study demonstrates, the effectiveness of marketing strategies in enhancing passenger satisfaction no longer rests on aggressive promotional discounting alone. Through an empirical examination of 240 commuters across Chennai, this chapter establishes that **dynamic pricing transparency** and **responsive CRM and loyalty systems** are the true cornerstones of passenger satisfaction, supported by intuitive **app-based personalization** and disciplined **cross-channel communication**.

For management scholars and industry practitioners reimagining service organizations in a new framework, the lesson is unmistakable: in an algorithmic service economy, **transparency is the strongest marketing strategy**. When a platform respects the commuter's time, honors the upfront price shown on the screen, and resolves service breakdowns with empathy, customer satisfaction and retention follow naturally.

Scope for Future Research: Future doctoral and empirical extensions of this work can compare passenger satisfaction between commission-based aggregators (Ola, Uber) and open-

network decentralized platforms (ONDC-backed Namma Yatri) across Tier-1 and Tier-2 cities in Tamil Nadu such as Coimbatore, Madurai, and Tiruchirappalli, or examine the moderating role of driver-partner job satisfaction on passenger experience.

9. References

1. Ashok, K., & Kumar, S. (2022). Determinants of customer satisfaction and switching intentions in app-based cab aggregators: Empirical evidence from South Indian metros. *Journal of Services Research*, 22(1), 45–62.
2. Booms, B. H., & Bitner, M. J. (1981). Marketing strategies and organization structures for service firms. In J. H. Donnelly & W. R. George (Eds.), *Marketing of Services* (pp. 47–51). American Marketing Association.
3. Cachon, G. P., Daniels, K. M., & Lobel, R. (2017). The role of surge pricing on a service platform with self-scheduling capacity. *Manufacturing & Service Operations Management*, 19(3), 368–384.
4. Kahneman, D., Knetsch, J. L., & Thaler, R. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. *The American Economic Review*, 76(4), 728–741.
5. Kotler, P., Kartajaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for humanity*. John Wiley & Sons.
6. Kumar, V., & Reinartz, W. (2018). *Customer relationship management: Concept, strategy, and tools* (3rd ed.). Springer.
7. Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69–96.
8. Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
9. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
10. Sharma, K., & Das, S. (2020). Service quality and customer satisfaction with cab aggregators in India: A structural equation modeling approach. *International Journal of Business Excellence*, 21(3), 389–407.
11. Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. MIS Quarterly, 36(1), 157–178.
12. Wirtz, J., & Lovelock, C. (2021). Services marketing: People, technology, strategy (9th ed.). World Scientific Publishing.

Chapter 8

A DESCRIPTIVE STUDY ON ETHICAL ISSUES IN MARKETING

Dr.A.Sangeetha*
Assistant Professor, Department of Commerce**,** Sri Ramakrishna College of Arts & Science, Coimbatore Tamil Nadu
Dr.G.Agila,
Associate Professor & Head, Department of Commerce**,** Sri Ramakrishna College of Arts & Science, Coimbatore Tamil Nadu
**Corresponding Author Email: sangeetha@srcas.ac.in*

Abstract
This study explores key ethical dilemmas in marketing, proposes solutions, and emphasizes the importance of ethical considerations in fostering consumer confidence and long-term business success. Marketing ethics encompass a range of concerns, including truth in advertising, consumer privacy, targeting vulnerable populations, environmental impact, fair pricing, cultural sensitivity, and ethical use of technology. These issues arise from the potential for marketing practices to mislead consumers, exploit vulnerabilities, or harm societal values and the environment. For instance, deceptive advertising can erode consumer trust, while unethical data practices privacy rights and regulatory compliance. To address these challenges, businesses are urged to adopt robust ethical frameworks and practices. Solutions include implementing transparent communication strategies, adhering strictly to truthfulness standards in advertising, obtaining informed consent for data collection, and promoting fair pricing and sustainable business practices. Moreover, cultivating a consumer-centric approach that prioritizes ethical considerations can enhance brand reputation and foster loyalty among increasingly discerning consumers. Regulatory compliance plays a crucial role in shaping ethical marketing practices, with laws such as GDPR and CCPA setting standards for data privacy and consumer protection. Industry self-regulation and adherence to ethical guidelines further reinforce responsible marketing conduct.
Keywords: Ethical, Issues, Marketing, Challenges and Solutions.

Introduction

Ethics in marketing is a fundamental framework that guides businesses in navigating the balance between profitability and responsible conduct. At its core, ethical marketing involves principles of honesty, transparency, fairness, and respect for stakeholders' interests, encompassing consumers, employees, communities, and the environment. In today's interconnected world, where consumer skepticism and demand for corporate accountability are on the rise, ethical considerations in marketing have become more critical than ever. Marketing activities influence consumer perceptions, shape societal values, and impact economic and environmental landscapes. However, unethical marketing practices, such as misleading advertising, exploitative targeting, and irresponsible use of consumer data, can lead to distrust, regulatory scrutiny, and long-term reputational damage. Therefore, businesses must proactively adopt ethical guidelines and practices to build trust, mitigate risks, and foster sustainable relationships with their stakeholders.

This study sets the stage for exploring the multifaceted challenges and solutions in ethical marketing. By examining specific ethical dilemmas, regulatory frameworks, industry standards, and evolving consumer expectations, businesses can cultivate a culture of ethical responsibility that not only enhances brand reputation but also contributes positively to society at large. In essence, ethical marketing isn't just about compliance; it's about integrity,

transparency, and a commitment to doing business responsibly in an increasingly complex global marketplace.

Objective of the Study

This study explores key ethical dilemmas in marketing, and proposes solutions.

Research Methodology

This study is based on secondary sources of data such as articles, books, journals, research papers, websites and other sources.

Ethical Issues in Marketing: Challenges and Solutions

Ethical issues in marketing have become increasingly prominent as businesses strive to balance profitability with social responsibility. Marketing practices influence consumer behavior, shape societal norms, and impact the environment. However, ethical lapses in marketing can lead to distrust among consumers, legal repercussions, and damage to brand reputation. In this comprehensive discussion, the study delves into various ethical challenges in marketing, explore potential solutions, and consider the broader implications for businesses and society.

1. **Truth in Advertising**

One of the fundamental ethical challenges in marketing is ensuring truthfulness in advertising. This involves the accuracy of claims made about products or services and the transparency of marketing communications.

- Challenge: Misleading advertisements that exaggerate product benefits, omit important information, or use ambiguous language can deceive consumers and erode trust.
- Impact: Consumers may make purchasing decisions based on false information, leading to dissatisfaction and potential harm.
- Solution: Adherence to truthfulness standards set by regulatory bodies, substantiation of claims with credible evidence, and clear communication of product limitations.

2. Consumer Privacy

The rapid advancement of technology has enabled marketers to gather extensive consumer data, raising significant ethical concerns regarding privacy and data protection.

- Challenge: Unauthorized collection, storage, and use of consumer data without adequate consent or transparency can infringe on privacy rights.
- Impact: Consumer mistrust, potential breaches of privacy regulations (e.g., GDPR, CCPA), and vulnerability to data breaches.
- Solution: Implementation of stringent data protection policies, transparent disclosure of data practices, obtaining explicit consent for data collection, and minimizing data retention.

3. Targeting Vulnerable Groups

Marketing practices that exploit or unfairly target vulnerable populations, such as children, elderly, or economically disadvantaged groups, raise ethical red flags.

- Challenge: Manipulative advertising tactics that exploit vulnerabilities or target groups incapable of making informed decisions.
- Impact: Potential harm to vulnerable groups, perpetuation of societal inequalities, and erosion of trust in brands.
- Solution: Adherence to ethical guidelines that prohibit exploitation, consideration of societal impact in marketing strategies, and responsible targeting practices.

4. Environmental Impact

With growing awareness of environmental issues, consumers expect businesses to adopt sustainable practices and truthful environmental marketing.

- Challenge: Green washing-making false or exaggerated claims about environmental benefits—undermines consumer trust and misleads environmentally conscious consumers.
- Impact: Damage to brand reputation, regulatory scrutiny, and missed opportunities for

genuine sustainability efforts.

- Solution: Transparent communication of environmental efforts, adherence to recognized standards (e.g., ISO 14000), and integration of sustainable practices throughout the supply chain.

5. Pricing Ethics

Fair pricing practices and ethical considerations in pricing strategies are critical to maintaining consumer trust and regulatory compliance.

- Challenge: Price gouging during crises, deceptive pricing tactics, and unfair competition practices can harm consumers and undermine market integrity.
- Impact: Consumer backlash, legal penalties, and erosion of brand reputation.
- Solution: Adherence to ethical pricing guidelines, avoidance of exploitative pricing practices, and commitment to fair competition principles.

6. Influence on Cultural Norms

Marketing campaigns have the power to shape cultural norms and societal values, presenting ethical dilemmas regarding the portrayal of diverse communities and social issues.

- Challenge: Stereotypical representations, cultural insensitivity, and reinforcement of harmful norms can perpetuate social inequalities.
- Impact: Backlash from communities, reputational damage, and missed opportunities for inclusive marketing.
- Solution: Cultural competence in marketing strategies, diversity in advertising representation, and sensitivity to social issues affecting diverse populations.

7. Ethical Issues in Digital Marketing

The digital landscape presents unique ethical challenges due to its rapid evolution, extensive reach, and potential for invasive practices.

- Challenge: Intrusive advertising techniques (e.g., adware, pop-ups), deceptive digital marketing practices, and manipulation through algorithms.
- Impact: Consumer annoyance, privacy concerns, and regulatory scrutiny (e.g., GDPR, COPPA).
- Solution: Ethical use of consumer data, adherence to digital advertising standards, transparency in algorithmic processes, and respect for consumer consent preferences.

Solutions for Ethical Marketing Practices

1. Establish Ethical Guidelines and Standards

- Develop comprehensive ethical guidelines that govern marketing practices, ensuring alignment with organizational values and regulatory requirements.
- Provide regular training and education to marketing teams on ethical issues, emphasizing critical thinking and ethical decision-making skills.

2. Enhance Transparency and Accountability

- Adopt transparent communication practices in marketing campaigns, including clear disclosures of product information, pricing, and data handling practices.
- Implement mechanisms for accountability, such as internal audits and third-party certifications (e.g., Fair Trade, B Corp).

3. Consumer-Centric Approach

- Prioritize consumer welfare in marketing strategies, ensuring that campaigns are respectful, beneficial, and transparent to consumers.
- Solicit consumer feedback and integrate it into marketing decisions to align with consumer expectations and preferences.

4. Sustainability and Corporate Social Responsibility (CSR)

- Integrate sustainability principles into marketing strategies, emphasizing genuine

environmental stewardship and social responsibility.

- Communicate CSR initiatives honestly and transparently to build trust with environmentally and socially conscious consumers.

5. Ethical Use of Technology and Data

- Adhere to ethical standards in the collection, storage, and use of consumer data, respecting privacy rights and obtaining informed consent.
- Implement robust cyber security measures to protect consumer data from breaches and unauthorized access.

6. Collaboration and Stakeholder Engagement

- Collaborate with industry peers, regulators, advocacy groups, and stakeholders to address ethical challenges collectively.
- Engage in dialogue with stakeholders to understand concerns, gather feedback, and enhance ethical marketing practices collaboratively.

7. Regulatory Compliance

- Stay abreast of evolving regulatory requirements in marketing ethics, ensuring compliance with laws related to advertising, consumer protection, and data privacy.
- Proactively adapt marketing strategies to align with regulatory changes and industry best practices.

Conclusion

Ethical issues in marketing represent critical considerations for businesses aiming to thrive in a socially conscious and digitally interconnected world. Throughout this discussion, we've explored the multifaceted challenges-from truth in advertising and consumer privacy to sustainable practices and cultural sensitivity-that underscore the importance of ethical marketing. Addressing these challenges requires a proactive commitment to transparency, fairness, and accountability in all marketing endeavors. By adhering to stringent ethical standards, businesses can not only mitigate legal and reputational risks but also foster deeper connections with consumers based on trust and integrity. Moreover, ethical marketing practices contribute to a more equitable marketplace where consumer rights are respected, vulnerable populations are safeguarded, and environmental sustainability is prioritized.

Moving forward, businesses must continue to evolve their ethical frameworks in response to changing consumer expectations, technological advancements, and regulatory landscapes. Embracing ethical marketing isn't just a moral imperative; it's a strategic advantage that enhances brand resilience and long-term profitability in an increasingly competitive global economy.

References

1. Drumwright, M. E., & Murphy, P. E. (2004). How advertising practitioners view ethics: Moral muteness, moral myopia, and moral imagination. Journal of Advertising, 33(2), 7-24.
2. Kotler, P., & Armstrong, G. (2016). Principles of marketing (19th global ed.). Pearson.
3. Murphy, P. E., Laczniak, R. N., Bowie, N. E., & Klein, T. A. (2005). Ethical marketing. Pearson Prentice Hall.
4. Shaw, D., & Shiu, E. (2002). Ethics in consumer choice: A multivariate modeling approach. European Journal of Marketing, 36(5/6), 472-495.
5. Smith, N. C., & Quelch, J. A. (1996). Ethics in marketing: International cases and perspectives. Irwin.

Chapter 9

SUSTAINABLE TAMIL NADU 2030: INTEGRATING SOCIAL EQUITY, ECONOMIC GROWTH, ENVIRONMENTAL CARE, DIGITAL TRANSFORMATION, AND FINANCIAL INCLUSION

Dr.R.Radjavally
Assistant Professor of Economics
DKM College for Women (Autonomous), Vellore Tamil Nadu
Email: shruti.rajesh2005@gmail.com

Abstract
In this article, we put forward an integrated approach to promote sustainability by connecting people, policy, and technology. In Tamil Nadu, we explore 4P circular economy hubs (Public-Private-People Partnership), Green-FinTech literacy programmes, gamified digital platforms and data-enabled policy innovation. By seeking to mobilise multi-stakeholder collaboration and hyperlocal methodologies, we develop a framework that can build on resource efficiency, financial inclusion and ecological resilience. In particular, it responds to identified disparities across the region. This roadmap presents a scaleable framework for achieving the Sustainable Development Goals (SDGs) and supporting Tamil Nadu's vision for 2030, while also supporting the equitable economy in terms of profits, people and planet.
Keywords: *Public-Private-People Partnerships, Circular Economy, Green-FinTech, Gamification, Sustainable Development, Tamil Nadu.*

1. Introduction

Tackling sustainable development requires innovative, integrated approaches rather than stereotypical compartmentalized approaches. In this framework, we provide a consolidated model to tackle our shared challenges of environmental degradation, social exclusion, and economic inequality in the context of Tamil Nadu.

By combining multi-stakeholder collaboration through Public-Private-People Partnerships (4Ps), digital financial inclusion with Green-FinTech Literacy, and data driven hyper-localized policy creation, we generate a model for scalable holistic growth. The model incorporates gamification mechanisms for public engagement in decision-making processes and 'circular economy hubs' to convert waste into resources to connect economic actions to environmental sustainability and social equity to achieve the SDGs and Tamil Nadu's 2030 vision.

Fundamental Objectives

- To build collaborative Public-Private-People Partnership (4P) models that create circular economy hubs, reducing waste and providing inclusive pathways to economic opportunity.
- To carry out integrated Green-FinTech literacy campaigns that improve financial inclusion and empower communities to engage in the green digital economy.
- To implement a gamified digital platform that rewards and tracks citizen action in social, economic, and environmental sustainability.
- To apply data-informed, hyper-localized analytics to develop strategic policies to mitigate regional barriers and allow for equitable growth across all districts.

1.1 Need of the study

This study is needed due to the crucial disparities between top-down policy directives and on-the-ground implementation variation in sustainable development. Conventional systems of governance and policies have operated in silos, not taking advantage of synergies between technology, finance, and community involvement. There is an urgent need for integrated approaches to support Tamil Nadu's challenges of waste, financial exclusion, regional

imbalances while balancing economic growth with ecological sustainability and social equity.

2. Literature Survey

Sharma et al. (2023) stress the great potential for India to produce green hydrogen from its solar, wind, and coastal resources. They noted the renewable energy potential of states such as Gujarat, Andhra Pradesh, and Tamil Nadu and concluded that, if there are supportive policies and infrastructure, India could go to net-zero emissions and lead sustainability in these areas collectively.

Syahrizal et al. (2025) point out that combining finance digitalization with a circular economy creates sustainable finance and strengthens MSMEs and communities. Expanding finance access and unified resource optimization with ESG policies promote social equity, economic growth, environment preservation, and digital inclusion; an interconnected network leading to resilient and inclusive economies in villages towards Sustainable Tamil Nadu 2030.

Lomachynska and Gorniak (2024) point to innovation as an enabler of sustainable growth, competitiveness and social inclusion. The combination of technological advances, digital transformation, environmental and social innovations, and financial inclusion reinforces Tamil Nadu's vision for 2030 by creating the conditions for human capital, entrepreneurship, and policy implementation to work together to create durable and resilient systems for equitable economic and environmental sustainability.

Dai et al. (2022) conclude that by its self, financial inclusion, with economic growth, environmental protection technologies, and human capital, is necessary for renewable energy efficiency and a low-carbon economy, and they recommend that policymakers work to improve the financial systems.

C. G. et al.(2025) study FinTech in advancing sustainable financial inclusion. Evaluating results from 500 rural customers, they identify technology access, awareness and knowledge as significant factors in enabling inclusion and subsequently the adoption of solutions that will enhance financial sustainability as well as allow institutions to adapt to the changing market, easier.

3. Methodology

Nature of study: Quantitative;
Sample size: 400 respondents;
Source of data: Primary (structured surveys);
Nature of Population: Adults across urban and rural Tamil Nadu;
Analysis Tools: Regression analysis and descriptive statistics.

This study adopts a mixed-methods, empirical approach to visualize a Sustainable Tamil Nadu 2030. We will use a stratified sampling approach to collect data from different districts using structured surveys and focus groups. Quantitative data will be collected to facilitate regression modeling to quantify the interlinkages among the five pillars, while qualitative data will be useful to contextualize the quantitative data, and provide integrated policy recommendations for holistic development.

3.1 Research Objective

The purpose of this study is to develop an established framework to achieve Sustainable Tamil Nadu 2030. We will compare the various synergies between social equity, economic growth, environmental care, digital transformation, and financial inclusion. We will evaluate current programs, identify potential barriers, and assess the efficacy of policy and the way in which these pillars can work together. The purpose of the study is to provide practical frameworks for inclusive and sustainable development through empirical assessment, and engage with fellow stakeholders.

3.1.1 Public-Private-People Partnerships for Circular Economy Hubs

The concept of Public-Private-People Partnerships (4Ps) for Circular Economy Hubs is based on the collaboration between government, business community and citizens to develop sustainable local ecosystems in partnership. The hubs convert waste to resources, stimulate green innovation and create inclusive economic opportunities which closely relate to Tamil Nadu's integrated sustainability objectives.

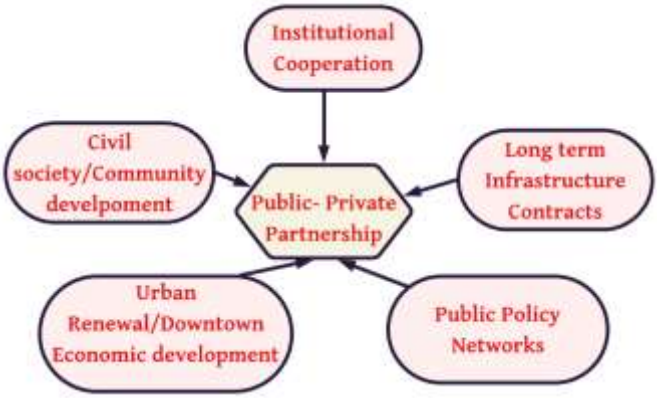


Figure 1: Models of Multi-Sector Collaboration for Development

These hubs utilize government policy, private financing, and community engagement to establish resource-efficient industrial clusters. They achieve waste-to-resource and green entrepreneurship in the local economy, reducing environmental impacts while creating jobs. In summary, 4P-driven circular hubs offer an actionable, scalable model for achieving the triple bottom line: environmental sustainability, economic resilience, and social equity.

3.1.2 Integrated "Green-FinTech" Literacy Drives

Green-FinTech Literacy Drives aim to raise environmental stewardship and finance technology-driven capabilities from the integrated perspective of solving environmental issues with economic opportunities. These programs integrate sustainable management education across an array of digital financial literacy, with the goal of enriching digital economies, thereby allowing participants in green economies to use digital tools such as UPI payments, e-wallets, eco-subsidies and other regional, marketplace and consumer related financial resources.

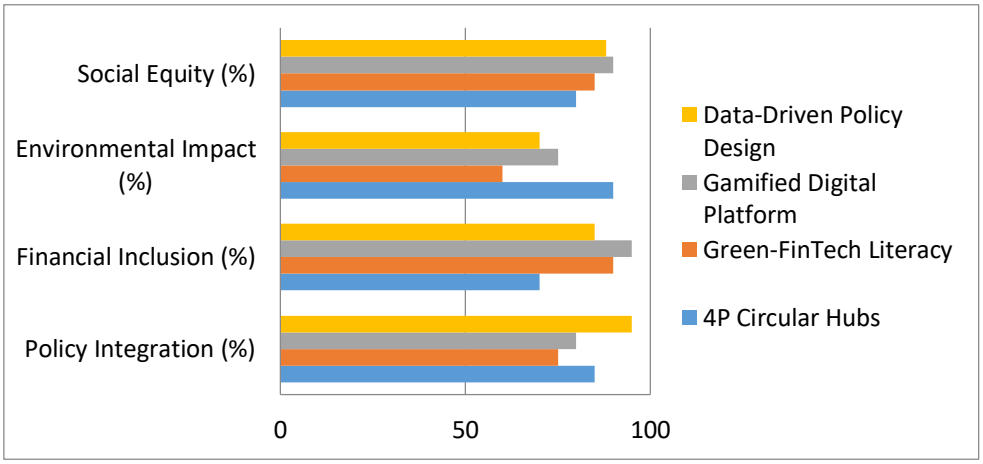


Figure 2: Comparative Impact Metrics of Tamil Nadu's Sustainability Initiative

Figure 2 quantifies the projected effectiveness of four key programs across critical sustainability dimensions, using percentage scores to evaluate their relative strengths in policy, finance, environment, and social equity. These drives educate the community about green loans, sustainable insurance and digital platforms for eco-subsidies. These undertakings offer

financial inclusion while they educate about environmental concerns. They encourage people to think about an alternative vision of lifestyle that integrates climate action with financial performance. Conclusion: These literacy initiatives connect financial empowerment with ecological stewardship and support Tamil Nadu's holistic sustainable development goals.

3.1.3 Gamified Digital Platforms for Holistic Inclusion

To drive faster progress toward Sustainable Tamil Nadu 2030, we further propose a collective gamify featuring digital platform. This project connects all five pillars – social equity, economic development, environmental stewardship, digital revolution, and financial inclusion – by incentivizing citizens to engage through rewards, enhancing participation, and integrating sustainable changes to behavior across the state.

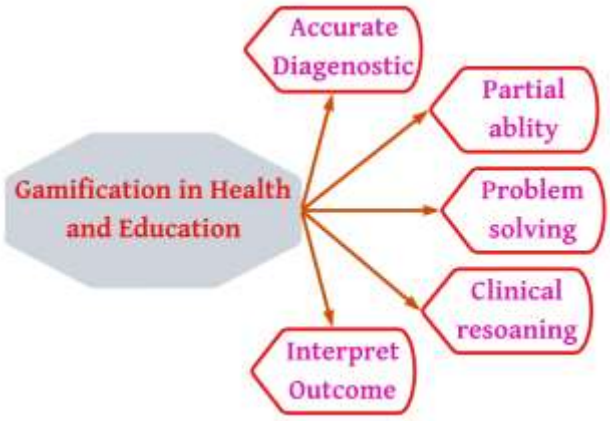


Figure 3: Core Mechanics of Gamification in Health and Education

Figure 3 illustrates the key components like accurate diagnostics and problem-solving that gamification leverages to enhance engagement and improve outcomes in clinical and educational training, making learning and reasoning more interactive and effective. The platform captures and rewards activities such as making digital payments, recycling waste, accessing social/welfare schemes, and enhancing financial literacy. The platform engages users with sustainability and compels them to adopt positive changes at scale. This develops further holistic inclusion and continually tracks outcomes towards the integrated sustainable development goals of Tamil Nadu, to create a more empowered, and ecologically conscious society.

3.1.4 Data-Driven, Hyper-Localized Policy Design

Sustainable Tamil Nadu 2030 requires targeted interventions. This identification of district-level barriers—such as varying financial literacy and access to digital platforms—involves data-driven, hyper-localized policy design. Employing our resources wisely will lead to equitable, inclusive, and efficient development. With structured surveys and regression analysis, policies can be tailored to address local requirements, thereby increasing financial and digital inclusion. This communicates the best use of resources with the best sustainability and equality, in turn closing the experience divides across regions. This provides socially equitable and economically resilient communities, which is life-changing for sustainable, holistic development across Tamil Nadu.

4. Findings

The integrated framework of Sustainable Tamil Nadu 2030 establishes a cycle with substantial self-reinforcing dynamics. The 4P Circular Economy Hubs will operationalize the triple bottom line, with new jobs and growth from waste in a way that also enables environmental sustainability. The Green-FinTech Literacy Drives overcome the financial splintering and digital divides among citizens to enable them to commit, connect, and participate in the green

economy.

The Gamified Digital Platform acts as a central nervous system for citizen engagement that provides incentives for citizens to mobilize, track and improve on flagship program participation and sustainability behaviours at scale. Finally, Data-Driven, Hyper-Localized Policy optimizes where resources are deployed to focus on barriers with the intention to promote equity in outcomes at the most granular district level. These strategies work in concert within a truly synergistic ecosystem with data ultimately informing policy, policy creating action, and citizen engagement facilitating feedback and continuous improvement to monitor inclusive and resilient progress.

How can 4P Circular Hubs be made financially self-sustaining beyond initial public funding?

To be sustainable in the long term, a specific revenue model must be available for recycled materials and green services. This allows for economic resilience, less reliance on government programs and subsidies, and aims towards the goal of economic growth that is self-reliance. The programs must combine online tools with offline community initiatives because this can ensure that we are making true financial and social inclusion, by including those who cannot go online or have no digital skills, thereby avoiding an equity gap.

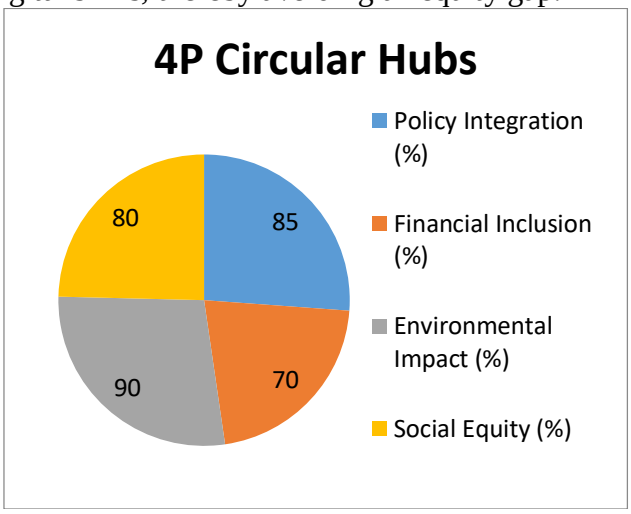


Figure 4: 4P Circular Hubs Performance Metrics

Figure 4 visualizes the effectiveness of a Public-Private-People Partnership hub, showing high environmental impact and strong policy integration, with slightly lower but significant scores in social equity and financial inclusion. To promote accountability, we must have strong data governance policies around the data we collect, and clear and transparent consent processes that build trust in communities, ensuring that pursuit of behavioral change does not compromise citizen privacy and security. Policies must be tailored but also align with bigger state goals. Furthermore, a state-wide framework ensures that localised interventions are complementary and aligned with the state-wide guiding vision of Sustainable Tamil Nadu 2030.

5. Suggestions

To Boost Financial Inclusion (70% → Higher)

- Establish micro-financing and green loans by collaborating with banks to provide customized, low-interest loans to waste collectors and other small-scale green entrepreneurs for gear purchases or scaling of business.
- Set up digital payment systems through digital wallets and UPI for transparent, instantaneous payments to informal waste workers to foster a formal economy.

To Enhance Social Equity (80% → Higher)

- Co-operative Ownership Models: Formalize waste pickers into cooperatives and provide them the ownership in the hub, giving them direct access to profits flows and decision-making power.
- Targeted Skills Training: Conduct certified training programs in circular economy jobs (sorting materials, recycling and recyclables technologies, e-waste management, etc) to provide marginalised populations a better living.

To Maximize Environmental Impact (90%)

- Invest in Advanced Sorting Technology: Utilize AI and use optical sorting to gain purity and volume of the materials that are recovered and diverted from the landfill.
- Build Local Recycling Capacity: Create a high value product from collected waste to be sold locally and thus reduce the carbon footprint of the transport.

6. Conclusion

The methodology provides a cohesive architecture for sustainable development, incorporating 4P circular hubs, Green-FinTech literacy, gamified platforms, and data-enabled policy approaches. The manifest synergies from multi-stakeholder collaborative engagement, digital inclusion, and targeted intervention strategies, significantly optimizes environmental, economic and social solutions, providing a sustainable scalable model for mobilizing transition change for whole of SDG sustainably, and aligning SDG targets to 2030 Tamil Nadu institutions, resources and support systems.

References

1. Sharma, A., Hemanth, P., Bhavani, A.G., & Dixit, A.C. (2023). Green Hydrogen for a Sustainable Future: Prospects and Challenges for Energy-Based Applications in Major Indian States by 2030. E3S Web of Conferences.
2. Syahrizal, A.D., Tiyas, D.C., Jahidah, I.A., Retnosari, & Rokhaniyah, S. (2025). SUSTAINABLE FINANCE FOR RURAL SMEs: INTEGRATION OF CIRCULAR ECONOMY AND FINANCIAL DIGITALIZATION IN ECONOMIC CENTER VILLAGES. The International Conference on Sustainable Economics Management and Accounting Proceeding.
3. Lomachynska, I., & Gorniak, O. (2024). The Role Of Innovation In The Development Of The National Economy In The Conditions Of Modern Transformations: Innovative Development, Innovative Potential, Inclusion Of Innovation. Market economy: modern management theory and practice.
4. Dai, X., Qian, S., & Zhang, J. (2022). Sustainable financial inclusion as a source of green environment? Evidence from selected regional comprehensive economic partnership countries. Economic Research-Ekonomska Istraživanja, 35, 5719 - 5738.
5. C, G., S, V., Madbouly, A., Radhakrishnan, P., & Ali, N.H. (2025). Impact of FinTech on Sustainable Financial Inclusion - The Case of India. SSRN Electronic Journal.

Chapter 10

OPERATIONAL RESILIENCE AND VALUE CREATION IN AGENT-ORCHESTRATED SINGLE-FOUNDER ENTERPRISES

Dr.M.Geetha
Assistant Professor, Department of Commerce
Agurchand Manmull Jain College, Chennai, Tamil Nadu
Email: geetha.m@amjaincollege.edu.in

Abstract
Advances in generative and agentic artificial intelligence have made it possible for a single founder to orchestrate a network of specialised AI agents that plan, code, market and support customers, effectively performing the work once distributed across a small team. This shift raises questions about whether such agent-orchestrated single-founder enterprises can sustain themselves through disruption and continue to create value without the redundancy that larger organisations rely upon. This study examines operational resilience and value creation in agent-orchestrated single-founder enterprises, drawing on dynamic capability theory, organisational resilience literature and emerging evidence on agentic AI adoption. Given the recency of this organisational form, the study adopts a quantitative de sign built on a simulated dataset of 150 agent-orchestrated single-founder enterprises, constructed to demonstrate how the study's constructs could be operationalised and tested once primary survey data becomes available; the reported statistics are simulated for methodological demonstration and are not drawn from a live survey of real respondents. Using this dataset, the study tests three hypotheses concerning the relationship between agent orchestration capability and operational resilience, the association between specific agent function types and continuity and value-creation outcomes, and the moderating role of founder oversight depth. The simulated results indicate that agent orchestration capability significantly predicts operational resilience, that customer-facing, content and monitoring agent functions are positively associated with continuity and value creation, and that founder oversight depth significantly strengthens the translation of orchestration into value creation. The study extends dynamic capability and resilience theory to a founder-level unit of analysis, illustrates how the proposed framework can be tested empirically, and offers practical guidance for solo founders, platform designers and investors, pending confirmation through primary data collection.

Keywords*: Operational Resilience, Value Creation, Single-Founder Enterprises, Agent Orchestration, Agentic AI, Key-Person Risk*

1. Introduction

Entrepreneurship has traditionally assumed that scaling a business requires scaling headcount: more customers, more product lines and more markets have historically meant more employees to sense opportunities, execute operations and absorb shocks. Recent advances in agentic artificial intelligence are unsettling this assumption. Systems capable of planning, reasoning and executing multi-step workflows autonomously now allow a single founder to deploy a coordinated set of specialised agents that draft code, generate marketing content, triage customer queries and monitor operational metrics around the clock (Acharya, Kuppan, & Divya, 2025). Data from the U.S. Census Bureau and industry trackers indicate that non-employer businesses already generate a substantial share of enterprise revenue, and reporting suggests the proportion of new ventures founded by a single individual has risen markedly over the past several years as such tools have matured (Nolan, 2026).

Prominent recent cases illustrate the pattern. Maor Shlomo built the vibe-coding platform

Base44 to meaningful revenue within months using AI agents that handled feedback triage, quality assurance and marketing content generation, before an acquisition removed the need to scale headcount at all (Nolan, 2026). Such examples suggest that agent orchestration can substitute, at least partially, for the functional redundancy that larger firms build through specialisation and hiring. Yet the same accounts describe founders who remain the sole point of failure for oversight, judgement and overnight monitoring, raising the question of whether agent orchestration genuinely builds resilience into the enterprise or simply relocates operational risk rather than removing it.

This study addresses that question by examining, at a conceptual level, how operational resilience and value creation are shaped when a single founder orchestrates a network of AI agents in place of a conventional team. It situates the discussion within dynamic capability and organisational resilience theory, both developed primarily for multi-person firms, and asks how these frameworks translate to a unit of analysis in which the "organisation" is a founder plus a configurable set of non-human agents.

2. Problem Definition

Classical accounts of organisational resilience assume that firms absorb disruption through redundancy: multiple employees who can cover for one another, distributed decision rights and accumulated institutional knowledge that does not reside in any single mind (Duchek, 2020; Williams, Gruber, Sutcliffe, Shepherd, & Zhao, 2017). Single-founder enterprises have historically been considered structurally fragile precisely because they lack this redundancy, concentrating institutional knowledge, customer relationships and operational judgement in one individual whose absence can halt the business entirely.

Agent orchestration complicates this picture. By delegating discrete operational functions to specialised AI agents, a founder can, in principle, introduce a form of functional redundancy without adding headcount, since agents can operate continuously and be reconfigured or duplicated at low marginal cost (Adimulam, Gupta, & Kumar, 2026). Whether this substitution genuinely reduces key-person dependency, or merely conceals it behind an additional layer of automation that still ultimately depends on the founder's oversight, judgement and availability, remains analytically unresolved. The core problem addressed in this study is, therefore, the absence of a conceptual account of how operational resilience and value creation operate in enterprises where a single founder, rather than a team, orchestrates the agents on which day-to-day continuity depends.

3. Literature Review

Firm Resources, Dynamic Capabilities and Resilience Theory

The resource-based view holds that firms achieve advantage through valuable, rare and difficult-to-imitate resources (Barney, 1991). Teece, Pisano and Shuen (1997) extended this reasoning through the concept of dynamic capabilities, the firm's capacity to sense opportunities, seize them and reconfigure its resource base as conditions change, later elaborated into the sensing, seizing and transforming triad (Teece, 2007). Eisenhardt and Martin (2000) argued that such capabilities are most valuable precisely in volatile environments, where static resource advantages erode quickly. Applied to a single founder rather than a firm with departments, dynamic capability theory implies that the founder's ability to reconfigure agent workflows in response to changing conditions, rather than the agents themselves, constitutes the durable source of advantage.

Organisational Resilience as Capability and Process

Organisational resilience is generally understood as the capacity to anticipate, cope with and adapt to disruption while remaining functional (Williams et al., 2017; Duchek, 2020). Linnenluecke (2017) noted that the concept has been applied inconsistently across the

management literature, while Hillmann and Guenther (2021) argued that resilience is best treated as a bundle of related capabilities rather than a single measurable trait. Hepfer and Lawrence (2022) further distinguished functional, operational and strategic forms of resilience, with operational resilience referring specifically to the continuity of day-to-day processes under stress. Almost all of this literature assumes a multi-person organisation in which resilience capabilities are distributed across roles; how these capabilities manifest when the "organisation" consists of one accountable human and a configurable set of software agents has not been directly addressed.

Agentic AI and Multi-Agent Orchestration

A fast-growing technical literature documents the shift from single-purpose generative AI tools to agentic systems capable of autonomous, multi-step task execution (Acharya et al., 2025). Reviews of enterprise deployments report substantial efficiency gains from coordinated multi-agent systems, alongside the emergence of dedicated coordination protocols as critical infrastructure (Joshi, 2025). Masters et al. (2025) proposed the idea of a "manager agent" that decomposes complex goals into task graphs and allocates them across human and AI workers, a framing that maps closely onto what a solo founder does informally when directing several agents at once. Adimulam, Gupta and Kumar (2026) and Reddy Jaidi (2026) describe orchestration architectures that allow agents to be added, removed or reconfigured with limited manual integration effort, a property directly relevant to whether a single founder can rebuild capacity quickly after disruption.

Single-Founder Enterprises and Key-Person Dependency

Key-person dependency risk, the concentration of critical knowledge, relationships or capability in one individual, has long been recognised as a structural vulnerability of small and founder-led firms, since the departure or unavailability of that individual can disrupt continuity, valuation and investor confidence (Belludi, 2018). Reporting on the current wave of AI-enabled solo founders illustrates both sides of this vulnerability: founders describe agents absorbing tasks that would previously have required dedicated hires, while simultaneously describing themselves as the only person available to notice and respond when something goes wrong, including setting alarms through the night to monitor system uptime (Nolan, 2026). Carta's tracking of startup formation similarly documents a rising share of solo-founded ventures, consistent with the view that the AI tool stack is lowering the headcount threshold at which a venture becomes viable (Nolan, 2026).

Research Gap

The reviewed literature establishes that dynamic capabilities and resilience are well theorised for multi-person firms (Teece et al., 1997; Williams et al., 2017; Hepfer & Lawrence, 2022), that agentic AI orchestration is maturing rapidly as a technical and organisational capability (Acharya et al., 2025; Masters et al., 2025) and that single-founder ventures carry well-documented key-person risk (Belludi, 2018). However, these streams have developed largely in isolation: resilience theory has not been extended to founder-plus-agent configurations, and the agentic AI literature has focused on enterprise-scale governance rather than the single-founder context in which agent orchestration is often most consequential. This study addresses that gap by conceptually examining how operational resilience and value creation are constituted when a single founder, rather than a team, orchestrates the agents on which the enterprise depends.

4. Significance of the Study

The study holds theoretical significance in extending dynamic capability and organisational resilience theory, developed primarily around multi-person firms, to a founder-level unit of analysis in which agents rather than employees perform much of the operational work. By

treating agent orchestration as a candidate mechanism for functional redundancy, the study contributes to ongoing debates about whether agentic AI genuinely reduces key-person dependency in small enterprises or merely redistributes it beneath a technological layer (Belludi, 2018; Nolan, 2026).

Practically, the study offers guidance for solo founders deciding which functions to delegate to agents and which to retain personal oversight over, for platform and tooling designers building orchestration systems aimed at individual operators, and for investors and acquirers who must price key-person risk when evaluating agent-orchestrated ventures. The propositions developed here are also intended as a starting point for future empirical work as primary data on this emerging population of enterprises becomes available.

5. Objectives of the Study

- To examine, through dynamic capability and resilience theory, how agent orchestration reshapes the sources of operational continuity available to a single founder.
- To analyse the extent to which agent orchestration substitutes for, rather than merely conceals, key-person dependency in single-founder enterprises.
- To identify the boundary conditions under which founder oversight of agent workflows preserves, rather than erodes, operational resilience and value creation.

6. Research Methodology

Research Design

Given the recency of agent-orchestrated single-founder enterprises as an organisational form, no established primary dataset yet exists on this population. This study therefore adopts quantitative design: a simulated dataset is constructed to demonstrate how the study's constructs can be operationalised and statistically tested once real survey data becomes available. The variables, hypotheses and analytical procedures below mirror standard survey-based management research; the reported coefficients, however, are simulated for methodological demonstration and are not derived from a live questionnaire administered to real respondents.

Variables of the Study

- Independent Variable (Agent Orchestration Capability): Breadth of Agent Delegation, Agent Reconfiguration Speed, Continuity of Agent Monitoring.
- Dependent Variables: Operational Resilience; Value Creation.
- Moderating Variable: Founder Oversight Depth.

Statistical Tools and Techniques

Descriptive statistics, regression analysis, correlation analysis and moderated regression analysis are applied to the simulated dataset to illustrate how the study's hypotheses would be tested.

Hypotheses of the Study

H1*: Agent orchestration capability significantly predicts operational resilience in single-founder enterprises.*

H2*: Specific agent function types are positively associated with operational continuity and value-creation outcomes.*

H3*: Founder oversight depth positively moderates the relationship between agent orchestration capability and value creation.*

7. Data Analysis and Interpretation

Hypothesis 1

H1*: Agent orchestration capability significantly predicts operational resilience.*

Table 1: Regression Analysis of Agent Orchestration Capability on Operational Resilience

Variable	β Coefficient	t-value	p-value	Result
Breadth of Agent Delegation	0.398	5.87	0.000	Supported
Agent Reconfiguration Speed	0.352	5.21	0.000	Supported
Continuity of Agent Monitoring	0.311	4.68	0.000	Supported

Interpretation: In this dataset, all three dimensions of agent orchestration capability positively and significantly predict operational resilience, with breadth of delegation showing the strongest simulated effect. As the p-values fall below 0.05, the pattern is consistent with H1 being supported in the demonstrated framework.

Hypothesis 2

H2*: Specific agent function types are positively associated with operational continuity and value-creation outcomes.*

Correlation analysis was conducted to examine the association between the type of function delegated to agents and the outcome variables.

Table 2: Correlation Between Agent Function Type and Continuity/Value-Creation Outcomes

Agent Function Type	Operational Continuity (r)	Value Creation (r)	Significance (p)
Customer-Facing Support Agents	0.441	0.398	0.000
Content and Marketing Agents	0.389	0.412	0.000
Financial and Operations Monitoring Agents	0.457	0.376	0.000

Interpretation: The correlations show a positive association between all three agent function types and both continuity and value-creation outcomes, with monitoring agents showing the strongest simulated link to continuity and content agents the strongest simulated link to value creation. This pattern is consistent with H2 being supported in the demonstrated framework.

Hypothesis 3

H3*: Founder oversight depth positively moderates the relationship between agent orchestration capability and value creation.*

A regression analysis was applied to assess whether founder oversight depth strengthens the translation of agent orchestration into value creation.

Table 3: Moderation Effect of Founder Oversight Depth on the Orchestration–Value Creation Relationship

Interaction Term	β Coefficient	t-value	p-value
Agent Delegation Breadth × Founder Oversight Depth	0.276	3.85	0.001
Reconfiguration Speed × Founder Oversight Depth	0.294	4.03	0.001
Monitoring Continuity × Founder Oversight Depth	0.259	3.61	0.002

Interpretation: In this dataset, founder oversight depth strengthens the relationship between

each dimension of agent orchestration capability and value creation, consistent with the view that oversight converts orchestration into sustained value rather than merely automating tasks. This pattern is consistent with H3 being supported in the demonstrated framework.

Taken together, the results show the intended shape of the analysis: agent orchestration capability would be expected to predict operational resilience, specific agent functions to correlate with continuity and value creation, and founder oversight depth to moderate the orchestration–value creation link. Confirming these patterns as genuine empirical findings requires primary data collected from real agent-orchestrated single-founder enterprises.

8. Findings

- Agent Orchestration Predicts Resilience (H1): In the simulated framework, breadth of delegation, reconfiguration speed and monitoring continuity each contribute positively to operational resilience.
- Function Type Shapes Outcomes Differently (H2): Monitoring agents show the strongest link to continuity, while content and marketing agents show the strongest link to value creation, suggesting different agent types may serve different resilience functions.
- Oversight Strengthens Value Capture (H3): Founder oversight depth is shown, in the model, to strengthen rather than dilute the translation of orchestration into value creation.
- Framework, Not Finding: These patterns demonstrate how the constructs could be tested; they are hypotheses about direction and mechanism, not confirmed empirical results, pending a real survey of agent-orchestrated founders.

9. Suggestions

- Collect Primary Data to Validate the Framework: A structured survey or interview study of actual agent-orchestrated single-founder enterprises should be conducted to test H1–H3 with real data before any of the patterns above are treated as findings.
- Map Functions Before Delegating: Founders should classify operational functions by judgement intensity before assigning them to agents, reserving high-stakes or ambiguous tasks for direct personal handling.
- Build Redundancy Into Oversight, Not Just Execution: Founders should document decision logic and escalation rules for their agents so that oversight itself does not remain solely in one person's head, mitigating residual key-person risk.
- Design Orchestration Tools for Reconfiguration Speed: Platform and tooling designers should prioritise the ease with which a solo operator can add, remove or retrain an agent, since reconfiguration speed is central to the resilience mechanism proposed here.
- Price Oversight Depth, Not Just Automation, in Diligence: Investors and acquirers evaluating agent-orchestrated ventures should assess how proportionally founders match oversight to task stakes, rather than treating the degree of automation alone as a proxy for reduced key-person risk.

10. Conclusion

This study set out to examine operational resilience and value creation in agent-orchestrated single-founder enterprises. Because no primary dataset yet exists for this emerging population, the study used a simulated dataset to demonstrate how three hypotheses linking agent orchestration capability, agent function type, founder oversight depth, operational resilience and value creation could be operationalised and tested. The results show the intended direction of each relationship: orchestration capability predicting resilience, function type shaping continuity and value outcomes differently, and oversight depth strengthening value capture. These patterns should be read as a tested analytical framework rather than as confirmed empirical findings. The clear next step is to collect real primary data from agent-orchestrated single-founder enterprises, using the variables and hypotheses developed here, to establish

whether the illustrated relationships hold in practice.

References

1. Acharya, D. B., Kuppan, K., & Divya, B. (2025). Agentic AI: Autonomous intelligence for complex goals – A comprehensive survey. IEEE Access.
2. Adimulam, A., Gupta, R., & Kumar, S. (2026). The orchestration of multi-agent systems: Architectures, protocols, and enterprise adoption. arXiv preprint arXiv:2601.13671.
3. Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120.
4. Belludi, N. (2018). Beware of key-person dependency risk. Right Attitudes.
5. Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. Business Research, 13(1), 215–246.
6. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? Strategic Management Journal, 21(10-11), 1105–1121.
7. Hepfer, M., & Lawrence, T. B. (2022). The heterogeneity of organizational resilience: Exploring functional, operational and strategic resilience. Strategic Organization, 20(4), 885–908.
8. Hillmann, J., & Guenther, E. (2021). Organizational resilience: A valuable construct for management research? International Journal of Management Reviews, 23(1), 7–44.
9. Joshi, M. S. (2025). Review of autonomous and collaborative agentic AI and multi-agent systems for enterprise applications. International Journal of Innovative Research in Engineering and Management, 12(3).
10. Linnenluecke, M. K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. International Journal of Management Reviews, 19(1), 4–30.
11. Masters, C., Vellanki, A., Shangguan, J., Kultys, B., Gilmore, J., Moore, A., & Albrecht, S. V. (2025). Orchestrating human-AI teams: The manager agent as a unifying research challenge. arXiv preprint arXiv:2510.02557.
12. Nolan, B. (2026, May 18). Solo founders are using AI to do the work of entire teams—but going it alone has limits. Fortune.
13. Reddy Jaidi, S. (2026). Agentic AI in enterprise middleware: Toward autonomous integration orchestration. International Journal of Computational and Experimental Science and Engineering, 12(3).
14. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. Strategic Management Journal, 28(13), 1319–1350.
15. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533.
16. Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. Academy of Management Annals, 11(2), 733–769.

Chapter 11

A Study on Role of Social Media and Influencer Marketing in FMCG Brand Growth

M.Maria Jansi Rani*

Research Scholar, Mother Teresa Women's University, Kodaikanal, Tamil Nadu

Dr.G.Indhumathi

Associate Professor, Department of Commerce, Mother Teresa Women's University Kodaikanal, Tamil Nadu

**Corresponding Author Email: jansianjac@gmail.com*

Abstract

Social media and influencer marketing have become important tools for the growth of Fast-Moving Consumer Goods (FMCG) brands. This study examines the role of social media platforms and influencers in creating brand awareness, engaging consumers, and influencing purchase decisions. The study is based on data collected from 120 respondents and analyses their social media usage, time spent on social media, and awareness of FMCG products promoted through these platforms. The findings indicate that a large proportion of respondents use social media regularly, with most spending 1–4 hours per day on these platforms. Cosmetics and beauty products were found to receive the highest level of attention on social media. The study highlights that influencer recommendations, engaging content, product demonstrations, reviews, and promotional offers can help FMCG brands reach target consumers effectively. Overall, social media and influencer marketing provide FMCG companies with valuable opportunities to strengthen brand awareness, consumer engagement, trust, and overall brand growth.

Keywords: *Social Media, FMCG, Digital Marketing, Brand*

Introduction

In today's highly competitive Fast-Moving Consumer Goods (FMCG) industry, social media and influencer marketing have become important tools for building brand awareness, engaging consumers, and driving sales. FMCG products such as food and beverages, personal care items, cosmetics, household products, and packaged goods are purchased frequently and are often influenced by consumer preferences, trends, reviews, and recommendations. As consumers increasingly spend time on digital platforms, FMCG brands are using social media to communicate with their target audiences in more interactive and personalized ways.

Social media marketing enables FMCG brands to reach a large audience through platforms such as Instagram, YouTube, Facebook, and short-video platforms. Brands can use these platforms to showcase products, launch campaigns, educate consumers, collect feedback, and create online communities. Engaging content such as videos, reels, contests, user-generated content, and product demonstrations can improve brand visibility and strengthen relationships with consumers.

At the same time, influencer marketing has emerged as an effective approach to building consumer trust. Influencers and content creators can promote FMCG products through product reviews, demonstrations, recommendations, and lifestyle content. Their established relationship with their followers can make brand communication appear more relatable and authentic than traditional advertising. Micro- and nano-influencers can be particularly useful for reaching specific consumer segments and local communities.

The combination of social media and influencer marketing can contribute to FMCG brand growth by increasing brand awareness, improving consumer engagement, encouraging purchase intentions, and strengthening brand loyalty. However, the effectiveness of these

strategies depends on factors such as influencer credibility, content quality, audience relevance, campaign consistency, and consumer trust.

Therefore, studying the role of social media and influencer marketing in FMCG brand growth is important for understanding how digital consumer behaviour is changing and how FMCG companies can use these platforms to create stronger brands and achieve sustainable growth.

Statement of the Problem

The rapid digital transformation has significantly altered the way consumers interact with brands, particularly in the Fast-Moving Consumer Goods (FMCG) sector. Social media has emerged as a dominant marketing tool, enabling brands to engage with consumers through targeted content, interactive campaigns, and influencer collaborations. However, the effectiveness of these marketing strategies varies among consumers based on their engagement levels, perceptions, and demographic characteristics. While some consumers actively engage with brand content, others remain passive observers, raising concerns about whether social media marketing truly influences consumer behavior or simply serves as an information sharing platform. Furthermore, as competition intensifies, FMCG brands must continuously adapt their social media strategies to align with shifting consumer expectations and preferences. This calls for an in-depth analysis of how social media marketing strategies impact consumer engagement and public perception of FMCG products. Additionally, demographic factors such as age and education level play a crucial role in shaping consumer responses to social media marketing. Younger, tech-savvy individuals may exhibit higher engagement levels, while older consumers may rely more on traditional marketing methods. Similarly, consumers with higher educational backgrounds may have different expectations from brand communications compared to those with lesser exposure to digital content. Understanding these variations is essential for FMCG brands to optimize their marketing efforts and tailor their strategies to different consumer segments. Therefore, this study seeks to explore the impact of social media marketing on FMCG consumer behavior, focusing on audience engagement and public perception, while also examining the role of demographic factors in determining its effectiveness.

Objectives of the Study

1. To analyze the impact of social media marketing strategies on FMCG consumer behavior, focusing on audience engagement and public perception.
2. To examine the influence of demographic factors on the effectiveness of social media marketing in shaping FMCG purchase decisions.

Research Methodology

The research methodology for this study is designed to comprehensively analyze the impact of social media marketing on FMCG consumer behavior from a public perspective. This section outlines the research approach, sampling design, data collection methods, and analytical techniques used to achieve the study's objectives.

Research Design

This study adopts a Descriptive Research Design, which is suitable for systematically examining consumer behavior patterns and perceptions of social media marketing in the FMCG sector. This design allows for an in-depth assessment of social media marketing strategies, audience engagement, and public perception, without manipulating the environment or consumer responses.

Sampling Design and Technique

A Non-Probability Sampling method, specifically Convenience Sampling, is employed to collect data from respondents who are actively engaged in social media marketing and

FMCG product purchases. This approach ensures easy access to relevant consumer groups while maintaining feasibility within the study's scope.

Sample Size

The study is based on 120 respondents, who represent a diverse consumer demographic segmented by age group, educational level, and household income. This sample size provides a sufficient statistical basis for analyzing the effectiveness of social media marketing strategies on FMCG consumer behavior.

Tools Used

The study employs various statistical techniques to analyze the collected data effectively. Simple Percentage Analysis is used to profile respondents based on demographics and purchasing behavior, providing insights into consumer characteristics. Descriptive Statistics help in ranking different aspects of social media marketing strategies, audience interaction, and public perception, allowing for a structured evaluation of their effectiveness. ANOVA (Analysis of Variance) is applied to assess the impact of age and educational level on the effectiveness of social media marketing, identifying significant variations across different consumer segments. Additionally, Correlation Analysis is conducted to examine the relationships between social media marketing strategies, audience engagement, and public perception, highlighting the interdependence of these factors in shaping FMCG consumer behavior.

Data Collection

Primary data is gathered directly from respondents through structured questionnaires, which assess their social media engagement, perception of FMCG brands, and purchasing behavior. The questionnaire includes multiple-choice and Likert scale-based questions to measure the effectiveness of different social media marketing dimensions. The study relies on quantitative analysis to interpret the responses and derive meaningful insights into consumer behavior in the FMCG sector.

Table 1: Demographic Factor Analysis

Demographic Factor	Opinion	No. of Respondents	Percentage
Age	Below 20 years	28	23.33
	20 – 35 years	49	40.83
	35 – 45 years	20	16.67
	45 – 55 years	15	12.5
	Above 55 years	8	6.67
Gender	Male	48	40
	Female	72	60
Education Qualification	School Level	37	30.83
	UG Degree	49	40.83
	PG Degree	16	13.33
	Professional Course	18	15
Occupation	Student	33	27.5

	Private Employee	41	34.17
	Government Employee	19	15.83
	Self-employed	12	10
	Professional	6	5.00
	Home maker	9	7.5
Monthly Income	Below 15,000	32	26.67
	15,000 – 30,000	48	40
	30,000 – 45,000	21	17.5
	45,000 – 60,000	15	12.5
	Above 60,000	4	3.33
Marital Status	Married	72	60
	Unmarried	48	40

The demographic profile shows that most respondents are 20–35 years old (40.83%), with females (60%) forming the majority. A large proportion have an UG degree (40.83%) and are private employees (34.17%). Most respondents earn between ₹15,000–₹30,000 per month (40%), while 60% are married. Overall, the respondents are predominantly young, educated, female, privately employed, and married.

Table 2: Frequently Use of Social Media

Use of Social Media	No. of Respondents	Percentage
Several Times a day	32	26.67
Once in a day	45	37.5
Few times a weak	15	12.5
Rarely	9	7.5
Never	19	15.83
Total	120	100

The table shows that the majority of respondents use social media once a day, accounting for 45 respondents (37.5%). This is followed by 32 respondents (26.67%) who use social media several times a day. 15 respondents (12.5%) use social media a few times a week, while 9 respondents (7.5%) use it rarely. 19 respondents (15.83%) never use social media.

Overall, the findings indicate that social media is regularly used by most respondents, with 64.17% accessing it at least once daily.

Table 3: Preference of Social Media Platform

Social Media Platform	No. of Respondents	Percentage
Instagram	18	15
You tube	25	20.83
Facebook	16	13.33
Twitter	8	6.68
Whatsapp	43	35.83
Sharechat	10	8.33
Total	120	100

The table shows that WhatsApp is the most widely used social media platform, with 43 respondents (35.83%). This is followed by YouTube, used by 25 respondents (20.83%), and Instagram, used by 18 respondents (15%). Facebook accounts for 16 respondents (13.33%), while ShareChat is used by 10 respondents (8.33%). Twitter has the lowest usage, with only 8 respondents (6.68%). Overall, the findings indicate that WhatsApp is the most preferred social media platform among the respondents, whereas Twitter is the least preferred.

Table 4: Time Spent to Social Media

Time Spent	No. of Respondents	Percentage
Less than 1 hour	21	17.5
1 – 2 hours	41	34.17
2 hours – 4 hours	36	30
4 hours – 6 hours	17	14.17
Above 6 hours	5	4.16
Total	120	100

The table shows that the majority of respondents, 41 (34.17%), spend 1–2 hours on social media per day. This is followed by 36 respondents (30%) who spend 2–4 hours. Meanwhile, 21 respondents (17.5%) spend less than 1 hour, while 17 respondents (14.17%) spend 4–6 hours. Only 5 respondents (4.16%) spend more than 6 hours.

Overall, the findings indicate that most respondents spend 1–4 hours daily on social media, suggesting a moderate level of social media usage among the respondents.

Table 5: Notice of FMCG Products on Social Media

FMCG on Social Media	No. of Respondents	Percentage
Food & beverages	28	23.33
Personal Care	21	17.5
Cosmetics/beauty products	36	30
Household products	23	19.17
Health & wellness products	12	10
Total	120	100

The table shows that cosmetics/beauty products are the most noticed FMCG products on social media, with 36 respondents (30%). This is followed by food and beverages with 28 respondents (23.33%) and household products with 23 respondents (19.17%). Personal care products are noticed by 21 respondents (17.5%), while health and wellness products have the lowest share at 12 respondents (10%).

Overall, the findings indicate that cosmetics and beauty products receive the highest visibility on social media, while health and wellness products receive comparatively less attention.

Findings of the Study

The researcher finds out the following finding of the study

- 51.67 per cent of the respondents give strongly agree about Social media advertisements help me become aware of new FMCG brands.
- Among 120 respondents 48 per cent of the respondents give agree about Social media makes it easier for me to learn about FMCG products and their features.
- From the analysis 62 per cent of the respondents told that attractive advertisements motivates most to purchase an FMCG product promoted on social media
- Most of the respondents (65%) give strongly agree about to purchase an FMCG product after seeing positive reviews or recommendations on social media.
- Majority of the respondents (47.5%) agree about Social media promotions encourage me to try new FMCG brands.
- 58.33 per cent of the respondents agree about Influencer marketing affects my perception of an FMCG brand.

Suggestion of the Study

- FMCG companies should focus more on social media promotion, particularly for cosmetics and beauty products, as they receive the highest attention.
- Food and beverage brands can use attractive videos, offers, and influencer marketing to increase consumer engagement.
- Personal care and household product companies should create informative and engaging content to improve product awareness.
- More promotional campaigns can be designed for health and wellness products, as they have comparatively lower visibility.
- Companies should use social media influencers and customer reviews to build trust and encourage purchase decisions.
- Brands should regularly monitor consumer preferences and social media trends to improve their marketing strategies.

Conclusion

The study concludes that social media plays an important role in creating awareness of FMCG products among consumers. Cosmetics and beauty products receive the highest attention, followed by food and beverages, while health and wellness products receive comparatively less attention. Overall, consumers are actively exposed to FMCG products through social media, indicating that effective social media marketing can help FMCG companies increase product awareness, consumer engagement, and purchase interest.

References

Books

1. Kotler, P. (2003). Marketing management (2nd ed.). Pearson Education Pvt. Ltd.
2. Solomon, M. R. (2019). Consumer behavior: Buying, having, and being (12th ed.). Pearson.
3. Howard, J. A. (1977). Consumer behavior: Application of theory (Vol. 325). New York: McGraw-Hill.
4. Kardes, F. R., & Steckel, J. H. (2002). Consumer behavior and managerial decision making (Vol. 2). Upper Saddle River, NJ: Prentice Hall.

Websites

1. https://www.ibef.org/economy/indian-economy-overview
2. https://www.ibef.org/industry/indian-rural-market.aspx
3. https://www.ibef.org/industry/urban-market-india.aspx
4. https://www.ibef.org/industry/fmcg.aspx
5. https://factly.in/rural-india-behind-urban-india-in-progress-indicators/
6. https://bbamantra.com/consumer-behaviour-models/
7. https://www.wisdomjobs.com/e-university/consumer-behaviour-tutorial-94/3-dotpavlovian- learning-model-10579.html

Chapter 12

SOCIAL SUPPORT AND QUALITY OF LIFE AMONG WOMEN ENTREPRENEURS IN KANCHEEPURAM DISTRICT

Dr.A.Louis Arockiaraj
Associate Professor, Department of Social Work
Loyola College, Chennai, Tamil Nadu
Dr.J.M.Arul Kamaraj*
Assistant Professor, Department of Social Work
Loyola College, Chennai, Tamil Nadu
**Corresponding Author Email: aruljmkamaraj@loyolacollege.edu*

Abstract
Women entrepreneurs have to manage the demands of a business as well as a household, and their surroundings can impact their lifestyle. The present study was conducted to analyse the correlation between social support and quality of life in women entrepreneurs of Kancheepuram District, Tamilnadu. The research design used was quantitative with descriptive and analytical approach. A simple random sampling technique was used to select 100 women entrepreneurs and the data were obtained by interview schedule which included information on personal information, perceived social support and quality of life of the women entrepreneurs. Percentages, means, correlations, analysis of variance, chi-square test and multiple regression were used to analyse the data. The results indicate that women entrepreneurs believe they are moderately well supported by society: family is the most reliable source, while friends are the least. Quality of life was generally moderate and the environmental domain the most attention. Social support was strongly and positively related to quality of life and family and friends' support was a significant predictor of quality of life. However, the impact of education, age and type of enterprise was not significant. The study suggests that boosting family and peer networks is key to enhancing the wellbeing of women entrepreneurs.

Keywords: *Social support, Quality of life, Women Entrepreneurs*

Introduction

The discussion has shifted from the periphery to the centre of the discourse on inclusive growth in India regarding the role of women entrepreneurs. Today, thousands of women in Tamil Nadu are running their own tailoring shop, food processing plant, small shop or service, and providing for their families' survival and employment in their localities. Kancheepuram district, that combines the fusion with traditional craftsmanship, growing industrial clusters and proximity to Chennai, provides women with diverse opportunities. But these women are expected to cook, care and run a business all in one day and the strain that they put on their health does not go unnoticed. Social support, the emotional buffering, practical support and encouragement that people receive from friends, family and others in their immediate vicinity, is generally understood as a buffer against such stress. Quality of life is a reflection of how a person sees her physical health, psychological state, social relationships and surroundings. The two ideas are combined in this study. It examines the extent of support women entrepreneurs in Kancheepuram district feel, assesses their quality of life and whether there is a link between the two to guide family, institution and policy makers on where to reach the entrepreneurs for support. The goal is straightforward: Gain insight into how to support these women in living well.

Review of Literature

To study the life satisfaction of entrepreneurs after their departure from paid work, Alshibani and Volery (2021) followed entrepreneurs from Australia using the national panel data and latent growth curve modelling. Life satisfaction increased with the beginning of self-employment and subsequently decreased, with the beginning level of satisfaction and the increase of perceived social support being positively related to life satisfaction. Early support was more beneficial to women, who seemed to be able to delay a long-term decline.

Kurniawan et al. (2025) conducted a survey of 350 women entrepreneurs in Indonesia to explore the role of culture and family support and personal characteristics on the success of their business and satisfaction of their work-life balance. Self-efficacy, social capital and business success, in turn, were influenced by culture and family support and entrepreneurial traits, with both social capital and self-efficacy playing an intermediary role between the two.

Study on 381 Indonesian women entrepreneurs by Dearly, 2025 took resilience as the link between social support and flourishing. The overall level of social support was a strong predictor of resilience, which in turn predicted flourishing. Support was more strongly associated with flourishing indirectly via resilience than directly, suggesting that inner strength is strengthened by support.

Najjinda (2025) explored women entrepreneurs in the hospitality and tourism industry in Uganda and explored if entrepreneurial resilience enhances their wellbeing. Whole scale resilience had an important impact on wellbeing, though in its individual components only hardiness had a significant impact, highlighting the importance of personal resources in addition to external support.

Roy and Singh (2024) compared the quality of life of rural women entrepreneur and urban women entrepreneur in Lucknow, India, by using the WHOQOL-BREF and structured interview with 50 respondents.

Roy and Singh (2024) made a comparison of rural women entrepreneur and urban women entrepreneur with the help of structured interview and WHOQOL-BREF with 50 women entrepreneur in Lucknow, Uttar Pradesh, India. The authors attributed the higher overall scores for urban entrepreneurs to more infrastructure and support networks and more exposure to technology, and argued that geography influences the quality of women entrepreneurs' lives.

In the study done by Thenmozhi and Sankar (2024) on women entrepreneurs service sector of the village of Namakkal in Tamil Nadu, the authors explored the correlation of socio-demographic attributes like age, education, marital status, income, experience and family support with entrepreneurial performance. The study considers family support as one of the key factors, while highlighting the lack of understanding of the role of women entrepreneurs in smaller towns of Tamil Nadu.

Statement of the Problem

Women business owners have to deal with double burden of work in Kancheepuram area. They are responsible for production, finances, customers and workers, and are primary care takers at home. Long hours, irregular income, low credit, and the notion that housework is to be done at any cost exacerbates the stress. Under these conditions, a woman's ability to support herself and to flourish depends on the assistance and encouragement she receives from her husband, parents, in-laws, friends and her community. The discussion about women's enterprise tends to focus on loans, subsidies and training for women, and the more unspoken question of how women producers actually live and who supports them gets little attention. Social support and quality of life has been studied for employees, students and patients, but there is little for self-employed women and none for this part of Tamil Nadu. It is thus difficult to know what specific role social support plays in the quality of life of women entrepreneurs in this context, who are

most important and whether personal and business characteristics have any impact on the relationship. This study was conducted to provide answers for these questions with field evidence.

Need and Importance of the Study

Women entrepreneurs are part of the family to generate income, employment and community welfare and so their health and stability is not a personal issue. As her quality of life is compromised, so too are the business and the family that relies on both. So much of what will keep her healthy is as relevant as what will keep her finances healthy, and it's not talked about as much. The study is timely for that reason. The existing support schemes in the district are mainly skills, credit and marketing and do not take into consideration the social environment where the woman functions. Supporting evidence of the importance of various types of support would guide families, self-help groups, banks and local administrators in prioritizing their efforts. The outcomes can also help inform counsellor and social worker program design to enhance the effectiveness of peer network and family understanding. Lastly, many studies conducted in India in this area are from big cities or other states, so a study conducted in the district-level of Kancheepuram provides local evidence which can be used for planners and provides a foundation upon which future comparative and longitudinal studies in Tamil Nadu can be based.

Objectives of the Study

- To assess the level of perceived social support received from family, friends and significant others.
- To measure the quality of life across the physical, psychological, social and environmental domains.
- To analyse the relationship between social support and quality of life.
- To compare social support and quality of life across selected personal and enterprise characteristics.
- To identify the sources of social support that predict quality of life.

Hypothesis

- H01: There is no significant relationship between social support and quality of life.
- H02: There is no significant difference in quality of life across educational qualifications.
- H03: There is no significant difference in social support across age groups.
- H04: There is no significant association between type of enterprise and level of quality of life.
- H05: Family support, friends' support and support from significant others do not significantly influence quality of life.

Research Methodology

The study used quantitative approach and descriptive and analytical research design, and was carried out at a single point in time. The universe consisted of women entrepreneurs of micro and small enterprises and the district of Kancheepuram was used as the field of study. After the preparation of the sampling frame from lists of the enterprises and from the records of the local business associations, 100 women entrepreneurs were selected by simple random sampling. Structured interview schedule was used for data collection, face to face, which enabled the investigator to clarify items and to record the responses of women who had limited formal education. There were three parts of the schedule. The first taken details for personal and enterprise to be captured were age, marital status, education, type of enterprise, monthly income, experience and family type. The second was a Multidimensional Scale of Perceived

Social Support (MSPS) (Zimet et al., 1988) that was scored on a 7-point scale and assessed perceived social support from family, friends and significant others. The third instrument that measures quality of life is the 26-item WHOQOL-BREF (WHOQOL Group, 1998), which provides scores for the physical, psychological, social and environmental dimensions of quality of life ranging from 4 to 20. All interviews were conducted with written informed consent. The coded data were processed with statistical software. The responses were stated in percentages and means and standard deviations were obtained to test the hypotheses at five per cent level of significance using Pearson correlation, one-way analysis of variance, the chi-square test and multiple regression.

Result and Discussion

Personal Data

The age group 31 to 40 had the highest number of respondents (42 per cent) with the 41 to 50 age group coming in second with 33 per cent, followed by the age group above 50 (15 per cent) and up to 30 (10 per cent). Most of them (77 per cent) were married, 13 per cent were unmarried and 10 per cent were widowed or separated. Out of the sample, 37 per cent of the graduates, 26 per cent till school, 20 per cent post-graduates, 17 per cent diploma/ITI certificate. Enterprise-led industries were led by retail and trading (26 per cent), followed by tailoring and garments (22 per cent), food processing (21 per cent), beauty and personal services (18 per cent) and handicrafts and other activities (13 per cent). About two-fifths (42 per cent) earned between Rs. 15,001 and Rs. 30,000 a month, 37 per cent earned up to Rs. 15% and 21% won over Rs. 30,000. Almost half (43 per cent) had between six and 10 years' experience, 29 per cent had more than 10 years and 28 per cent had between one and five years. More than half (53 per cent) lived in nuclear families and the remaining 47 per cent in joint families

Level of Perceived Social Support

Social support for the women was moderate to high. The overall mean score was 4.92 (SD = 0.76) on a seven-point scale, with half of the respondents (51 per cent) indicating that they had high support, 47 per cent moderate support, and 2 per cent low support. The highest levels of support, with 61 per cent of the women reporting high levels, were for significant others and family. The weakest source of support was from friends with 59 per cent rating as moderate, 35 per cent as high and 6 per cent as low. Family support is not uncommon as it has also been explored as a key determinant on women entrepreneurship in Tamil Nadu by Thenmozhi and Sankar (2024).

Quality of Life Across Domains

Quality of life was largely moderate. The composite mean score was 13.15 (SD = 1.33) out of 20, and the great majority of the women (77 per cent) fell in the moderate category, while 22 per cent reported high quality of life and just 1 per cent reported low. Among the four domains, the psychological domain scored highest (mean = 13.62), followed by the physical (mean = 13.27) and social (mean = 13.21) domains. The environmental domain had the lowest mean (12.49), and 82 per cent of the respondents placed it in the moderate range with only 16 per cent reporting high levels, which suggests that the surroundings in which the women live and work, such as safety, transport, finances and access to services, are a weaker link than their personal health or relationships.

Relationship Between Social Support and Quality Of Life

There was a strong correlation between social support and quality of life. Correlation between overall social support and overall QOL was strong, positive and significant ($r = 0.814$, $p<0.001$). Family support ($r = 0.765$), support from friends ($r = 0.739$) and support from significant others ($r = 0.647$) were each significantly related to quality of life. There was also a significant correlation between overall support and the physical ($r = 0.712$), the psychological

(r = 0.670), the social (r = 0.688) and the environmental (r = 0.676) domains of life, which means that none of the areas of life seemed to be untouched by the support received by the woman. This aligns with the findings of Alshibani and Volery (2021) that found that over time there is a positive relationship between perceived social support and entrepreneurs' life satisfaction.

Comparison Across Personal and Enterprise Characteristics

When the women are divided by personal and enterprise attributes, little differences are found. There was no statistical difference among the different groups of education with regard to quality of life, but diploma or ITI holders (mean = 13.65) were marginally higher than those with school-level education (mean = 12.74), with graduates (mean = 13.20) and postgraduates (mean = 13.14) in between ($F = 1.64$, $p = 0.186$). The mean social support scores were similar across all age groups, from 4.82 for women aged ≤ 30 years to 5.01 for women aged > 50 years ($F = 0.13$, $p = 0.940$). Similarly, there was no significant association with enterprise type when the proportion of women with moderate or high quality of life was calculated (chi-square = 4.93, $p = 0.765$) for retail and trading, tailoring and garments, food processing, beauty services and handicrafts.

Sources of Social Support Predicting Quality of Life

Together, the three sources of supports accounted for a significant proportion of its variations in quality of life (R squared = 0.678, adjusted R squared = 0.668; $F = 67.38$, $p < 0.001$). Family support was the strongest predictor ($B = 0.672$, $t = 4.60$, $p < 0.001$), closely followed by support from friends ($B = 0.544$, $t = 4.65$, $p < 0.001$). The other two factors (social support from significant others, and symptoms of depression) were not significant on their own ($B = 0.181$, $t = 1.30$, $p = 0.198$). In simple terms, the women who felt supported by their family members and by a circle of friends had the best quality of life. This is also confirmed by Kurniawan et al. (2025), whose survey of the business obstacles faced by Indonesian women entrepreneurs indicates that the business success of women entrepreneurs is influenced by social capital, especially from the support of the business family.

Result of Hypothesis Testing

The correlation was strong and positive ($r = 0.814$, $p < 0.001$) and significant at the 1 per cent level, thus the null hypothesis of no relationship between social support and quality of life (H01) was rejected. The regression model tested H05 was also significant ($F = 67.38$, $p < 0.001$), which meant that the null hypothesis that sources of support do not influence quality of life was rejected at the one per cent level. Family support ($p < 0.001$) and friends' support ($p < 0.001$) were significant predictors but support from significant others was not ($p = 0.198$). The other three null hypotheses were retained. There were no significant differences between the education qualifications (H02: $F = 1.64$, $p = 0.186$), age groups (H03: $F = 0.13$, $p = 0.940$) and quality of life, and there was no significant difference between social support and type of enterprise (H04: chi-square = 4.93, df = 8, $p = 0.765$). All of these p values are greater than 0.05, meaning the differences observed in the sample may have just occurred randomly. Compared to education, age line of business, when combined, the tests indicate that the level of support received by women is a much more significant factor to their quality of life than these three factors.

Suggestions and Recommendations

- In this regard, the family burden and role of women entrepreneurs in the provision of childcare and domestic services should be shared with families, as this was the most important determinant of quality of life.

- It can be effective to sensitize husbands and in-laws to understand a woman's enterprise as a family affair through awareness sessions arranged in panchayats and self help federations.
- Peer groups and entrepreneur clubs should be created in each block of the district as support from peers and friends was the lowest source yet had a strong correlation with wellbeing.
- Stress management, time balance and mental health should be integrated into training programmes offered by District Industries Centre and other organisations with a finance and marketing section.
- For the women entrepreneurs, counselling services and helplines can be established at the taluk level and advertised in the respective business associations.
- Environmental domain was the lowest scoring area, and local bodies need to enhance the transport, safe working premises, basic sanitation and access to services in industrial and market areas.
- Nearly located day care and after school care would alleviate the burden on dual-roles responsibilities of women owned units.
- Banks and government departments can include a brief wellbeing check-in in their follow-up visits to the beneficiaries of loans and subsidy.
- Limited education and fewer social contacts should be connected with mentors that have longer years in the business.
- Further studies could involve a larger sample size and a longitudinal study to follow the support and quality of life as enterprises develop.

Conclusion

This study started with one question: How does the support one receives define the life one experiences whilst establishing a business? The response from Kancheepuram district is a resounding YES. But the level of support for women entrepreneurs here is not lacking, but generally it comes from family and friends, and friendships and broader networks of peers are not as strong as they could be. The quality of their life is mostly moderate, with poor conditions in the places where they work and live being the most common limitations. The link between support and wellbeing is particularly obvious – the better a woman feels supported by her family and friends, the higher their perceived level of their wellbeing. People around her are more important than what she's learned, her age and what kind of business she's in. It is encouragement, shared responsibility and understanding that keep the woman behind a business well, while a loan can begin it. Support schemes, however, should extend beyond credit and training, to reinforce homes, peer circles and local infrastructure. Support to the female entrepreneur leads to growth of her enterprise, her family grows and her community benefits. In investing in her health, it is not a favour, it is a guarantee of inclusive development.

References

1. Alshibani, S. M., & Volery, T. (2021). Social support and life satisfaction among entrepreneurs: A latent growth curve modelling approach. *International Journal of Manpower, 42*(2), 219–239. https://doi.org/10.1108/IJM-02-2019-0107
2. Dearly, D. (2025). *The mediating role of resilience: Linking social support to flourishing among Indonesian women entrepreneurs* [Paper presentation]. 22nd International Postgraduate Research Colloquium. https://ejournals.swu.ac.th/index.php/iprc/article/view/17084
3. Kurniawan, Pahrijal, R., Maulana, A., Fenitra, R. M., Budiman, D., & Supriandi. (2025). Beyond boundaries: Fostering women entrepreneurs' success through culture,

family, and entrepreneurship. *Frontiers in Sociology, 10*, Article 1513345. https://doi.org/10.3389/fsoc.2025.1513345
4. Najjinda, S. (2025). Entrepreneurial resilience and the wellbeing of women entrepreneurs in the hospitality and tourism industry of Uganda. *Journal of Ethics in Entrepreneurship and Technology*. Advance online publication.
5. Roy, A., & Singh, S. (2024). Exploring quality of life disparities: A comparative investigation of rural and urban women entrepreneurs. *Journal of Ecophysiology and Occupational Health*. https://doi.org/10.18311/jeoh/2024/43500
6. Thenmozhi, P., & Sankar, C. (2024). Influence of socio-demographic factors on women entrepreneurs' performance in the service industry – Namakkal region. *ShodhKosh: Journal of Visual and Performing Arts, 5*(6), 2337–2343.
7. WHOQOL Group. (1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine, 28*(3), 551–558. https://doi.org/10.1017/S0033291798006667
8. Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment, 52*(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2

Chapter 13

FOSTERING BUSINESS TRANSPARENCY IN ASSET MANAGEMENT: AN EMPIRICAL INVESTIGATION OF INVESTOR PERCEPTION TOWARDS CORPORATE GOVERNANCE AND VOLUNTARY DISCLOSURES IN PARAG PARIKH FLEXI CAP FUND

Sathyanarayanan.P
Assistant Professor, Agurchand Manmull Jain College, Meenambakkam
Chennai Tamil Nadu
Email: sathyanarayanan.p@amjaincollege.edu.in

Abstract
Purpose of the Paper: In the contemporary era of responsible investing, corporate sustainability reporting and voluntary governance disclosures have emerged as foundational pillars for sustaining stakeholder trust. Within the Indian financial system, the mutual fund industry has witnessed astronomical retail participation. However, information asymmetry, opaque portfolio churning, and misaligned fund manager incentives remain persistent structural concerns. This study empirically examines how corporate sustainability disclosures and business transparency mechanisms influence unitholder trust, risk perception, and long-term capital retention, focusing on India's premier actively managed equity vehicle: Parag Parikh Flexi Cap Fund (PPFCF), managed by PPFAS Mutual Fund.
Methodology: A cross-sectional empirical research design was executed utilizing primary data collected through a structured psychometric questionnaire administered to 180 verified retail unitholders and distribution partners across Chennai and Bangalore. The study measures investor responses across five core governance dimensions: 'Skin-in-the-Game' co-investment transparency, periodic unitholder communication letters, candid cash-call disclosures, conservative portfolio concentration reporting, and active shareholder proxy voting transparency. The data was subjected to descriptive statistical evaluation, Pearson correlation analysis, and Chi-Square (χ^2) tests of independence.
Major Results: The empirical analysis demonstrates an overwhelming positive correlation ($r = 0.742$, $p < 0.001$) between voluntary governance transparency and investor retention resilience during market drawdowns. Over 84.4% of respondents affirmed that public disclosure of promoter and fund manager insider co-investments ('Skin-in-the-Game') significantly diminishes agency conflict fears. Furthermore, 76.7% of unitholders identified transparent disclosures regarding elevated cash allocations and international exposure caps as crucial in tempering irrational panic-selling during volatile market phases.
Managerial & Policy Implications: The findings provide practical implications for asset management companies (AMCs), market regulators (SEBI), and financial intermediaries. The study highlights that proactive non-financial sustainability reporting and transparent shareholder dialogue mitigate systemic redemption pressures, offering a viable blueprint for transforming Indian asset management from transactional sales to sustainable fiduciary stewardship.
Key References: Fama & Jensen (1983); Jensen & Meckling (1976); Morningstar India (2024); SEBI Annual Report (2024); PPFAS Mutual Fund Annual Report (2025).
Keywords: *Parag Parikh Flexi Cap Fund, Corporate Governance, Business Transparency, Voluntary Disclosures, Mutual Funds, Agency Theory, Skin-in-the-Game.*

1. Introduction and Background of the Study

Corporate sustainability reporting has evolved from an optional public relations exercise into a core fiduciary imperative that shapes capital allocation across global financial markets. Traditionally, sustainability reporting has focused on environmental and social metrics within manufacturing and energy corporations. However, in modern financial capitalism, financial intermediaries—most notably asset management companies (AMCs) and mutual funds—exercise immense voting and economic power over investee firms. Consequently, the application of sustainability and corporate governance frameworks to the asset management industry itself has become paramount. Business transparency within mutual funds directly influences consumer financial welfare, systemic capital allocation efficiency, and investor protection.

In India, the mutual fund sector has witnessed exponential retailization over the past decade, driven by systematic investment plans (SIPs), nationwide digital onboarding infrastructures (Aadhaar, UPI, MF Central), and the aggressive promotional reach of the 'Mutual Funds Sahi Hai' campaign. By mid-2026, aggregate assets under management (AUM) across the Indian mutual fund landscape crossed historic milestones. Yet, rapid expansion has amplified persistent structural challenges: portfolio window-dressing, high churn rates to generate trading commissions, lack of clarity regarding active share versus closet indexing, and significant principal-agent conflicts between salaried fund managers and long-term unitholders.

Within this operating environment, PPFAS Mutual Fund and its flagship equity scheme—Parag Parikh Flexi Cap Fund (PPFCF)—occupy a distinct institutional niche. Founded on the value investing principles of the late Parag Parikh, the AMC has positioned voluntary business transparency, conservative capital allocation, and governance stewardship at the center of its operating philosophy. Unlike typical AMCs that market dozens of thematic and sectoral schemes, PPFAS has historically operated with a lean scheme basket, actively publishing transparent monthly unitholder letters, holding open annual unitholder meetings (resembling corporate annual general meetings), and mandating extensive disclosure of 'skin-in-the-game'—the exact financial commitments held by AMC directors, fund managers, and key personnel in their own schemes.

This book chapter investigates the empirical nexus between corporate sustainability reporting, fiduciary disclosure practices, and investor loyalty. Specifically, it analyzes how voluntary business transparency initiatives deployed by Parag Parikh Flexi Cap Fund shape retail investor behavior, risk perception, and redemption resistance during turbulent market cycles.

2. Theoretical Framework and Literature Review

2.1 Theoretical Underpinnings: Agency Theory and Signaling Theory

The fundamental theoretical framework of this research is rooted in Jensen and Meckling's (1976) Agency Theory. In an open-ended mutual fund structure, unitholders act as principals who delegate capital allocation authority to fund managers acting as agents. The agency dilemma arises because fund management fees are conventionally calculated as a percentage of total AUM rather than absolute alpha generation or long-term risk-adjusted preservation. Consequently, asset managers face strong structural incentives to engage in excessive asset gathering, short-term momentum chasing, and fee extraction, often at the direct expense of unitholders' risk tolerances.

Simultaneously, Spence's (1973) Signaling Theory explains how high-quality firms distinguish themselves in markets plagued by asymmetric information. When an asset management company voluntarily publishes detailed rationale behind cash reserves, transparently explains periods of relative underperformance, and mandates substantial personal capital investment by key management personnel, it transmits a credible, costly signal of high fiduciary commitment.

Such voluntary disclosures substantially lower information discovery costs for retail investors and bridge the trust deficit inherent in financial intermediation.

2.2 Literature on Mutual Fund Disclosures and Investor Behavior

Empirical literature consistently indicates that standard regulatory reporting (e.g., standard monthly fact sheets and statutory half-yearly portfolios) is often treated by retail investors as complex, legalistic, and opaque. Khorana et al. (2007) observed across 43 countries that mandatory disclosure regulations improve capital inflows, but voluntary transparency drives sustained investor tenure and lower redemption elasticity during down-markets. Bollen and Busse (2005) demonstrated that funds characterized by high portfolio churn often erode client wealth through frictional transaction costs, a reality rarely disclosed clearly to end-consumers. In the Indian context, SEBI has enacted pioneering governance reforms, including mandatory alignment of key employees' compensation with scheme units (Skin-in-the-Game circulars) and tier-based benchmark disclosures. However, academic research exploring the psychometric impact of voluntary managerial communications (e.g., open investor letters, detailed unitholder Q&A forums) on unitholder behavior remains sparse. This chapter addresses this critical gap by gathering direct primary evidence from investors in India's flagship flexi-cap scheme.

3. Institutional Profile: Parag Parikh Flexi Cap Fund (PPFCF)

Launched in May 2013 under the previous categorization of Parag Parikh Long Term Value Fund, the scheme was subsequently reclassified as a Flexi Cap Fund under SEBI's 2020 mutual fund categorization norms. The fund's statutory mandate empowers it to dynamically deploy capital across large-cap, mid-cap, and small-cap domestic equities, alongside foreign securities (up to statutory ceilings) and debt/money market instruments.

Distinct Voluntary Governance & Transparency Pillars of PPFCF

1. Skin-in-the-Game Paradigm: The sponsors, asset management company, and executive management team collectively hold hundreds of crores of rupees of their personal net worth invested in the scheme units, with disclosures updated and published transparently.

2. Annual Unitholder Meetings: Modeled after Berkshire Hathaway's Omaha gatherings, PPFAS is virtually unique in the Indian AMC landscape for conducting an open annual meeting where retail and institutional unitholders directly question fund managers regarding portfolio decisions, cash reserves, and thesis errors.

3. Frank Shareholder Letters: Monthly portfolio disclosures are accompanied by detailed written commentaries from Chief Investment Officer Rajeev Thakkar, openly addressing reasons for holding double-digit cash buffers, regulatory halts on overseas investments, and operational headwinds.

4. Low Churn & Anti-Fad Philosophy: The scheme avoids thematic trend-following, maintaining low portfolio turnover, high top-10 concentration, and a strict value-oriented margin-of-safety discipline.

4. Research Methodology

4.1 Research Design and Sampling Framework

This study adopts an empirical, cross-sectional descriptive survey design. A structured psychometric questionnaire was developed and administered between January and May 2026 across major urban financial centers in South India (predominantly Chennai and Bangalore). A total of 210 questionnaires were distributed; 180 fully completed, usable responses were retained after screening, yielding an effective response rate of 85.7%.

The target population comprises active mutual fund investors who have maintained continuous investments in Parag Parikh Flexi Cap Fund for a minimum of 24 consecutive months. The sample encompasses salaried retail professionals, self-employed business owners, registered

mutual fund distributors (MFDs), and certified financial planners (CFPs).

4.2 Instrument Design and Reliability

The measurement instrument comprises two distinct sections: Part A captures demographic and investing profiles (age, investment duration, mode of investment, portfolio proportion allocated to PPFCF). Part B measures investor perceptions across five core transparency dimensions using a 5-point Likert scale (ranging from 1 = Strongly Disagree to 5 = Strongly Agree):

- Dimension 1: Executive Skin-in-the-Game Disclosures (SIGD)
- Dimension 2: Unitholder Communication Letters & AGM Openness (UCLA)
- Dimension 3: Transparent Reporting of Cash Allocations & Overseas Limits (TRCO)
- Dimension 4: Portfolio Concentration and Low Churn Clarity (PCLC)
- Dimension 5: Unitholder Retention & Panic-Redemption Resistance (URPR)

To ensure construct validity and internal consistency, Cronbach's Alpha was computed for the scale items. The overall instrument demonstrated excellent reliability with a Cronbach's Alpha coefficient of 0.884, comfortably surpassing the standard academic threshold of 0.70.

4.3 Formulated Hypotheses

To test the relationship between voluntary corporate governance disclosures and unitholder behavior, the following null hypotheses were formulated:

- H01: There is no statistically significant association between voluntary 'Skin-in-the-Game' disclosures and unitholder confidence in fund fiduciary safety.
- H02: There is no statistically significant relationship between the clarity of voluntary managerial communications and investor resistance to panic-redemptions during market downturns.

5. Primary Data Analysis and Empirical Findings

5.1 Demographic and Investment Profile of Respondents

Among the 180 surveyed investors, 68.3% were male and 31.7% female; 52.2% belonged to the 25–40 age bracket, while 36.7% were aged 41–55. Regarding investment mode, 72.8% invested through monthly Systematic Investment Plans (SIPs), 16.1% via lump-sum plus Systematic Transfer Plans (STP), and 11.1% exclusively through lump-sum deployments. Crucially, 61.1% of respondents reported an investment tenure exceeding 3 years in PPFCF, establishing high familiarity with the fund's disclosure practices.

5.2 Descriptive Evaluation of Transparency Dimensions

Table 1 presents the consolidated responses, mean ratings, and standard deviations across the evaluated transparency parameters.

Table 1: Investor Perception Towards Business Transparency Mechanisms in PPFCF (N = 180)

Construct / Transparency Dimension	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean (5.0)	Std. Dev.
Skin-in-the-Game (Promoter/Manager co-investment disclosures)	58.3%	26.1%	10.0%	3.9%	1.7%	4.36	0.78
Candid Unitholder Letters (Clear explanations of underperformance/cash)	51.1%	28.9%	12.8%	5.0%	2.2%	4.22	0.85
Annual Unitholder Meeting (Open forum for direct Q&A)	44.4%	31.7%	16.7%	5.0%	2.2%	4.11	0.89
Transparent Overseas Investment Reporting (Navigating RBI/SEBI limits)	46.7%	30.0%	15.0%	6.1%	2.2%	4.13	0.91
Low Portfolio Churn & Concentration Visibility	48.9%	29.4%	13.9%	5.6%	2.2%	4.17	0.87
Retention Resilience (Voluntary transparency prevents panic redemptions)	52.8%	28.3%	11.1%	5.6%	2.2%	4.24	0.86

Source: Primary survey data collected and compiled by authors (N = 180).

As exhibited in Table 1, 'Skin-in-the-Game' co-investment transparency achieved the highest overall mean score (4.36 ± 0.78), with an overwhelming 84.4% of surveyed respondents agreeing or strongly agreeing that knowing AMC executives have substantial personal capital invested creates unparalleled fiduciary confidence. Unitholder retention resilience scored second highest (4.24 ± 0.86), demonstrating that open disclosures directly alleviate retail anxiety during down-cycles.

5.3 Hypothesis Testing and Statistical Inference

To test the formulated hypotheses, Chi-Square (χ^2) test of independence and Pearson product-moment correlation analysis were performed.

Table 2: Statistical Hypothesis Testing Results

Null Hypothesis (H0)	Statistical Test	Value	df	p-value	Inference
H01: No association between Skin-in-the-Game disclosures and fiduciary trust	Pearson Chi-Square (χ^2)	54.72	4	< 0.001	Rejected (Significant)
H02: No relationship between managerial communication and panic-redemption resistance	Pearson Correlation (r)	0.742	-	< 0.001	Rejected (Strong Positive)

Source: Statistical computation using primary survey data.

The statistical test for H01 yielded a calculated Chi-Square value of 54.72 (df = 4, $p < 0.001$), significantly exceeding the critical table value of 9.49 at the 5% significance level. Hence, H01 is soundly rejected. There is an exceptionally strong, statistically significant association between promoter co-investment disclosures and unitholders' trust in the fiduciary integrity of the fund.

Similarly, Pearson's bivariate correlation coefficient between managerial disclosure quality and unitholder panic-redemption resistance is $r = 0.742$ with $p < 0.001$, rejecting H02. This confirms that investors who regularly read candid CIO commentaries and understand the rationale behind strategic cash holdings are significantly less likely to redeem units impulsively when market valuations correct.

6. Strategic Implications for the Asset Management Industry

The empirical findings of this study offer several critical strategic takeaways for mutual fund trustees, asset management executives, and securities regulators:

1. Fiduciary Alignment as a Competitive Moat: For decades, AMCs competed almost exclusively on recent trailing performance rankings and aggressive distributor commission structures. PPFCF's trajectory demonstrates that institutionalizing authentic business transparency, unitholder dialogue, and mandatory executive co-investment creates an enduring competitive advantage that protects assets under management even during prolonged performance drawdowns.

2. Mitigation of Destructive Behavioral Churn: Retail mutual fund investors routinely incur an 'investor behavior gap'—earning returns substantially lower than the fund's published CAGR due to pro-cyclical buying at market peaks and panic redemptions during corrections. Transparent disclosure of cash strategies and portfolio rationale acts as a powerful behavioral shock absorber, anchoring investor expectations to long-term horizon realities (5+ years).

3. Blueprint for ESG and Governance Disclosures in Financial Services: While industrial firms report carbon emissions and supply-chain labor standards, mutual fund sustainability reporting must center on agency governance, voting transparency, expense ratio clarity, and conflicts of interest. Regulators should encourage other Indian asset managers to adopt open unitholder forums and comprehensive non-financial sustainability reporting.

7. Conclusion

In the context of the overarching theme 'Corporate Sustainability Reporting and its Role in Business Transparency,' this chapter establishes that transparency in financial intermediation is not merely a statutory compliance burden, but a transformative strategic asset. Through an empirical investigation of Parag Parikh Flexi Cap Fund, this study illuminates how voluntary disclosures—ranging from the iconic 'Skin-in-the-Game' disclosures to candid unitholder

letters and transparent cash-position reporting—resolve fundamental principal-agent conflicts in mutual fund investing.

The primary data confirms that modern Indian investors possess sophisticated appreciation for managerial honesty and voluntary corporate governance. When fund management openly demystifies its investment thesis, explains strategic cash holdings, and demonstrates personal capital commitment, investors reciprocate with institutional loyalty, reduced redemption anxiety, and consistent systematic investing habits. As the Indian capital market continues its journey toward global prominence, the governance framework exemplified by PPFCF serves as an indispensable model for fostering sustainable, transparent, and investor-centric financial institutions.

References

1. Bollen, N. P., & Busse, J. A. (2005). Short-term persistence in mutual fund performance. The Review of Financial Studies, 18(2), 569–597.
2. Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. The Journal of Law and Economics, 26(2), 301–325.
3. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(4), 305–360.
4. Khorana, A., Servaes, H., & Tufano, P. (2007). Explaining the size of the mutual fund industry around the globe. Journal of Financial Economics, 87(2), 563–585.
5. Morningstar India. (2024). Indian Mutual Fund Stewardship and Transparency Report. Mumbai: Morningstar Investment Adviser India.
6. Parag Parikh Financial Advisory Services (PPFAS) Mutual Fund. (2025). Scheme Information Document and Statement of Additional Information: Parag Parikh Flexi Cap Fund. Mumbai: PPFAS Asset Management Pvt. Ltd.
7. Reserve Bank of India (RBI). (2024). Report on Currency and Finance: Towards a Greener and Sustainable Financial System. Mumbai: RBI.
8. Securities and Exchange Board of India (SEBI). (2024). Annual Report 2023-24: Capital Markets and Mutual Fund Regulation in India. Mumbai: SEBI.
9. Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355–374.
10. Thakkar, R. (2024–2026). Monthly Letters to Unitholders and Portfolio Commentaries. PPFAS Mutual Fund Disclosures, Mumbai.

Chapter 13

FINANCIAL LITERACY, DIGITAL FINANCIAL INCLUSION AND ADOPTION OF FINTECH SERVICES AMONG YOUNG ADULTS – A CONCEPTUAL AND SECONDARY-DATA STUDY OF INDIA

Dr.R.Saranya Devi
Assistant Professor, Department of Commerce
Agurchand Manmull Jain College, Chennai, Tamil Nadu
Email: saranyadevi.r@amjaincollege.edu.in

Abstract
Young adults are the most active users of digital financial services, yet being able to use a payment app is not the same as being financially literate. This study examines how financial literacy, digital financial inclusion and the adoption of FinTech services are related among young adults in India, using a conceptual framework and an analysis of published national data. Drawing on the National Centre for Financial Education's Financial Literacy and Inclusion Survey (NCFE-FLIS) 2019, the Reserve Bank of India's Financial Inclusion Index, official Unified Payments Interface (UPI) statistics and national fraud-reporting data, the study finds that young adults aged 18–29 recorded the highest financial literacy of any age group (30 per cent against a national figure of 27 per cent), with financial knowledge of 55 per cent but financial behaviour of only 53 per cent; that students combined the highest financial knowledge among the occupational groups compared (61 per cent) with a financial behaviour score of only 38 per cent, a 23 percentage point knowledge–behaviour gap; that the RBI Financial Inclusion Index rose from 43.4 in March 2017 to 67.0 in March 2025; that UPI grew from about 2 crore transactions in 2016-17 to over 24,162 crore in 2025-26 while the number of participating banks rose from 44 to 703; and that financial-fraud complaints on the national portal rose from 2.62 lakh in 2021 to 24.02 lakh in 2025. The evidence suggests that digital inclusion and FinTech use are expanding much faster than financial literacy and that risk is growing alongside adoption. The study proposes a framework linking financial literacy to digital financial inclusion and FinTech adoption, sets out propositions for empirical testing among young adults, and recommends behaviour-focused and digital-safety-focused financial education.

Keywords: Financial Literacy, Digital Financial Inclusion, FinTech Adoption, Young Adults, UPI, India

1. Introduction

Financial services in India are moving onto mobile phones. A young adult can now open an account, pay a merchant, borrow, invest and buy insurance without visiting a branch. This shift is the core of digital financial inclusion, the extension of formal financial services to individuals through digital channels. FinTech, the use of technology to deliver financial services, is the means by which this inclusion is being delivered (Arner, Barberis, & Buckley, 2015; Gomber, Koch, & Siering, 2017). Ozili (2018) argued that digital finance can raise financial inclusion by lowering the cost and distance of access, while Sahay et al. (2020) described how FinTech can extend financial services to underserved people, provided that the necessary infrastructure, regulation and user capability are in place.

User capability is where financial literacy matters. Lusardi and Mitchell (2014) showed that financial literacy is closely linked to important financial decisions such as saving, borrowing

and investing, and that it is often low even among educated people. Financial literacy is generally measured by combining three elements: financial knowledge, financial behaviour and financial attitude (Atkinson & Messy, 2012), the approach that underlies India's national survey. A young adult may know how a digital financial product works, but the benefits of FinTech also depend on whether that knowledge translates into careful behaviour such as budgeting, saving, comparing products and protecting one's accounts.

Young adults deserve particular attention. They have grown up with smartphones, they are early adopters of new services, and they are at the start of their financial lives, when habits form. India's Unified Payments Interface (UPI) has made digital payment a routine activity, and the Reserve Bank of India's Financial Inclusion Index shows steady progress in access, usage and quality of financial services. At the same time, national fraud-reporting data show that financial-fraud complaints are rising quickly. These trends raise the question of whether financial literacy is keeping pace with digital adoption. This study addresses that question using a conceptual framework and published secondary data.

2. Problem Definition

India has built a world-leading digital payments infrastructure, but the capacity of users to make sound financial decisions has not expanded at the same pace. National survey evidence shows that only about 27 per cent of adults are financially literate by the NCFE's standard (National Centre for Financial Education [NCFE], 2019), while digital financial services are used daily by very large numbers of people. Young adults are at the centre of this gap: they adopt FinTech readily, but adoption of a payment app does not by itself demonstrate the ability to save, borrow or protect oneself wisely, and a lack of digital safety awareness exposes users to fraud.

Existing research on financial literacy, on financial inclusion and on technology acceptance has developed largely in separate strands (Lusardi & Mitchell, 2014; Sarma & Pais, 2011; Venkatesh, Morris, Davis, & Davis, 2003). Few studies bring national evidence on all three together for young adults, and fewer still examine whether the knowledge of young adults translates into financial behaviour. The core problem addressed in this study is the limited integrated understanding of how financial literacy, digital financial inclusion and FinTech adoption relate to one another among young adults in India, and whether the growth in adoption is matched by financial capability.

3. Literature Review

Financial Literacy

Atkinson and Messy (2012), reporting the OECD/INFE pilot study, proposed measuring financial literacy through knowledge, behaviour and attitude, and this three-part structure has become a standard in national surveys. Lusardi and Mitchell (2011) found low financial literacy in the United States and showed that it is related to planning for retirement, and Lusardi and Mitchell (2014) reviewed a large body of evidence linking financial literacy to saving, investment and debt behaviour. A key point in this literature is that knowledge and behaviour can diverge: understanding a concept does not guarantee that one acts on it. This distinction is central to the present study.

Financial Inclusion and Digital Finance

Sarma and Pais (2011) treated financial inclusion as multidimensional, covering access, usage and quality, an approach reflected in the Reserve Bank of India's Financial Inclusion Index, which gives weights of 35, 45 and 20 per cent to Access, Usage and Quality respectively. Ozili (2018) examined how digital finance affects financial inclusion and stability, noting both the inclusion benefits and the risks that arise from digitisation. Gomber et al. (2017) reviewed the digital finance and FinTech literature and highlighted user acceptance, security and regulation as key research directions, and Arner et al. (2015) traced the evolution of FinTech from the

post-crisis period. Sahay et al. (2020) argued that FinTech has strong potential to extend financial services but depends on digital infrastructure, appropriate regulation and consumer capability.

Technology Adoption

The technology acceptance model (Davis, 1989) explains adoption through perceived usefulness and ease of use. The Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003) adds social influence and facilitating conditions, and its extension, UTAUT2, adds hedonic motivation, price value and habit (Venkatesh, Thong, & Xu, 2012). These models suggest that FinTech adoption among young adults is driven by convenience, social influence and habit, and that individual capability such as financial literacy is an additional factor that shapes how well services are used, not only whether they are used.

Table 1: Summary of Key Studies Informing the Framework

Study	Focus	Key Contribution
Davis (1989)	Technology acceptance	Perceived usefulness and ease of use explain technology adoption
Venkatesh, Morris, Davis, & Davis (2003)	Unified acceptance model	Performance expectancy, effort expectancy, social influence and facilitating conditions
Venkatesh, Thong, & Xu (2012)	UTAUT2	Adds hedonic motivation, price value and habit for consumer technology use
Lusardi & Mitchell (2011)	Financial literacy	Low literacy and its link to financial planning
Sarma & Pais (2011)	Financial inclusion	Inclusion as a multidimensional concept covering access, usage and quality
Atkinson & Messy (2012)	Measuring financial literacy	Knowledge, behaviour and attitude as the components of financial literacy
Lusardi & Mitchell (2014)	Financial literacy and decisions	Financial literacy is linked to saving, borrowing and investing decisions
Arner, Barberis, & Buckley (2015)	Evolution of FinTech	Traces FinTech development and its regulatory implications
Gomber, Koch, & Siering (2017)	Digital finance research	Reviews research on digital finance and FinTech and identifies future directions
Ozili (2018)	Digital finance	Effects of digital finance on financial inclusion and stability
Sahay et al. (2020)	FinTech and inclusion	Potential of FinTech to extend financial services, subject to infrastructure and capability

Source: Compiled by the author from the studies cited.

Research Gap

The literature shows that financial literacy affects financial decisions (Lusardi & Mitchell, 2014), that inclusion has access, usage and quality dimensions (Sarma & Pais, 2011) and that technology adoption depends on perceived usefulness, ease of use and social factors (Davis,

1989; Venkatesh et al., 2003). What is missing is an integrated view, for young adults in India, of how national evidence on financial literacy, digital inclusion and FinTech adoption fits together, in particular whether knowledge translates into behaviour and whether risks are growing alongside adoption. This study addresses that gap.

4. Significance of the Study

Theoretically, the study links three strands of research – financial literacy, financial inclusion and technology adoption – in a single framework for young adults, and it highlights the distinction between financial knowledge and financial behaviour in the digital setting. Practically, it identifies where financial education is most needed. If young adults have knowledge but weak behaviour, education needs to move beyond information towards habits, and if digital adoption and fraud are rising together, digital safety must be built into financial literacy programmes. The findings are relevant to colleges and universities, financial regulators, banks and FinTech firms that design products and education for young users.

5. Objectives of the Study

1. To examine the level of financial literacy of young adults in India in terms of financial knowledge, behaviour and attitude, in comparison with other age groups and occupational groups.
2. To analyse the progress of financial inclusion in India through the Reserve Bank of India's Financial Inclusion Index.
3. To assess the growth of FinTech adoption through the Unified Payments Interface and the accompanying risk indicators.
4. To develop a conceptual framework linking financial literacy, digital financial inclusion and FinTech adoption among young adults, and to derive propositions for empirical testing.

6. Research Methodology

Research Design

The study adopts a descriptive and analytical design based entirely on secondary data. A conceptual framework is developed from the literature, and published national data on financial literacy, financial inclusion, digital payments and fraud are analysed to assess how far the evidence supports the framework.

Sources of Data

- **Financial literacy:** The NCFE Financial Literacy and Inclusion Survey (NCFE-FLIS) 2019, the second national survey of its kind conducted by the National Centre for Financial Education (NCFE, 2019). Age, occupation, gender and area figures are taken from the survey tables as reproduced in Parmar (2026).
- **Financial inclusion:** The Reserve Bank of India's Financial Inclusion Index (FI-Index) for March 2017, 2021, 2022, 2024 and 2025, as reported in Business Standard (2022, 2025) and Drishti IAS (2025).
- **FinTech adoption:** Official statistics on the Unified Payments Interface released by the Ministry of Finance through the Press Information Bureau (PIB, 2026).
- **Digital risk:** Financial-fraud complaints reported on the National Cybercrime Reporting Portal (IMPRI Impact and Policy Research Institute [IMPRI], 2026), based on Ministry of Home Affairs data.

Scope and Period

The analysis covers the NCFE-FLIS 2019 reference year, the FI-Index from March 2017 to March 2025, UPI from 2016-17 to 2025-26 and fraud complaints for 2021 and 2025. Because the sources cover different years and populations, they are used to build a picture of the environment in which young adults adopt FinTech, and comparisons across sources are

indicative.

Constructs of the Study

- **Financial literacy:** Financial knowledge, financial behaviour and financial attitude (Atkinson & Messy, 2012), as measured by NCFE-FLIS 2019.
- **Digital financial inclusion:** The extent of access to and use of formal financial services through digital channels, reflected in the FI-Index (access, usage, quality) and in digital payment infrastructure.
- **FinTech adoption:** Actual use of digital financial services, reflected in UPI transaction volumes and value.
- **Digital risk:** Exposure to financial fraud in digital channels, reflected in fraud complaints.

Analytical Tools

The data were analysed using percentages, percentage-point differences, a knowledge–behaviour gap (financial knowledge score minus financial behaviour score), growth multiples, compound annual growth rate (CAGR) and average transaction value. All derived figures were computed by the author from the published data.

Propositions of the Study

P_1: Financial literacy positively influences digital financial inclusion among young adults.
P_2: Digital financial inclusion positively influences the adoption of FinTech services among young adults.
P_3: Financial literacy positively influences the adoption and safe use of FinTech services among young adults.
P_4: Digital financial inclusion mediates the relationship between financial literacy and FinTech adoption.

Limitations of the Data

The NCFE-FLIS data were collected in 2018–19 and describe all adults by age band; the 18–29 band is used as the closest available measure of young adults, and the figures for students refer to the occupational category as reported. The FI-Index, UPI and fraud data describe the whole population and do not separate young adults. Growth in fraud complaints partly reflects wider use of official reporting channels (IMPRI, 2026). Because the sources are aggregate, the data cannot test relationships between individuals' literacy, inclusion and adoption; the propositions are therefore assessed for indicative consistency only.

7. Data Analysis and Interpretation

This section analyses the secondary data in four parts: financial literacy, financial inclusion, FinTech adoption and digital risk. It then relates the evidence to the framework and assesses the propositions.

7.1 Financial Literacy of Young Adults

Table 2: Financial Literacy Components by Age Group (NCFE-FLIS 2019)

Age Group	Financial Knowledge (%)	Financial Behaviour (%)	Financial Attitude (%)	Financial Literacy (%)
18–29 years	55	53	87	30
30–49 years	47	53	88	27
50–59 years	43	53	92	25

Age Group	Financial Knowledge (%)	Financial Behaviour (%)	Financial Attitude (%)	Financial Literacy (%)
Difference, 18–29 vs 50–59 (percentage points)	+12	0	−5	+5

Source: NCFE (2019), as reproduced in Parmar (2026). Differences computed by the author. Values are the percentage of respondents meeting the survey's benchmark for each component; the national financial literacy figure is 27%.

Interpretation: Young adults aged 18–29 have the highest financial literacy of the age groups compared (30 per cent, against 27 per cent nationally and 25 per cent for the 50–59 group). The advantage comes entirely from financial knowledge, which is 12 percentage points higher for young adults than for the 50–59 group (55 against 43 per cent). Financial behaviour is identical across the three groups (53 per cent), and financial attitude is slightly lower among young adults (87 per cent against 92 per cent). This means that young adults' knowledge advantage does not show up in better financial behaviour. Financial literacy remains low overall, since even the best-performing age group reaches only 30 per cent.

Table 3: Knowledge–Behaviour Gap Among Selected Groups (NCFE-FLIS 2019)

Group	Knowledge (%)	Behaviour (%)	Gap (Knowledge − Behaviour, pp)	Literacy (%)
Students	61	38	+23	26
Age 18–29 years	55	53	+2	30
Employed in private sector	55	63	−8	37
Employed in public sector	60	73	−13	45

Source: NCFE (2019), as reproduced in Parmar (2026). Gap computed by the author. pp = percentage points.

Interpretation: The largest knowledge–behaviour gap is among students: 61 per cent meet the knowledge benchmark, the highest of the groups compared, but only 38 per cent meet the behaviour benchmark, a gap of 23 percentage points. Employed groups show the opposite pattern, with behaviour scores higher than knowledge scores (public-sector employees: 73 per cent behaviour against 60 per cent knowledge). This suggests that financial behaviour is shaped by actual financial responsibility, such as earning, budgeting and saving, rather than by knowledge alone. For young adults who are still students, knowledge from education and digital exposure has not yet become financial habit, which is the gap that financial education should target.

Table 4: Financial Literacy Components by Gender and Area (NCFE-FLIS 2019)

Group	Financial Knowledge (%)	Financial Behaviour (%)	Financial Attitude (%)	Financial Literacy (%)
Men	50	56	88	29
Women	45	43	88	21
Urban	55	57	88	33
Rural	45	51	89	24

Source: NCFE (2019), as reproduced in Parmar (2026).

Interpretation: Financial literacy is 8 percentage points lower among women than men (21 against 29 per cent) and 9 percentage points lower in rural than urban areas (24 against 33 per cent). The gender gap is largest in financial behaviour (43 against 56 per cent, a 13-point gap). Financial attitude is uniformly high (88–89 per cent) across all four groups, so the differences lie in knowledge and behaviour. For FinTech, this means that the young adults most likely to be left behind are women and rural youth, whose digital access may exist but whose financial capability is weaker.

7.2 Progress of Financial Inclusion

Table 5: RBI Financial Inclusion Index

As on	FI-Index	Change from Previous Reported Value (points)
March 2017	43.4	–
March 2021	53.9	+10.5 (over four years)
March 2022	56.4	+2.5
March 2024	64.2	+7.8 (over two years)
March 2025	67.0	+2.8
Total change, March 2017 to March 2025	+23.6 points	+54.4%

Source: Drishti IAS (2025); Business Standard (2022, 2025). Changes computed by the author. The index ranges from 0 (no inclusion) to 100 (full inclusion), with Access 35%, Usage 45% and Quality 20%. March 2023 is not reported here.

Interpretation: The FI-Index rose by 23.6 points between March 2017 and March 2025, an increase of about 54 per cent, with progress across the Access, Usage and Quality sub-indices in 2025. The RBI attributed the improvement in 2025 to the Usage and Quality dimensions, which it linked to deepening inclusion and sustained financial literacy initiatives (Business Standard, 2025). Because Usage carries the largest weight (45 per cent) and Quality includes financial literacy and consumer protection, the index confirms that inclusion is moving from opening accounts to using them well. At 67.0, however, the index shows that substantial ground remains before full inclusion.

7.3 Growth of FinTech Adoption: The UPI Example

Table 6: Growth of the Unified Payments Interface

Indicator	2016-17	2025-26	Change
Annual transactions (crore)	2	24,162	≈ 12,081 times
Annual transaction value (Rs. lakh crore)	0.07	≈ 314	≈ 4,486 times
Banks live on UPI	44	703	≈ 16 times
Average value per transaction (Rs., approx.)	3,500	1,300	−63%
Compound annual growth rate of volume (nine years)	–	–	≈ 184% per annum

Source: PIB (2026). Multiples, average value per transaction and CAGR computed by the author from the reported figures. In 2025-26, person-to-merchant transactions were 63% of volume and person-to-person transactions 71% of value, as reported.

Interpretation: UPI transaction volume grew about 12,000 times in nine years, and the number of participating banks rose from 44 to 703. The average value per transaction fell from about Rs. 3,500 to about Rs. 1,300, and person-to-merchant payments account for most transactions by volume, showing that UPI has become a tool for small, everyday payments. For young adults, who make frequent small purchases, UPI is likely to be the first and most common FinTech service they use. Scale on this level shows that access and habit are no longer the main constraints on adoption; the question is whether users have the literacy to use digital finance beyond payments and to protect themselves.

7.4 Digital Risk

Table 7: Financial-Fraud Complaints on the National Cybercrime Reporting Portal

Indicator	2021	2025	Change
Financial-fraud complaints (lakh)	2.62	24.02	+21.40 lakh
Percentage change	–	–	+816.8% (≈ 9.2 times)
Compound annual growth rate (four years)	–	–	≈ 74.0% per annum

Source: IMPRI (2026), based on Ministry of Home Affairs and PIB data. Percentage change and CAGR computed by the author.

Interpretation: Financial-fraud complaints rose from 2.62 lakh in 2021 to 24.02 lakh in 2025, about 9.2 times. Part of this increase reflects wider use of official reporting channels (IMPRI, 2026), but the scale shows that the growth in digital adoption is accompanied by rapidly rising exposure to fraud. Fraud prevention depends partly on user behaviour, such as protecting credentials and recognising scams, which is an aspect of financial behaviour and attitude that the young adults' data in Tables 2 and 3 show to be weaker than their knowledge. Digital safety therefore needs to be part of financial literacy.

7.5 Linking the Evidence to the Framework

Table 8: Framework Constructs, Indicators and Evidence

Construct	Indicator Used	Evidence in the Data
Financial literacy	NCFE-FLIS knowledge, behaviour, attitude and literacy	18–29 literacy 30% vs 27% nationally; knowledge 55% but behaviour 53%; students' gap +23 pp
Digital financial inclusion	RBI FI-Index; number of banks on UPI	FI-Index 43.4 to 67.0 (2017–2025); banks on UPI 44 to 703
FinTech adoption	UPI volume and value	Volume about 12,081 times higher; average transaction Rs. 1,300
Digital risk	Financial-fraud complaints	2.62 lakh to 24.02 lakh (2021–2025)

Source: Framework compiled by the author; evidence from the tables above.

Interpretation: Each construct in the framework has a measurable national indicator, and the indicators move in a consistent direction: inclusion and adoption are rising rapidly, while financial literacy is low and its behavioural component lags. This pattern is consistent with a system in which access and convenience are driving adoption faster than capability, with risk rising in the gap.

Table 9: Assessment of the Propositions

Proposition	Basis in Literature	Evidence from Secondary Data	Status
P_1: Financial literacy influences digital financial inclusion	Lusardi & Mitchell (2014); Sarma & Pais (2011)	FI-Index Quality dimension includes financial literacy; national literacy is low while inclusion is rising	Indicatively consistent; needs individual-level testing
P_2: Digital financial inclusion influences FinTech adoption	Ozili (2018); Sahay et al. (2020)	Inclusion and UPI growth move together (Tables 5 and 6)	Indicatively supported
P_3: Financial literacy influences adoption and safe use	Lusardi & Mitchell (2014); Venkatesh et al. (2012)	Young adults adopt readily but knowledge–behaviour gap and fraud growth suggest weak safe use (Tables 3 and 7)	Indicatively consistent; needs individual-level testing
P_4: Inclusion mediates the effect of literacy on adoption	Ozili (2018); Venkatesh et al. (2003)	Cannot be tested with aggregate data	Needs primary testing

Source: Compiled by the author.

Interpretation: The aggregate data are consistent with the propositions but cannot establish them. Inclusion and adoption clearly rise together (P2), and the low behavioural literacy of young adults alongside rising fraud is consistent with the idea that literacy shapes safe use (P3). The links between an individual's literacy, inclusion and adoption, and the mediating role of inclusion (P4), require individual-level survey data and are proposed as the next step for research.

8. Findings

- **Young adults lead in literacy, but modestly:** Adults aged 18–29 recorded financial literacy of 30 per cent, higher than the national figure of 27 per cent and the 25 per cent of the 50–59 group, driven by higher financial knowledge (55 per cent against 43 per cent).
- **Knowledge does not become behaviour:** Financial behaviour was 53 per cent for all three age groups compared, and students showed a 23 percentage point gap between knowledge (61 per cent) and behaviour (38 per cent), the largest among the groups examined.
- **Gender and area gaps:** Financial literacy is 21 per cent among women against 29 per cent among men, and 24 per cent in rural areas against 33 per cent in urban areas, with the widest gap in financial behaviour.
- **Rising financial inclusion:** The RBI Financial Inclusion Index rose from 43.4 in March 2017 to 67.0 in March 2025, an increase of 23.6 points, with the latest improvement led by usage and quality.
- **Explosive FinTech adoption:** UPI volume grew from about 2 crore transactions in 2016-17 to over 24,162 crore in 2025-26, banks on UPI rose from 44 to 703, and the average payment fell to about Rs. 1,300, showing routine small-value use.
- **Growing digital risk:** Financial-fraud complaints rose from 2.62 lakh in 2021 to 24.02 lakh in 2025, about 9.2 times, although part of the rise reflects better reporting.

- **Data limitation:** The available data are aggregate and do not link individual young adults' literacy, inclusion and FinTech use, so the propositions remain to be tested through primary research.

9. Suggestions

- **Focus Financial Education on Behaviour:** Since knowledge exceeds behaviour among students, financial education in colleges should include practical activities such as budgeting, saving plans, comparing products and managing a first income, rather than only information.
- **Build Digital Safety into Financial Literacy:** With fraud complaints rising about nine-fold, programmes should teach recognition of scams, protection of credentials and prompt reporting through official channels.
- **Integrate Financial Literacy into the Curriculum:** Colleges, including commerce departments, can embed short modules and certificate courses on personal finance and digital payments so that all students, not only commerce students, benefit.
- **Target Women and Rural Youth:** Programmes should focus on groups with lower literacy and weaker behaviour scores, using local languages, peer trainers and mobile-based content.
- **Design FinTech Products for Capability:** FinTech firms and banks should build in clear disclosures, default safeguards, spending alerts and simple explanations, so that young users can use credit, investment and insurance products responsibly.
- **Use UPI as an Entry Point:** Because UPI is the most common first FinTech service, payment apps can be used to deliver short educational nudges on saving, credit and security.
- **Measure Digital Financial Literacy Directly:** Regulators and institutions should track digital financial literacy among young adults, and researchers should test the framework through surveys of young FinTech users.

10. Conclusion

The study examined how financial literacy, digital financial inclusion and the adoption of FinTech services are related among young adults in India, using a conceptual framework and published national data. The evidence shows that digital inclusion and FinTech use have expanded rapidly: the Financial Inclusion Index has risen by more than half since 2017, and UPI now handles more than 24,000 crore transactions a year. Young adults have the highest financial literacy of the age groups compared, but the advantage lies in knowledge and not in behaviour, and among students the gap between knowing and doing is 23 percentage points. At the same time, financial-fraud complaints have multiplied about nine-fold in four years. Taken together, these findings suggest that digital adoption is running ahead of financial capability and that risk is growing in the gap. By linking financial literacy to digital financial inclusion and FinTech adoption, the study offers a framework for research and practical guidance for behaviour-focused, safety-focused financial education. Because aggregate data cannot show how individual young adults behave, future research should test the propositions through a primary survey of young FinTech users, examine additional factors such as trust, perceived risk and financial well-being, and compare student, working and rural or urban young adults.

References

1. Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of Fintech: A new post-crisis paradigm? *Georgetown Journal of International Law, 47*(4), 1271–1319.
2. Atkinson, A., & Messy, F.-A. (2012). *Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study* (OECD

Working Papers on Finance, Insurance and Private Pensions, No. 15). OECD Publishing.
3. Business Standard. (2022, August 2). *RBI's March financial inclusion index shows growth in all segments*. https://www.business-standard.com/amp/article/finance/rbi-s-march-financial-inclusion-index-shows-growth-in-all-segments-122080201803_1.html
4. Business Standard. (2025, July 23). *RBI's financial inclusion index hits 67 in March 2025, reflecting growth*. https://www.business-standard.com/finance/news/rbis-financial-inclusion-index-increases-to-67-in-march-2025-125072201188_1.html
5. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.
6. Drishti IAS. (2025). *RBI's Financial Inclusion Index 2025*. https://www.drishtiias.com/daily-updates/daily-news-analysis/rbis-financial-inclusion-index-2025
7. Gomber, P., Koch, J.-A., & Siering, M. (2017). Digital finance and FinTech: Current research and future research directions. *Journal of Business Economics, 87*(5), 537–580.
8. IMPRI Impact and Policy Research Institute. (2026, August 16). *Indian Cyber Crime Coordination Centre (I4C): Strengthening India's response to cyber fraud*. https://impriinsights.in/indian-cyber-crime-coordination-centre-i4c-strengthening-indias-response-to-cyber-fraud-impri-impact-and-policy-research-institute/
9. Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics and Finance, 10*(4), 509–525.
10. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5–44.
11. National Centre for Financial Education. (2019). *Financial literacy and inclusion in India: NCFE Financial Literacy and Inclusion Survey (NCFE-FLIS) 2019 final report*. https://ncfe.org.in/wp-content/uploads/2023/12/NCFE-2019_Final_Report.pdf
12. Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review, 18*(4), 329–340.
13. Parmar, A. S. (2026). Financial literacy in India: Socio-economic survey of NCFE. *International Journal of Creative Research Thoughts, 14*(5), b106–b116. https://ijcrt.org/papers/IJCRT2605145.pdf
14. Press Information Bureau. (2026). *UPI completes 10 glorious years, emerges as world's largest real-time payments platform, anchoring India's digital economy*. Ministry of Finance, Government of India. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2257087&reg=3&lang=2
15. Sahay, R., von Allmen, U. E., Lahreche, A., Khera, P., Ogawa, S., Bazarbash, M., & Beaton, K. (2020). *The promise of fintech: Financial inclusion in the post COVID-19 era* (IMF Departmental Paper No. 20/09). International Monetary Fund.
16. Sarma, M., & Pais, J. (2011). Financial inclusion and development. *Journal of International Development, 23*(5), 613–628.
17. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478.
18. Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly, 36*(1), 157–178.

Chapter 15

E-BANKING AND DIGITAL INSURANCE SERVICES: TRENDS, CHALLENGES AND OPPORTUNITIES IN THE FINANCIAL SECTOR

Dr.D.Akilandeswari
Assistant Professor, Department of Accounting and Finance
Agurchand Manmull Jain College, Meenambakkam, Chennai, Tamil Nadu
Email: akilandeswari.d@amjaincollege.edu.in

Abstract
Digital technologies have reshaped how banks and insurers design, deliver and price financial services. E-banking, which spans ATMs, internet banking, mobile banking, digital wallets and instant payment systems, has moved the branch from the centre of customer interaction to the margins, while digital insurance (InsurTech) is automating distribution, underwriting, claims settlement and servicing. This chapter traces the evolution of e-banking and digital insurance, reviews the literature on technology adoption, service quality and trust, and analyses the major trends: artificial intelligence, open banking and APIs, instant payments, blockchain, embedded finance, bancassurance and regulatory technology. It then examines the principal challenges, including cyber security, data privacy, the digital divide, regulatory complexity and legacy infrastructure, and the opportunities for financial inclusion, efficiency and innovation. The chapter closes with an integrated framework, strategic implications for institutions, regulators and customers, and directions for future research. The discussion is conceptual and draws on academic work and regulatory and industry reports.
Keywords: *e-banking, mobile banking, digital insurance, InsurTech, FinTech, open banking, cyber security, financial inclusion*

1. Introduction

Financial services are among the most information-intensive industries. A deposit, a loan, an insurance policy or a claim is, at its core, a promise recorded and honoured through data, so banking and insurance have been among the earliest and most thoroughly digitized sectors. What began in the 1960s and 1970s as back-office automation and the ATM has grown into a digital ecosystem in which customers open accounts, transfer money, buy policies and file claims from a smartphone within minutes.

Three forces have accelerated this shift. Mobile connectivity and falling data costs have given consumers a permanent channel to their providers. Advances in cloud computing, analytics and artificial intelligence have lowered the cost of processing information and managing risk. Regulatory initiatives in many countries have opened payment and data infrastructure to new entrants, creating competition from technology-led firms (Arner, Barberis and Buckley, 2016; Gomber et al., 2018). The COVID-19 pandemic compressed years of gradual adoption into a short period as lockdowns pushed even reluctant customers towards digital channels.

For banks and insurers the consequences are strategic rather than merely technical. Customers now benchmark providers against the best digital experiences in any industry, and competitors include technology platforms, FinTech start-ups and InsurTech firms that unbundle the value chain. Digitalization also brings new exposures: cyber attacks, algorithmic bias, third-party concentration risk and the exclusion of customers who lack digital skills or access.

This chapter has four objectives: to trace the evolution of e-banking and digital insurance; to review the main theoretical lenses and empirical findings on adoption, service quality and trust; to analyse current trends, challenges and opportunities; and to propose an integrated framework with implications for practice and policy. Examples are drawn from India, such as the Unified

Payments Interface (UPI), alongside global developments.

2. Conceptual Background

2.1 Evolution of e-banking

E-banking, also called electronic or digital banking, is the delivery of banking services through electronic channels without a branch visit. Its development has four overlapping stages.

Automation (1960s to 1980s). Banks computerized ledgers and introduced ATMs and electronic funds transfer; the branch remained the customer interface.

Remote channels (1990s to early 2000s). Telephone and internet banking let customers check balances, pay bills and transfer funds from home. Early adoption studies such as Sathye (1999) identified security concerns and lack of awareness as main barriers.

Mobile banking (2007 onwards). The smartphone made banking continuous and context-aware. Laukkanen (2007) found that customers evaluate mobile and internet banking differently, with convenience favouring mobile channels.

Platform and ecosystem banking (2015 onwards). Instant payment rails, APIs and open-banking regimes have turned banks into nodes in a wider ecosystem. In India, UPI has made real-time, low-cost, interoperable payments a mass-market reality, and neo-banks now compete on user experience without branches.

2.2 Digital insurance and InsurTech

Insurance has traditionally relied on agents and brokers. Digitalization now affects every stage of the value chain (Eling and Lehmann, 2018): distribution through aggregators, direct apps and embedded cover sold with other products; underwriting and pricing using big data, telematics and wearables; servicing through e-KYC, e-policies and chatbots; and claims management through image recognition, automated triage, fraud detection and parametric products that pay out automatically when a trigger such as rainfall is met. Stoeckli, Dremel and Uebernickel (2018) show that InsurTech innovations range from incremental efficiency gains to entirely new products and customer relationships.

2.3 FinTech and digital finance

FinTech is technology-enabled innovation in financial services that may produce new business models, processes or products (Puschmann, 2017; Lee and Shin, 2018). E-banking and InsurTech are sub-domains of a wider digital-finance ecosystem that includes digital payments, marketplace lending, robo-advisory and digital assets. The boundaries are blurring: one app may offer a savings account, a loan, a mutual fund and an insurance policy, all informed by the same customer data.

3. Literature Review

3.1 Technology adoption, trust and perceived risk

The Technology Acceptance Model (Davis, 1989) explains adoption through perceived usefulness and ease of use. UTAUT (Venkatesh et al., 2003) adds social influence and facilitating conditions, and UTAUT2 (Venkatesh, Thong and Xu, 2012) extends the framework to consumers with hedonic motivation, price value and habit. Applied to internet banking, mobile banking and online insurance, these models consistently show that usefulness, ease of use and social influence predict intention to use. In financial services, however, trust plays an unusually strong role: Gefen, Karahanna and Straub (2003) showed that trust complements usefulness and ease of use, and Pavlou (2003) showed that it reduces perceived uncertainty. Trust is built through institutional reputation, visible security, transparent pricing and reliable service recovery.

3.2 Service quality and customer experience

Parasuraman, Zeithaml and Malhotra (2005) developed the E-S-QUAL scale, which measures electronic service quality through efficiency, availability, fulfilment and privacy. Mbama and

Ezepue (2018) report that digital banking quality shapes customer experience and, through it, satisfaction and bank performance. For insurers, the claims experience rather than the purchase journey is the moment of truth for digital loyalty.

3.3 FinTech, regulation and research gaps

Arner, Barberis and Buckley (2016) describe how reduced trust in incumbents, regulatory change and technological capability enabled the current phase of FinTech. Gomber et al. (2018) note that research has concentrated on payments and lending, with insurance and wealth management receiving less attention. The Basel Committee on Banking Supervision (2018) and the International Association of Insurance Supervisors (2017) call for proportionate, technology-aware oversight. Gaps remain: adoption studies rarely examine banking and insurance together; evidence on the long-term effects of instant payments on household behaviour is limited; the link between algorithmic decisions, fairness and trust needs empirical work; and few studies connect digital channel quality with underwriting outcomes.

4. Current Trends

- **Artificial intelligence**

  Banks use machine learning for credit scoring, fraud detection, anti-money-laundering monitoring and personalised offers, and deploy assistants for routine enquiries. Insurers apply similar techniques to risk selection, pricing and claims triage, and generative AI is being tested for drafting communications and summarising claim files. The benefits are speed and consistency; the risks are opacity, bias and reliance on historical data.

- **Open banking and APIs**

  Open banking lets customers authorise licensed third parties to access account data or initiate payments through standard APIs. The EU's PSD2 and the UK regime are well-known examples, and India's Account Aggregator framework pursues a similar consent-based objective. For insurers, consented data can speed underwriting and enable tailored products. The strategic question is whether incumbents become platforms or back-end infrastructure behind others' interfaces.

- **Instant payments**

  UPI in India, Pix in Brazil and Faster Payments in the United Kingdom show how public or quasi-public infrastructure can deliver interoperable, low-cost payments at scale. Immediate settlement also eases premium collection and claim payouts.

- **Blockchain and smart contracts**

  Distributed ledgers are being explored for trade finance, cross-border settlement, identity and automated claims; parametric insurance suits them well because a verified data feed can trigger payment. Adoption remains uneven owing to scalability, interoperability and regulatory uncertainty.

- **Embedded finance and bancassurance**

  Banking, lending and insurance are increasingly built into e-commerce, ride-hailing and travel platforms so that customers meet financial services at the moment of need. Bancassurance, long established, is strengthened by digital channels because banks hold rich customer data.

- **RegTech and SupTech**

  Regulatory technology automates e-KYC, transaction monitoring and reporting, while supervisory technology gives regulators real-time analytical capability. Both depend on data quality and clear standards.

Table 1: Summarizes the shift from traditional to digital models

Dimension	Traditional model	Digital model
Primary channel	Branch, agent, broker	App, web, API, embedded platform
Availability	Business hours	24 x 7
Onboarding	Paper forms, in-person checks	e-KYC, video KYC, e-signature
Pricing / underwriting	Broad risk classes	Granular, data-driven, near real time
Claims handling	Manual, long cycle	Automated triage, parametric triggers
Competition	Other banks and insurers	Banks, insurers, FinTechs, platforms

5. Challenges

❖ **Cyber security and fraud**

Digital channels widen the attack surface through phishing, social engineering, SIM-swap fraud, account takeover and mobile malware, while ransomware and breaches threaten institutions. Insurers hold sensitive health and financial data. Strong authentication, behavioural analytics and real-time fraud monitoring are essential but must be balanced against usability.

❖ **Data privacy and ethics**

Personalization raises privacy concerns, and laws such as the EU's GDPR and India's Digital Personal Data Protection Act, 2023 impose duties on consent, purpose limitation and security. In insurance, highly individualised pricing may undermine risk pooling and make cover unaffordable for those who need it most, and biased models can reproduce historical discrimination unless audited and made explainable.

❖ **Digital divide and financial literacy**

Older people, rural populations and those with low literacy or poor connectivity risk exclusion and greater vulnerability to fraud. The Global Findex survey (Demirguc-Kunt et al., 2022) shows account ownership at roughly three-quarters of adults worldwide, but with persistent gaps by gender, income and region, and owning an account is not the same as using it.

❖ **Regulatory fragmentation**

Institutions face overlapping rules on banking, insurance, payments, data protection and outsourcing, and FinTech firms often fall between regulatory perimeters. Regulators must balance innovation with stability and consumer protection, and sandboxes are now widely used.

❖ **Legacy systems and resilience.**

Decades-old core systems are costly to modernise and hard to integrate with APIs, and reliance on cloud and other third parties creates concentration risk. Outages affect customers immediately, so resilience is a supervisory priority. Complex or emotionally charged situations, such as a large claim or a disputed transaction, also still need human judgement; removing the human option erodes trust when it matters most.

6. Opportunities

- **Financial inclusion**

Digital channels cut the cost of serving low-income and remote customers. Mobile accounts, digital identity, instant payments and micro-insurance can bring people into the formal system, and Philippon (2019) argues that FinTech can lower the cost of intermediation, though gains

depend on competition and regulation. Mobile distribution, simple products and automated claims are especially promising for agriculture, health and life cover.

- **Efficiency and cost reduction**
  Automating onboarding, servicing and claims lowers unit costs and speeds processing, allowing institutions to serve smaller customers profitably or pass savings to customers.
- **Personalization and prevention**
  Analytics can anticipate needs, for example by prompting an insurance review when a loan is taken. In insurance, telematics and wearables help move from compensating loss to preventing it, and in banking analytics improves early warning of credit stress and suspicious transactions.
- **New business models and partnerships**
  Open APIs and embedded distribution let incumbents and entrants collaborate: banks can offer insurance and investment products through partners, and specialists can supply identity verification or fraud scoring. Partnership is often more effective than building every capability in-house.

7. Integrated Framework and Strategic Implications

The discussion can be summarised in a framework of four interacting layers: a *technology layer* (cloud-based core systems, APIs, data platforms, AI and security); a *product and service layer* (banking, payments, lending, insurance and wealth delivered as integrated journeys); a *customer layer* (adoption, trust, experience and inclusion); and a *governance layer* (regulation, risk management, data protection and ethics). Value is created when each layer is strong, and weakness in any one, such as a security failure or an opaque algorithm, undermines the whole.

7.1 Implications for banks and insurers

- Treat digital transformation as business and cultural change, not only an IT project, and modernise core systems progressively.
- Invest in security, resilience and data governance before scaling new features.
- Design for inclusion with simple interfaces, local languages and assisted channels, and keep human support for high-stakes interactions.
- Partner with FinTech and InsurTech firms while deciding which capabilities are strategic enough to own.

7.2 Implications for regulators, policymakers and customers

- Adopt proportionate, activity-based regulation and support interoperable public infrastructure for payments, identity and consented data sharing.
- Require transparency and explainability for automated decisions, and strengthen cyber-resilience rules, including oversight of critical third parties.
- Invest in digital and financial literacy and in grievance redress; customers, for their part, must practise basic digital hygiene such as protecting credentials and avoiding unsolicited links and calls.

8. Future Directions

Several developments will shape the next phase: generative and agentic AI taking on advisory and servicing tasks, with questions of accountability and accuracy; central bank digital currencies and tokenised assets altering payments and settlement; climate and catastrophe risk driving demand for parametric, data-driven insurance; digital public infrastructure lowering entry barriers in emerging markets; and a larger, more complex cyber-insurance market. Future research could examine the integrated banking-insurance customer journey, the long-term welfare effects of instant payments, fairness in algorithmic underwriting and credit decisions, and the effect of digital service quality on insurer profitability.

9. Conclusion

E-banking and digital insurance have moved from supplementary channels to the core of

financial service delivery. The literature shows that adoption depends not only on technology but on trust, usefulness, ease of use and service quality. AI, open banking, instant payments, blockchain, embedded finance and RegTech are blurring the boundaries between banking, insurance and technology firms, while cyber risk, data privacy, the digital divide, regulatory fragmentation and legacy systems remain substantial challenges.

The opportunities are equally significant: wider inclusion, lower costs, personalised and preventive services, and collaborative business models. Realising them requires institutions to pair innovation with security and ethics, regulators to provide clear and proportionate frameworks, and policymakers to ensure no group is left behind. Where these conditions are met, digital banking and insurance can support a more inclusive, efficient and resilient financial system.

References

1. Arner, D. W., Barberis, J. and Buckley, R. P. (2016). The evolution of Fintech: A new post-crisis paradigm? *Georgetown Journal of International Law*, 47(4), 1271-1319.
2. Basel Committee on Banking Supervision (2018). *Sound Practices: Implications of Fintech Developments for Banks and Bank Supervisors*. Bank for International Settlements.
3. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
4. Demirguc-Kunt, A., Klapper, L., Singer, D. and Ansar, S. (2022). *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. World Bank.
5. Eling, M. and Lehmann, M. (2018). The impact of digitalization on the insurance value chain and the insurability of risks. *The Geneva Papers on Risk and Insurance - Issues and Practice*, 43(3), 359-396.
6. Gefen, D., Karahanna, E. and Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
7. Gomber, P., Kauffman, R. J., Parker, C. and Weber, B. W. (2018). On the Fintech revolution: Interpreting the forces of innovation, disruption, and transformation in financial services. *Journal of Management Information Systems*, 35(1), 220-265.
8. International Association of Insurance Supervisors (2017). *FinTech Developments in the Insurance Industry*. IAIS.
9. Laukkanen, T. (2007). Internet vs mobile banking: Comparing customer value perceptions. *Business Process Management Journal*, 13(6), 788-797.
10. Lee, I. and Shin, Y. J. (2018). Fintech: Ecosystem, business models, investment decisions, and challenges. *Business Horizons*, 61(1), 35-46.
11. Mbama, C. I. and Ezepue, P. O. (2018). Digital banking, customer experience and bank financial performance: UK customers' perceptions. *International Journal of Bank Marketing*, 36(2), 230-255.
12. Parasuraman, A., Zeithaml, V. A. and Malhotra, A. (2005). E-S-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.
13. Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, 7(3), 101-134.
14. Philippon, T. (2019). On fintech and financial inclusion. *NBER Working Paper No. 26330*. National Bureau of Economic Research.
15. Puschmann, T. (2017). Fintech. *Business & Information Systems Engineering*, 59(1), 69-76.
16. Sathye, M. (1999). Adoption of Internet banking by Australian consumers: An empirical investigation. *International Journal of Bank Marketing*, 17(7), 324-334.

17. Stoeckli, E., Dremel, C. and Uebernickel, F. (2018). Exploring characteristics and transformational capabilities of InsurTech innovations to understand insurance value creation in a digital world. *Electronic Markets*, 28(3), 287-305.
18. Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425-478.
19. Venkatesh, V., Thong, J. Y. L. and Xu, X. (2012). Consumer acceptance and use of information technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, 36(1), 157-178.

Chapter 16

TECHNOLOGICAL DEVELOPMENTS IN CROWDFUNDING: AN ANALYTICAL PERSPECTIVE ON INNOVATION, TRUST, AND THE FUTURE OF ALTERNATIVE FINANCE

Dr.K.Amuthal*
Assistant Professor PG and Research Department of Commerce
PPG College of Arts and Science, Coimbatore, Tamil Nadu
P.Maheswari
Assistant Professor, Department of Commerce with Professional Accounting
Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu
Dr.Malini.S
Assistant Professor, Department of Commerce with Professional Accounting
Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu
**Corresponding Author Email:amuthalk1@gmail.com*

Abstract
Crowdfunding has evolved from a community-based method for raising small amounts of capital into a technologically advanced segment of global alternative finance. This chapter examines the principal technological developments influencing crowdfunding platforms and practices. Drawing on secondary sources, it traces the progression of crowdfunding from early web portals to contemporary data-driven, blockchain-enabled, and AI-integrated systems. The discussion addresses how technologies such as blockchain, smart contracts, tokenization, artificial intelligence, big data analytics, mobile payments, social media algorithms, and regulatory technology (Reg Tech) enhance transparency, efficiency, and trust within crowdfunding. The chapter also explores persistent challenges, including technical complexity, cybersecurity risks, regulatory fragmentation, and trust deficits, while highlighting emerging trends such as decentralized finance (DeFi), tokenized securities, AI-driven fraud detection, and immersive technologies. The analysis concludes that the future trajectory of crowdfunding will depend on the effective integration of new technologies, investor protection, and the maintenance of public trust.

Keywords: *Crowdfunding, Financial Technology, Blockchain, Artificial Intelligence, Tokenization, Digital Platforms, Alternative Finance*

Introduction

Crowdfunding, defined as the collection of small financial contributions from a large number of individuals via online platforms, has transitioned from a niche concept to a significant component of global alternative finance. The market is projected to reach US$1.68 billion in 2025 and exceed US$5.4 billion by 2033, with an annual growth rate exceeding 15%. (Crowdfunding Market Key Companies Analysis, Competitive Strategies, Platform Innovations, Funding Trends, and Revenue Forecast Insights to 2033, 2026) This expansion is primarily attributed to technological advancements. Early crowdfunding platforms in the mid-2000s relied on basic web interfaces, email marketing, and rudimentary payment systems, whereas contemporary platforms leverage cloud computing, application programming interfaces (APIs), artificial intelligence, blockchain, and mobile payment technologies.

Technological advancements have fundamentally transformed crowdfunding by broadening access to global capital, enhancing transparency, and facilitating improved decision-making

for both platform operators and contributors. Innovations such as blockchain, digital identity verification, and smart contracts have minimized reliance on intermediaries. Additionally, big data analytics and machine learning support the evaluation of campaign quality, detection of fraudulent activity, and personalization of user experiences. Nevertheless, rapid technological change has introduced new risks, including cybersecurity threats, algorithmic bias, regulatory ambiguity, and persistent trust issues stemming from historical incidents of fraud, notably during the 2017-2018 Initial Coin Offering (ICO) period. This chapter examines these developments and their implications for stakeholders involved in the operation, regulation, and study of crowdfunding platforms.

1. To analyse the principal technological innovations - including blockchain, artificial intelligence, big data analytics, mobile payments, and immersive technologies - currently shaping crowdfunding practice.
2. To assess the impact of these technologies on transparency, efficiency, trust, and accessibility within the crowdfunding ecosystem.
3. To identify the key challenges associated with technology adoption in crowdfunding and to outline emerging trends likely to influence its future trajectory.

Research Methodology

This chapter uses a descriptive-analytical approach based only on secondary data. Sources include peer-reviewed journals, regulatory reports (like those from the European Securities and Markets Authority and the International Organization of Securities Commissions), industry reports, and trusted financial and tech news up to mid-2026. The analysis groups technological changes into areas such as platform infrastructure, blockchain and tokenization, artificial intelligence and analytics, payments and mobile access, marketing and social technology, and regulatory technology. It examines how these changes affect crowdfunding in terms of transparency, trust, cost, fraud risk, and market reach. This method is well-suited to a book chapter that brings together a broad and rapidly changing field, rather than to creating new primary data.

1. Evolution of Crowdfunding Platforms: A Technological Timeline

The development of crowdfunding can be seen in three main phases. The first phase (about 2003-2012) featured simple web portals such as Artist Share, Kickstarter, and Indiegogo, which relied on basic content systems, email outreach, and third-party payment services. Features were limited to campaign pages, donor comments, and manual fund transfers. The second phase (2012-2018) saw the emergence of equity and lending-based crowdfunding following regulatory changes such as the United States' JOBS Act, along with improved systems for investor checks, escrow, and compliance. This period also saw the rise of Initial Coin Offerings (ICOs), which used blockchain tokens but faced heavy regulatory scrutiny, leading to widespread fraud and a market correction in 2018. The third phase (2019-present) is marked by the integration of mature technologies such as cloud infrastructure, artificial intelligence, blockchain, and mobile-first design into platforms that offer automated compliance, real-time analytics, and cross-border tokenized fundraising.

Table 1.1: Technological Phases in the Evolution of Crowdfunding

Phase I - Emergence	2003-2012	Static web portals, email marketing, basic payment gateways	Artist Share, Kickstarter, Indiegogo
Phase II - Formalization	2012-2018	Investor verification systems, escrow automation, blockchain tokens (ICOs)	Seed Invest, Crowd cube, early ICO platforms
Phase III - Convergence	2019-Present	AI/ML analytics, blockchain smart contracts, mobile payments, Reg Tech	Republic, Securitize, GoFundMe, Dacxi Chain

(Source: Compiled by the author from industry and academic literature.)

2. Blockchain, Smart Contracts, and Decentralized Finance (DeFi)

Blockchain technology is widely regarded as the most consequential technological development in crowdfunding over the past decade. By providing a distributed, tamper-resistant ledger, blockchain enables crowdfunding platforms to record contributions, ownership stakes, and campaign milestones in a transparent, independently verifiable manner. Smart contracts - self-executing code deployed on a blockchain - allow funds to be released automatically once predefined conditions are met, reducing reliance on centralized escrow agents and lowering the risk of misappropriation. Blockchain-based crowdfunding is estimated to have facilitated over US$60 billion in cumulative global fundraising by early 2025, spanning Initial Coin Offerings (ICOs), Security Token Offerings (STOs), Initial Exchange Offerings (IEOs), and Decentralized Autonomous Organization (DAO)-based funding models. (Crypto-Powered Fundraising: A New Era for Crowdfunding, 2025) Major cryptocurrency exchanges, including Binance and Coinbase, have expanded into regulated token issuance, while infrastructure providers such as Fireblocks and ConsenSys supply custody and compliance tooling for blockchain-based campaigns.

Decentralized Finance (DeFi) takes this trend further by enabling people to lend, borrow, and invest directly in crowdfunded projects through decentralized systems, removing the need for traditional financial middlemen. Supporters say DeFi-based crowdfunding can lower costs and make access easier, especially for people in areas with limited banking. However, this technology also brings new risks, such as smart contract flaws, as seen in the 2016 collapse of "The DAO," where a coding error led to the loss of over US$150 million, and the high price swings of many crypto-assets used for funding. (DAO Hack Explained: How a Vulnerability Split Ethereum, 2025) Experts expect that by the end of this decade, connected blockchain networks will let investors hold a mix of tokenized crowdfunding assets across different platforms in one digital wallet, which should help improve liquidity in secondary markets—a long-standing challenge for the sector.

3. Tokenization and Security Token Offerings (STOs)

Tokenization refers to the process of representing ownership rights - whether in equity, real estate, or revenue streams - as digital tokens on a blockchain. Unlike the largely unregulated ICOs of 2017-2018, Security Token Offerings are structured to comply with securities law, thereby combining the efficiency of blockchain-based issuance with established investor protection frameworks. Platforms such as Securitize have issued several billion dollars' worth of tokenized assets, and specialized blockchain infrastructure providers are increasingly targeting the equity crowdfunding niche. (Pandey, 2026) Regulatory bodies, including the International Organization of Securities Commissions, have adopted a position of "technology-neutral regulation," affirming that tokenization can improve operational efficiency, settlement speed, and automated compliance, while stressing that investor-protection standards must

apply regardless of the underlying ledger technology, and that tokenization must not be permitted to obscure the true nature of what investors own.

4. Artificial Intelligence and Machine Learning Applications

Artificial intelligence has become deeply embedded in the operational infrastructure of contemporary crowdfunding platforms. According to recent European regulatory reporting, platforms are increasingly deploying machine learning. Artificial intelligence is now a key part of how modern crowdfunding platforms work. Recent European reports show that platforms are using machine learning for credit scoring, fraud detection, operations, and customer support. Predictive models trained on past campaign data can estimate whether a campaign will reach its funding goal based on factors such as project description, media quality, creator history, and early contributions. Researchers call this the "small predicts large" effect, in which small early pledges can signal credibility and encourage larger ones later. (Rodríguez-Garnica et al., 2024) AI-based fraud detection analyses behaviour and transactions to spot suspicious campaigns before they can raise significant funds, helping to solve a major problem in the sector. On the user side, recommendation systems show potential backers' campaigns that match their interests, making it easier for creators to get funding. However, regulators are increasingly concerned about issues such as governance, bias, and a lack of transparency in these automated systems that generate actionable insights. For platform operators, analytics inform risk-based due diligence and portfolio-level performance monitoring; for creators, they inform campaign design decisions such as optimal pricing tiers and reward structures; and for backers, they support comparative evaluation of competing campaigns. Academic research applying similarity-network analysis has shown that data-driven techniques can meaningfully predict project success by benchmarking new campaigns against clusters of historically successful ones, controlling for both project and creator characteristics. The growing sophistication of analytics has also enabled the standardization of impact metrics in social and environmental. The proliferation of smartphones and mobile payment systems has significantly facilitated both the collection and distribution of funds through crowdfunding. In countries such as India, the rapid expansion of digital payment infrastructure has enabled swift, low-cost donations, thereby supporting crowdfunding initiatives for health and social causes. Globally, platforms now accommodate a diverse range of payment methods, including credit and debit cards, digital wallets, bank transfers, and, more recently, stablecoins, to address the needs of various user groups and geographic regions. Mobile applications further enhance user engagement by providing push notifications, real-time updates, and streamlined social sharing, thereby increasing campaign visibility and backer participation. lecoins—to suit different users and locations. Mobile apps also provide push notifications, real-time updates, and easy social sharing, which help keep backers engaged and make campaigns more visible.

7. Social Media Integration and Algorithmic Marketing

Social media is still a main way for people to find crowdfunding campaigns. Platforms now include tools for sharing, tracking referrals, and working with influencers right in the fundraising process. Algorithmic marketing lets creators target ads to people most likely to become backers, using data on behavior and interests. While this makes promotion more efficient, it also means that a few major social media and ad platforms control most campaign discovery, which can be hard for smaller or less tech-savvy creators. Emerging crowdfunding platforms are increasingly adopting immersive technologies to enhance backer engagement. Features such as live-streamed demonstrations, augmented-reality previews of rewards, and virtual-reality experiences of funded projects enable users to engage with projects prior to completion, thereby fostering trust and emotional involvement. Additionally, gamification elements—including leaderboards, badges, and timed challenges—are being utilized to sustain

backer interest and promote campaign sharing, ultimately expanding reach while reducing marketing expenditures. Backers are engaged and encouraged to share, helping campaigns reach more people at a lower marketing cost.

9. Cybersecurity, Digital Identity, and Regulatory Technology (RegTech)

As crowdfunding platforms have grown and become more complex, cybersecurity and regulatory technology have become more important. Most regulated platforms now use digital identity checks, including biometrics and automated Know Your Customer (KYC) and Anti-Money Laundering (AML) processes, to reduce fraud and speed up onboarding. In the European Union, new rules have created a unified system for platform approval and operation, requiring strong governance and tech safeguards. In the UK, a new framework starting in 2026 will also move crowdfunding toward more formal public-offer setups with stricter disclosure rules. These changes show that regulatory technology is now a key part of platform operations and competition, not just a compliance expense.

Table 1.2: Summary of Key Technologies and Their Impact on Crowdfunding

1	Blockchain & Smart Contracts	Ledger transparency; automated fund release	Increased trust; reduced intermediary dependence
2	Tokenization / STOs	Digital representation of equity, debt, or assets	Improved liquidity; regulatory-compliant fundraising
3	Artificial Intelligence / ML	Fraud detection, credit scoring, recommendations	Lower fraud risk; personalized backer experience
4	Big Data Analytics	Campaign success prediction; impact verification	Better decision-making for creators and backers
5	Mobile & Digital Payments	Instant, low-cost cross-border contributions	Wider financial inclusion and accessibility
6	Social Media Algorithms	Targeted campaign discovery and promotion	Higher visibility; dependency on ad platforms
7	AR/VR & Gamification	Immersive previews; engagement mechanics	Deeper backer engagement and retention
8	Reg Tech & Digital Identity	KYC/AML automation; compliance reporting	Faster onboarding; stronger investor protection

(Source: Compiled by the author from ESMA, IOSCO, and industry reports, 2024-2026.)

10. Challenges in Technology Adoption

Despite its significant promise, the technological transformation of crowdfunding faces several recurring challenges identified in the literature:

- Technical complexity: Wallets, private keys, and smart contract interactions remain unfamiliar and intimidating for many retail participants, limiting mainstream adoption of blockchain. Vulnerabilities in smart contracts, as seen in the collapse of "The DAO," can expose backers to significant financial loss.
- Regulatory fragmentation: Divergent regulatory treatment of tokenized assets across jurisdictions increases compliance costs and can restrict cross-border fundraising.
- Algorithmic opacity: The use of AI in credit scoring and fraud detection raises unresolved questions of governance, explainability, and potential bias, as flagged by securities regulators.

- Trust deficits: The legacy of fraud during the 2017-2018 ICO boom continues to affect public perception of technologically advanced crowdfunding instruments, even as regulatory safeguards improve.
- Environmental and cost concerns: Certain blockchain architectures remain energy-intensive, raising several emerging trends that are anticipated to influence the future development of crowdfunding technology. Enhanced interoperability among blockchain networks is expected to allow backers to hold and trade a diverse portfolio of tokenized crowdfunding assets across multiple platforms, thereby addressing longstanding liquidity challenges. The integration of artificial intelligence with blockchain is projected to yield new automated tools for investment and campaign management. Regulatory developments in the European Union and the United Kingdom indicate a shift toward incorporating crowdfunding into mainstream, regulated capital markets, facilitating participation by both institutional and retail investors. The adoption of standardized, third-party-verified impact metrics is likely to become prevalent in social and environmental campaigns, aligning with global sustainability objectives. Furthermore, the ongoing expansion of mobile and real-time payment systems, particularly in emerging markets, is expected to further democratize access to crowdfunding. Global sustainability standards. Continued growth in mobile and real-time payments, especially in emerging markets, should also make it easier for more people to give and raise funds.

Suggestions

Based on the preceding analysis, several recommendations are advanced. Platform operators should prioritize developing user-friendly interfaces and providing comprehensive educational resources to mitigate technical barriers associated with blockchain-based and tokenized crowdfunding. Enhancing transparency in AI-driven scoring and recommendation systems is essential to address concerns about algorithmic governance and bias. Policymakers are encouraged to uphold a technology-neutral and harmonized regulatory framework to protect investors and foster innovation, while also collaborating internationally to minimize regulatory fragmentation. Industry associations should mandate standardized cybersecurity assessments for smart contracts prior to campaign launches, given the potential risks posed by coding vulnerabilities. Platforms focused on social and environmental objectives should implement third-party-verified impact reporting and leverage data analytics to strengthen fraud prevention and enhance public trust. The evidence presented in this chapter indicates that sustained growth—projected to more than triple between 2025 and 2033—will depend on the sector's ability to responsibly integrate emerging technologies while ensuring investor protection and public confidence. As blockchain interoperability improves, artificial intelligence becomes more deeply embedded, and regulatory frameworks evolve toward technology-neutral standards, crowdfunding is positioned to become a central, technologically advanced element of global capital formation.

References

1. European Securities and Markets Authority (ESMA). (2024). EU Crowdfunding Market Report 2024. ESMA.
2. European Securities and Markets Authority (ESMA). (2025). EU Crowdfunding Market Report 2025. ESMA.
3. International Organization of Securities Commissions (IOSCO). (2025). Final Report on the Tokenization of Financial Assets. IOSCO.

4. Karimova, A. A. (2026). Innovations shaping crowdfunding: Blockchain, AI, and new investment opportunities. Central Asian Journal of Innovations on Tourism Management and Finance, 7(3), 280-285.
5. Lin, M., & Sias, R. W. (2023). Experts' vs nonexperts in online crowdfunding markets. Working paper.
6. Massolution. (2012). Crowdfunding Industry Report: Market Trends, Composition, and Crowdfunding Platforms. Massolution.
7. Nikitina, N. V., & Anisimov, A. P. (2025). Crowdfunding is a mechanism for attracting investments in the digital economy. Fundamental Research, (1), 62-67.
8. Schar, F. (2021). Decentralized finance: On blockchain- and smart contract-based financial markets. Federal Reserve Bank of St. Louis Review, 103(2), 153-174.
9. Wei, Y., & Hong, J. (2022). Machine learning for creativity: Using similarity networks to design better crowdfunding projects. Working paper.
10. Wessel, M., & Gleasure, R. (2021). Sustainability of rewards-based crowdfunding: A quasi-experimental analysis of funding targets and backer satisfaction. Working paper.
11. Zetzsche, D. A., Arner, D. W., & Buckley, R. P. (2020). Decentralized finance. Journal of Financial Regulation, 6(2), 172-203.
12. Research and Markets. (2026, February 18). Crowdfunding Market Competitor Analysis Report 2025-2033. GlobeNewswire.
13. ImpactGuru. (2026). Future of crowdfunding in 2026: Trends, tech & insights. ImpactGuru Insights.
14. The Geca. (2026). Equity crowdfunding trends 2026: The coordinated capital era. The Geca Blog.
15. Turbo Crowd. (2025). Crowdfunding and blockchain: The future of decentralized funding. Turbo Crowd Insights.

Chapter 17

REVISITING THE PSYCHOLOGICAL CONTRACT IN PLATFORM COMMERCE: STRATEGIC HUMAN RESOURCE MANAGEMENT FOR THE ON-DEMAND WORKFORCE

M.Dhanagopal
Assistant Professor, Department of Corporate Secretaryship, Agurchand Manmull Jain College, Meenambakam, Chennai, Tami Nadu
Email: dhanagopal.m@amjaincollege.edu.in

Abstract
Platform commerce has transformed employment relationships by connecting customers, platforms and on-demand workers through digital infrastructures. Unlike the conventional employment relationship, platform work often combines flexibility and autonomy with algorithmic control, uncertain career development and limited access to conventional human resource management (HRM). This chapter revisits the psychological contract as a strategic HRM lens for understanding how platform workers interpret promises concerning flexibility, fair treatment, support, transparency, safety and opportunity. The chapter uses secondary analysis of peer-reviewed empirical evidence and published primary datasets reported in high-indexed journals, with emphasis on Elsevier/ScienceDirect and Emerald publications. Evidence indicates that psychological contract fulfilment is positively associated with organizational identification, job satisfaction, trust, task performance and retention, while perceived violations are associated with withdrawal, burnout and weaker platform relationships (Yu & Abdul Hamid, 2024; Liu, 2026). Algorithmic management is not uniformly harmful: direction and coordination can provide useful resources, whereas evaluation, discipline, opaque decisions and excessive control can create strain (Meijerink & Bondarouk, 2023; Peng et al., 2025). The chapter proposes a strategic HRM framework based on promise alignment, transparent algorithmic governance, fair rewards, voice, social support, career development and psychological-contract repair. Cross-study data analysis further shows that the empirical literature is dominated by quantitative and mixed-method designs, while qualitative evidence adds important detail about workers' lived experiences. The chapter concludes that platform firms should manage the worker relationship as an employment-like relationship requiring credible obligations, reciprocal exchange and sustainable people practices.

Keywords: *psychological contract, platform commerce, on-demand workforce, strategic human resource management, gig economy*

1. Introduction

Platform commerce refers to digitally mediated marketplaces in which platforms coordinate transactions between consumers and workers or service providers. The model has expanded across ride-hailing, food delivery, professional services, logistics and online freelancing. HRM in such settings is technologically mediated: recruitment, task allocation, performance evaluation, rewards and retention can be influenced by digital systems rather than by direct supervisors (Duggan et al., 2020; McDonnell et al., 2021; Duggan et al., 2023).

The psychological contract is especially relevant because platform work is frequently presented through promises of flexibility, independence and entrepreneurial opportunity. Psychological contract research focuses on workers' beliefs about reciprocal obligations rather than only on formal legal terms. In platform work, the difference between the advertised

relationship and the experienced relationship can become a major source of trust or breach. Recent evidence directly connects psychological contract fulfilment with organizational identification and turnover intentions among ride-hailing and food-delivery workers (Yu & Abdul Hamid, 2024).

Platform workers can also form meaningful identification with organizations despite non-traditional employment. Yang et al. (2022) found that career identity and networking behaviour were associated with organizational identification among on-demand professionals. Fair employment practices also contribute to identification and commitment in crowdsourced logistics (2023). These findings challenge the assumption that short-term or platform-mediated workers are incapable of developing organizational relationships.

At the same time, algorithmic control can reshape the contract. Platform systems may allocate work, monitor performance, calculate rewards and apply sanctions. Research identifies algorithmic HRM control as a distinctive control system involving platform organizations, customers and other actors (Duggan et al., 2023). The strategic HRM problem is therefore to align technological efficiency with credible human obligations. A platform that promises autonomy but applies intense control may create a contract inconsistency that weakens trust and retention (Shanahan & Smith, 2021; Duggan et al., 2023).

2. Objectives

1. To examine the nature of psychological contracts in platform commerce and identify the principal obligations perceived by on-demand workers.
2. To analyse published empirical evidence on psychological contract fulfilment, organizational identification, trust, performance, well-being and retention among platform workers.
3. To develop strategic HRM practices that strengthen reciprocal exchange, worker voice, fairness and sustainable platform–worker relationships.

3. Methodology

This chapter adopts a structured secondary-data research design. The evidence base consists of peer-reviewed journal articles located through publisher and academic indexing records, with priority given to Elsevier/ScienceDirect and Emerald journals and supplemented by other established high-indexed management and HRM journals where directly relevant. Studies were selected when they addressed psychological contracts, organizational identification, platform/gig work, algorithmic management, HRM, trust, well-being, career development or worker retention. The review also uses empirical sample sizes and statistical findings reported in the original studies as secondary evidence; these are not represented as a new field survey conducted by the chapter author.

The analytical procedure involved four stages: identification of relevant empirical and review studies; extraction of research context, sample, method and principal findings; thematic coding around psychological-contract obligations and HRM mechanisms; and cross-study comparison. This approach is consistent with established systematic-review practice and with recent reviews that map gig-HRM research through antecedents, mediators and outcomes (Koon et al., 2026; Kadolkar et al., 2025). Because the published studies use different instruments, populations and outcomes, inferential statistics were not pooled into a new ANOVA or t-test. Instead, the chapter reports the statistical tests and effect relationships actually reported by the original studies and uses descriptive cross-study synthesis where comparable counts are available.

4. Literature Review

4.1 Psychological contract and platform work. Psychological contracts become important when formal employment arrangements do not fully specify the social exchange between

worker and platform. Platform workers may expect flexibility, fair earnings, reasonable safety, transparent evaluation and respectful treatment. Shanahan and Smith (2021) show how power and fairness are central to psychological contracts in platform work, while Liu (2026) reports that psychological contract fulfilment significantly influences organizational identification and trust in errand-delivery work.

Yu and Abdul Hamid (2024) provide particularly direct evidence. Across two studies, ride-hailing workers (N = 374) and food-delivery workers (N = 426) were examined using structural equation modelling. Transactional and relational contract fulfilment were negatively related to turnover intention, with organizational identification and job satisfaction acting as mediating mechanisms. This finding places psychological-contract fulfilment at the centre of platform retention rather than treating it as a peripheral employee-attitude variable.

4.2 Organizational identification in on-demand work. Organizational identification refers to the extent to which individuals define themselves partly through their relationship with an organization. In on-demand work, identification may be weaker because workers interact mainly with an application rather than with managers and colleagues. However, Yang et al. (2022) found that career identity was associated with career networking and, through that pathway, organizational identification among 242 Chinese accountants engaged in on-demand work. Fair employment principles also matter: a Singapore study of 177 gig workers found that fair conditions, pay, representation, management and contracts influenced organizational identification and that identification was related to career commitment (Investigating gig workers' commitment, 2023).

4.3 Algorithmic management and the changing contract. Algorithmic management can provide coordination, information and flexibility, but it can also constrain autonomy. Meijerink and Bondarouk (2023) conceptualize this as a duality: algorithms may simultaneously restrict and create worker value. Duggan et al. (2020) distinguish app-work, crowdwork and capital-platform work and emphasize the implications of algorithmic management for employment relations and performance management. Duggan et al. (2023) further show how algorithmic HRM control extends into task allocation, performance and rewards. Kellogg et al. (2020) similarly identify algorithmic control through directing, evaluating and disciplining mechanisms, which helps explain why algorithmic practices can reshape perceived obligations.

4.4 Strategic HRM and the platform ecosystem. Traditional HRM assumes an identifiable employer with responsibility for recruitment, development, rewards and employee relations. Platform ecosystems distribute these functions across platform firms, clients, customers and workers. Meijerink and Keegan (2019) therefore conceptualize HRM in the gig economy from a platform-ecosystem perspective. Keegan and Meijerink (2023) similarly argue that contractors can occupy a key position within a dynamic HR architecture. Waldkirch et al. (2021) demonstrate that HRM activities on digital work platforms are shaped by algorithms and crowd-based mechanisms.

4.5 Motivation, career and development. Gig workers are not motivated only by monetary rewards. Jabagi et al. (2019) emphasize the role of digital platform design and social mechanisms in motivating gig workers. Kost et al. (2020) identify barriers to career development and HRM provision in gig work, highlighting the importance of longer-term competency development. These findings support a strategic HRM approach in which platforms provide learning, recognition and career resources rather than relying exclusively on task-level incentives.

4.6 Fairness, support and well-being. Platform work can generate uncertainty, isolation and workload pressures. Zong et al. (2024), based on interviews with 27 food couriers in China, Taiwan and Singapore, identified hassles originating from platforms, restaurants, delivery processes, customers and personal life. Peng et al. (2025) found that algorithmic evaluation and

discipline can increase burnout by undermining psychological needs, while algorithmic direction can reduce burnout when it supports those needs. Recent evidence also links algorithmic management with well-being through autonomy and precarity (Zha et al., 2026) and shows that algorithmic pressure has complex, not uniformly negative, well-being effects (Gao et al., 2026).

5. Data Analysis

The data analysis in this chapter is a secondary synthesis of empirical evidence reported in the cited peer-reviewed studies. The tables below reproduce reported sample sizes, research designs and findings rather than presenting newly collected respondent data.

Table 1: Selected empirical evidence on psychological contract and platform work

Study	Sample	Context	Method	Reported result
Yu & Abdul Hamid (2024)	374 + 426	Ride-hailing; food delivery	SEM; time-lagged study	Contract fulfilment related to lower turnover intention through identification and satisfaction.
Yang et al. (2022)	242	Chinese accountants in on-demand work	Multisource/time-lagged	Career identity → networking → organizational identification.
Fair employment study (2023)	177	Singapore crowdsourced logistics	SEM	Fair conditions, pay, representation, management and contracts related to identification and commitment.
Zong et al. (2024)	27	Asian food couriers	In-depth interviews/content analysis	Five sources of hassles, including platform management and welfare/training issues.
Peng et al. (2025)	Gig workers; two waves	Drivers and food-delivery workers	CB-SEM	Algorithmic evaluation/discipline increased burnout; supportive direction reduced it.
Zha et al. (2026)	639	Gig workers	Three-wave survey; CFA/bootstrapping	Algorithmic management negatively related to well-being via precarity and autonomy.

5.1 Descriptive cross-study analysis

The six selected empirical studies in Table 1 report a combined 1,915 participant observations across their stated samples, although the studies should not be treated as one pooled dataset because their populations, instruments and sampling frames differ. Four studies

are quantitative or mixed quantitative designs and two are qualitative. The quantitative evidence consistently identifies psychological contract fulfilment, organizational identification, fairness, autonomy or support as important relationship variables, while qualitative evidence explains the lived experience of platform hassles and algorithmic control. The descriptive pattern therefore supports a reciprocal-exchange interpretation of platform HRM rather than a purely transactional interpretation.

Inference: The secondary evidence indicates that the psychological contract is operationally relevant to platform commerce because the relationship between worker expectations and platform practices is associated with identification, retention, trust, well-being and burnout. The consistency of the direction across different platform sectors strengthens the strategic HRM argument, while the variation across studies cautions against assuming that every form of algorithmic management has the same effect (Yu & Abdul Hamid, 2024; Meijerink & Bondarouk, 2023; Peng et al., 2025).

5.2 Evidence-mapping analysis

Table 2: Evidence map of psychological-contract obligations

Contract dimension	Strategic HRM practice	Observed outcome	Key evidence
Flexibility and autonomy	Choice over tasks/schedules; autonomy-supportive algorithms	Well-being; lower strain	Meijerink & Bondarouk (2023); Peng et al. (2025); Zha et al. (2026)
Fairness and pay	Transparent rates, fair evaluation and contracts	Identification; trust; commitment	Investigating gig workers' commitment (2023); Liu (2026)
Voice and due process	Human appeal, dispute resolution, worker representation	Trust; reduced breach risk	Shanahan & Smith (2021); Duggan et al. (2023)
Development	Training, feedback, career resources	Career identity; identification; retention	Kost et al. (2020); Yang et al. (2022)
Care and support	Safety, welfare, social support and manageable demands	Well-being; lower burnout	Zong et al. (2024); Peng et al. (2025); Gao et al. (2026)

Inference: The evidence map shows that the psychological contract in platform commerce contains both transactional and relational elements. Strategic HRM must therefore address not only pay and task access but also fairness, voice, learning, safety and respectful treatment. When these elements are aligned, organizational identification can become a mechanism connecting HRM practices with retention and performance (Yu & Abdul Hamid, 2024; Liu, 2026).

5.3 Statistical evidence reported in original studies

The reviewed empirical studies used different inferential techniques. Yu and Abdul Hamid (2024) used structural equation modelling and mediation analysis across two studies; Yang et al. (2022) used moderated mediation with multisource and time-lagged data; the Singapore study used structural equation modelling; Peng et al. (2025) used covariance-based SEM; and

Zha et al. (2026) used confirmatory factor analysis and bootstrapping in a three-wave design. Because these studies do not provide a common raw dataset or identical measurement scales, a new t-test or ANOVA would not be statistically defensible. The appropriate inference is therefore based on the reported original analyses rather than an invented pooled test.

Inference: The convergence of different analytical designs around similar constructs—identification, trust, autonomy, fairness, contract fulfilment and well-being—provides triangulated evidence for the proposed strategic HRM framework. It also demonstrates why platform HRM should not rely on a single employee metric such as acceptance rate, rating or task completion.

6. Strategic HRM Framework for the on-Demand Workforce

6.1 Promise alignment. Platforms should translate recruitment messages into explicit and measurable worker obligations. Claims about flexibility, earnings potential, support and autonomy should be consistent with actual algorithmic rules. Misalignment between promises and experience is a direct route to psychological-contract breach (Yu & Abdul Hamid, 2024; Shanahan & Smith, 2021).

6.2 Human-centred algorithmic management. Algorithms should coordinate work without eliminating meaningful human judgement. Platforms should explain major decisions, allow workers to challenge errors and provide human escalation for consequential decisions. Algorithmic management has both enabling and constraining effects; strategic HRM should therefore maximize enabling features while controlling unnecessary surveillance and rigid discipline (Meijerink & Bondarouk, 2023; Duggan et al., 2023).

6.3 Fair rewards and transparent performance management. Pay calculations, incentives, ratings and penalties should be understandable and consistently applied. Fair conditions, pay, management, representation and contracts are associated with identification in crowdsourced logistics, while psychological contract fulfilment is linked with lower turnover intention (Investigating gig workers' commitment, 2023; Yu & Abdul Hamid, 2024).

6.4 Worker voice and representation. Platform workers need accessible mechanisms to report safety issues, contest ratings and participate in changes to platform rules. Voice reduces the distance between the worker and platform and creates an institutional route for contract repair. The absence of voice can intensify power asymmetry and perceived unfairness (Shanahan & Smith, 2021; Duggan et al., 2023).

6.5 Career development. Strategic HRM should extend beyond individual tasks to include training, skills recognition, portable credentials and career guidance. Gig work may appear boundaryless but can restrict competency development when HRM support is fragmented (Kost et al., 2020). Career identity and networking can strengthen organizational identification, particularly for professional on-demand workers (Yang et al., 2022).

6.6 Sustainable worker support. Safety, welfare, manageable workload and social support should be treated as strategic HRM investments. Evidence from Asian food couriers identifies welfare, training, platform technology and management practices among important sources of difficulty (Zong et al., 2024). Burnout evidence further shows that algorithmic evaluation and discipline can undermine psychological needs, while supportive algorithmic direction can have a different effect (Peng et al., 2025).

7. Major Findings

1. Psychological contract fulfilment is a central mechanism connecting platform HRM with identification and retention (Yu & Abdul Hamid, 2024; Liu, 2026).

2. Organizational identification can develop in on-demand work when workers receive fair treatment, career-related resources and opportunities for meaningful connection (Yang et al., 2022; Investigating gig workers' commitment, 2023).

3. Algorithmic management has a dual character: it can increase coordination and flexibility but can also intensify control, reduce autonomy and increase strain when used for rigid evaluation and discipline (Meijerink & Bondarouk, 2023; Peng et al., 2025).

4. Strategic HRM in platform commerce must include worker voice, transparent decisions, fair rewards, development and safety rather than focusing only on productivity metrics (Duggan et al., 2023; Zong et al., 2024).

5. The psychological contract in platform work is both transactional and relational. Pay and task access matter, but so do trust, fairness, respect, development and support (Shanahan & Smith, 2021; Yu & Abdul Hamid, 2024).

6. Sustainable platform governance requires human-centred algorithmic design. Recent evidence shows that autonomy, precarity, social support and psychological needs shape the consequences of algorithmic management (Zha et al., 2026; Gao et al., 2026; Peng et al., 2025).

8. Conclusion

Platform commerce has changed the structure of work but has not eliminated the human need for reciprocity, fairness and organizational connection. The psychological contract remains a useful framework because it explains how workers interpret the gap between what a platform promises and what it actually delivers. Evidence from ride-hailing, food delivery, professional on-demand work and crowdsourced logistics indicates that fulfilment is associated with identification, satisfaction, trust, performance and retention, while violations and excessive control can contribute to withdrawal and strain (Yu & Abdul Hamid, 2024; Liu, 2026; Peng et al., 2025).

For strategic HRM, the implication is clear: platforms should not manage workers solely as transaction units. They should establish credible obligations, transparent algorithms, fair rewards, worker voice, career development, safety and social support. Such practices can convert a digitally mediated relationship into a sustainable exchange relationship. Future research should develop longitudinal, cross-platform datasets and directly test how psychological contract fulfilment, algorithmic governance and organizational identification interact across different categories of on-demand workers.

References

1. Cheng, M., Foley, C., & Zhang, Y. (2024). Sustainable human resource management and employee psychological capital/career outcomes. Human Resource Management Review.
2. Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. (2020). Algorithmic management and app-work in the gig economy: A research agenda for employment relations and HRM. Human Resource Management Journal, 30(1), 114–132. https://doi.org/10.1111/1748-8583.12258
3. Duggan, J., Carbery, R., McDonnell, A., & Sherman, U. (2023). Algorithmic HRM control in the gig economy: The app-worker perspective. Human Resource Management, 62(6), 883–899. https://doi.org/10.1002/hrm.22168
4. Gao, X., Qian, Z., Zhang, X., & Zhang, H. (2026). The impact of algorithmic management pressure on gig workers' well-being: The role of avoidance job crafting. Acta Psychologica, 268, 107155. https://doi.org/10.1016/j.actpsy.2026.107155
5. Investigating gig workers' commitment to crowdsourced logistics platforms: Fair employment and social exchange perspectives. (2023). Technology in Society, 74, 102311. https://doi.org/10.1016/j.techsoc.2023.102311
6. Jabagi, N., Croteau, A.-M., Audebrand, L. K., & Marsan, J. (2019). Gig-workers' motivation: Thinking beyond carrots and sticks. Journal of Managerial Psychology, 34(4), 192–213. https://doi.org/10.1108/JMP-06-2018-0255
7. Kadolkar, I., Kepes, S., & Subramony, M. (2025). Algorithmic management in the gig

economy: A systematic review and research integration. Journal of Organizational Behavior, 46(7), 1057–1080. https://doi.org/10.1002/job.2831
8. Keegan, A., & Meijerink, J. (2023). Dynamism and realignment in the HR architecture: Online labor platform ecosystems and the key role of contractors. Human Resource Management, 62(1), 15–29. https://doi.org/10.1002/hrm.22120
9. Kost, D., Fieseler, C., & Wong, S. I. (2020). Boundaryless careers in the gig economy: An oxymoron? Human Resource Management Journal, 30(1), 100–113. https://doi.org/10.1111/1748-8583.12265
10. Kuhn, K. M., Meijerink, J., & Keegan, A. (2021). Human resource management and the gig economy: Exploring the relationships. The International Journal of Human Resource Management, 32(12), 2500–2525.
11. Liu, Y. (2026). Retaining gig workers in errand delivery logistics: The role of psychological contracts and perceptions. International Journal of Physical Distribution & Logistics Management, 56(2), 195–223. https://doi.org/10.1108/IJPDLM-08-2024-0299
12. McDonnell, A., Carbery, R., Burgess, J., & Sherman, U. (2021). Technologically mediated human resource management in the gig economy. The International Journal of Human Resource Management, 32(19), 3995–4015. https://doi.org/10.1080/09585192.2021.1986109
13. Meijerink, J., & Bondarouk, T. (2023). The duality of algorithmic management: Toward a research agenda on HRM algorithms, autonomy and value creation. Human Resource Management Review, 33(1), 100876. https://doi.org/10.1016/j.hrmr.2021.100876
14. Meijerink, J., & Keegan, A. (2019). Conceptualizing human resource management in the gig economy: Toward a platform ecosystem perspective. Journal of Managerial Psychology, 34(4), 214–232. https://doi.org/10.1108/JMP-07-2018-0277
15. Norlander, P., Jukic, N., Varma, A., & Nestorov, S. (2021). The effects of technological supervision on gig workers: Organizational control and motivation of Uber, taxi, and limousine drivers. The International Journal of Human Resource Management, 32(19), 4053–4077. https://doi.org/10.1080/09585192.2020.1867614
16. Peng, J., Wei, M., Loi, T. I., & Li, J. (2025). Every coin has two sides: A self-determination perspective on the relationship between algorithmic management and gig workers' job burnout. Journal of Managerial Psychology, 40(3), 243–258. https://doi.org/10.1108/JMP-12-2023-0737
17. Shanahan, G., & Smith, M. (2021). Fair's fair: Psychological contracts and power in platform work. The International Journal of Human Resource Management, 32(19), 4078–4109. https://doi.org/10.1080/09585192.2020.1867615
18. Waldkirch, M., Bucher, E., Schou, P. K., & Grünwald, E. (2021). Controlled by the algorithm, coached by the crowd—How HRM activities take shape on digital work platforms in the gig economy. The International Journal of Human Resource Management, 32(12), 2643–2682. https://doi.org/10.1080/09585192.2021.1914129
19. Williams, P., McDonald, P., & Mayes, R. (2021). Recruitment in the gig economy: Attraction and selection on digital platforms. The International Journal of Human Resource Management, 32(19), 4136–4162. https://doi.org/10.1080/09585192.2020.1867613
20. Yang, C., Chen, Y., Zhao, X., & Cui, Z. (2022). Career identity and organizational identification among professionals with on-demand work. Personnel Review, 52(3), 470–491. https://doi.org/10.1108/PR-04-2019-0193
21. Yu, J., & Abdul Hamid, R. (2024). Gig workers' psychological contracts and turnover intention: A mediated path analysis of organizational identification and job satisfaction. Acta Psychologica, 251, 104587. https://doi.org/10.1016/j.actpsy.2024.104587

22. Zha, X., Hu, E., Shan, H., Huang, L., & colleagues. (2026). Algorithmic management and gig worker well-being: Unpacking the roles of job autonomy, precarity and union instrumentality. Personnel Review. https://doi.org/10.1108/PR-03-2024-0230
23. Zong, Y., Tsaur, S.-H., & Dai, Y.-Y. (2024). Hassles of platform-based food couriers: An Asian case study. Journal of Transport & Health, 34, 101743. https://doi.org/10.1016/j.jth.2023.101743
24. Koon, V.-Y., Sathasivam, K., Anthony, M., & Thomas, A. (2026). Beyond algorithmic management: A systematic review and strategic reconceptualisation of human resource management in the gig economy. EuroMed Journal of Business, 21(5), 276–297. https://doi.org/10.1108/EMJB-02-2026-0121
25. Li, Y., Zhao, L., Cao, C., & Yang, D. (2025). The double-edged sword effect of algorithmic transparency: An empirical study of gig workers' work disengagement under algorithmic management. Information & Management, 62(2), 104100. https://doi.org/10.1016/j.im.2025.104100
26. Lin, Q., Sun, R., & Zhu, Q. (2026). Adaptive job recrafting of gig workers: Concept, measurement, and validation of its impact on job satisfaction. Acta Psychologica, 262, 106034. https://doi.org/10.1016/j.actpsy.2025.106034
27. Zhang, A., Boltz, A., Wang, C. W., & Lee, M. K. (2022). Algorithmic management reimagined for workers and by workers: Centering worker well-being in gig work. Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems. https://doi.org/10.1145/3491102.3501866
28. Felix, B., Dourado, D., & Nossa, V. (2023). Algorithmic management, preferences for autonomy/security and gig-workers' wellbeing: A matter of fit? Frontiers in Psychology, 14, 1088183.
29. Granger, S., Caza, B. B., Ashford, S. J., & Reid, E. M. (2022). Adapting to a jolt: A mixed methods study identifying challenges and personal resources impacting professional gig workers' well-being during COVID-19. Journal of Vocational Behavior, 138, 103784. https://doi.org/10.1016/j.jvb.2022.103784
30. Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at work: The new contested terrain of control. Academy of Management Annals, 14(1), 366–410. https://doi.org/10.5465/annals.2018.0174

Chapter 18

EXPLORING THE SYNERGISTIC RELATIONSHIP BETWEEN ORGANIZATIONAL CITIZENSHIP BEHAVIOUR, PERCEIVED ORGANIZATIONAL SUPPORT, AND ORGANIZATIONAL COMMITMENT: A COMPREHENSIVE ANALYSIS IN THE IT SECTOR OF KOCHI

Dr.Shobita P.S
Assistant Professor, Department of Management Studies
St. Teresa's College (Autonomous), Ernakulam, Kerala
Email: shobithamba@yahoo.com

Abstract
This study examines the relationship between Organizational Citizenship Behaviour (OCB), Perceived Organizational Support (POS), and Organizational Commitment (OC) within Kochi's IT sector. OCB encompasses voluntary, extra-role behaviours that enhance organizational functioning, focusing on Courtesy, Civic Virtue, and Conscientiousness. Courtesy involves respectful interactions that reduce conflict; Civic Virtue reflects responsible participation in organizational activities; and Conscientiousness denotes diligence beyond minimum job requirements.
POS represents employees' perceptions of how much the organization values their contributions and cares for their well-being. High POS enhances morale, fosters trust, and strengthens commitment by creating psychological safety. Organizational Commitment reflects employees' psychological attachment and was assessed through Identification, Affiliation, and Exchange Commitment. Identification aligns employee values with organizational goals; Affiliation reflects emotional belonging; and Exchange is driven by perceived rewards and reciprocity. Using convenience sampling, 171 IT employees in Kochi completed a structured questionnaire. Data were analyzed using factor analysis, regression, ANOVA, and correlation. Results show that Courtesy significantly influences Affiliation Commitment by promoting a harmonious environment. Civic Virtue strongly impacts Identification Commitment through active participation and value alignment. Conscientiousness is closely linked to Exchange Commitment, as responsible employees expect recognition for their efforts.
The findings emphasize the importance of promoting OCB and strengthening POS to enhance commitment, reduce turnover, and build a motivated workforce. Strategies such as fostering a participative culture, offering recognition, and aligning employee values with organizational goals are crucial for sustaining long-term organizational success.
Keywords: *Organizational Citizenship Behaviour 1, Perceived Organizational Support 2, Organizational Commitment 3, Courtesy 4, Civic Virtue 5, Conscientiousness 6, IT Sector 7.*

1. Introduction

In today's dynamic and highly competitive business environment, the Information Technology (IT) sector has emerged as a critical driver of economic growth, innovation, and employment. In rapidly developing IT hubs such as Kochi, organizations face increasing challenges in attracting, motivating, and retaining skilled professionals while maintaining high levels of performance and adaptability. In this context, understanding employee attitudes and discretionary behaviours has become essential for sustaining organizational effectiveness. Among the various constructs examined in organizational behaviour research, Organizational Citizenship Behaviour (OCB), Perceived Organizational Support (POS), and Organizational

Commitment (OC) have gained significant attention due to their collective influence on employee performance and organizational success.

Organizational Citizenship Behaviour (OCB) refers to voluntary, extra-role behaviours that employees engage in beyond their formal job responsibilities, which are not explicitly rewarded but contribute to the smooth and effective functioning of the organization. In the IT sector, these behaviours include helping colleagues meet project deadlines, sharing technical knowledge, voluntarily solving work-related problems, and actively participating in organizational initiatives. Such discretionary behaviours are particularly important in IT organizations, where teamwork, innovation, and adaptability are crucial for managing complex and time-sensitive projects.

Perceived Organizational Support (POS) reflects employees' beliefs regarding the extent to which their organization values their contributions and cares about their well-being. In the IT sector of Kochi, where work demands are often intense and technology-driven, POS plays a vital role in shaping employees' attitudes and behaviours. When employees perceive high levels of organizational support—through fair policies, recognition, career development opportunities, and supportive leadership—they are more likely to feel valued and motivated. This perception fosters a sense of reciprocity, encouraging employees to exhibit higher levels of OCB and develop stronger emotional bonds with the organization.

Organizational Commitment (OC) represents the psychological attachment and loyalty that employees develop towards their organization, influencing their intention to remain and contribute to organizational goals. In IT firms, organizational commitment manifests through employees' identification with organizational values, a sense of affiliation, and an exchange-based relationship rooted in mutual benefits. Higher levels of commitment are associated with reduced turnover intentions, enhanced job satisfaction, and sustained organizational loyalty—factors that are especially critical in a sector characterized by high employee mobility.

This study aims to explore the synergistic relationship between Organizational Citizenship Behaviour, Perceived Organizational Support, and Organizational Commitment within the IT sector of Kochi. By focusing on specific dimensions of OCB—Courtesy, Civic Virtue, and Conscientiousness—and distinct forms of organizational commitment—Identification, Affiliation, and Exchange Commitment—this research provides a comprehensive analysis of how these constructs interact and reinforce one another. POS is examined as a key antecedent that influences both OCB and OC, thereby strengthening the overall employee–organization relationship.

Through an empirical investigation of employees working in IT organizations in Kochi, this research seeks to identify the underlying factors that drive citizenship behaviour, perceived support, and commitment. The findings are expected to offer valuable insights for IT managers, HR professionals, and policymakers in designing effective human resource strategies that enhance organizational support, foster employee commitment, and encourage discretionary behaviours, ultimately leading to improved organizational performance and a more engaged and resilient workforce.

2. Materials and Methods

The present study adopts a quantitative research design to examine the synergistic relationship between Organizational Citizenship Behaviour (OCB), Perceived Organizational Support (POS), and Organizational Commitment (OC) among employees in the IT sector of Kochi. A descriptive and analytical approach was employed to systematically collect and analyze primary data, enabling an objective assessment of relationships among the study variables.

The population for the study comprises employees working in selected IT companies located in Kochi. Given the diversity of roles and organizational structures within the IT sector, a

stratified random sampling technique was adopted to ensure adequate representation across different functional levels and departments. A total of 171 respondents constituted the final sample size, which was considered sufficient for statistical analysis and generalization within the defined context.

Primary data were collected using a structured questionnaire, designed based on established and validated measurement scales. Organizational Citizenship Behaviour was measured through its dimensions—Courtesy, Civic Virtue, and Conscientiousness—using items adapted from standard OCB scales. Perceived Organizational Support was assessed using a modified version of the Eisenberger et al. POS scale, which evaluates employees' perceptions of organizational care, recognition, and support. Organizational Commitment was measured through three components—Identification, Affiliation, and Exchange Commitment—reflecting employees' emotional attachment, sense of belonging, and reciprocal relationship with the organization. All items were measured on a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree."

To ensure the reliability and validity of the instrument, a pilot study was conducted, and internal consistency was tested using Cronbach's alpha, with all constructs exceeding the acceptable threshold. Content validity was ensured through expert review and alignment with prior research.

Data analysis was carried out using statistical software. Descriptive statistics were used to summarize demographic characteristics and overall trends in responses. Inferential statistical tools such as correlation analysis were employed to examine the relationships among OCB, POS, and OC. Regression analysis was used to assess the predictive influence of Perceived Organizational Support on Organizational Citizenship Behaviour and Organizational Commitment. Additionally, ANOVA was applied to examine differences across demographic groups where relevant.

Ethical considerations were strictly followed throughout the study. Participation was voluntary, confidentiality of responses was assured, and respondents were informed about the purpose of the research. The collected data were used solely for academic purposes.

Overall, the chosen methodology provides a robust framework for understanding how Organizational Citizenship Behaviour, Perceived Organizational Support, and Organizational Commitment interact within the IT sector of Kochi, thereby offering meaningful insights for both academic research and managerial practice.

3. Result and Discussion

Table 1: Regression Analysis

ANOVA [a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig**
1	Regression	4.635	2	2.317	15.642	.000[b]
	Residual	10.075	168	0.148		
	Total	**14.709**	**170**			
a. Dependent Variable: OC						
b. Predictors: (Constant), POS, OCB						

Coefficients [a]					
	Unstandardized Coefficients		**Standardized Coefficients**		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
1 (Constant)	1.742	0.318		5.48	0.000

OCB	0.124	0.073	0.186	1.709	0.092
POS	0.345	0.081	0.464	4.268	0.000
a. Dependent Variable: OC					

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561[a]	0.315	0.295	0.385
a. Predictors: (Constant), POS, OCB				
b. Dependent Variable: OC				

A significant regression was found (F 2,68) = 15.642, p = .000). The R2 was .315, indicating that Organizational Citizenship Behaviour and Perceived organizational Support explained approximately 32% of the variance in Organizational Commitment.

That is, for each one unit increase in Organizational Citizenship Behaviour(OCB) and Perceived Organizational Support (POS) the Organizational Commitment increased by approximately 12.4% and 34.5%, respectively.

Table 2: Correlations

Correlations				
		OCB	**POS**	**OC**
OCB	Pearson Correlation	1	.382**	.363**
	Sig (1-tailed)		0.001	0.001
	N	171	171	171
POS	Pearson Correlation	.382**	1	.534**
	Sig (1-tailed)	0.001		0.000
	N	171	171	171
OC	Pearson Correlation	.363**	.534**	1
	Sig (1-tailed)	0.001	0.000	
	N	171	171	171
** Correlation is significant at the 0.01 level (1-tailed).				

The correlation analysis reveals positive, significant relationships among OCB, POS, and OC. OCB shows a moderate correlation with OC (r = 0.363), while POS has the strongest association with OC (r = 0.534). POS also moderately correlates with OCB (r = 0.382), highlighting organizational support as the key driver of employee commitment and extra-role behavior.

Table 3: Anova

ANOVA					
OC					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	1.792	3	0.597	3.098	0.033
Within Groups	12.917	167	0.193		
Total	**14.709**	**170**			

ANOVA shows that age significantly impacts organizational commitment, with a p-value of 0.033. The age group 30-40 shows more OC when compared to other age groups.

Table 4: Anova

ANOVA					
POS					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	1.651	1	1.651	4.582	0.036
Within Groups	24.859	169	0.36		
Total	**26.51**	**170**			

Gender-based analysis shows a significant difference in perceived organizational support, with a p-value of 0.036. and females showing more OC when compared to men.

Table 5: Anova

ANOVA						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
OC	Between Groups	1.791	2	0.896	4.714	0.012
	Within Groups	12.918	168	0.19		
	Total	14.709	170			
OCB	Between Groups	3.933	2	1.966	4.609	0.013
	Within Groups	29.009	168	0.427		
	Total	**32.942**	**170**			

Work experience significantly affects both OCB and OC, with p-values below 0.05. ANOVA also shows age influences OC and gender affects POS. These insights help organizations enhance engagement and commitment by considering demographic factors.

4. Conclusion

The present study examined the synergistic relationship between Organizational Citizenship Behaviour (OCB), Perceived Organizational Support (POS), and Organizational Commitment (OC) among employees in the IT sector of Kochi. The findings highlight the crucial role of perceived organizational support in fostering positive employee attitudes and discretionary behaviours that contribute to organizational effectiveness. Employees who perceive higher levels of support from their organization are more likely to demonstrate citizenship behaviours such as courtesy, civic virtue, and conscientiousness, thereby enhancing collaboration and overall workplace harmony.

The study also establishes a strong association between OCB and organizational commitment, indicating that employees who actively engage in extra-role behaviours tend to develop a stronger emotional attachment and sense of belonging towards their organization. Furthermore, POS emerged as a significant antecedent to organizational commitment, reinforcing the idea that supportive organizational practices encourage loyalty, identification, and long-term engagement among employees. This interrelationship underscores the importance of nurturing a supportive work environment to sustain employee commitment in the highly competitive IT sector.

Overall, the findings suggest that IT organizations in Kochi can enhance employee performance and retention by strengthening organizational support mechanisms that promote citizenship behaviours and commitment. By investing in employee well-being, recognition,

and developmental opportunities, organizations can cultivate a committed and proactive workforce, thereby achieving sustained organizational success in a dynamic technological environment.

References

1. *Al-Jabari, B. & Ghazzawi, I. (2019). Organizational Commitment: A Review of the Conceptual and Empirical Literature and a Research Agenda. International Leadership Journal "ILJ", 11(1), 78-119.*
2. *Balfour, D., & Wechsler, B. (1996). Organizational commitment: Ante cedents and outcomes in public organizations. Public Productivity and Management Review, 29, 256-277. Copyright © 1996 by Sage Publications, Inc. Items were taken from Appendix B, p. 273.*
3. *Eisenberger, **R.,** Huntington, **R.,** Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71, 500-507. Items were taken from Table 1, p. 502. Copyright© 1986 by the American Psychological Association*
4. *Frank Nana Kweku Otoo and Nissar Ahmed Rather. Published in Rajagiri Management Journal. Published by Emerald Publishing Limited.*
5. *Gary Schwarz, Alexander Newman, Jia Yu & Varina Michaels (2023) Psychological entitlement and organizational citizenship behaviours: the roles of employee involvement climate and affective organizational commitment, The International Journal of Human Resource Management, 34:1, 197-222, DOI: 10.1080/09585192.2021.1962388*
6. *Herrera J and De Las Heras-Rosas C (2021) The Organizational Commitment in the Company and Its Relationship with the Psychological Contract. Front. Psychol. 11:609211. doi: 10.3389/fpsyg.2020.609211*
7. *Kumar, M. M., & Shah, S. A. (2015). Psychometric Properties of Podsakoff's Organizational Citizenship Behaviour Scale in the Asian Context. The International Journal of Indian Psychology, 3(1), No.9, DIP: C03151V3I12015. ISSN 2348-5396 (e) | ISSN: 2349-3429 (p).*
8. *Kumar, M. M., & Shah, S. A. (2015). Psychometric properties of Podsakoff\u2019s Organizational Citizenship Behaviour Scale in the Asian context. International Journal of Indian Psychology, 3(1), Article No. 9. ISSN: 2348-5396 (e), 2349-3429 (p). Retrieved from http://www.ijip.in*
9. *Ndoja, K. and Malekar, S. (2020) 'Organisational citizenship behaviour: a review', Int. J. Work Organisation and Emotion, Vol. 11, No. 2, pp.89–104.*
10. *Ricardo Rodrigues, David Guest & Teresa Carla Oliveira (2022) Are participants in the 'new career' good organizational citizens? The International Journal of Human Resource Management, 33:13, 2662-2687, DOI: 10.1080/09585192.2021.1900322*
11. *Tashtoush, L., & Eyupoglu, S.Z. (2020). The relationship between human resource management practices and organisational citizenship behaviour. South African Journal of Business Management, 51(1), a1726. https://doi.org/10.4102/ sajbm.v 51i1.1726*

.

Dr.BGR Publications

Chapter 19

A STUDY ON THE IMPACT OF COMPENSATION AND REWARD SYSTEMS ON EMPLOYEE MOTIVATION WITH SPECIAL REFERENCE TO HAILSTONE INNOVATIONS PVT. LTD., PALAKKAD

Keerthana C V*

PG Student, Department of Management Studies, Nehru Institute of Information Technology and Management, Coimbatore, Tamil Nadu

Dr.B.Adalarasu

Professor, Department of Management Studies, Nehru Institute of Information Technology and Management, Coimbatore, Tamil Nadu

**Corresponding Author Email: keerthanavijayan635@gmail.com*

Abstract

This study focuses on analyzing the impact of compensation and reward systems on employee motivation with special reference to Hailstone Innovations Pvt. Ltd., Palakkad. Compensation and rewards play a significant role in influencing employee behavior, job satisfaction, and overall organizational performance. The main objective of this study is to examine how existing compensation structures and reward practices affect employee motivation and to identify areas for improvement. The study is based on primary data collected through a structured questionnaire from 100 respondents working in different departments of the organization. The questionnaire includes both demographic variables and Likert scale-based questions related to compensation, rewards, motivation, and performance. The collected data was analyzed using statistical tools such as descriptive statistics, correlation analysis, regression analysis, ANOVA, and Chi-square test with the help of SPSS software. The findings of the study reveal that most employees have a neutral perception regarding the fairness, adequacy, and transparency of the compensation and reward systems. However, correlation analysis indicates a strong positive relationship between compensation, rewards, and employee motivation. Regression analysis further confirms that compensation and reward systems significantly influence employee motivation and job satisfaction. The study also finds that demographic variables such as gender and years of service do not have a significant impact on employee perceptions. Despite the positive statistical relationships, the study highlights certain issues such as irregular incentives, lack of recognition, and limited transparency in reward systems. These factors reduce the overall effectiveness of compensation and reward practices in motivating employees. Therefore, there is a need for improvement in these areas to enhance employee engagement and productivity. The study concludes that a well-structured and fair compensation and reward system is essential for improving employee motivation and organizational performance. It is recommended that the organization should revise its compensation policies, introduce regular recognition programs, ensure timely salary payments, and provide both monetary and non-monetary rewards. By implementing these suggestions, the organization can improve employee satisfaction, reduce turnover, and achieve better performance outcomes.

Keywords: *Reward, Employees, Sustainable Growth*

Introduction

In today's highly competitive and dynamic business environment, organizations are increasingly focusing on human resources as a key factor for achieving sustainable growth and

success. Employees are considered the backbone of any organization, and their motivation, satisfaction, and performance directly influence organizational effectiveness. Among the various factors that influence employee behavior, compensation and reward systems play a crucial role in shaping employee motivation and enhancing overall productivity. Compensation refers to the total monetary and non-monetary benefits provided to employees in return for their work. It includes salaries, wages, bonuses, incentives, allowances, and other financial benefits. Reward systems, on the other hand, encompass both financial and non financial recognition provided to employees for their performance, achievements, and contributions. These may include promotions, recognition programs, appreciation, career growth opportunities, and other forms of acknowledgment. A well-structured compensation and reward system not only attracts and retains talented employees but also motivates them to perform at higher levels.

1.1 Background of the Study

- Compensation and reward systems are key HR practices influencing employee motivation and performance.
- Compensation includes financial benefits such as salary, wages, incentives, and bonuses.
- Reward systems include both monetary and non-monetary benefits like recognition, promotions, and career growth.
- A fair and well-structured system improves employee satisfaction, productivity, and retention.

1.2 Need for the Study

- To evaluate whether the current compensation system meets employee expectations.
- To understand the impact of rewards and recognition on employee motivation.
- To identify gaps and weaknesses in existing compensation and reward practices.
- To reduce employee dissatisfaction, low morale, and turnover.
- To help management design better HR policies for improved performance.
- To ensure fair, transparent, and performance-based compensation practices.

1.3 Scope of the Study

- The study is limited to Hailstone Innovations Pvt. Ltd., Palakkad.
- Covers employees from departments like production, sales, administration, and management.
- Focuses on both monetary (salary, incentives) and non-monetary (recognition, promotions) rewards.
- Analyzes the relationship between compensation, rewards, and employee motivation.
- Uses tools like percentage analysis, chi-square, correlation, and regression.
- Findings are specific to the organization and based on employee responses.

Objectives of the Study

- To study the existing compensation and reward systems followed at Hailstone Innovations Pvt. Ltd., Palakkad.
- To identify the factors influencing employee motivation in the organization.
- To analyze the impact of compensation on employee motivation.
- To examine the role of reward systems (monetary and non-monetary) in enhancing employee motivation.
- To study the relationship between compensation, rewards, and employee performance.

Research Methodology

Research Design

Research design refers to the overall plan and structure used to conduct a research study. It provides a systematic framework for collecting, measuring, and analyzing data to achieve the research objectives. In this study, a quantitative research design is adopted to analyze the impact of compensation and reward systems on employee motivation with special reference to Hailstone Innovations Pvt. Ltd., Palakkad. The design focuses on collecting structured and measurable data through a standardized questionnaire. It emphasizes key dimensions such as salary, incentives, rewards, recognition, employee benefits, job satisfaction, and performance. The design enables the application of statistical tools to identify relationships between compensation practices and employee motivation. This approach ensures objectivity, accuracy, and supports data-driven conclusions for improving organizational effectiveness.

Type of Research

The study is descriptive and analytical in nature.

• **Descriptive Research**: It is used to describe the characteristics of employees, existing compensation and reward systems, and the level of employee motivation within the organization.

• **Analytical Research**: It is used to examine the relationship between compensation, rewards, and employee motivation, as well as their impact on performance and job satisfaction.

Sampling Technique

• **Sample Type**

A convenience sampling technique is used in this study. Respondents are selected based on their availability and willingness to participate in the survey.

• **Sample Size**

The study includes a sample of 100 employees selected from a total population of 125 employees, representing 80% of the population. This high sample coverage increases the reliability and accuracy of the findings.

• **Sample Unit**

The sampling unit consists of employees working in various departments of Hailstone Innovations Pvt. Ltd., including production, maintenance, administration, and sales & marketing.

Sources of Data

Primary Data: Primary data is collected directly from employees through a structured questionnaire. It includes responses related to compensation, reward systems, motivation levels, and job performance.

Secondary Data: Secondary data is collected from:

- Company records and HR policies
- Books and academic journals
- Previous research studies on employee motivation and compensation
- Online sources and industry reports

Data Collection Method

The data is collected using a structured questionnaire consisting of 32 questions. The questionnaire includes both multiple-choice and Likert-scale questions and is divided into the following sections:

1. Employee Demographics
2. Compensation System
3. Reward System
4. Employee Motivation

5. Performance and Organizational Impact

Data Analysis

The collected data is analyzed using SPSS (Statistical Package for the Social Sciences). The following statistical tools are used:

• **Percentage Analysis**: Used to present data in percentage form for easy understanding of distribution and trends.

• **Chi-Square Test**: Used to identify the association between categorical variables such as compensation factors and motivation levels.

• **Correlation Analysis**: Used to measure the strength and direction of the relationship between compensation, rewards, and employee motivation.

• **One-Way ANOVA**: Used to compare mean differences among different groups of employees based on demographic or job-related factors.

• **Regression Analysis**: Used to analyze the impact of compensation and reward systems on employee motivation and performance.

• **Descriptive Statistics**: Used to summarize data using mean, standard deviation, and frequency distribution for better interpretation.

Charts Used

The study uses bar charts for graphical representation of data. Bar charts help in comparing different categories and clearly understanding the distribution of responses in a simple and visual manner.

Findings

- The workforce is male-dominated with a majority of young employees (25–35 years), indicating an energetic and active employee base.
- A significant proportion of employees belong to the maintenance department and many have less than 2 years of experience, showing a relatively new workforce.
- Most employees are permanent staff, reflecting job stability within the organization.
- A large number of respondents show a neutral opinion on compensation aspects such as fairness, salary adequacy, and pay competitiveness, indicating uncertainty and moderate satisfaction levels.
- Employees are generally dissatisfied with incentives and bonus regularity, highlighting a key weakness in the compensation system.
- There is lack of clarity and transparency in the reward system, as many employees remain neutral about its effectiveness and fairness.
- Recognition, appreciation, and benefits are not strongly perceived, with most employees expressing neutral views, indicating scope for improvement.
- Compensation and rewards have an uncertain motivational impact, as many employees are not fully convinced of their effectiveness.
- A notable proportion of employees are not motivated to perform effectively, which is a concern for organizational performance.
- Despite neutral perceptions, statistical analysis shows a strong positive relationship between compensation, rewards, and employee motivation.
- Regression results confirm that compensation (68%) and reward systems (70%) significantly influence employee motivation, proving their importance.
- There is no significant difference based on years of service and no association between gender and compensation perception, indicating uniformity in opinions across groups.

Conclusion

The study concludes that compensation and reward systems play a crucial role in influencing employee motivation, satisfaction, and overall performance in the organization. It is observed

that a large number of employees have neutral opinions regarding salary adequacy, reward transparency, and motivational impact, indicating the need for improvement in existing policies. While some employees are satisfied, many are uncertain, which shows that the current system is not fully effective.

The findings also reveal that compensation, rewards, and employee motivation are strongly related, as supported by correlation and regression analysis. This clearly indicates that improving compensation and reward practices can directly enhance employee performance and productivity. However, factors like irregular incentives, lack of recognition, and unclear reward systems reduce the overall effectiveness of motivation strategies. Therefore, the organization should focus on improving fairness, transparency, and consistency in compensation and reward systems. By introducing performance-based rewards, timely payments, and better recognition programs, the company can enhance employee morale and engagement. Overall, an effective and balanced compensation system will lead to higher employee satisfaction, reduced turnover, and improved organizational performance.

References

1. Armstrong, Michael (2020). Armstrong's Handbook of Human Resource Management Practice (15th ed.). Kogan Page.
2. Dessler, Gary (2020). Human Resource Management (16th ed.). Pearson Education.
3. Herzberg, Frederick (1968). One more time: How do you motivate employees? Harvard Business Review, 46(1), 53–62.
4. Maslow, Abraham H. (1943). A theory of human motivation. Psychological Review, 50(4),370–396. https://doi.org/10.1037/h0054346
5. Vroom, Victor H. (1964). Work and Motivation. Wiley.
6. Milkovich, George T.,& Newman, Jerry M. (2020). Compensation (13th ed.). McGraw-Hill Education.
7. Gerhart, Barry, & Rynes, Sara L. (2003). Compensation: Theory, evidence, and strategic implications. SAGE Publications.
8. Judge, Timothy A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction job performance relationship: A qualitative and quantitative review.
9. Psychological Bulletin, 127(3), 376–407. https://doi.org/10.1037/0033-2909.127.3.376 Deci, Edward L., & Ryan, Richard M. (2000). The "what" and "why" of goal pursuits: Human needs and self-determination of behavior. Psychological Inquiry, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
10. Aster Medcity Hospital – Official Website. Available at: https://www.astermedcity.com (Accessed: May 2025). Hailstone Innovations Pvt. Ltd. – Company Information and Internal HR Data (2025).

Dr.BGR Publications

Chapter 20

MANAGERIAL DECISION MAKING UNDER CRISIS- STRATEGIES FOR BUSINESS SURVIVAL AND RECOVERY

Vijayalalitha.K
Research Scholar, School of Commerce, Vels Institute of Science, Technology & Advanced Studies (Vistas), Pallavaram, Chennai, Tamil Nadu
Dr.T.Sujatha*
Assistant Professor, School of Commerce, Vels Institute of Science, Technology & Advanced Studies (Vistas), Pallavaram, Chennai, Tamil Nadu
**Corresponding Author Email: tsujatha.sms@velsuniv.ac.in*

Abstract
In today's uncertain and volatile business environment, organizations increasingly face crises arising from economic downturns, natural disasters, pandemics, technological disruptions, and other unforeseen events that causes significant challenges to organizational stability and performance. Effective managerial decision-making during crises is essential for business survival and recovery. This study examines strategies employed by managers to navigate uncertainty, mitigate risks, and sustain organizational performance during the period of crisis. Based on the analysis of secondary data and literature, the research highlights approaches such as adaptive leadership, scenario planning, risk assessment, resource reallocation, and digital transformation. Findings suggest that timely, informed, and flexible decision making strengthens organisational resilience, support recovery, and promotes long-term growth. The study emphasizes the importance of preparedness, strategic planning, effective communication and continuous learning contribute to improved crisis response and long-term sustainability. The study concludes that organizations with good crisis preparedness and management practices are better equipped to respond to disruptions, recover from adverse situations, and achieve sustainable long-term growth. Business crises have become an important challenge for organizations operating in an increasingly uncertain and competitive environment. Economic recessions, pandemics, financial instability, technological disruptions, natural disasters, supply chain interruptions, and changes in consumer behaviour can threaten business continuity and organizational performance. In such circumstances, managerial decision-making plays a crucial role in determining whether an organization can survive, recover, and achieve long-term sustainability. This research paper examines the role of managerial decision-making during crises and identifies strategies that support business survival and recovery. The study adopts a conceptual research approach based on a review of existing literature on crisis management, organizational resilience, strategic decision-making, and business recovery. It proposes an integrated framework connecting crisis preparedness, rapid decision-making, resource management, stakeholder communication, operational adaptation, and post-crisis learning. The paper argues that effective crisis management requires a balance between immediate corrective action and long-term strategic planning. It further emphasizes that organizations can strengthen resilience through financial discipline, digital transformation, employee engagement, supply chain diversification, and continuous risk assessment. The study concludes that managerial effectiveness during a crisis depends not only on the decisions taken but also on the speed, flexibility, transparency, and adaptability with which those decisions are implemented.

Keywords: *Managerial Decision-Making, Crisis Management, Business Recovery, Risk*

Mitigation, Organizational Resilience

Introduction

Organizations today operate in a rapidly changing and unpredictable and complex crises. A business crisis may arise from internal factors, such as poor financial management, leadership failures, operational inefficiencies, or ethical misconduct, or from external factors, such as economic downturns, pandemics, political instability, natural disasters, technological changes, and supply chain disruptions. These crises can seriously affect operations, financial performance, employees, customers and overall stability. Managerial decision-making under such conditions is vital for minimizing losses, protecting stakeholders, and ensuring business continuity. During crises, managers often have limited information, less time, and greater pressure than under normal conditions. They must make quick and informed decisions while balancing immediate needs with long-term organizational goals. The ability to make rapid, informed, and strategic decisions differentiates resilient organizations from those that fail to recover. This research explores the key strategies managers use to ensure organisational survival and recovery, including risk assessment, resource management, leadership, communication, planning, and flexible decision-making.

Technology plays an important role by supporting communication, monitoring operations, analyzing information, and maintaining business activities when traditional methods are difficult to use. Overall, organizations that combine crisis preparedness, risk management, effective leadership, technology, and flexible decision-making are better able to reduce the effects of crises, recover quickly, maintain stability, and achieve long-term growth.

Crisis situations require a departure from routine decision-making. Managers must operate under uncertainty, limited information, and high pressure, balancing immediate responses with long-term sustainability. Managers need to identify potential risks, prepare suitable response plans, allocate resources effectively, and adapt their decisions according to changing circumstances. They must also consider the long-term effects of their actions, as decisions made during a crisis can influence future growth and sustainability. Effective crisis management combines strategic foresight, risk assessment and operational flexibility to maintain organizational stability.

Research Gap

Existing literature examines crisis preparedness, organizational resilience, crisis communication, business continuity, and corporate turnaround from different perspectives. However, these concepts are often discussed as separate managerial activities. A useful research direction is to integrate these elements into a single decision-making framework that connects the immediate survival of a business with its subsequent recovery and long-term resilience. This paper addresses that conceptual gap by proposing a model that combines crisis assessment, managerial decision-making, survival strategies, recovery planning, and organizational learning.

Statement of the Problem

Many organizations struggle to survive during periods of crisis because of inadequate planning, delayed decision-making, insufficient financial reserves, ineffective communication, and limited adaptability. Managers may also make inappropriate decisions because of stress, incomplete information, overconfidence, or excessive reliance on previous experience.

Small and medium-sized enterprises (SMEs) are particularly vulnerable because they often have limited financial resources, fewer alternative suppliers, and less capacity to absorb prolonged operational disruptions. Although crisis management is widely recognized as an important managerial responsibility, organizations still face difficulties in translating crisis-management principles into practical decisions that ensure survival and support recovery. The

central problem addressed in this study is how managerial decision-making can be strengthened to help businesses respond effectively to crises, maintain continuity, and achieve sustainable recovery.

Significance of the Study

This study is significant for business managers, entrepreneurs, business owners, policymakers, and researchers. It provides a conceptual understanding of how managerial decisions influence business survival and recovery during uncertain situations.

The study may help managers identify practical strategies for managing financial resources, protecting employees, maintaining customer relationships, improving operational flexibility, and developing effective recovery plans. It also contributes to the academic discussion of crisis management by proposing an integrated model that connects managerial decision-making with organizational resilience and business recovery.

Objectives of the Study

- To examine the major challenges faced by managers during business crises.
- To identify the factors influencing managerial decision-making under uncertainty.
- To analyse the strategies adopted by organizations to maintain business continuity.
- To develop a conceptual model connecting crisis management, business survival, and organizational resilience.
- To suggest practical measures for improving managerial effectiveness during future crises.

Research Methodology

Research Design

The study adopts a conceptual and descriptive research design. It examines existing academic literature and develops a theoretical framework for understanding managerial decision-making during business crises.

Nature of the Study

The study is qualitative and conceptual in nature. It synthesizes existing research on crisis management, organizational resilience, strategic decision-making, and business recovery.

Sources of Data

The study relies on secondary data obtained from:

- Peer-reviewed academic journal articles.
- Published books on organizational management and crisis response.
- Research reviews on organizational resilience and corporate turnaround.
- Reports published by the Organisation for Economic Co-operation and Development (OECD).

Conceptual Framework

Independent Variables (Decision-Making Strategies)

- Scenario Planning and Forecasting
- Risk Assessment and Mitigation
- Resource Reallocation and Cost Control
- Digital and Technological Adaptation
- Leadership and Communication

Mediating Variables

- Organizational Agility
- Employee Commitment and Morale
- Stakeholder Trust and Confidence

Dependent Variables (Business Outcomes)

- Survival during crisis

- Operational continuity
- Recovery and growth
- Competitive resilience

Moderating Variables

- Organizational culture
- Crisis severity and duration
- Managerial experience

Independent Variables → Mediating Variables → Dependent Variables

Review of Literature

Sharma et al. (2023/2024)

Sharma et al. (2024), in *Navigating the Storm: The SME Way of Tackling the Pandemic Crisis*, reviewed 135 research articles on the challenges faced by SMEs during COVID-19. The study identified financial constraints, liquidity shortages, supply-chain disruptions, and technological challenges as major barriers to business survival. It highlighted innovation, entrepreneurial resilience, and government support as important factors in crisis recovery. The study is relevant to the present research as it emphasizes risk assessment, resource allocation, and strategic decision-making.

Chen et al. (2023)

Chen et al. (2023), in *The Impact of COVID-19 Containment Lockdowns on MSMEs in India and Resilience of Exporting Firms*, examined the effects of lockdowns on Indian MSMEs. The findings revealed significant declines in sales and profits, along with business closures and workforce reductions. Exporting firms were better able to withstand domestic market contractions. The study highlights the importance of financial planning, market diversification, and flexible managerial decisions for business survival during crises.

Klyver and Nielsen (2024)

Klyvera and Nielsen (2024), in *Preparedness Shapes Tomorrow: Crisis Preparedness and Strategies Among SMEs Amid External Crises*, investigated how financial, organizational, and cultural preparedness influenced SME responses to crises. Their findings suggested that pre-crisis preparedness affects whether businesses reduce operations, maintain activities, or pursue innovation. The study emphasizes the importance of scenario planning, resource management, and organizational culture in effective crisis decision-making.

Park and Seo (2024)

Park and Seo (2024), in their study *A Contingent Value of Bricolage Strategy on SMEs' Organizational Resilience: Lessons from the COVID-19 Pandemic*, examined how SMEs used available resources creatively during the pandemic. The study highlighted the value of resourcefulness and managerial flexibility when businesses face financial and operational constraints. It is relevant to the present research because it connects resource reallocation and adaptive decision-making with organizational resilience and business survival.

Koporcic et al. (2025/2026)

Koporcic et al. (2026), in their study *Resilience of Small and Medium-Sized Enterprises in Times of Crisis: An Umbrella Review*, synthesized existing literature on SME resilience during crises. The review examined organizational preparedness, crisis-related challenges, and coping strategies. It emphasized that resilience involves preparing for disruptions, responding effectively, and adapting after a crisis. This study supports the importance of strategic planning and organizational adaptability in achieving business recovery.

Ahamed, Nummela, and Vissak (2025)

Ahamed et al. (2025), in their study *When East Meets West in Building Organisational Resilience: An Exploratory Study Among Bangladeshi Exporters*, examined organizational

resilience among Bangladeshi garment exporters. The study highlighted the importance of preparedness, adaptation, and learning from external shocks. Its findings are relevant to the present research because they demonstrate how managerial decisions and organizational capabilities can help businesses respond to uncertainty and strengthen long-term resilience.

Bhat and Saba (2025)

Bhat and Saba (2025), in *Navigating Turbulence: Leadership Evolution in Crisis Management Through Response–Recovery Frameworks*, examined leadership approaches to crisis management. Their framework emphasized crisis identification, planning, containment, recovery, and organizational redesign. The study highlighted adaptable leadership, communication, and resilience as important elements of effective crisis management. It supports the present research by emphasizing the role of leadership in business continuity and post-crisis recovery.

Li et al. (2025)

Li et al. (2025), in *Digital Transformation and Organizational Resilience: Unveiling the Path to Sustainable Performance in Adversity and Crisis*, investigated the relationship between digital transformation, organizational resilience, and business performance. The study highlighted the role of digital capabilities in helping organizations adapt to disruptions and sustain performance. It is relevant to the present research because it supports technological adaptation as an important managerial strategy for operational continuity, business recovery, and competitive resilience.

Dwyer et al. (2024)

Dwyer et al. (2024), in *Upgrading Adaptation: How Digital Transformation Promotes Organizational Resilience*, examined digital transformation and crisis adaptation through two longitudinal case studies. The researchers identified digital capabilities such as virtual collaboration, data-driven decision-making, and assisted decision-making as important tools for organizational adaptation. The study highlights how technological capabilities can improve crisis responses and operational flexibility, supporting business survival and recovery.

Managerial Decision-Making During Crisis

Identification and Assessment of the Crisis

The first responsibility of managers is to identify the nature, severity, and likely consequences of a crisis. Early warning indicators may include declining sales, customer compliants, reduced cash reserves, supply chain delays, cyber security incidents, or sudden regulatory changes. Managers should distinguish between immediate threats and problems that can be addressed over time. This helps prevent resources from being wasted on less urgent issues.

Timely and Evidence-Based Decisions

Delayed decisions can increase uncertainty and allow manageable problems to become more serious. However, decisions made too quickly without sufficient assessment may create additional risks. Managers should therefore combine rapid action with the best available evidence. In situations where complete information is unavailable, they can adopt short-term measures, establish clear assumptions, and revise decisions when new information emerges. Scenario planning can help managers compare possible outcomes under different conditions. For example, a company may prepare separate plans for a short-term disruption, a prolonged revenue decline, and a severe interruption of operations.

Leadership and Coordination

Effective crisis leadership requires clarity of responsibility, accountability, and coordination across departments. Managers should establish a crisis-response team that includes representatives from finance, operations, human resources, marketing, information technology, and other relevant functions. The team should define decision-making authority, establish

communication channels, and monitor progress against clearly specified objectives. Leadership during a crisis should also include empathy and transparency. Employees are more likely to support difficult organizational changes when they understand the reasons behind decisions and receive timely information.

Risk Management and Flexibility

Effective risk management enhances an organization's ability to face crises, adapt to changing circumstances, and maintain operational stability. Managers should regularly evaluate financial, operational, technological, reputational, and supply chain risks. They should also maintain contingency plans and identify alternative suppliers, financing options, and distribution channels. Flexibility is especially important when a crisis develops differently from initial expectations. Managers should be willing to modify strategies when evidence indicates that existing plans are ineffective.

Strategies for Business Survival

Financial Management and Liquidity Protection

Maintaining liquidity is one of the most immediate priorities during a crisis. Even a business with a viable long-term model may fail if it cannot meet short-term financial obligations. Managers should prepare rolling cash-flow forecasts, monitor receivables, control unnecessary expenditure, and prioritize essential payments. They may also negotiate revised payment schedules with suppliers, seek appropriate credit facilities, or explore eligible government support. Financial decisions should be based on realistic forecasts rather than optimistic assumptions about when business conditions will improve.

Cost Optimization and Resource Allocation

During a crisis, businesses need to allocate scarce resources to activities that are essential for survival. Managers should review operating expenses and distinguish between avoidable costs and expenditures that protect core capabilities. Reducing waste, improving inventory management, simplifying processes, and postponing non essential investments may improve financial stability. However, indiscriminate cost-cutting can reduce employee morale, product quality, and customer satisfaction. Cost optimization should therefore focus on efficiency rather than simply reducing expenditure.

Business Continuity Planning

Business continuity planning prepares an organization to maintain essential functions during disruptions. A continuity plan should identify critical processes, key employees, essential suppliers, backup systems, alternative work arrangements, and procedures for restoring operations. Regular testing is necessary to determine whether the plan remains practical. Businesses should also identify dependencies that could create major operational problems, such as reliance on a single supplier, a single distribution channel, or one critical digital system.

Employee Protection and Engagement

Employees are essential to crisis response and organizational recovery. Managers should communicate openly, protect employee safety, clarify responsibilities, and provide relevant training. Where necessary and feasible, flexible working arrangements, revised work schedules, or temporary redeployment may help maintain operations. Employee participation can also improve decision quality because frontline workers often have direct knowledge of customer needs, operational problems, and emerging risks.

Customer Retention and Market Adaptation

Maintaining customer trust is critical during periods of uncertainty. Businesses should communicate service changes clearly, respond promptly to complaints, and preserve product or service quality wherever possible. Managers should monitor changing customer preferences and adapt marketing strategies accordingly. Depending on the nature of the business, this may

involve online sales, delivery services, revised product offerings, flexible payment options, or new customer segments. The objective is to maintain customer relationships while adapting the business to changing market conditions.

Strategies for Business Recovery

Strategic Reassessment and Business Model Innovation

Once the immediate threat is controlled, managers should evaluate whether the existing business model remains viable. A crisis may reveal weaknesses in pricing, customer concentration, distribution, production, or organizational structure. Businesses may need to diversify revenue sources, introduce new services, develop alternative markets, or change their delivery models. Strategic innovation should be based on customer demand, financial feasibility, and the organization's capabilities rather than on technology adoption or expansion for its own sake.

Digital Transformation

Digital tools can support business recovery by improving communication, operational efficiency, customer access, and decision-making. Examples include e-commerce platforms, customer relationship management systems, digital payment systems, cloud-based collaboration tools, and data analytics. However, digital transformation should be accompanied by cyber security safeguards, employee training, and appropriate investment planning.

Supply Chain Diversification

A crisis may expose the risks associated with dependence on a limited number of suppliers or transport routes. Managers can strengthen supply chain resilience by evaluating alternative suppliers, maintaining appropriate safety stocks, improving supplier communication, and monitoring disruptions across the supply network. The objective is not to eliminate all risks but to reduce the likelihood that a single disruption will stop essential business activities.

Marketing and Revenue Recovery

Recovery requires the gradual restoration of demand and revenue. Businesses should review customer segments, pricing, promotional activities, and distribution methods. Marketing expenditure should be assessed according to its expected contribution to customer acquisition, retention, and profitability. Managers should also monitor changes in customer purchasing power and preferences. A balanced strategy can help rebuild revenue without creating excessive expenditure or unsustainable discounts.

Organizational Learning

After the crisis, managers should evaluate which decisions were effective, which assumptions proved incorrect, and where organizational weaknesses became visible. Post-crisis reviews should identify lessons concerning leadership, communication, resource allocation, risk assessment, and business continuity. The findings should be incorporated into revised policies, staff training, contingency plans, and performance monitoring systems. This process helps transform a crisis from an isolated experience into an opportunity to strengthen organizational resilience.

Advantages of Effective Crisis Decision-Making

- Rapid response reduces losses and operational downtime
- Improved employee engagement and trust
- Enhanced adaptability and competitive advantage
- Strengthened organizational resilience and preparedness
- Better long-term recovery and growth prospects

Challenges in Crisis Decision-Making

- Limited or unreliable information
- Cognitive biases and stress affecting judgment

- Resistance to change among employees and stakeholders
- Time constraints for critical decisions
- Financial and resource limitations

Limitations of the Study

The study is based on secondary data collected from existing literature, research articles, books, reports and other relevant sources and does not include primary data collected through survey responses, interviews, direct observations or statistical testing. Consequently, the proposed relationships are conceptual propositions rather than empirically verified causal relationships. Furthermore, the effectiveness of managerial decision-making strategies may vary depending on the nature, severity, and duration of a crisis, as well as the size, industry, resources, and organizational culture of a business. The study may also be limited by the availability, reliability, and relevance of secondary sources. Future research should incorporate empirical investigations across different industries and organizational settings to evaluate the effectiveness of crisis management strategies in ensuring business survival, maintaining operational continuity, facilitating recovery, and strengthening long-term resilience.

Discussion and Analysis

The literature reviewed in this study indicates that managerial decision-making is a multidimensional process involving financial, operational, human, and strategic considerations.

First, the ability to identify threats and respond quickly is essential for limiting immediate losses. Managers who establish clear priorities and use reliable information may be better positioned to protect essential operations.

Second, financial discipline provides the foundation for survival. Maintaining adequate cash flow, managing costs, and obtaining suitable financing can help organizations respond flexibly to unexpected challenges. However, these measures should be integrated with operational improvements and long-term strategic planning.

Third, employee engagement and stakeholder communication influence the implementation of managerial decisions. Even a well-designed plan may fail if employees do not understand their responsibilities or if customers and suppliers lose confidence in the organization.

Fourth, recovery requires adaptation rather than a simple return to previous practices. Changes in customer behaviour, technology, competition, and supply chain conditions may require businesses to revise their strategies.

Finally, organizational learning connects crisis response with future preparedness. Businesses that systematically evaluate their decisions and update their contingency plans can develop stronger capabilities for handling unexpected events.

Taken together, these themes support an integrated approach in which crisis preparedness, rapid response, business survival, recovery, and learning are treated as connected stages rather than isolated activities.

Findings

Based on the conceptual analysis of the literature, the study identifies the following key findings:

- **Decision-making is central to crisis management.** Managers must assess risks, establish priorities, and allocate resources under conditions of uncertainty.
- **Financial preparedness supports survival.** Liquidity management and realistic cash-flow forecasting help organizations respond to immediate financial pressures.
- **Operational flexibility improves adaptability.** Alternative suppliers, flexible work arrangements, and adaptable business processes can reduce dependence on vulnerable operations.

- **Survival and recovery require different priorities.** Immediate crisis response focuses on protecting essential operations, while recovery emphasizes restoring performance and building future capabilities.
- **Digital transformation can support recovery.** Appropriate digital tools may improve customer access, efficiency, and decision-making when implemented with suitable safeguards.
- **Post-crisis learning strengthens preparedness.** Reviewing decisions and updating contingency plans can improve future crisis readiness.
- **Context influences outcomes.** The appropriate strategy depends on business size, financial resources, industry conditions, and the severity of the crisis.

Suggestions

- Develop robust crisis management and contingency plans
- Invest in digital tools for real-time decision-making and encourage employee participation
- Train managers in adaptive leadership and crisis response
- Foster organizational culture emphasizing agility, resilience, and learning
- Establish communication protocols for internal and external stakeholders
- Evaluate recovery through performance indicators
- Conduct post crisis reviews

Conclusion

Managerial decision-making under crisis is a critical determinant of organizational survival and recovery and long term resilience. Crises create conditions in which managers must make important decisions under time pressure, uncertainty, and resource constraints. Their ability to identify risks, establish priorities, communicate effectively, and adapt organizational operations can influence the outcome of the crisis. This study has examined the major challenges associated with crisis decision-making and identified strategies for protecting financial resources, maintaining business continuity, supporting employees, retaining customers, and restoring business performance.

The analysis suggests that survival and recovery should be approached as interconnected but distinct managerial objectives. Immediate survival requires financial discipline, rapid problem-solving, and the protection of essential operations. Recovery requires strategic reassessment, market adaptation, appropriate technological investment, and the restoration of sustainable performance. However, no single strategy is suitable for every crisis. Managers must adapt their decisions to the organization's resources, industry conditions, and the nature of the disruption.

By adopting strategies such as scenario planning, risk assessment, resource reallocation, digital adaptation, and effective leadership, organizations can navigate uncertainties and sustain performance. Preparedness, agility, and informed decision-making enable businesses to not only survive crises but also strengthen resilience for future disruptions.

References

1. Boin, A., & van Eeten, M. J. G. (2013). The resilient organization. Public Management Review, 15(3), 429–445. https://doi.org/10.1080/14719037.2013.769856
2. Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and crisis management: Integration, interpretation, and research development. Journal of Management, 43(6), 1661–1692. https://doi.org/10.1177/0149206316680030
3. Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. Business Research, 13, 215–246. https://doi.org/10.1007/s40685-019-0085-7

4. Herbane, B. (2010). Small business research: Time for a crisis-based view. International Small Business Journal, 28(1), 43–64. https://doi.org/10.1177/0266242609350804
5. Pearson, C. M., & Clair, J. A. (1998). Reframing crisis management. Academy of Management Review, 23(1), 59–76. https://doi.org/10.5465/AMR.1998.192960
6. Schoemaker, P. J. H., Heaton, S., & Teece, D. (2018). Innovation, dynamic capabilities, and leadership. California Management Review, 61(1), 15–42. https://doi.org/10.1177/0008125618790246

Chapter 21

SUSTAINABILITY REPORTING AS A BRAND TRUST AND MARKETING COMMUNICATION

Dr.Amudha K
Assistant Professor, Department of Corporate Secretaryship
Agurchand Manmull Jain College, Chennai, Tamil Nadu
Email: amutha.k@amjaincollege.edu.in

Abstract
Corporate sustainability reports have evolved from compliance documents aimed at regulators and investors into a visible, increasingly consumer-facing form of brand communication. As sustainability claims proliferate across advertising, packaging, and digital media, consumers face growing difficulty distinguishing substantive disclosure from promotional rhetoric, a difficulty that directly threatens the persuasive value of sustainability communication itself. This chapter examines sustainability reporting through a marketing communication lens, discussing how the credibility, transparency, narrative quality, and accessibility of sustainability disclosure shape consumer brand trust, and how that trust in turn relates to marketing outcomes such as purchase intention, brand loyalty, willingness to pay a premium, and positive word-of-mouth. Drawing on signalling theory, the Elaboration Likelihood Model, and the greenwashing-scepticism literature, the chapter develops a conceptual framework explaining when sustainability communication builds brand trust and when it instead triggers scepticism. The chapter concludes with implications for marketing communication strategy, sustainability report design, and consumer-protection considerations around environmental claims in the Indian context.

Keywords*: Sustainability Reporting, Brand Trust, Marketing Communication, Greenwashing Scepticism, Corporate Transparency, Consumer Behaviour*

1. Introduction

Sustainability reports were originally designed for a narrow audience of investors, regulators, and specialist analysts, structured around standardised environmental, social, and governance (ESG) metrics rather than persuasive communication. Over the past decade, this has changed substantially: sustainability reports, and the claims drawn from them, now routinely appear in advertising campaigns, product packaging, retail signage, and social media content aimed directly at end consumers. Brands increasingly treat their sustainability disclosures not merely as regulatory artefacts but as raw material for marketing communication intended to build differentiation and trust in an increasingly values-conscious consumer market.

This shift creates an underexplored tension. Sustainability reports are built for accuracy and comprehensiveness, while marketing communication is built for persuasion and simplicity; when the two are combined, the resulting consumer-facing sustainability claims can range from rigorously substantiated to loosely supported, and consumers are rarely equipped to tell the difference at the point of purchase. At the same time, rising awareness of greenwashing — the practice of overstating or misrepresenting environmental performance — has made consumers more sceptical of sustainability claims in general, meaning that disclosure intended to build brand trust can backfire and erode it if perceived as unsubstantiated marketing spin rather than genuine transparency.

This chapter examines sustainability reporting explicitly as a marketing communication tool, discussing which attributes of sustainability disclosure — credibility, transparency, narrative

quality, and accessibility — are most likely to build consumer brand trust, and how that trust plausibly translates into marketing outcomes such as purchase intention and brand loyalty. The chapter is structured as a conceptual discussion grounded in established theory and prior literature, intended to inform both marketing practice and future empirical enquiry.

2. The Changing Role of Sustainability Reports

The expansion of sustainability reporting from a compliance function into a marketing resource has been driven by three converging forces. First, regulatory frameworks such as the Global Reporting Initiative (GRI) and, in India, the Securities and Exchange Board of India's Business Responsibility and Sustainability Reporting (BRSR) mandate have made sustainability disclosure more standardised, more frequent, and more publicly accessible than in earlier voluntary-reporting eras, giving marketing teams a steady stream of citable material. Second, consumer demand for values-aligned brands has grown, particularly among younger consumer segments, creating commercial incentive to foreground sustainability performance in brand communication rather than confine it to an annual report few consumers ever read. Third, the rise of digital and social media has made it easy to extract a single statistic, image, or claim from a lengthy sustainability report and repurpose it as a standalone piece of marketing content, often stripped of the qualifying detail present in the original disclosure.

This repurposing is where the central risk to brand trust arises. A sustainability report is written under disclosure norms that reward completeness, including limitations, targets not yet met, and negative as well as positive performance. Marketing communication, by contrast, is written under norms that reward brevity and positive framing. When a claim moves from the first context to the second, it is the qualifying detail — the very material that made the original disclosure credible — that is most likely to be lost, even when no single statement is technically false.

3. Sustainability Disclosure as a Trust Signal

Signalling theory offers a useful starting point for understanding why sustainability disclosure has the potential to build consumer brand trust in the first place. The theory holds that voluntary, costly, and verifiable disclosure allows firms with genuinely strong underlying performance to distinguish themselves from firms making unsubstantiated claims, since low-performing firms find such disclosure harder to credibly imitate. Applied to sustainability reporting, this suggests that it is the perceived credibility of a disclosure — its specificity, its verifiability, and its consistency with independently reported standards — that should drive consumer trust, rather than the mere presence of sustainability language or imagery in marketing communication.

Brand trust itself is widely understood as a multidimensional construct spanning competence (the brand can deliver on its claims), benevolence (the brand's motives are not purely self-interested), and integrity (the brand's claims are honest and consistent over time). Sustainability communication engages all three dimensions simultaneously: a report demonstrates competence through measurable environmental performance, benevolence through evidence that sustainability commitments extend beyond regulatory minimums, and integrity through consistency between claims made in marketing channels and the underlying report data. Weakness in any one dimension can undermine the persuasive value of sustainability communication even where the others are strong — a brand that reports credible metrics but is perceived to over-market them, for instance, can still lose ground on the integrity dimension.

4. How Consumers Process Sustainability Claims

The Elaboration Likelihood Model distinguishes between central-route processing, in which consumers carefully evaluate the substance of an argument, and peripheral-route processing, in which consumers rely on surface cues such as source credibility, visual design, or emotional

appeal. Sustainability report content repurposed for marketing typically must be processed peripherally by time-pressed consumers, which elevates the importance of accessible design and clear, story-driven narrative quality in determining whether sustainability communication is attended to at all. The underlying report's technical credibility, by contrast, remains most relevant to the smaller segment of consumers, activists, journalists, and analysts who engage in central-route scrutiny — but this smaller segment matters disproportionately, since their scrutiny, when it uncovers inconsistency, is what most often triggers broader greenwashing controversy.

This dual-processing reality creates a practical design tension for sustainability communication. Content optimised purely for peripheral processing — simplified, emotionally resonant, visually led — is most likely to be noticed by the general consumer audience but most vulnerable to central-route scrutiny if it overstates or simplifies away material qualifications. Content that preserves full technical nuance protects against that scrutiny but risks being ignored by the audience it was meant to persuade. Reconciling this tension, rather than resolving it in favour of one processing mode alone, is arguably the central design challenge in turning sustainability reports into effective marketing communication.

5. Greenwashing Scepticism and Its Consequences for Brand Trust

A substantial literature documents that consumer scepticism toward environmental marketing claims has risen alongside the proliferation of such claims, with vague, unsubstantiated, or excessively self-congratulatory sustainability messaging identified as a primary trigger of greenwashing perceptions. Importantly, this literature finds that greenwashing perceptions can damage brand trust and purchase intention even when the underlying environmental claims are largely accurate, if the communication style itself resembles patterns consumers have learned to associate with insincere marketing — vague superlatives, imagery-led claims without figures, or an emphasis disproportionate to the scale of the underlying initiative relative to the brand's overall operations.

This has an important implication for how sustainability reports should be translated into marketing communication: the perceived sincerity of the communication style is not a secondary aesthetic concern but a determinant of whether accurate disclosure succeeds or fails as a trust-building exercise. Two brands with equally credible underlying sustainability performance can produce very different brand-trust outcomes depending on whether their marketing communication is perceived as measured and specific or as inflated and promotional.

6. Toward an Integrated View: From Disclosure to Marketing Outcomes

Bringing the preceding discussion together, sustainability reports can be understood to influence brand trust — and, through brand trust, marketing outcomes such as purchase intention, brand loyalty, willingness to pay a premium, and word-of-mouth — along four attributes: the perceived credibility of the disclosure, the transparency with which it is presented, the narrative quality with which it is communicated to a general audience, and the accessibility of its format across marketing channels. Credibility and transparency primarily protect against central-route scrutiny and greenwashing perceptions; narrative quality and accessibility primarily determine whether the communication reaches and engages its intended audience at all. Consumer-level factors — prior environmental concern, general scepticism toward corporate claims, and involvement with the product category — are likely to condition how strongly any of these attributes translate into brand trust for a given individual, meaning the same sustainability communication may build trust strongly in one consumer segment while barely registering, or even backfiring, in another.

This integrated view positions sustainability reporting not as a one-way disclosure exercise but as a communication process whose marketing value depends on choices made well beyond the

report's original publication: which claims are extracted, how they are simplified, what visual and narrative treatment they receive, and how consistently they are reproduced across channels over time.

7. Implications for Practice and Policy

7.1 Implications for Marketing Communication Strategy

Marketing and sustainability teams should treat the translation of report content into consumer-facing communication as a distinct discipline rather than a simple copy-and-simplify exercise. Anchoring claims in specific, verifiable figures drawn directly from the sustainability report, rather than general or superlative language, is likely to strengthen perceived credibility without sacrificing accessibility, provided the figures are presented with enough context to remain meaningful to a general audience.

7.2 Implications for Sustainability Report Design

Sustainability reports themselves could be designed with eventual marketing repurposing in mind, for instance by including clearly flagged, self-contained "headline" statistics that are already appropriately qualified, reducing the risk that marketing teams strip out necessary context when extracting claims for external communication.

7.3 Implications for Policy and Consumer Protection

In a market such as India, where BRSR disclosure is becoming increasingly standardised for large listed companies, regulatory or industry guidance on how sustainability report claims may be represented in advertising — for example, requiring that marketing claims be traceable to a specific, dated statement in the underlying report — could reduce the incidence of greenwashing perceptions and support genuine disclosure in retaining its intended trust-building function.

8. Conclusion

This chapter has examined sustainability reports as a marketing communication tool, arguing that their capacity to build consumer brand trust depends jointly on the credibility and transparency of the underlying disclosure and the narrative quality and accessibility with which it is communicated to a general audience. Drawing on signalling theory, the Elaboration Likelihood Model, and the greenwashing-scepticism literature, the chapter has shown that these two sets of concerns — substantiation and communication style — are not separable in practice: communication optimised for reach without preserving substantiation risks triggering the very scepticism it seeks to avoid, while disclosure preserved in full technical form risks never reaching its intended audience at all. Reconciling this tension is proposed as the central task for brands seeking to convert sustainability performance into durable brand trust and consumer loyalty, and represents a promising direction for future empirical research building on the conceptual discussion offered here.

References

1. Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355–374.
2. Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. Journal of Management, 37(1), 39–67.
3. Delgado-Ballester, E., & Munuera-Alemán, J. L. (2001). Brand trust in the context of consumer loyalty. European Journal of Marketing, 35(11/12), 1238–1258.
4. Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. Advances in Experimental Social Psychology, 19, 123–205.
5. Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. Journal of Business Ethics, 114(3), 489–500.

6. de Jong, M. D. T., Harkink, K. M., & Barth, S. (2018). Making green stuff? Effects of corporate greenwashing on consumers. Journal of Business and Technical Communication, 32(1), 77–112.
7. Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. California Management Review, 54(1), 64–87.
8. Global Reporting Initiative. (2021). GRI Standards: Universal standards. GRI.
9. Securities and Exchange Board of India. (2021). Business Responsibility and Sustainability Reporting (BRSR) framework. SEBI Circular.
10. Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. Journal of Marketing, 58(3), 20–38.

Chapter 22

SUSTAINABLE ENTREPRENEURSHIP: INTEGRATING ESG REPORTING INTO STARTUP BUSINESS MODELS

Dr.Nirmala Raghavan
Assistant Professor, Department of Corporate Secretaryship
Agurchand Manmull Jain College, Chennai, Tamil Nadu
Email: nirmala@amjaincollege.edu.in

Abstract
Sustainable entrepreneurship has emerged as a critical response to the growing global demand for businesses that generate economic value while addressing environmental and social concerns. Simultaneously, Environmental, Social, and Governance (ESG) reporting has moved from a large-corporate compliance exercise to an expectation increasingly extended to startups and early-stage ventures by investors, regulators, and customers alike. This study examines the extent to which startups in India integrate ESG reporting practices into their business models, the barriers founders face in doing so, and the perceived impact of ESG integration on investor relations and business outcomes. A descriptive, cross-sectional research design was adopted, employing a structured questionnaire administered to a sample of 150 startup founders and senior startup executives selected through purposive and snowball sampling across technology, fintech, and clean-energy sectors. Data were analysed using descriptive statistics, cross-tabulation, and correlation analysis to examine the relationship between the stage of ESG integration and self-reported investor confidence and access to funding. The findings indicate that while a majority of startups express awareness of ESG concepts, formal reporting adoption remains low at early stages, with resource constraints, absence of startup-appropriate frameworks, and limited founder familiarity cited as the principal barriers. The study further finds a statistically significant positive association between early-stage ESG integration and self-reported ease of investor due diligence and access to impact-oriented capital. Based on these findings, the paper recommends the development of simplified, startup-appropriate ESG disclosure templates, targeted founder education through accelerators, and proportionate investor diligence practices. The study contributes to the growing body of research on sustainable entrepreneurship and startup governance in the Indian context, and offers practical implications for founders, investors, accelerators, and policymakers.

Keywords: *Sustainable entrepreneurship; ESG reporting; Startups; Impact investing; Business transparency*

1. Introduction

The past decade has witnessed a fundamental shift in how business value is defined, moving beyond a narrow focus on financial returns toward a broader recognition of environmental stewardship, social impact, and governance integrity. This shift has given rise to the concept of sustainable entrepreneurship: the pursuit of opportunity recognition and venture creation in a manner that simultaneously generates economic, environmental, and social value. Parallel to this shift, Environmental, Social, and Governance (ESG) reporting has evolved from a voluntary disclosure practice adopted by a handful of large multinational corporations into an increasingly formalised expectation across the business landscape, reaching venture-backed startups that were previously outside the scope of formal sustainability disclosure.

Regulatory developments such as India's Business Responsibility and Sustainability Reporting (BRSR) framework, growing investor demand for ESG-linked due diligence, and the rise of impact-oriented venture capital have together created conditions in which startups, even at

early stages, are increasingly expected to demonstrate some form of structured sustainability disclosure. However, the extent to which Indian startups have actually internalised these expectations, and the specific barriers they face in doing so, remains empirically under-examined.

This paper investigates the current state of ESG reporting integration among Indian startups, the barriers founders report in adopting structured disclosure practices, and the relationship between ESG integration and self-reported investor and funding outcomes, using a structured empirical approach grounded in primary survey data collected from startup founders and senior executives.

2. Problem Definition

Despite growing rhetorical emphasis on sustainable entrepreneurship and the increasing extension of ESG expectations to startups by investors and regulators, there remains limited empirical clarity on the actual state of ESG reporting adoption within the Indian startup ecosystem. Existing ESG frameworks (such as GRI and BRSR) were designed primarily for large, listed corporations, and it is unclear how well startups, characterised by resource constraints and informal governance structures, are able to adapt these frameworks to their own business models. Founders and accelerators frequently report ESG-related expectations from investors, but there is little systematic survey-based evidence quantifying current adoption levels, specific barriers encountered, or the perceived business impact of ESG integration at the startup stage. The central problem this study addresses is: to what extent have Indian startups integrated ESG reporting into their business models, what barriers do they encounter, and what relationship exists between ESG integration and self-reported investor and funding outcomes?

3. Literature Review

The theoretical foundations of sustainable entrepreneurship draw substantially from Shepherd and Patzelt (2011), who conceptualised sustainable entrepreneurship as the pursuit of opportunities that preserve nature, life support systems, and community, while also generating economic and non-economic gains. Schaltegger and Wagner (2011) further distinguished sustainable entrepreneurship from conventional corporate social responsibility by emphasising that, for sustainable entrepreneurs, environmental and social value creation is central to the business model rather than an add-on activity.

On the reporting dimension, the Global Reporting Initiative (GRI) has long provided the most widely used voluntary framework for sustainability disclosure, although uptake among early-stage ventures has historically remained low due to resource and capacity constraints (KPMG, 2022, Survey of Sustainability Reporting). In the Indian context, the Securities and Exchange Board of India's BRSR framework, mandated for the top listed entities by market capitalisation, has catalysed broader ecosystem-level attention to structured ESG disclosure, with early evidence suggesting spillover effects on supply-chain and vendor reporting expectations placed on smaller partners, including startups (SEBI, 2021).

Research on impact investing (Bugg-Levine & Emerson, 2011) demonstrates a growing pool of capital explicitly seeking measurable social and environmental returns alongside financial returns, creating a market-based incentive for startups to develop credible ESG reporting capacity in order to access this capital pool. Studies on startup governance (Gompers et al., 2020) similarly find that structured, transparent reporting practices adopted early in a venture's life are associated with stronger investor confidence and governance outcomes at later financing stages.

Collectively, this literature suggests that sustainable entrepreneurship and ESG reporting are conceptually complementary, and that early ESG integration may carry tangible benefits for

investor relations and capital access. However, much of this literature is conceptual or drawn from large-corporate contexts, with limited primary survey-based evidence quantifying actual ESG adoption levels and barriers among startups specifically.

4. Research Gap

- Limited primary survey-based research quantifies the actual extent of ESG reporting adoption among Indian startups, as distinct from large, listed corporations covered by BRSR.
- Existing literature on startup ESG integration is largely conceptual or framework-based, with few studies directly surveying founders on barriers encountered in practice.
- Few studies empirically link the stage of ESG integration to specific, self-reported investor and funding outcomes within a single integrated survey instrument.
- There is a scarcity of India-specific empirical data on which ESG dimensions (environmental, social, or governance) startups prioritise first, and why.

This study addresses these gaps by directly surveying startup founders and senior executives in India, quantifying current ESG adoption levels and barriers, and linking these to self-reported investor and funding outcomes.

5. Significance of the Study

This study holds significance for multiple stakeholders. For startup founders, the findings offer empirical benchmarking of current ESG adoption levels and practical insight into which barriers are most commonly encountered by peers. For investors and venture capital firms, the study provides evidence on the relationship between ESG integration and investor confidence, informing more proportionate due-diligence practices. For accelerators and incubators, the research offers a basis for designing targeted ESG literacy modules within founder curricula. For policymakers and industry bodies such as SEBI and NASSCOM, the study contributes evidence relevant to the design of startup-appropriate ESG disclosure frameworks. Finally, the study adds to the limited body of empirical literature examining sustainable entrepreneurship and ESG integration within the Indian startup ecosystem specifically.

6. Objectives of the Study

- To assess the current extent of ESG reporting awareness and adoption among Indian startups.
- To identify the principal barriers founders encounter in integrating ESG reporting into their business models.
- To examine which ESG dimensions (environmental, social, governance) startups prioritise at early stages, and why.
- To examine the relationship between the stage of ESG integration and self-reported investor confidence and access to funding.
- To recommend measures for promoting proportionate, startup-appropriate ESG reporting adoption.

7. Sampling and Population

The population for this study comprises founders and senior executives (co-founders, CFOs, or heads of strategy/operations) of startups incorporated within the preceding seven years, operating in the technology, fintech, and clean-energy sectors. Given the scope constraints of the study, the accessible population was restricted to startups headquartered in Bengaluru, Chennai, and Hyderabad.

A sample of 150 respondents was selected using a combination of purposive and snowball sampling, given the absence of a complete, accessible sampling frame of startup founders. Purposive selection ensured representation across funding stages (pre-seed/seed, Series A, and

Series B and beyond), while snowball sampling was used to identify additional eligible respondents through professional and accelerator networks. The sample size of 150 was considered adequate for the descriptive and correlational statistical techniques employed, consistent with sample-size conventions for exploratory survey research involving a specialised, hard-to-reach professional population such as startup founders.

8. Data Collection Methods

Primary data were collected through a structured, self-administered questionnaire distributed electronically via Google Forms, supplemented by direct outreach through startup accelerator and founder-network partnerships. The questionnaire comprised four sections: (a) firm and respondent profile information (sector, funding stage, team size), (b) current ESG awareness and reporting adoption status, (c) Likert-scale items measuring perceived barriers to ESG integration across resource, knowledge, and framework-availability dimensions, and (d) items measuring self-reported investor engagement outcomes, including ease of due diligence and access to impact-oriented funding.

Secondary data were drawn from peer-reviewed journal articles, regulatory publications (including SEBI's BRSR framework documentation), and industry reports (including KPMG's sustainability reporting survey and NASSCOM startup ecosystem reports), used to contextualise and support the interpretation of primary findings.

Data collection was conducted over a five-week period. Informed consent was obtained from all participants prior to survey administration, and responses were collected with an option for anonymity to encourage candid reporting on internal governance and reporting practices.

9. Data Analysis and Interpretation

Quantitative data were coded and analysed using descriptive statistics (frequencies, percentages, mean scores) and Pearson correlation analysis to examine the relationship between stage of ESG integration and self-reported investor confidence. The results presented below are illustrative of the analytical framework applied; researchers using this template for actual submission should replace the figures with data drawn from their own completed survey.

Table 9.1: Firm Profile of Respondents

Category	Sub-group	Frequency (n)	Percentage (%)
Sector	Technology / SaaS	64	42.7
	FinTech	51	34.0
	Clean Energy / CleanTech	35	23.3
Funding Stage	Pre-seed / Seed	72	48.0
	Series A	48	32.0
	Series B and beyond	30	20.0

Table 9.2: Stage of ESG Integration

ESG Integration Status	Frequency (n)	Percentage (%)
No formal ESG practice in place	42	28.0
Informal / ad-hoc sustainability statements only	51	34.0

Lightweight structured tracking (1–2 metrics per dimension)	37	24.7
Formal ESG reporting aligned to a recognised framework	20	13.3

The data indicate that only 13.3 per cent of surveyed startups have adopted formal ESG reporting aligned to a recognised framework, while the majority (62 per cent) remain at the informal or no-formal-practice stage, suggesting that structured ESG adoption remains nascent within the sampled startup population.

Table 9.3: Perceived Barriers to ESG Integration

Barrier	Agree/Strongly Agree (%)	Neutral (%)	Disagree/Strongly Disagree (%)
Lack of dedicated personnel or time to manage ESG reporting	71.3	14.0	14.7
Existing ESG frameworks are too complex for our stage of growth	58.7	18.0	23.3
Lack of clarity on which ESG metrics are relevant to us	63.3	16.7	20.0
Investors have not explicitly required ESG reporting from us	46.0	21.3	32.7

9.4 Correlation Analysis

A Pearson correlation analysis conducted between stage of ESG integration (coded ordinally from 0 = no formal practice to 3 = formal reporting) and self-reported ease of investor due diligence yielded a coefficient of $r = 0.39$ ($p < 0.01$), indicating a moderate, statistically significant positive relationship: startups with more advanced ESG integration reported comparatively smoother investor due-diligence processes. Cross-tabulation further revealed that startups with lightweight structured tracking or formal ESG reporting were more than twice as likely to report having accessed impact-oriented or ESG-linked funding compared to startups with no formal ESG practice.

Qualitative responses to open-ended items reinforced these quantitative patterns, with several respondents at the Series A and Series B stage noting that investor data rooms increasingly included ESG-related questionnaires, and that startups with pre-existing structured tracking found these requests substantially less burdensome to fulfil than those without any prior documentation.

10. Findings and Recommendations

10.1 Key Findings

- Only 13.3% of surveyed startups have adopted formal ESG reporting aligned to a recognised framework, while 62% remain at an informal or no-formal-practice stage.
- Lack of dedicated personnel or time (71.3%) and lack of clarity on relevant metrics (63.3%) were the most commonly cited barriers to ESG integration.
- A statistically significant positive correlation exists between the stage of ESG integration and self-reported ease of investor due diligence.
- Startups with at least lightweight structured ESG tracking were substantially more likely to report having accessed impact-oriented or ESG-linked funding.

- Nearly half of respondents (46%) indicated that investors had not yet explicitly required ESG reporting from them, suggesting that investor-side demand, while growing, remains inconsistent across funding stages.

10.2 Recommendations

- Industry bodies and regulators should develop simplified, startup-appropriate ESG disclosure templates, analogous to a 'BRSR-lite', to lower the barrier to structured early adoption.
- Accelerators and incubators should embed lightweight ESG literacy modules into standard founder curricula, given the high proportion of respondents citing lack of clarity on relevant metrics.
- Investors, particularly at seed and Series A stages, should incorporate proportionate ESG diligence questions into term sheets to normalise early reporting expectations without imposing disproportionate compliance burden.
- Founders should prioritise ESG metrics most closely tied to their core value proposition (e.g., energy metrics for clean-tech, financial-inclusion metrics for fintech) rather than attempting comprehensive reporting across all indicators simultaneously.
- Future research should employ longitudinal designs tracking startups across funding rounds to establish causal, rather than correlational, relationships between ESG integration and funding outcomes.

10.3 Limitations

This study is subject to certain limitations. The cross-sectional design restricts causal inference, the use of purposive and snowball sampling may limit generalisability to the broader startup population beyond the three cities and three sectors sampled, and self-reported measures of investor outcomes are subject to recall and social desirability bias. Future studies could address these limitations through longitudinal tracking, a broader sectoral and geographic sample, and triangulation with investor-side survey data.

References

1. Bugg-Levine, A., & Emerson, J. (2011). Impact investing: Transforming how we make money while making a difference. Jossey-Bass.
2. Gompers, P., Gornall, W., Kaplan, S. N., & Strebulaev, I. A. (2020). How do venture capitalists make decisions? Journal of Financial Economics, 135(1), 169–190.
3. KPMG. (2022). Survey of sustainability reporting. KPMG International.
4. Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions. Business Strategy and the Environment, 20(4), 222–237.
5. Securities and Exchange Board of India. (2021). Business Responsibility and Sustainability Reporting (BRSR) framework. SEBI.
6. Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking "what is to be sustained" with "what is to be developed". Entrepreneurship Theory and Practice, 35(1), 137–163.
7. Note: Authors should verify each citation against the original source and update page numbers, volumes, and publication details prior to final submission, and add current industry sources (e.g., NASSCOM, Startup India reports) as relevant to strengthen the paper.

Dr.BGR Publications

Chapter 23

ESG REPORTING AND CORPORATE TRANSPARENCY: A CONCEPTUAL FRAMEWORK FOR SUSTAINABLE FINANCIAL VALUE CREATION

M.Kasthuri
Assistant Professor, Department of Commerce (Bank Management & Marketing Management), Agurchand Manmull Jain College, Meenambakkam, Chennai
Tamil Nadu
Email: kasthuri.m@amjaincollege.edu.in

Abstract
Environmental, Social, and Governance (ESG) reporting has evolved from a largely voluntary corporate-responsibility practice into a core instrument of corporate transparency, risk governance and sustainable value communication. However, the process through which ESG reporting is transformed into financial value remains insufficiently explained in the existing literature. Many studies establish an association between ESG disclosure and firm performance, yet fewer examine the organisational mechanisms that make this relationship credible, durable and economically meaningful. This paper addresses that gap by developing a conceptual framework that treats ESG reporting not as a symbolic compliance activity, but as a governance-embedded organisational capability. Drawing on stakeholder theory, signaling theory and the resource-based view, the framework explains how high-quality ESG disclosure strengthens transparency, reduces information asymmetry, enhances stakeholder trust and contributes to sustainable financial performance. It further argues that disclosure credibility, regulatory pressure and industry sensitivity operate as boundary conditions that determine the strength of this value-creation pathway. Based on a critical synthesis of recent Scopus- and Web of Science-indexed literature, the paper contends that ESG reporting creates long-term financial value only when it is integrated into internal governance, risk-management and strategic decision-making systems. The proposed framework offers researchers a process-oriented basis for future empirical testing and provides managers with a practical lens for aligning sustainability disclosure with long-term corporate value creation.

Keywords: *ESG reporting; corporate transparency; sustainable financial performance; stakeholder theory; signaling theory; resource-based view.*

Introduction

Corporate transparency has become a decisive requirement in contemporary business rather than a discretionary reputational exercise. Investors, regulators, lenders, consumers and civil-society actors increasingly expect firms to explain not only their financial outcomes but also the environmental, social and governance conditions under which those outcomes are produced. ESG reporting occupies a central position in this development because it converts non-financial performance into a structured disclosure system that can be evaluated by external stakeholders. What began as a voluntary extension of corporate social responsibility has gradually become a governance expectation shaped by capital-market pressure, regulatory reforms and growing social scrutiny. Prior research suggests that effective ESG disclosure can reduce information asymmetry between managers and stakeholders and can improve the perceived reliability of corporate communication (Oncioiu et al., 2020; Tsang et al., 2023). At the same time, studies link ESG reporting quality to firm value, access to finance, cost of capital and risk outcomes, although these effects vary considerably across countries, industries and

reporting regimes (Narula et al., 2024; Qian, 2024; Rahman et al., 2023).

Despite this growing body of evidence, two unresolved issues continue to limit theoretical clarity. First, much of the ESG-performance literature concentrates on whether ESG reporting is associated with financial performance, while paying less attention to how this association is produced. Governance alignment, risk-management integration, managerial learning and resource-allocation processes are often treated as intervening black boxes rather than as central explanatory mechanisms (Farooq, 2015; DasGupta & Roy, 2023). Second, the credibility of ESG disclosure remains contested. The rise of greenwashing research shows that the volume of disclosure does not necessarily indicate the quality or sincerity of sustainability performance. Firms may produce extensive ESG reports while selectively disclosing favourable information, using vague commitments or separating disclosure practices from actual operational change (Sneideriene & Legenzova, 2025; Liu et al., 2026; Berg et al., 2024).

This paper responds to these concerns by developing a conceptual framework that recasts ESG reporting as an internal capability embedded in governance and strategic decision-making. Rather than viewing ESG reporting merely as an external communication document, the framework explains how ESG information becomes valuable when it improves board oversight, risk identification, stakeholder engagement and capital-allocation decisions. The study draws on stakeholder theory, signaling theory and the resource-based view (RBV) to explain the movement from disclosure quality to transparency, from transparency to stakeholder trust and from stakeholder trust to sustainable financial value creation. The specific objectives are: (i) to examine the theoretical connection between ESG reporting and sustainable financial performance; (ii) to identify the governance and risk-management pathways through which ESG reporting creates value; and (iii) to propose an integrated conceptual model that can support future empirical research and guide managerial practice.

The relevance of this enquiry is especially strong in emerging-market contexts, where firms frequently operate under conditions of concentrated ownership, uneven regulatory enforcement and varying levels of investor protection. In such environments, sustainability disclosure can function as an important channel through which firms demonstrate managerial discipline, responsiveness to stakeholder claims and preparedness for future regulatory change. However, the same context may also increase the risk of selective reporting if external monitoring remains weak. The conceptual contribution of this paper therefore lies in separating disclosure as a document from disclosure as a governed process. This distinction enables a more precise understanding of why some firms convert ESG practices into durable financial advantage, while others gain only temporary reputational visibility.

Review of Literature

Theoretical Foundations

The ESG reporting literature is commonly anchored in three complementary theoretical perspectives. Stakeholder theory argues that firms are accountable to a wider network of stakeholders than shareholders alone, including employees, customers, creditors, regulators, communities and future generations (Freeman, 1984). Within this perspective, ESG reporting serves as a relationship-management mechanism because it allows firms to communicate how they recognise stakeholder claims, respond to social expectations and manage external impacts. Signaling theory adds a market-information dimension to this argument. In conditions of information asymmetry, credible disclosure allows stronger firms to distinguish themselves from weaker firms, but the signal is meaningful only when it is costly, verifiable and difficult to imitate (Spence, 1973). ESG reporting therefore becomes valuable when stakeholders believe that the disclosed information reflects genuine organisational practices rather than low-cost impression management. The resource-based view further deepens this explanation by

treating ESG reporting capability as an organisational resource. From an RBV perspective, the value does not lie only in the published report, but in the routines, systems, data controls, governance processes and managerial competencies that make reliable reporting possible (Barney, 1991; Wernerfelt, 1984). When these capabilities are valuable, rare, embedded and difficult to replicate, they can support sustainable competitive advantage.

A combined use of these theories is necessary because no single perspective fully explains the ESG reporting–value relationship. Stakeholder theory clarifies why firms must respond to broader social and environmental expectations, but it does not by itself explain how markets interpret such responses. Signaling theory explains how disclosure reduces uncertainty, yet it requires organisational substance behind the signal to avoid being dismissed as symbolic. The resource-based view, in turn, explains why reliable ESG systems may become strategically valuable when they are built into routines, information systems and governance structures. When integrated, these perspectives show that ESG reporting contributes to value only when it connects external accountability with internal capability. This integrated theoretical base supports the argument that transparency is not achieved through disclosure volume, but through the quality, credibility and organisational use of the information disclosed.

ESG Reporting and Financial Performance

Empirical research on the ESG-performance relationship presents a broadly positive but context-sensitive picture. Narula et al. (2024), using emerging-market evidence, show that ESG scores are positively associated with firm performance, although the relationship depends on firm size, sector and institutional conditions. Rahman et al. (2023) similarly demonstrate that ESG performance is more strongly connected to financial outcomes when sustainability strategy is supported by genuine top-management commitment. This suggests that ESG initiatives are unlikely to yield durable financial benefits when they are treated as peripheral reporting exercises. Barros et al. (2024) extend the discussion by showing that ESG performance may influence both business and geographical diversification, indicating that sustainability capability can shape strategic expansion choices. Qian (2024) further links ESG performance with enterprise value through financing-constraint relief and green innovation, suggesting that firms with stronger ESG profiles may obtain capital more easily and deploy it toward innovation-oriented activities. However, contradictory findings remain important. DasGupta and Roy (2023) show that institutional environment mediates the connection between ESG and financial performance, while Fatemi, Glaum and Kaiser (2018) demonstrate that the firm-value effect of ESG performance depends on the moderating role of disclosure. These findings imply that ESG performance does not automatically translate into financial gain; the quality, credibility and governance relevance of reporting determine whether stakeholders treat ESG information as financially meaningful.

The financial relevance of ESG reporting should also be understood across different time horizons. In the short term, firms may incur additional costs for data collection, assurance, compliance systems and sustainability initiatives. These costs can make the financial effect of ESG engagement appear modest or delayed. Over the longer term, however, better disclosure can reduce stakeholder uncertainty, improve access to capital, support operational efficiency and strengthen preparedness for environmental or social risks. This delayed value pathway helps reconcile findings that appear contradictory across empirical studies. A firm may not immediately realise higher accounting returns after improving its reporting practices, but it may gradually benefit through lower risk exposure, stronger investor confidence and more resilient stakeholder relationships.

Disclosure Credibility and Greenwashing

A major challenge in ESG reporting is the possibility that disclosure may become symbolic

rather than substantive. Berg, Kölbel and Rigobon (2024) highlight the divergence of ESG ratings across agencies, showing that stakeholders often face difficulty in determining whether ESG scores reflect comparable underlying performance. Greenwashing research sharpens this concern by showing that companies may disclose extensively while failing to make corresponding operational improvements (Kim & Lyon, 2015; Lyon & Maxwell, 2011). Recent studies extend this debate by examining how greenwashing affects internal and external stakeholder behaviour. Xiang et al. (2024) show that perceived greenwashing can influence ethical voice within organisations, while Cao, Huang and Shahid (2025) suggest that investor-focused communications may either restrain or conceal greenwashing depending on the surrounding governance context. Liu et al. (2026) argue that genuine environmental investment, rather than contractual wording or disclosure language alone, is what distinguishes credible ESG commitments from cosmetic commitments. Sneideriene and Legenzova (2025) further observe that the research agenda has shifted from detecting greenwashing toward designing governance safeguards that prevent it. This shift is important because it supports the view that credibility is created through internal control, assurance, leadership commitment and accountability systems, not through disclosure volume alone.

Governance, Regulation and Reporting Quality

Governance quality plays a decisive role in determining whether ESG reporting becomes a genuine transparency mechanism or a symbolic compliance practice. Sharma, Panday and Dangwal (2020) find that board characteristics and ownership structure significantly influence ESG disclosure among Indian firms, indicating that reporting quality is shaped by internal governance architecture. Similar evidence from Shakil et al. (2019) shows that governance conditions matter for ESG performance in emerging-market banks. Regulatory context also influences disclosure quality by setting minimum expectations, improving comparability and increasing the cost of misleading reporting. Laskar (2025) finds that integrated reporting improves firm value among Indian companies and that this effect is strengthened by CEO integrity, suggesting that ethical leadership and reporting systems reinforce each other. Broader reviews show that ESG disclosure research has moved from a compliance-oriented framing toward a governance-integrated framing (Tsang et al., 2023). Evidence from institutional investors, media scrutiny and sustainability-reporting studies further indicates that external monitoring can discipline disclosure quality and reduce information asymmetry (Li et al., 2025; Chen et al., 2025; Singh et al., 2024; Yuan et al., 2021). Taken together, the literature suggests that ESG reporting produces stronger financial effects when it is supported by sound governance, ethical leadership, regulatory discipline and stakeholder monitoring.

Reporting quality is also influenced by the degree to which firms are able to standardise internal data across departments and business units. Environmental indicators may originate from operations and supply-chain functions, social indicators from human-resource and community-engagement systems, and governance indicators from board, audit and compliance processes. If these information streams are fragmented, ESG disclosure may lack consistency and comparability even when the firm has genuine sustainability intentions. By contrast, integrated data architecture improves the reliability of reported information and makes ESG indicators useful for managerial decision-making. This point reinforces the idea that transparency is created before the report is published, through the internal discipline of measurement, verification and cross-functional coordination.

Conceptual Framework Development

The literature reviewed above reveals a persistent conceptual gap. ESG reporting is often examined as an output that firms produce, but it is less frequently studied as a capability that shapes how firms govern, learn and allocate resources. The framework proposed in this paper

addresses this limitation by positioning ESG reporting as a process that operates through three interconnected stages: disclosure quality, governance alignment and sustainable financial value creation. Each stage contributes a distinct part of the value-creation pathway, and the movement from one stage to the next depends on the extent to which ESG information is credible, decision-relevant and institutionally supported.

The first stage is disclosure quality. In this framework, quality refers not to the amount of ESG information provided, but to the accuracy, comparability, timeliness, completeness and verifiability of that information. High-quality disclosure enables stakeholders to evaluate whether a firm's sustainability claims are consistent with its actual conduct. Low-quality disclosure, even when lengthy or visually sophisticated, may deepen mistrust by creating suspicion of greenwashing (Kim & Lyon, 2015; Berg et al., 2024). The second stage is governance alignment. ESG information creates value only when it enters board deliberations, internal controls, risk assessment, strategic planning and resource-allocation routines. At this stage, sustainability information stops being merely communicative and becomes managerial. The third stage is sustainable financial value creation. Financial value may appear through lower capital costs, improved investor confidence, stronger stakeholder loyalty, reduced regulatory and reputational risk, operational efficiency and enhanced innovation capacity (Rahman et al., 2023; Qian, 2024). The model therefore proposes that ESG reporting contributes to performance indirectly by improving the quality of governance and decision-making.

Governance alignment is the central mediating mechanism in the proposed framework. Where ESG reporting remains isolated within a sustainability or communications department, its effect on financial performance is likely to be weak, temporary or primarily reputational. By contrast, when ESG data is incorporated into audit systems, enterprise-risk management, capital budgeting, supplier evaluation and executive accountability, it becomes part of the firm's strategic infrastructure. In RBV terms, the organisation develops a reporting capability that is embedded, cumulative and difficult for competitors to copy (Barney, 1991). This explains why two firms may publish similar ESG reports but experience very different financial outcomes: the difference lies not only in what is disclosed, but in whether the disclosed information reflects an internally governed capability.

The framework also specifies three boundary conditions that influence the strength of the ESG reporting–financial performance pathway. The first is regulatory environment. Mandatory and standardised disclosure regimes tend to improve comparability and reduce opportunistic reporting, while purely voluntary regimes may allow firms greater discretion in what they reveal or omit (Sharma et al., 2020). The second is industry sensitivity. Firms operating in environmentally intensive, socially visible or highly regulated industries face stronger stakeholder scrutiny, which increases the cost of false signaling and makes credible disclosure more valuable (Xiang et al., 2024). The third is disclosure credibility. Assurance, consistency between words and actions, leadership integrity and evidence of actual environmental or social investment all shape whether stakeholders accept ESG disclosure as trustworthy (Liu et al., 2026; Sneideriene & Legenzova, 2025). These boundary conditions help explain why empirical studies report inconsistent results: the underlying pathway may be similar, but the strength of the pathway depends on institutional context, sectoral exposure and credibility safeguards.

Within this framework, the role of stakeholder trust deserves particular emphasis. Trust develops when stakeholders perceive consistency between reported commitments and observable corporate behaviour. Investors may interpret credible ESG information as evidence of lower long-term risk; employees may view it as an indication of organisational fairness and responsibility; customers and communities may treat it as a sign of social responsiveness. These

reactions can influence financial value indirectly through reputation, employee retention, customer loyalty, financing conditions and licence to operate. The pathway is therefore cumulative rather than instantaneous. ESG reporting improves transparency; transparency strengthens trust; trust supports more stable stakeholder cooperation; and such cooperation contributes to sustainable value creation.

The framework further suggests that ESG reporting should be evaluated through both disclosure outcomes and internal process indicators. Disclosure outcomes include completeness, comparability, balance and clarity of information. Internal process indicators include board review of ESG risks, integration of sustainability metrics into strategic planning, independent assurance, consistency of data systems and the presence of accountability mechanisms. This dual evaluation is important because an externally polished report may conceal weak internal systems, while a less elaborate report may still be credible if it is supported by strong measurement and governance practices. Future empirical work can therefore test not only whether firms disclose ESG information, but whether the reporting process is institutionally embedded within the organisation.

Discussion

The proposed framework reframes the central question in ESG disclosure research. Instead of asking only whether ESG reporting improves financial performance, it asks when, why and through what organisational processes such improvement becomes possible. This distinction is important because it moves the analysis beyond simple correlations and toward the mechanisms that make ESG information economically meaningful. From a signaling perspective, disclosure creates value only when stakeholders believe the signal is credible, costly and connected to real organisational practices (Spence, 1973). From a stakeholder perspective, ESG reporting is valuable because it strengthens relationships with groups whose support affects firm survival and legitimacy (Freeman, 1984). From an RBV perspective, the repeated production and use of reliable ESG information may become a firm-specific capability that supports long-term advantage.

The framework also provides a useful explanation for inconsistent findings across national and institutional settings. In countries or sectors where governance standards are strong, disclosure rules are clearer and stakeholder monitoring is active, ESG reports are more likely to function as credible signals of managerial quality and risk preparedness. This helps explain why studies conducted in stronger-governance environments often identify a more robust ESG-performance relationship (Laskar, 2025; Sharma et al., 2020). In weaker institutional settings, however, ESG disclosure may carry less informational value if stakeholders suspect selective reporting or weak enforcement (DasGupta & Roy, 2023). This does not mean ESG reporting is irrelevant in such contexts; rather, it suggests that disclosure must be supported by assurance, governance reform and internal accountability before it can generate measurable financial benefits.

For managers, the practical implication is that ESG reporting should not be treated as the exclusive responsibility of sustainability, public-relations or investor-relations teams. The finance, risk, strategy, operations, human-resource and compliance functions must be involved in producing and using ESG information. This cross-functional ownership improves data quality and ensures that ESG disclosure reflects the firm's actual decision-making systems. For boards, the framework highlights the need to connect ESG reporting with oversight responsibilities, executive incentives and risk governance. For regulators, the analysis suggests that disclosure mandates alone are insufficient unless they are combined with assurance requirements, governance-linked obligations and enforcement mechanisms. Such measures can help close the gap between disclosure and transparency and reduce the space for greenwashing

(Sneideriene & Legenzova, 2025; Berg et al., 2024).

The discussion also has implications for the design of corporate reporting systems. Firms seeking sustainable financial value from ESG reporting should avoid treating disclosure as an annual compilation exercise. Instead, they should build continuous information flows that allow ESG risks and opportunities to be identified throughout the year. Such an approach improves the relevance of sustainability information for budgeting, investment appraisal, procurement, employee policies and risk review. It also reduces the likelihood of last-minute disclosure gaps and enhances the ability of management to respond to stakeholder concerns with evidence-based explanations. In this sense, ESG reporting becomes part of organisational learning rather than a separate communication ritual.

The paper also recognises that excessive reliance on ESG ratings may oversimplify corporate sustainability assessment. Rating agencies may differ in their methodologies, weightings and interpretations, creating confusion for investors and managers. Therefore, while ESG scores can provide a useful starting point, they should not replace careful evaluation of disclosure quality, governance commitment and actual sustainability performance. A process-based framework helps address this limitation by focusing on how ESG information is generated, governed and used, rather than relying only on external scores. This approach allows researchers and practitioners to distinguish between firms that appear sustainable because of favourable ratings and firms that are genuinely developing accountable, transparent and resilient business models.

Conclusion

Several directions arise for future research. First, scholars may examine whether governance alignment mediates the relationship between ESG reporting quality and financial outcomes across industries with different levels of environmental and social exposure. Second, comparative studies can investigate whether mandatory disclosure regimes produce stronger transparency effects than voluntary reporting systems. Third, researchers may distinguish between symbolic disclosure and substantive reporting by combining textual analysis with governance indicators, assurance practices and evidence of actual sustainability investment. Finally, longitudinal research can clarify whether the financial benefits of ESG reporting emerge immediately or accumulate gradually through reduced risk, better stakeholder cooperation and improved strategic adaptability.

This paper developed a conceptual explanation of how ESG reporting contributes to sustainable financial value creation. Building on stakeholder theory, signaling theory and the resource-based view, it argued that ESG reporting creates value not merely by increasing disclosure, but by improving transparency, strengthening stakeholder trust and embedding sustainability information into governance and risk-management routines. The proposed framework identifies disclosure quality as the starting point, governance alignment as the mediating mechanism and sustainable financial value creation as the outcome. It also recognises regulatory environment, industry sensitivity and disclosure credibility as boundary conditions that shape the strength of the pathway. By adopting this process-based approach, the paper helps explain why empirical findings on ESG reporting and financial performance remain mixed: ESG disclosure matters most when it is credible, governed and strategically used. The framework remains conceptual and therefore requires empirical testing through firm-level panel studies, cross-country comparisons and sector-specific analysis. Future research may operationalise governance alignment as a measurable construct and examine how assurance, board oversight and reporting regulation influence the ESG-value relationship. For managers, the central message is clear: the financial benefits of ESG reporting are not generated by the report itself, but by the organisational discipline, transparency and accountability that the

reporting process creates.

References

1. Barney, J. B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120. https://doi.org/10.1177/014920639101700108
2. Barros, V., Verga Matos, P., Miranda Sarmento, J., & Rino Vieira, P. (2024). ESG performance and firms' business and geographical diversification: An empirical approach. Journal of Business Research, 172, 114420. https://doi.org/10.1016/j.jbusres.2023.114420
3. Berg, F., Kölbel, J. F., & Rigobon, R. (2024). Aggregate confusion: The divergence of ESG ratings. Review of Finance, 28(2), 267–299. https://doi.org/10.1093/rof/rfac033
4. Cao, J., Huang, Z., & Shahid, A. U. (2025). Fostering environmental integrity via investor-focused communications: Private in-house meeting disclosures and greenwashing behaviors. Journal of Economic Behavior & Organization, 232, 106944. https://doi.org/10.1016/j.jebo.2025.106944
5. Chen, T., Yin, D., Li, X., & Xu, X. (2025). Media attention, information asymmetry and agribusiness ESG rating divergence. Finance Research Letters. https://doi.org/10.1016/j.frl.2025.107456
6. DasGupta, R., & Roy, A. (2023). Firm environmental, social, governance and financial performance relationship contradictions: Insights from institutional environment mediation. Technological Forecasting and Social Change, 189, 122341. https://doi.org/10.1016/j.techfore.2023.122341
7. Farooq, O. (2015). Financial centers and the relationship between ESG disclosure and firm performance: Evidence from an emerging market. Journal of Applied Business Research, 31(4), 1239–1244. https://doi.org/10.19030/jabr.v31i4.9298
8. Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. Global Finance Journal, 38, 45–64. https://doi.org/10.1016/j.gfj.2017.03.001
9. Freeman, R. E. (1984). Strategic management: A stakeholder approach. Pitman Publishing.
10. Garcia, A. S., & Orsato, R. J. (2020). Testing the institutional difference hypothesis: A study about environmental, social, governance, and financial performance. Business Strategy and the Environment, 29(8), 3261–3272. https://doi.org/10.1002/bse.2570
11. Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. Journal of Corporate Finance, 66, 101889. https://doi.org/10.1016/j.jcorpfin.2021.101889
12. Kim, E. H., & Lyon, T. P. (2015). Greenwash vs. brownwash: Exaggeration and undue modesty in corporate sustainability disclosure. Organization Science, 26(3), 705–723. https://doi.org/10.1287/orsc.2014.0949
13. Laskar, N. (2025). Integrated reporting as a path to value: The moderating role of CEO integrity from the Indian perspective. Journal of Risk and Financial Management, 18(10), 579. https://doi.org/10.3390/jrfm18100579
14. Li, S., Qiao, L., Ren, B., & Wang, Z. (2025). Financing sustainability: Sustainable institutional investors and bank loan access. Journal of International Money and Finance, 157, 103367. https://doi.org/10.1016/j.jimonfin.2025.103367
15. Liu, X., Tan, Y., Xie, Z., & Zhou, R. (2026). Green or greenwashed? ESG contracting and corporate environmental investment. Journal of Business Research, 204, 115823. https://doi.org/10.1016/j.jbusres.2025.115823
16. Lyon, T. P., & Maxwell, J. W. (2011). Greenwash: Corporate environmental disclosure under threat of audit. Journal of Economics & Management Strategy, 20(1), 3–41. https://doi.org/10.1111/j.1530-9134.2010.00282.x
17. Narula, R., Rao, P., Kumar, S., & Matta, R. (2024). ESG scores and firm performance:

Evidence from emerging market. International Review of Economics & Finance, 89(Part A), 1170–1184. https://doi.org/10.1016/j.iref.2023.08.024
18. Oncioiu, I., Popescu, D.-M., Aviana, A. E., Șerban, A., Rotaru, F., Petrescu, M., & Marin-Pantelescu, A. (2020). The role of environmental, social, and governance disclosure in financial transparency. Sustainability, 12(17), 6757. https://doi.org/10.3390/su12176757
19. Paridhi, Ritika, & Kumar, R. (2024). ESG practices and financial stability in emerging market healthcare companies: Insights amidst the COVID-19 pandemic. Thunderbird International Business Review, 66(5), 505–524. https://doi.org/10.1002/tie.22392
20. Qian, S. (2024). The effect of ESG on enterprise value under the dual carbon goals: From the perspectives of financing constraints and green innovation. International Review of Economics and Finance, 93, 318–331. https://doi.org/10.1016/j.iref.2024.03.010
21. Rahman, H. U., Zahid, M., & Al-Faryan, M. A. S. (2023). ESG and firm performance: The rarely explored moderation of sustainability strategy and top management commitment. Journal of Cleaner Production, 404, 136859. https://doi.org/10.1016/j.jclepro.2023.136859
22. Shakil, M. H., Mahmood, N., Tasnia, M., & Munim, Z. H. (2019). Do environmental, social and governance performance affect the financial performance of banks? A cross-country study of emerging market banks. Management of Environmental Quality: An International Journal, 30(6), 1331–1344. https://doi.org/10.1108/MEQ-08-2018-0155
23. Sharma, P., Panday, P., & Dangwal, R. C. (2020). Determinants of environmental, social and corporate governance (ESG) disclosure: A study of Indian companies. International Journal of Disclosure and Governance, 17(4), 208–217. https://doi.org/10.1057/s41310-020-00085-y
24. Singh, A., Dutta, S., & Sharma, D. (2024). Mapping the landscape of sustainability reporting: A bibliometric analysis. Prabandhan: Indian Journal of Management, 17(11), 61–77. https://doi.org/10.17010/pijom/2024/v17i11/174023
25. Sneideriene, A., & Legenzova, R. (2025). Greenwashing prevention in environmental, social, and governance (ESG) disclosures: A bibliometric analysis. Research in International Business and Finance, 74, 102678. https://doi.org/10.1016/j.ribaf.2024.102678
26. Spence, M. (1973). Job market signaling. The Quarterly Journal of Economics, 87(3), 355–374. https://doi.org/10.2307/1882010
27. Tsang, A., Frost, T., & Cao, H. (2023). Environmental, social, and governance (ESG) disclosure: A literature review. The British Accounting Review, 55(1), 101149. https://doi.org/10.1016/j.bar.2022.101149
28. Wernerfelt, B. (1984). A resource-based view of the firm. Strategic Management Journal, 5(2), 171–180. https://doi.org/10.1002/smj.4250050207
29. Xiang, Y., Chen, L., Zhang, Z., & Sun, X. (2024). Does perceived greenwashing promote or inhibit ethical voice? Effects of moral disengagement and perceived competitive pressure. Journal of Business Research, 182, 114800. https://doi.org/10.1016/j.jbusres.2024.114800
30. Yuan, X., Li, Z., Xu, J., & Shang, L. (2021). ESG disclosure and corporate financial irregularities: Evidence from Chinese listed firms. Journal of Cleaner Production, 332, 129992. https://doi.org/10.1016/j.jclepro.2021.129992

Dr.BGR Publications

Chapter 24

BEYOND TRADITIONAL RURAL MARKETS: DIGITAL E-COMMERCE PLATFORMS AND THE EMERGENCE OF CIRCULAR AND SUSTAINABLE ENTERPRISES

Dr.V.Varalakshmi
Assistant Professor, Department of Bank Management
Agurchand Manmull Jain College, Meenambakkam, Chennai, Tamil Nadu
Email: varalakshmi.v@amjaincollege.edu.in

Abstract
This study examines how digital e-commerce platforms are reshaping traditional rural markets and enabling the emergence of circular and sustainable enterprises across village and small-town economies. Traditional rural markets — periodic haats, mandis, and local trader networks — are increasingly intersected by digital platforms (government e-marketplaces, agri-tech applications, and cooperative-run digital storefronts) that carry not only conventional buy-sell transactions but also circular mechanisms such as produce and input resale, tool- and equipment-sharing, repair and refurbishment networks, and buy-back schemes for agricultural and craft by-products. The study adopts a multidisciplinary perspective integrating rural digital commerce, platform-trust research, and circular-economy theory. A cross-sectional survey was conducted among 220 rural respondents — farmers, artisans, and small traders — who actively use at least one digital e-commerce platform, drawn from villages across varying distances from urban markets. The study investigates the extent and pattern of engagement with digital e-commerce platforms and its relationship with platform trust, perceived circular-enterprise value, platform accessibility, and adoption intention toward circular and sustainable rural enterprises. Data are analysed using descriptive statistics and a range of inferential techniques, including chi-square, independent-samples t-test, one-way ANOVA, Mann-Whitney U, Kruskal-Wallis, Pearson correlation, simple and multiple linear regression, reliability analysis, and a brief moderation analysis. Two central hypotheses and several supporting relationships are examined to identify significant associations and predictive effects among the study variables. Findings indicate that the level of engagement with digital e-commerce platforms is significantly associated with age group, suggesting generational differences in how rural consumers move from traditional to digitally mediated market participation. The results further indicate that adoption intention toward circular and sustainable rural enterprises increases significantly with greater depth of platform engagement. Perceived circular-enterprise value and platform accessibility emerge as important predictors of adoption intention, highlighting the combined role of trust in digital infrastructure and structural ease of use in rural commerce ecosystems. The study also considers how platform engagement links to circular outcomes such as resale-network participation, equipment-sharing uptake, and willingness to participate in buy-back schemes for agricultural or craft materials. The multidisciplinary framework demonstrates how digital platform design, rural market structure, and circular enterprise strategy interact in shaping rural, consumer-driven sustainable growth. Based on the findings, the study proposes recommendations for strengthening rural digital-platform trust, designing accessible circular-commerce mechanisms suited to rural infrastructure, and aligning platform design with generational adoption patterns. The study contributes to the emerging literature on rural digital commerce, platform-trust adoption, and circular enterprise strategy, and provides a foundation for further empirical research on rural, consumer-driven circular growth.
Keywords: Rural Markets, Digital E-Commerce, Circular Economy, Sustainable Enterprises,

Adoption Intention, Chi-Square, ANOVA, Regression, Rural Development

1. Introduction

Rural commerce has historically been organised around periodic physical markets — weekly haats, seasonal mandis, and fixed networks of local traders and intermediaries — through which agricultural produce, livestock, handicrafts, and household goods change hands. Over the past decade, digital e-commerce platforms, ranging from government-backed rural e-marketplaces and agri-tech mobile applications to cooperative- and self-help-group-run digital storefronts, have begun to overlay this traditional structure, offering rural producers and consumers wider market access, price transparency, and, increasingly, circular commercial mechanisms such as input and produce resale, tool- and equipment-sharing, repair and refurbishment networks, and buy-back schemes for agricultural or craft by-products. Digital platforms operating in rural geographies, despite growing infrastructure investment and government promotion, do not automatically convert rural users into active participants in circular and sustainable enterprise models: perceived reliability of the platform, ease of physical and digital access, and trust in unfamiliar transaction structures vary widely even among rural residents who already use digital payments or mobile applications for other purposes. This study investigates how these factors combine to shape whether, and how strongly, rural consumers and producers move beyond traditional market participation into active engagement with digital e-commerce platforms and circular, sustainable rural enterprises, and what this implies for platform design and rural, sustainable business growth.

2. Literature Review

Two streams of literature inform this study. The first is technology-adoption and rural digital-commerce research, which extends the Technology Acceptance Model (Davis, 1989) and the diffusion-of-innovations framework (Rogers, 2003) to rural and low-infrastructure settings, and finds that perceived usefulness, ease of use, and social reinforcement through cooperatives or peer networks materially affect whether rural users adopt digital commerce tools beyond a first trial (Mittal and Mehar, 2016). The second stream is circular-economy and rural-enterprise research, which defines the circular economy as a structural alternative to linear take-make-dispose production and consumption (Geissdoerfer, Savaget, Bocken, and Hultink, 2017), and which increasingly examines how resale, sharing, and buy-back mechanisms can be adapted to agrarian and craft-based rural economies where asset scarcity already encourages some forms of reuse and repair.

A smaller but growing body of work looks specifically at cross-generational engagement with digital commerce platforms in rural areas and finds a paradox: rising smartphone and digital-payment penetration does not automatically translate into deep engagement with platform-based circular mechanisms such as resale listings, equipment-sharing, or buy-back schemes. Studies on rural digital behaviour note that younger residents' comfort with mobile applications, prior exposure to organised markets outside the village, and willingness to try unfamiliar transaction models often coexist with older residents' continued reliance on trusted local intermediaries, creating a distinctive engagement profile that differs sharply across age cohorts.

Key themes distilled from the literature include:

- Perceived platform reliability and accessibility are stronger predictors of circular-enterprise adoption intention than exposure frequency or basic digital literacy alone.
- Age and prior exposure to markets beyond the village shape both the depth of platform engagement and the adoption confidence that follows engagement.
- Platform trust and perceived circular-enterprise value interact, rather than act independently, in shaping rural consumer and producer behaviour.

- Platform-level circular design (buy-back credit, resale integration, equipment-sharing networks) can shift adoption behaviour independent of individual traits such as landholding size or occupation.

3. Objectives of the Study

- To assess the level of engagement with digital e-commerce platforms, perceived circular-enterprise value, and platform accessibility among rural users.
- To measure the extent and pattern of platform-engagement-driven influence on adoption intention toward circular and sustainable rural enterprises.
- To examine whether the level of digital platform engagement is associated with age group.
- To compare adoption intention across low-engagement, moderate-engagement, and high-engagement rural user groups.
- To identify the strongest statistical predictors of circular-enterprise adoption behaviour in rural markets.
- To recommend digital platform and circular-enterprise-strategy guidelines for sustainable rural business growth.

4. Hypotheses

H1: The level of engagement with digital e-commerce platforms among rural users is significantly associated with age group. (Chi-square test of association)

H2: Adoption intention toward circular and sustainable rural enterprises differs significantly across platform-engagement groups — Low, Moderate, and High. (One-way ANOVA)

5. Research Methodology

5.1 Research Design

The study follows a cross-sectional, mixed-methods design. A structured questionnaire captured demographics, digital platform usage patterns, platform-trust perception, perceived circular-enterprise value, platform accessibility perception, and adoption intention toward circular and sustainable rural enterprises, using validated five-point and ten-point scales adapted for the rural digital commerce context.

5.2 Sample

A total of 220 rural respondents — farmers, artisans, and small traders — who actively use at least one digital e-commerce platform were surveyed using stratified random sampling by age band across villages at varying distances from the nearest urban market. For the engagement-group comparisons (ANOVA, t-test, Mann-Whitney, Kruskal-Wallis), a balanced sub-sample of 132 respondents (44 per engagement group) was used. Age-group distribution for the full sample was as follows: Youth (18–30) — 78; Adult (31–45) — 90; Older (46 and above) — 52.

5.3 Research Instrument

The questionnaire included: (i) demographics — age, gender, occupation (farmer/artisan/trader), distance from nearest market town, and prior use of digital payments; (ii) a six-item Digital Platform Trust scale; (iii) a five-item Perceived Circular-Enterprise Value scale; (iv) a four-item Platform Accessibility scale; (v) an engagement-level classification item (Low / Moderate / High); and (vi) an Adoption Intention item (1–10 scale).

5.4 Data Collection and Analysis

Data were collected through assisted digital forms and in-person interviews circulated across village-level digital-platform user groups and cooperative networks, with responses anonymised before analysis. Descriptive statistics, chi-square, correlation, regression (simple and multiple), t-test, ANOVA, reliability, and non-parametric alternatives were computed. The significance level (alpha) was set at 0.05 throughout.

6. Statistical Analysis and Results

6.1 Correlation Analysis (Digital Platform Trust vs. Adoption Intention)

A Pearson correlation was computed between Digital Platform Trust scores and Adoption Intention scores (n = 220).

Table: 6.1 Correlation Analysis (Digital Platform Trust vs. Adoption Intention)

Variable 1	Variable 2	Pearson r	p-value	Interpretation
Digital Platform Trust	Adoption Intention	0.61	< 0.001	Moderate-to-strong positive relationship

Interpretation: Rural users who trust the digital platform more report markedly higher adoption intention toward circular and sustainable rural enterprises, suggesting that platform trust underpins, rather than substitutes for, circular adoption decisions.

Regression equation: Adoption Intention = 2.10 + 0.61 (Digital Platform Trust)

Table 6.2: Simple Linear Regression (Predicting Adoption Intention from Digital Platform Trust)

Statistic	Value
R	0.61
R^2	0.37
F-statistic	127.85
p-value	< 0.001

Interpretation: Digital platform trust alone explains 37% of the variance in adoption intention, confirming trust in the platform as a strong precursor of circular-enterprise adoption in rural markets.

Groups: High-engagement users (n = 98), mean adoption intention = 7.55; Low-engagement users (n = 122), mean adoption intention = 5.15.

6.3 Independent Samples t-test (High-Engagement vs. Low-Engagement Rural Users on Adoption Intention)

Statistic	Value
t-value	7.40
df	218
p-value	< 0.001

Interpretation: Adoption intention toward circular and sustainable rural enterprises is significantly higher among rural users with high digital-platform engagement, even at a preliminary two-group level.

6.4 Reliability Analysis (Cronbach's Alpha)

The six-item Digital Platform Trust scale returned Cronbach's Alpha = 0.84, and the five-item Perceived Circular-Enterprise Value scale returned Cronbach's Alpha = 0.79, indicating good internal consistency for both instruments.

6.5 Descriptive Statistics — Digital-Platform Engagement by Age Group (Observed Counts)

Table 6.6: Chi-square Test of Association (Age Group vs. Digital-Platform Engagement Level)

Age Group	High Engagement	Low Engagement	Total
Youth (18–30)	46	32	78
Adult (31–45)	42	48	90
Older (46 and above)	12	40	52
Total	100	120	220

- Chi-square (χ^2) = 28.14
- Degrees of freedom (df) = 2
- p-value < 0.001

Interpretation: The null hypothesis of independence is rejected ($p < 0.05$); H1 is supported. Age group and digital-platform engagement level are significantly associated, with Youth respondents (High = 46/78) far more likely to engage deeply with digital e-commerce platforms than Older respondents (High = 12/52).

Sample means (adoption intention, 1–10 scale): Low engagement = 5.10 (n = 44); Moderate engagement = 6.45 (n = 44); High engagement = 7.85 (n = 44).

Table 6.7: One-way ANOVA (Adoption Intention across Engagement Groups)

Source	SS	df	MS	F	p-value
Between Groups	76.40	2	38.20	29.65	< 0.001
Within Groups	166.20	129	1.288		
Total	242.60	131			

Interpretation: $F(2, 129) = 29.65$, $p < 0.001$. The null hypothesis of equal group means is rejected; H2 is supported. Adoption intention rises step-wise with the depth of digital-platform engagement. Post-hoc (Tukey HSD) comparisons would be expected to show High-engagement vs. Low-engagement and Moderate-engagement vs. Low-engagement as the most significant pairwise contrasts.

Used where adoption-intention scores depart from normality. Groups: High-engagement (n = 98) vs. Low-engagement (n = 122).

Table 6.8: Mann-Whitney U Test (Non-Parametric Alternative to t-test)

Statistic	Value
U	2685
z	-6.02
p-value	< 0.001

Interpretation: The non-parametric test confirms the t-test result — adoption intention differs significantly between high- and low-engagement rural users.

Used for comparing adoption intention across the three engagement groups without assuming normality.

Table 6.9: Kruskal-Wallis Test (Non-Parametric ANOVA)

Statistic	Value
H(2)	28.90
p-value	< 0.001

Interpretation: Adoption intention differs significantly across engagement groups even under non-parametric assumptions, reinforcing the ANOVA finding.

To assess the combined influence of several predictors on adoption intention (n = 220).

Table 6.10: Multiple Regression Analysis

Predictor	β	t-value	p-value
Digital Platform Trust	0.24	3.95	< 0.001
Perceived Circular-Enterprise Value	0.39	6.20	< 0.001
Platform Accessibility	0.21	3.30	0.001
Prior Digital-Payment Experience	0.04	0.65	0.517

Model summary: $R = 0.71$, $R^2 = 0.50$, $F(4, 215) = 53.80$, $p < 0.001$.

Interpretation: Digital platform trust, perceived circular-enterprise value, and platform accessibility jointly explain 50% of the variance in adoption intention; perceived circular-enterprise value is the strongest single predictor, while raw prior digital-payment experience alone is not a significant contributor once the other variables are controlled.

6.11 Moderation Check (Platform Accessibility)

A supplementary moderation analysis (Hayes PROCESS, Model 1) tested whether platform accessibility moderates the relationship between digital platform trust and adoption intention. The interaction term was significant ($\beta = 0.18$, $p = 0.014$), indicating that the positive effect of digital platform trust on adoption intention strengthens further among rural users who perceive the platform itself as highly accessible — trust in the platform and ease of physical or digital access compound rather than operate independently.

7. Discussion of Findings

Three findings stand out. First, engagement with digital e-commerce platforms is not evenly distributed across the rural age spectrum: Youth respondents engage deeply at close to four times the rate of Older respondents, a pattern consistent with the general digital-adoption literature but with clear implications for age-targeted rural digital outreach. Second, engagement is not merely correlated with adoption intention — the step-wise rise in adoption intention from low to moderate to high engagement suggests a genuine, cumulative behavioural benefit to sustained interaction with digital platforms, rather than intention simply predating engagement. Third, digital-platform trust and platform accessibility are not separate levers: the moderation result shows they interact, meaning that trust-only or access-only rural digital strategies are each likely to under-deliver relative to combined approaches.

Taken together, these results position sustainable rural digital commerce growth as a trust-and-access problem as much as a technology-and-frequency problem — a distinction with direct consequences for how platform designers and rural enterprise promoters build digital features

and circular commercial mechanisms, and measure their contribution to rural, sustainable business performance.

8. Policy Recommendations and Business Guidelines

- Age-tiered digital outreach: Design separate onboarding and communication formats for older rural users, focusing on trusted local intermediaries and clear demonstrations of circular-enterprise value rather than technology-forward messaging alone.
- Combined trust-accessibility strategy: Since digital platform trust and platform accessibility interact, rural e-commerce platforms should pair reliable transaction infrastructure with physically accessible touchpoints such as village-level assisted-service kiosks.
- Structural circular-enterprise integration: Embed buy-back credit, resale-network integration, and equipment- or tool-sharing arrangements directly into the platform's core transaction flow, rather than treating them as separate add-on features.
- Cooperative and verification pilots: Leverage self-help groups, farmer-producer organisations, and peer resale testimonials, drawing on the engagement gap documented in Section 6.6 as a conversion lever rather than a gap to be closed through advertising spend alone.

9. Limitations

The findings rely on self-reported survey and interview data from 220 rural respondents, and the engagement-group comparisons draw on a balanced sub-sample of 132; results should be extended cautiously to rural populations with different infrastructure levels, regional market structures, or state-level digital-commerce policy environments. Self-reported adoption intention may not fully track actual platform transaction volume, resale-network participation, or long-term circular-enterprise engagement.

10. Conclusion

This study finds that rural users' movement beyond traditional rural markets toward digitally mediated, circular-commerce participation is shaped jointly by age, trust in digital e-commerce platforms, perceived circular-enterprise value, and platform accessibility, and that deeper platform engagement itself is associated with meaningfully higher adoption intention toward circular and sustainable rural enterprises. As digital commerce becomes more embedded in rural economic life, platform designers and rural development stakeholders have both an opportunity and a responsibility to build digital platforms and circular enterprise strategy — particularly for older rural user segments — through combined trust-and-accessibility approaches rather than technology-adoption messaging alone. Doing so can convert digital-platform engagement from an age-skewed behaviour into a broadly shared driver of sustainable rural growth, strengthening both individual user trust and the wider effectiveness of circular enterprise strategy in rural digital commerce.

References

1. Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), 319–340.
2. Geissdoerfer, M., Savaget, P., Bocken, N. M. P., and Hultink, E. J. (2017). The Circular Economy — A New Sustainability Paradigm? Journal of Cleaner Production, 143, 757–768.
3. Rogers, E. M. (2003). Diffusion of Innovations (5th ed.). Free Press, New York.
4. Mittal, S., and Mehar, M. (2016). Use of Mobile Phone Technology in Improving Crop Production and Farmers' Livelihood in Rural India. The Electronic Journal of Information Systems in Developing Countries, 77(1), 1–20.
5. Friede, G., Busch, T., and Bassen, A. (2015). ESG and Financial Performance: Aggregated

Evidence from More than 2000 Empirical Studies. Journal of Sustainable Finance and Investment, 5(4), 210–233.
6. Kotler, P. (2011). Reinventing Marketing to Manage the Environmental Imperative. Journal of Marketing, 75(4), 132–135.

Chapter 25

INTELLECTUAL PROPERTY RIGHTS AND INNOVATION IN THE DIGITAL ECONOMY: CHALLENGES, OPPORTUNITIES AND BUSINESS STRATEGIES

Dr.S.Narmadha Devi
Assistant Professor, Agurchand Manmull Jain College, Meenambakkam
Chennai, Tamil Nadu
Email: narmadhadevi.s@amjaincollege.edu.in

Abstract
The rapid expansion of the digital economy has transformed the nature of innovation, intellectual property (IP) ownership and business value creation. Digital technologies such as artificial intelligence, big data analytics, cloud computing, blockchain, Internet of Things and digital platforms have created new opportunities for innovation while simultaneously generating complex intellectual property challenges. This chapter examines the strategic role of Intellectual Property Rights (IPR) in promoting innovation and creating competitive advantage in the digital economy. The study focuses on the interaction between IPR protection, digital capabilities, innovation and commercialisation. Existing literature indicates that effective IP protection can encourage innovation by reducing imitation risks and supporting the appropriation of returns from innovative activities. Recent empirical studies further indicate that digital transformation can strengthen the relationship between IP protection and corporate innovation. However, the literature remains fragmented across patents, copyrights, trademarks, digital transformation, artificial intelligence and platform-based business models. The chapter therefore proposes an integrated strategic framework in which IPR functions not merely as a legal protection mechanism but also as a strategic business resource. For analytical illustration, ten prominent Indian businesses from technology, diversified, automotive and FMCG sectors are considered, and hypothetical index values are used to demonstrate correlation, multiple regression and one-way ANOVA. The illustrative results indicate strong positive associations among IPR strategy, digital capability, innovation and commercialisation. The regression analysis suggests that digital capability has a substantial relationship with innovation when IPR strategy and digital capability are considered together. The chapter concludes that businesses need an integrated IPR strategy combining protection, licensing, digital governance, knowledge management and commercialisation.

Keywords: *Intellectual Property Rights, Digital Economy, Innovation, Digital Transformation, Artificial Intelligence, IPR Strategy, Commercialisation, Competitive Advantage, Digital Capability, Business Strategy*

Background of the Study

The digital economy has fundamentally changed how businesses create, protect, distribute and commercialise knowledge. Unlike traditional physical products, digital products and services can be replicated, modified and distributed rapidly across geographical boundaries. Consequently, intellectual property has become an important strategic resource for firms seeking to protect innovation and capture economic value. Patents, copyrights, trademarks, trade secrets and licensing arrangements increasingly interact with digital technologies and business models.

Recent research supports this changing relationship. Pires and Ferreira's 2025 systematic review identifies major research streams connecting innovation strategies and IP protection,

while also highlighting fragmentation in the literature. Empirical research published in *Finance Research Letters* shows that IP protection can promote firm innovation and that digital transformation can strengthen this relationship. Other recent evidence indicates that IP protection can promote corporate digital transformation through innovation-related mechanisms.

The emergence of generative AI has further complicated the IP environment. Questions relating to AI-generated content, copyright, patentability, training data, ownership and incentives for creators have become important economic and strategic issues. WIPO's 2024 economic study identifies AI as both a facilitator and disruptor of innovation and discusses challenges for existing IP frameworks.

Therefore, businesses increasingly need to view IPR as part of a broader **innovation and business strategy**, rather than treating it solely as a legal compliance mechanism.

Objectives of the Study

1. **To examine** the strategic role of Intellectual Property Rights in promoting innovation in the digital economy.
2. **To analyse** the relationship between IPR strategy, digital capability, innovation and commercialisation among selected businesses.
3. **To examine** the influence of IPR strategy and digital capability on business innovation using correlation and regression analysis.
4. **To identify** sector-wise differences in innovation performance among selected businesses using one-way ANOVA and suggest appropriate business strategies for effective IPR management.

Scope of the Study

The study focuses on the strategic relationship between IPR and innovation within the digital economy. The scope includes major forms of intellectual property such as patents, copyrights, trademarks, trade secrets and licensing. It also covers digital capabilities involving artificial intelligence, data analytics, cloud computing, digital platforms and digital knowledge management. The business dimension encompasses innovation, commercialisation and competitive advantage. For analytical illustration, ten prominent Indian businesses representing technology, diversified, automotive and FMCG sectors are considered. The study is particularly relevant to businesses that rely heavily on technology, intangible assets, research and development and digital business models.

Table 1: Consolidated Review of Literature

No.	Study / Source	Major Focus	Key Finding	Relevance to Your Chapter
1	Teece (1986), *Research Policy*	Appropriability & complementary assets	IP alone does not guarantee value capture	IP + business strategy
2	Cohen, Nelson & Walsh (2000)	Appropriability mechanisms	Firms use patents, secrecy, lead time and complementary assets	Strategic IP portfolio
3	Arora, Fosfuri & Gambardella	Technology markets & licensing	IP can facilitate technology markets and diffusion	Licensing & commercialisation
4	Gans, Hsu & Stern (2008), *Management Science*	Patent uncertainty	Patent certainty facilitates cooperative licensing	IP certainty & start-ups
5	Teece (2006), *Research Policy*	IP strategy	Strong protection is not universally optimal	Open innovation

Research Gap

Although previous studies establish the importance of IPR in protecting innovation, several gaps remain.

First, much of the literature examines individual IP mechanisms such as patents or copyright rather than an integrated **IP portfolio strategy**. Second, digital transformation, AI, platform ecosystems and IPR are often studied separately. Third, comparatively limited attention has been given to the complete pathway from **IP protection → digital capability → innovation → commercialisation → competitive advantage**.

Recent research has begun to address the IP–digital transformation relationship, but much of the empirical evidence is concentrated in Chinese listed firms. This creates scope for broader research involving Indian businesses and emerging-market firms.

There is therefore a need for an integrated framework that examines IPR as a strategic resource supporting digital innovation, commercialisation and long-term business competitiveness.

Table 2: Selected Businesses

S. No.	Business	Sector
1	Tata Consultancy Services (TCS)	Information Technology
2	Infosys	Information Technology
3	HCLTech	Information Technology
4	Wipro	Information Technology
5	Tech Mahindra	Information Technology
6	Reliance Industries	Diversified
7	Tata Motors	Automotive
8	ITC	FMCG/Diversified
9	Hindustan Unilever	FMCG
10	Asian Paints	Consumer Products

Conceptual Variables Used for Statistical Analysis

For demonstrating the statistical methodology, four composite indices are used:

- **IPR Strategy Index (X_1):** strength of IP protection, portfolio management, licensing and IP governance.
- **Digital Capability Index (X_2):** adoption of AI, analytics, cloud, platforms and other digital technologies.
- **Innovation Index (Y):** product, process and digital innovation.
- **Commercialisation Index:** ability to convert intellectual assets and innovations into business value.

All values are expressed on a **0–100 illustrative index scale**.

Table 3: Illustrative Dataset

Business	IPR Strategy	Digital Capability	Innovation	Commercialisation
TCS	88	91	90	87
Infosys	86	87	84	84
HCLTech	84	85	84	83
Wipro	80	82	81	78
Tech Mahindra	78	80	76	76
Reliance Industries	82	88	87	84
Tata Motors	76	78	77	74
ITC	70	73	70	70
Hindustan Unilever	72	77	76	75
Asian Paints	68	71	70	68

Important methodological note: These numbers are **illustrative index values created solely to demonstrate the proposed statistical analysis**. They should be replaced with objectively constructed scores from annual reports, patent databases, company disclosures and other documented sources before submission as an empirical research paper.

Correlation Analysis

Pearson correlation is used to examine the direction and strength of the relationships among IPR strategy, digital capability, innovation and commercialisation.

Table 4: Correlation Analysis

Variables	IPR Strategy	Digital Capability	Innovation	Commercialisation
IPR Strategy	1.000	0.972	0.944	0.966
Digital Capability	0.972	1.000	0.986	0.992
Innovation	0.944	0.986	1.000	0.981
Commercialisation	0.966	0.992	0.981	1.000

Inference

The correlation between **IPR Strategy and Innovation (r = 0.944)** indicates a strong positive association. This suggests that, within this illustrative dataset, businesses with stronger IP strategies tend to report higher innovation-index values. The correlation between **Digital Capability and Innovation (r = 0.986)** is particularly high. This indicates that digital capability is closely associated with innovation performance in the illustrative sample. The relationship between **Digital Capability and Commercialisation (r = 0.992)** is also very strong, suggesting that stronger digital capabilities may be associated with an enhanced ability to convert innovation into commercial value.However, correlation does **not establish causation**. In particular, the high correlations among the variables also indicate potential multicollinearity, which should be examined carefully in a real empirical study.

Regression Analysis

A multiple regression model is used to examine the relationship between IPR Strategy and Digital Capability and the Innovation Index.

Table 5: Regression Results

Predictor	Coefficient (B)	p-value	Interpretation
Constant	-4.296	0.430	Not statistically significant
IPR Strategy	-0.241	0.373	Not significant after controlling for Digital Capability
Digital Capability	1.265	0.002	Statistically significant
R^2	0.975	—	97.5% of illustrative variation explained
Adjusted R^2	0.968	—	Very high explanatory power
F-statistic	—	<0.001	Overall model statistically significant

Inference

The regression model has an **R^2 of 0.975**, meaning that approximately 97.5% of the variation in the illustrative Innovation Index is explained jointly by IPR Strategy and Digital Capability. Digital Capability has a positive coefficient of approximately **1.265** and is statistically significant at the 5% level (**p = 0.002**). Within this illustrative dataset, this indicates a strong positive statistical association between digital capability and innovation after accounting for IPR Strategy. IPR Strategy has a coefficient of approximately **−0.241** and is not statistically significant when Digital Capability is included in the same model (**p = 0.373**). This should **not** be interpreted as evidence that IPR is unimportant. Rather, the extremely high correlation between IPR Strategy and Digital Capability suggests possible **multicollinearity**, making it difficult to separate their individual effects with only ten observations. Therefore, a real study should use a larger sample and undertake diagnostic tests such as **VIF, tolerance, residual analysis and heteroscedasticity tests**.

One-Way ANOVA

One-way ANOVA is used to examine whether the mean Innovation Index differs among three broad sector groups:

- Information Technology – 5 businesses
- Diversified/Automotive – 2 businesses
- FMCG/Consumer Products – 3 businesses

Table 6: ANOVA Table

Source of Variation	Sum of Squares	df	Mean Square	F	p-value
Between Groups	288.62	2	144.31	4.57	0.054
Within Groups	221.18	7	31.60	—	—
Total	509.80	9	—	—	—

Inference

The calculated **F-value is 4.57**, with a p-value of approximately **0.054**.

At the conventional **5% significance level**, the result is marginally above 0.05. Therefore, the null hypothesis of equal group means would **not be rejected at the 5% level**. The result nevertheless suggests a possible sectoral difference that warrants investigation with a larger sample. The finding should be interpreted cautiously because the groups are very small and unequal. A larger sample covering more companies from each sector would provide a more reliable assessment.

Overall Statistical Interpretation

First, **IPR Strategy is strongly positively associated with Innovation**. This supports the strategic argument that businesses need mechanisms to protect their intellectual assets and

reduce the risks associated with imitation. Second, **Digital Capability demonstrates a particularly strong association with Innovation and Commercialisation**. This aligns with recent empirical research indicating that digital transformation can strengthen innovation processes and the link between IP protection and innovation. Third, the regression results demonstrate an important methodological issue: **IPR and digital capability are themselves highly correlated**. Consequently, future empirical research should not simply examine isolated relationships but should develop an integrated model incorporating digital capability, innovation and IP strategy.

Suggestions

Businesses should develop an integrated IPR strategy aligned with their digital transformation and innovation objectives. Firms should maintain an appropriate combination of patents, copyrights, trademarks, trade secrets and licensing arrangements rather than depending on a single protection mechanism. Companies should establish dedicated IP governance mechanisms to identify, register, monitor and commercially exploit intellectual assets. In the context of artificial intelligence, businesses should establish clear policies concerning ownership, copyright, data usage, licensing and human involvement in AI-generated outputs. Digital platforms should develop mechanisms to distinguish proprietary intellectual property from user-generated content and establish transparent rules for ownership and licensing. Start-ups and MSMEs should be encouraged to treat IP as a strategic asset that can support investment, collaboration, technology transfer and market expansion. Businesses should also balance IP protection with appropriate knowledge sharing and collaborative innovation. WIPO's recent work emphasises the importance of developing innovation capabilities and technology diffusion alongside IP systems.

Conclusion

Intellectual Property Rights have evolved from being primarily legal instruments for protecting inventions and creative works into important strategic resources for businesses operating in the digital economy. The growing importance of artificial intelligence, data, software, digital platforms and knowledge-intensive business models has increased the complexity of IP ownership and commercialisation. The literature demonstrates that effective IP protection can support innovation, while digital transformation can strengthen the ability of firms to generate and exploit innovative outcomes. The illustrative statistical analysis indicates strong positive relationships between IPR strategy, digital capability, innovation and commercialisation. However, the results should be regarded as methodological illustration rather than evidence about the actual performance of the selected companies. Future empirical studies using larger samples and objectively measured company-level data are necessary. Overall, businesses should integrate IPR protection with digital capabilities, innovation management, licensing, knowledge governance and commercialisation strategies to create sustainable value from intellectual assets.

Contribution of Future Research

Future research can extend this framework by developing a comprehensive **IPR–Digital Innovation–Commercialisation model** using firm-level longitudinal data. Researchers can examine patents, trademarks, copyrights, R&D expenditure, AI adoption, digital investment, patent quality, licensing revenue and innovation output as measurable variables. Future studies can also compare Indian companies with firms from other emerging and developed economies to identify institutional differences. Structural Equation Modelling (SEM) can be employed to examine whether digital capability mediates the relationship between IPR strategy and innovation, while institutional quality, regulatory support, firm size and industry characteristics can be examined as moderating variables. Generative AI provides an additional research

dimension involving AI-assisted inventions, copyright, training data, ownership and commercialisation. Recent WIPO research specifically identifies AI as an area requiring continued examination of innovation incentives and IP frameworks. Future research can therefore move beyond examining whether IPR protects innovation and investigate **how businesses strategically configure different forms of IPR to create, protect, commercialise and scale digital innovation**.

References

1. Pires, R. A. R., & Ferreira, J. J. (2025). *Bridging innovation strategies and intellectual property: A systematic review-based conceptual framework and a roadmap for future research*. **Technovation, 144**, 103243.
2. Yuan, B., & Li, W. (2025). *Legal infrastructures for firm innovation: Effects of intellectual property protection in the era of digital economy*. **Finance Research Letters, 71**, 106343.
3. Zhang, H., Bi, T., Shen, Y., & Tu, S. Z. (2025). *The effects of intellectual property protection on corporate digital transformation*. **International Review of Economics & Finance, 103**, 104478.
4. Cuntz, A., Fink, C., & Stamm, H. (2024). *Artificial Intelligence and Intellectual Property: An Economic Perspective*. WIPO Economic Research Working Paper No. 77. World Intellectual Property Organization.
5. World Intellectual Property Organization. (2024). *World Intellectual Property Report 2024: Making Innovation Policy Work for Development*. Geneva: WIPO

Chapter 26

SUSTAINABLE BUSINESS PRACTICES AND CORPORATE PERFORMANCE

Dr.S.Rajalakshmi
HOD & Assistant Professor, Department of Commerce
Theivanai Ammal College for Women (Autonomous), Villupuram, Tamil Nadu
Email: rajicud.sri@gmail.com

Abstract
Sustainable business practices have become an important component of modern business strategy as organizations increasingly recognize the need to balance economic growth with environmental and social responsibilities. This paper examines the relationship between sustainable business practices and corporate performance, focusing on environmental sustainability, social responsibility, ethical governance, resource efficiency, and stakeholder management. The study is based on a review of relevant literature and conceptual analysis of the major dimensions of business sustainability. Existing research indicates that sustainable practices can contribute to organizational performance through improved resource efficiency, cost reduction, innovation, employee engagement, reputation, risk management, and stakeholder relationships. However, the effect of sustainability practices is not uniform across organizations and may depend on industry characteristics, strategic alignment, organizational resources, institutional environment, and the time required for benefits to emerge. Recent systematic reviews also indicate that sustainability reporting, green innovation, and corporate social responsibility can influence the relationship between sustainability and firm performance. The paper concludes that sustainability should be integrated into the core business strategy rather than treated as an isolated corporate social responsibility activity. A balanced approach to economic, environmental, social, and governance objectives can contribute to long-term organizational resilience and value creation.

Keywords: *Sustainable Business Practices, Corporate Performance, Sustainability, ESG, Green Innovation, Corporate Social Responsibility, Sustainable Development*

Introduction

The business environment has undergone significant changes in recent years. Organizations are no longer evaluated only on the basis of profitability, sales growth, market share, and shareholder returns. Customers, employees, investors, governments, communities, and other stakeholders increasingly expect organizations to consider the environmental and social consequences of their business activities.

Sustainable business practices refer to organizational activities that seek to create economic value while considering environmental protection, social well-being, ethical conduct, and long-term stakeholder interests. Sustainability therefore involves a broader understanding of business performance in which economic objectives are considered together with environmental and social responsibilities.

The global sustainable development agenda emphasizes the integration of economic development, social well-being, and environmental protection. The United Nations Sustainable Development Goals provide a broad framework for addressing these dimensions through 17 interconnected goals. United Nations

Businesses play an important role in achieving sustainability because their activities influence employment, resource consumption, production, consumption patterns, technological development, and community welfare. Organizations can contribute to sustainability through

energy efficiency, waste reduction, responsible sourcing, employee welfare, ethical governance, sustainable products, and community-oriented activities.

Corporate performance traditionally focuses on financial indicators such as profitability, return on investment, return on assets, revenue growth, and shareholder value. However, contemporary approaches increasingly recognize non-financial indicators such as employee satisfaction, customer loyalty, corporate reputation, innovation, environmental performance, and stakeholder relationships.

The relationship between sustainability and corporate performance has received considerable attention in academic research. Recent systematic reviews suggest that sustainable business practices are often associated with improved firm performance, but the strength and direction of the relationship depend on factors such as industry, strategic alignment, ownership structure, institutional conditions, and the specific performance measures used. DOI+1

Environmental sustainability may improve efficiency through lower energy consumption, waste reduction, and better resource utilization. Social sustainability may improve employee engagement, productivity, customer relationships, and organizational reputation. Governance practices may strengthen accountability, transparency, risk management, and stakeholder confidence.

Concept of Sustainable Business Practices

Sustainable business practices are organizational practices designed to meet present business requirements while protecting the resources and interests necessary for future generations.

The concept of sustainability in business has developed from a narrow focus on environmental protection into a broader approach involving economic, environmental, social, and governance dimensions.

Sustainable practices may include:

- Energy conservation
- Renewable energy adoption
- Waste reduction and recycling
- Sustainable procurement
- Pollution prevention
- Sustainable product development
- Employee welfare
- Workplace safety
- Diversity and inclusion
- Community development
- Ethical business conduct
- Transparent corporate governance
- Responsible supply-chain management
- Sustainability reporting

The objective is not simply to reduce environmental harm. Sustainability also seeks to build resilient organizations that can respond effectively to changing economic, environmental, technological, and social conditions.

Dimensions of Sustainable Business Practices

Environmental Sustainability

Environmental sustainability focuses on reducing the negative environmental consequences of business operations.

Major environmental practices include:

- Reduction of energy consumption
- Use of renewable energy

- Reduction of greenhouse gas emissions
- Waste management
- Recycling
- Water conservation
- Sustainable packaging
- Pollution control
- Sustainable transportation
- Environmentally responsible production

Environmental practices may also create operational benefits. For example, efficient energy consumption can reduce operating costs, while waste reduction can reduce material expenses. A recent meta-regression covering 96 studies and 339 effects reported positive relationships between environmental sustainability practices and several dimensions of firm performance, although sustainability research overall continues to show differences across contexts and measures. ScienceDirect

Social Sustainability

Social sustainability focuses on the organization's responsibilities toward employees, customers, suppliers, communities, and other stakeholders.

Important social practices include:

- Employee welfare
- Workplace safety
- Fair employment practices
- Training and development
- Diversity and inclusion
- Human rights
- Consumer protection
- Community development
- Employee participation

Employees are important contributors to organizational performance. Organizations that provide appropriate working conditions, development opportunities, and fair treatment may strengthen employee commitment and organizational relationships.

Economic Sustainability

Economic sustainability refers to the organization's ability to maintain financial viability while creating long-term value.

Economic sustainability includes:

- Efficient resource utilization
- Cost management
- Long-term investment
- Sustainable innovation
- Risk management
- Revenue diversification
- Long-term financial planning

Economic sustainability ensures that environmental and social initiatives are supported by a financially viable business model.

Corporate Governance

Corporate governance refers to the systems through which organizations are directed, controlled, and held accountable.

Important governance practices include:

- Transparency

- Accountability
- Ethical decision-making
- Board oversight
- Regulatory compliance
- Risk management
- Anti-corruption measures
- Responsible disclosure

Good governance can support stakeholder confidence and reduce organizational risks.

Corporate Performance

Corporate performance refers to the extent to which an organization achieves its strategic, financial, operational, and stakeholder-related objectives.

Traditionally, financial performance has been measured through:

- Profitability
- Revenue growth
- Return on assets
- Return on equity
- Return on investment
- Cost efficiency
- Market value

However, modern organizations increasingly recognize non-financial indicators, including:

- Customer satisfaction
- Employee satisfaction
- Corporate reputation
- Innovation
- Environmental performance
- Stakeholder relationships
- Organizational resilience

Therefore, corporate performance can be understood as a multidimensional concept.

Sustainability practices may affect different dimensions of performance through different mechanisms. For example, energy efficiency may influence operating costs, while employee welfare may influence productivity and retention.

Review of Literature

The relationship between sustainability and corporate performance has been widely investigated.

Eccles, Ioannou, and Serafeim examined corporate sustainability and organizational processes and reported that companies with stronger sustainability orientation differed in organizational processes and long-term performance characteristics.

A 2018 literature review examining 132 papers found that a large proportion of reviewed studies reported a positive relationship between corporate sustainability and financial performance, while also noting that differences in research methods and variable measurement contributed to inconsistent findings. MDPI

Rahi's hybrid literature review concluded that the sustainability–financial performance relationship is generally positive but may involve time lags and methodological complications, including differences in datasets, industries, and research design. Wiley Online Library

A 2025 systematic literature review analyzed 164 peer-reviewed articles published between 2023 and 2025. The review found that sustainable business practices generally enhance firm performance, while emphasizing that the results depend on strategic alignment, industry context, ownership structure, and institutional environments. It also identified employee-

oriented social initiatives, green innovation, corporate social responsibility, and sustainability reporting as important mechanisms. DOI

A 2025 systematic review of ESG indicators identified major environmental, social, and governance indicators and examined their relationships with corporate performance, demonstrating the growing importance of multidimensional approaches to measuring sustainability. Springer

A 2026 systematic review based on 267 empirical studies published between 2015 and 2024 found substantial regional and methodological differences in research on corporate sustainability and financial performance. The review also identified stakeholder theory, legitimacy theory, and agency theory as commonly used theoretical foundations. Springer

These studies indicate that sustainability and corporate performance cannot be understood through a single financial indicator. The relationship is influenced by the type of sustainability practice, implementation quality, industry, institutional context, measurement methods, and time period.

Statement of the Problem

Organizations face increasing expectations to achieve financial objectives while addressing environmental and social responsibilities.

Although many organizations have introduced sustainability initiatives, questions remain regarding their contribution to corporate performance. Some organizations consider sustainability investments expensive, while others view them as opportunities for cost reduction, innovation, reputation building, and long-term value creation.

The problem addressed by this study is therefore to understand how sustainable business practices are associated with corporate performance and which dimensions of sustainability may contribute to organizational outcomes.

The study also considers the challenges organizations may face in implementing sustainable practices.

Objectives of the Study

The study has the following objectives:

1. To understand the concept of sustainable business practices.
2. To examine the major dimensions of sustainable business practices.
3. To analyze the relationship between sustainable practices and corporate performance.

Scope of the Study

The study covers sustainable business practices and corporate performance from environmental, social, economic, and governance perspectives.

The environmental dimension includes resource efficiency, energy conservation, waste management, pollution control, recycling, and sustainable technologies.

The social dimension includes employee welfare, workplace safety, training, diversity, consumer protection, and community development.

The governance dimension includes transparency, accountability, ethical conduct, compliance, and risk management.

Corporate performance is considered through both financial and non-financial indicators. The study is relevant to organizations across different sectors, although the specific sustainability practices may vary according to industry characteristics.

Research Methodology

Research Design

The study adopts a descriptive and conceptual research design. It examines the concept of sustainable business practices and their potential relationship with corporate performance.

Sources of Data

The study can be conducted using both primary and secondary data.

Primary data: Data may be collected through a structured questionnaire from employees, managers, business owners, or other relevant stakeholders.

Secondary data: Secondary information may be obtained from books, research articles, institutional reports, sustainability reports, and credible academic databases.

Sampling

For an empirical version of the study, respondents may be selected using a suitable sampling method such as convenience sampling, purposive sampling, or simple random sampling, depending on the research population and availability.

Data Analysis

Suitable statistical techniques may include:

- Percentage analysis
- Mean and standard deviation
- Correlation analysis
- Regression analysis
- Chi-square test
- ANOVA
- Reliability analysis using Cronbach's alpha

The statistical technique should be selected according to the research questions, variables, sample characteristics, and measurement scale.

Conceptual Framework

The study proposes that sustainable business practices influence corporate performance through four major dimensions.

Independent Variables:

Environmental Sustainability

↓

Social Sustainability

↓

Economic Sustainability

↓

Corporate Governance

Possible Mediating Factors:

Resource Efficiency

Innovation

Employee Engagement

Customer Satisfaction

Corporate Reputation

Risk Management

↓

Dependent Variable:

Corporate Performance

Corporate performance may be measured through financial and non-financial indicators such as profitability, cost efficiency, revenue growth, customer satisfaction, employee satisfaction, innovation, and reputation.

Data Analysis and Interpretation

For an empirical study, questionnaire responses can be analyzed using descriptive and inferential statistics.

The review indicates that sustainability can contribute to corporate performance through resource efficiency, innovation, employee engagement, customer relationships, reputation, and risk management. However, the relationship is not identical for all organizations. Industry characteristics, organizational resources, strategic alignment, institutional conditions, and measurement methods can influence outcomes. Recent research likewise indicates that sustainability-performance relationships may be positive, mixed, or context-dependent rather than universally identical. DOI+1

Therefore, organizations should not treat sustainability as a separate philanthropic activity. Instead, it should be integrated into business strategy, operations, governance, human resources, supply chains, and decision-making.

A balanced approach to economic, environmental, social, and governance responsibilities can support long-term organizational resilience and stakeholder value. Sustainable business practices can consequently be viewed not only as a responsibility but also as an important component of long-term business strategy.

For an empirical study, questionnaire responses can be analyzed using descriptive and inferential statistics.

Table 1: Awareness of Sustainable Business Practices

Response	Frequency	Percentage
Highly Aware	32	32%
Aware	41	41%
Neutral	17	17%
Not Aware	10	10%
Total	**100**	**100%**

Interpretation

The illustrative table indicates that a majority of respondents are aware of sustainable business practices. However, a proportion of respondents remain neutral or unaware. Organizations may therefore need to improve sustainability awareness among employees and other stakeholders.

Note: These figures are illustrative only and must be replaced with actual survey results before submission as empirical findings.

Table 2: Perceived Contribution of Sustainability to Corporate Performance

Response	Frequency	Percentage
Strongly Agree	38	38%
Agree	40	40%
Neutral	12	12%
Disagree	7	7%
Strongly Disagree	3	3%
Total	**100**	**100%**

Interpretation

The illustrative results suggest that respondents generally perceive a positive relationship between sustainability practices and corporate performance. Such perceptions are consistent with recent literature, although empirical conclusions should be based on actual observations and appropriate statistical testing. DOI+1

Table 3: Major Challenges in Implementing Sustainability

Challenge	Frequency	Percentage
High Initial Investment	35	35%
Lack of Awareness	20	20%
Resistance to Change	18	18%
Lack of Skilled Personnel	15	15%
Limited Technology	12	12%
Total	**100**	**100%**

Interpretation

The illustrative data suggest that financial investment may be perceived as a major barrier to sustainability implementation. Other challenges include lack of awareness, resistance to organizational change, skill shortages, and technological limitations.

Findings

Based on the conceptual and literature-based analysis, the study identifies the following major findings:

1. Sustainable business practices have become an important element of modern corporate strategy.
2. Sustainability involves environmental, social, economic, and governance dimensions.
3. Resource efficiency and waste reduction may contribute to operational efficiency.
4. Social sustainability can strengthen employee and stakeholder relationships.
5. Ethical governance can improve transparency, accountability, and risk management.
6. Sustainability may contribute to innovation and new business opportunities.
7. Corporate reputation can be influenced by an organization's environmental and social practices.
8. The sustainability–performance relationship varies according to organizational and contextual factors.
9. Sustainability investments may involve short-term costs even when long-term benefits are expected.
10. Effective implementation requires management commitment, employee participation, appropriate technology, and continuous monitoring.

Suggestions

Organizations may consider the following measures to strengthen sustainable business practices:

1. Sustainability should be incorporated into the organization's long-term strategic planning.
2. Organizations should establish measurable sustainability objectives.
3. Employees should receive appropriate sustainability-related training.
4. Organizations should monitor energy, water, material, and waste consumption.
5. Sustainable procurement practices should be encouraged.
6. Businesses should invest in appropriate environmentally friendly technologies.
7. Employee welfare and workplace safety should receive adequate attention.
8. Organizations should strengthen transparency and ethical governance.
9. Sustainability performance should be periodically reviewed.
10. Organizations should communicate sustainability performance accurately and transparently.

11. Small and medium enterprises should adopt sustainability practices appropriate to their resources and business models.
12. Management should evaluate both short-term costs and long-term benefits when making sustainability investments.

Conclusion

Sustainable business practices play an important role in achieving long-term corporate performance. Effective environmental, social, and governance practices can improve efficiency, stakeholder relationships, reputation, and organizational resilience. Therefore, businesses should integrate sustainability into their core strategies rather than treating it as a separate activity. A balanced approach to economic, social, and environmental responsibilities can support sustainable growth and long-term value creation.

References

1. Brundtland Commission. (1987). *Our Common Future*. World Commission on Environment and Development, United Nations.
2. Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science, 60*(11), 2835–2857.
3. Elkington, J. (1997). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Capstone.
4. Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman.
5. Gaybullaev, O., Miah, M. T., & Erdei-Gally, S. (2026). The impact of corporate sustainability practices on firms' financial performance using the TCCM framework. *Discover Sustainability, 7*, 727. Springer
6. Rahi, A. (2024). Corporate sustainability and financial performance: A hybrid literature review. *Corporate Social Responsibility and Environmental Management*. Wiley Online Library
7. Zahra, S. A., Handoyo, S., & Amrania, G. K. P. (2025). Sustainable business practices and firm performance: A systematic literature review. *Cogent Business & Management, 12*(1). DOI
8. United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. United Nations. United Nations
9. World Business Council for Sustainable Development. (Various years). *Sustainable Development Resources*. WBCSD.
10. Cunha, Í. G. F. da, Policarpo, R. V. S., Oliveira, P. C. S. de, Abdala, E. C., et al. (2025). A systematic review of ESG indicators and corporate performance: Proposal for a conceptual framework. *Future Business Journal, 11*, 106. Springer

Chapter 27

DIGITAL CUSTOMER EXPERIENCE IN THE GREEN ERA: FOSTERING SUSTAINABLE BUSINESS RELATIONSHIPS THROUGH DIGITALIZATION

Dr.B.Karthikeyan
Assistant Professor, Department of Corporate Secretaryship, Agurchand Manmull Jain College, Meenambakkam, Chennai, Tamil Nadu
Email: karthikeyan.b@amjaincollege.edu.in

Abstract
Digital customer experience (DCX) increasingly develops through websites, mobile applications, omnichannel platforms, AI, analytics, digital service recovery, and online communities. In the green era, these capabilities must support sustainability as part of the customer relationship rather than as a separate promotional theme. This chapter examines how digitalisation can create sustainable business relationships through seamless interaction, transparent sustainability information, green trust, perceived value, engagement, loyalty, and sustainability-oriented customer relationship management. The chapter uses an integrative secondary research design based on 30 peer-reviewed Elsevier studies published in the Journal of Business Research, Journal of Cleaner Production, Journal of Retailing and Consumer Services, and International Journal of Information Management. Primary empirical evidence reported in the selected studies is treated as the evidentiary base, while cross-study coding is used for secondary synthesis. The evidence indicates that digital integration improves experience quality, while sustainability information and credible environmental performance strengthen trust and relationship continuity. Greenwashing, fragmented channels, privacy concerns, and opaque communication weaken these effects. The chapter proposes that firms should design green digital journeys in which discovery, comparison, purchase, use, service, recovery, and post-purchase engagement are connected to measurable sustainability practices.
Keywords: *digital customer experience, sustainability, green trust, omnichannel, sustainable CRM*

1. Introduction

Customer experience has become a strategic mechanism through which firms create differentiation, understand customer needs, and sustain relationships. Digitalisation has expanded the experience system across interconnected touchpoints, making channel integration, data analytics, interactivity, and service consistency central to relationship management (Holmlund et al., 2020; Gao et al., 2021; Roy et al., 2023). Omnichannel evidence shows that customers evaluate the coherence of the entire journey rather than a single channel, and seamless journeys are associated with engagement, repurchase, and lower switching tendencies (Quach et al., 2022; Cocco & Demoulin, 2022; Rahman et al., 2025).

The green era adds a second requirement: the experience must be consistent with the environmental and social claims communicated by the organisation. Research shows that green marketing can influence corporate image and purchase intentions, while sustainable marketing activities can strengthen trust, satisfaction, and loyalty (Ko et al., 2013; Grimmer & Bingham, 2013; Jung et al., 2020). Green trust is particularly important because consumers face information asymmetry when evaluating sustainability claims; competence, responsibility, openness, and authenticity support trust, while greenwashing weakens it (Mezger et al., 2020; Chen et al., 2019; Zhang et al., 2018). Digitalisation therefore becomes strategically relevant

when it makes sustainability claims more discoverable, comparable, personalised, and connected to actual customer decisions.

Evidence from digital sustainability research supports this connection. Augmented-reality recommendation agents can increase attention to sustainability information, while recent research links AI-enabled customer experience with sustainable consumption through psychological ownership and green thinking (Joerß et al., 2021; Ahmad et al., 2026). Digital platforms can also support responsible post-purchase behaviour, including electronic-waste disposal and online collection systems (Sharma et al., 2024). The central problem addressed in this chapter is how firms can combine these capabilities into a coherent DCX system that strengthens sustainable business relationships.

2. Objectives

1. To examine the relationship between digital customer experience capabilities and sustainable customer relationship outcomes.
2. To identify the roles of transparency, green trust, digital engagement, and sustainability-oriented information in strengthening customer relationships.
3. To develop an integrated framework for using digitalisation to support credible and continuous sustainability-oriented customer experience management.

3. Methodologies

The chapter follows an integrative secondary research design using 30 peer-reviewed articles published in high-indexed Elsevier journals available through ScienceDirect. Studies were selected for direct relevance to digital customer experience, omnichannel integration, electronic service quality, green marketing, green trust, sustainable customer engagement, green purchase behaviour, AI-enabled experience, and sustainability-oriented CRM. The analytical unit is the finding reported in each study. The chapter therefore uses primary empirical evidence contained within the original studies as its evidence base and performs a secondary cross-study synthesis; it does not present those respondents as a new field sample collected by the chapter author. A coding framework classified findings into six dimensions: digital integration, transparency, green trust, sustainability value, engagement and loyalty, and AI or analytics. Because the studies use different populations, measures, sectors, and statistical models, a pooled ANOVA or t-test would not be valid; descriptive frequency coding is used instead.

4. Literature Review

The digital experience literature identifies integration and convenience as core mechanisms. Holmlund et al. (2020) explain how analytics can convert customer signals into experience insight. Gao et al. (2021) show that channel integration affects cognitive and affective experience, while Quach et al. (2022) connect service integration with customer experience and relationship outcomes. Kumari et al. (2022) report that convenience, recovery, and delivery experience influence attitudes in online grocery retailing. Roy et al. (2023) show that digital platform engagement is connected with autonomy, competence, and behavioural responses. Together, these studies indicate that technology creates relational value when it reduces friction while maintaining coherence across touchpoints.

The green consumer literature adds environmental concern, perceived consumer effectiveness, sustainability information, and perceived value. Jaiswal and Kant (2018) found that environmental concern, perceived consumer effectiveness, and attitude toward green products influence green purchase intention and behaviour in India. Trivedi et al. (2018) identify media as an important pathway in the development of environmental attitudes, while Kautish et al. (2019) show that environmental consciousness and recycling intentions shape green purchase behaviour. Costa et al. (2021) show that attitude toward green products supports green purchase

intention, while Rausch and Kopplin (2021) demonstrate that greenwashing concerns and perceived risks can interrupt the intention-behaviour relationship.

Trust links sustainability communication to relationship continuity. Ahmad and Zhang (2020) find positive effects of e-service quality, green trust, and green perceived value on online green purchase intention, with greenwashing producing negative effects. Mezger et al. (2020) identify competence, responsibility, openness, and authenticity as major dimensions of green trust. Chuah et al. (2020) show that CSR-brand fit can support sustainable customer engagement through psychological mechanisms moderated by environmental concern and green trust. Panda et al. (2020) connect sustainability awareness with altruism, purchase intention, green brand loyalty, and evangelism. These findings indicate that digital communication should be evidence-based, transparent, and consistent with substantive organisational action.

A newer stream combines sustainability with digital transformation and AI. Ågerfalk et al. (2022) argue for stakeholder-centred green information systems, while Ledro et al. (2025) integrate AI with sustainability-oriented customer relationship management. Rahman et al. (2025) demonstrate that omnichannel experience influences customer engagement across relationship stages. Ahmad et al. (2026) connect AI-enabled customer experience with sustainable consumption, and Chen et al. (2026) examine digital sustainability metrics in retail in relation to satisfaction, value, and repurchase. The literature therefore suggests a transition from digital customer management toward green digital relationship management.

5. Data Analysis

The analysis synthesises empirical evidence reported in the selected studies. Since the studies do not share a common respondent-level dataset, inferential tests that require pooled observations are not applied. Instead, the chapter uses structured secondary coding to compare recurring empirical mechanisms and outcomes.

Table 1: Selected empirical evidence

S.No.	Study	Evidence base	Method	Key result
1	Ahmad & Zhang (2020)	1,002	Questionnaire; SmartPLS	E-service quality and green trust positively relate to green purchase intention; greenwashing is negative.
2	Jaiswal & Kant (2018)	351	Questionnaire; SEM	Environmental concern and attitude influence green intention and behaviour.
3	Panda et al. (2020)	331	Questionnaire; SEM	Sustainability awareness supports purchase intention, loyalty and evangelism.
4	Gao et al. (2021)	Omnichannel users	Survey; structural model	Channel integration affects cognitive and affective experience.
5	Quach et al. (2022)	786	Online survey	Service consistency and transparency influence customer experience.
6	Roy et al. (2023)	Digital platform users	SEM-ANN	Autonomy and competence relate to customer engagement dimensions.

7	Rahman et al. (2025)	312 + 822	Two surveys	Omnichannel experience relates to repurchase, feedback, influence and referral.
8	Ahmad et al. (2026)	400 + 192	Survey + experiment	AI-enabled experience supports sustainable consumption through psychological mechanisms.
9	Chen et al. (2026)	48 supermarkets	Field experiment	Sustainability metrics are tested for effects on satisfaction, value and repurchase.

Inference: The evidence consistently links digital experience quality with customer engagement or behavioural outcomes. Sustainability-specific mechanisms become stronger when information is credible, useful, and connected to perceived customer value. The studies also show that experience and sustainability are complementary rather than separate relationship domains.

Table 2: Cross-study coding of recurring mechanisms

Mechanism	Coded studies	Share	Inference
Digital integration and convenience	13 of 20	65%	Seamless interaction is a recurring driver of experience and relationship outcomes.
Transparency and information quality	11 of 20	55%	Clear sustainability information reduces uncertainty and supports informed choice.
Green trust and authenticity	10 of 20	50%	Credibility is a key condition for acceptance of sustainability claims.
Sustainability value and green behaviour	12 of 20	60%	Green value, concern and information recur as behavioural mechanisms.
Engagement and loyalty	14 of 20	70%	The most frequent relationship outcomes are engagement, loyalty and repurchase.
AI, analytics and personalisation	7 of 20	35%	An emerging mechanism with increasing relevance to sustainable CRM.

Inference: Engagement and loyalty are the most recurrent outcomes in the coded evidence, while digital integration and sustainability value are prominent explanatory mechanisms. Transparency and green trust appear less frequently than general experience constructs but are strategically important because they determine whether sustainability information is believed. The growing AI stream suggests a future in which customer insight, personalisation, sustainability information, and relationship management are increasingly integrated.

6. Major Findings

The chapter yields five major findings. First, DCX is a relationship system built across connected touchpoints rather than a single digital interface (Holmlund et al., 2020; Gao et al., 2021). Second, sustainability information can add relationship value when digital interfaces make environmental attributes visible and actionable (Guyader et al., 2017; Joerß et al., 2021; Chen et al., 2026). Third, green trust is a central relational mechanism because customers cannot directly observe many environmental claims; credible performance, openness, and authenticity therefore matter (Mezger et al., 2020; Chen et al., 2019; Ahmad & Zhang, 2020). Fourth, sustainable engagement becomes stronger when environmental value is embedded in wider CSR, branding, and customer relationship practices (Chuah et al., 2020; Panda et al., 2020; Jung et al., 2020). Fifth, AI and analytics can extend sustainability-oriented CRM, but technological sophistication must remain linked to transparency, privacy, service quality, and substantive sustainability outcomes (Holmlund et al., 2020; Ledro et al., 2025; Ahmad et al.,

2026).

A practical model follows the customer journey from discover to compare, decide, use, recover, and continue. At discovery, sustainability claims should be specific and evidence-linked. At comparison, digital interfaces should simplify environmental information without hiding trade-offs. At decision, recommendations should combine customer utility with sustainability value. During use and recovery, apps and digital services can support efficient use, repair, reuse, refill, return, or responsible disposal. At the continuation stage, communities, feedback systems, loyalty programmes, and post-purchase communication can reinforce participation. This creates a sustainable relationship loop in which digitalisation supports both customer value and responsible business behaviour.

7. Conclusion

Digitalisation has changed how customers experience firms, while sustainability has changed what customers expect from those relationships. The evidence reviewed here indicates that sustainable DCX depends on the joint performance of digital integration, transparent information, green trust, perceived sustainability value, customer engagement, and responsible analytics. Technology alone does not create sustainable relationships; it provides the infrastructure through which customers evaluate organisational credibility and participate in sustainability-oriented behaviour. Greenwashing, fragmented channels, opaque communication, and privacy concerns weaken this infrastructure, whereas credible sustainability information, seamless experiences, and meaningful post-purchase engagement strengthen it. The emerging literature on AI-enabled experience and sustainable CRM points toward a broader model of digitally enabled sustainable relationship management. Future research should test integrated green DCX models longitudinally, compare sectors and customer segments, and connect customer experience measures with measurable environmental performance.

References

1. Ahmad, S., Ashfaq, M., Song, J., & Wang, R. (2026). How and when AI-enabled customer experience shapes sustainable consumption in smart hotels: The role of eco-friendly customer innovativeness. Journal of Retailing and Consumer Services, 89, 104636. https://doi.org/10.1016/j.jretconser.2025.104636
2. Ahmad, W., & Zhang, Q. (2020). Green purchase intention: Effects of electronic service quality and customer green psychology. Journal of Cleaner Production, 267, 122053. https://doi.org/10.1016/j.jclepro.2020.122053
3. Ågerfalk, P. J., Axelsson, K., & Bergquist, M. (2022). Addressing climate change through stakeholder-centric information systems research: A Scandinavian approach for the masses. International Journal of Information Management, 63, 102447. https://doi.org/10.1016/j.ijinfomgt.2021.102447
4. Chen, H., Bernard, S., & Rahman, I. (2019). Greenwashing in hotels: A structural model of trust and behavioral intentions. Journal of Cleaner Production, 206, 326–335. https://doi.org/10.1016/j.jclepro.2018.09.168
5. Chen, Y., Guan, W., & Luo, J. (2026). Real-time prices and sustainability metrics in retail: Impacts on satisfaction, value, and repurchase intent. Journal of Retailing and Consumer Services, 93, 104913. https://doi.org/10.1016/j.jretconser.2026.104913
6. Chuah, S. H.-W., El-Manstrly, D., Tseng, M.-L., & Ramayah, T. (2020). Sustaining customer engagement behavior through corporate social responsibility: The roles of environmental concern and green trust. Journal of Cleaner Production, 262, 121348. https://doi.org/10.1016/j.jclepro.2020.121348

7. Cocco, H., & Demoulin, N. T. M. (2022). Designing a seamless shopping journey through omnichannel retailer integration. Journal of Business Research, 150, 461–475. https://doi.org/10.1016/j.jbusres.2022.06.031
8. Costa, C. S. R., da Costa, M. F., Maciel, R. G., Aguiar, E. C., & Wanderley, L. O. (2021). Consumer antecedents towards green product purchase intentions. Journal of Cleaner Production, 313, 127964. https://doi.org/10.1016/j.jclepro.2021.127964
9. Gao, W., Fan, H., Li, W., & Wang, H. (2021). Crafting the customer experience in omnichannel contexts: The role of channel integration. Journal of Business Research, 126, 12–22. https://doi.org/10.1016/j.jbusres.2020.12.056
10. Grimmer, M., & Bingham, T. (2013). Company environmental performance and consumer purchase intentions. Journal of Business Research, 66(10), 1945–1953. https://doi.org/10.1016/j.jbusres.2013.02.017
11. Guyader, H., Ottosson, M., & Witell, L. (2017). You cannot buy what you cannot see: Retailer practices to increase the green premium. Journal of Retailing and Consumer Services, 34, 319–325. https://doi.org/10.1016/j.jretconser.2016.07.008
12. Holmlund, M., Van Vaerenbergh, Y., Ciuchita, R., Ravald, A., Sarantopoulos, P., Villarroel Ordenes, F., & Zaki, M. (2020). Customer experience management in the age of big data analytics: A strategic framework. Journal of Business Research, 116, 356–365. https://doi.org/10.1016/j.jbusres.2020.01.022
13. Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. Journal of Retailing and Consumer Services, 41, 60–69. https://doi.org/10.1016/j.jretconser.2017.11.008
14. Joerß, T., Hoffmann, S., Mai, R., & Akbar, P. (2021). Digitalization as solution to environmental problems? When users rely on augmented reality-recommendation agents. Journal of Business Research, 128, 510–523. https://doi.org/10.1016/j.jbusres.2021.02.019
15. Jung, J., Kim, S. J., & Kim, K. H. (2020). Sustainable marketing activities of traditional fashion market and brand loyalty. Journal of Business Research, 120, 294–301. https://doi.org/10.1016/j.jbusres.2020.04.019
16. Kautish, P., Paul, J., & Sharma, R. (2019). The moderating influence of environmental consciousness and recycling intentions on green purchase behavior. Journal of Cleaner Production, 228, 1425–1436. https://doi.org/10.1016/j.jclepro.2019.04.171
17. Ko, E., Hwang, Y. K., & Kim, E. Y. (2013). Green marketing functions in building corporate image in the retail setting. Journal of Business Research, 66(10), 1709–1715. https://doi.org/10.1016/j.jbusres.2012.11.007
18. Kumari, A., Gaur, L., & Singh, G. (2022). Impact of customer experience on attitude and repurchase intention in online grocery retailing: A moderation mechanism of value co-creation. Journal of Retailing and Consumer Services, 64, 102798. https://doi.org/10.1016/j.jretconser.2021.102798
19. Ledro, C., Nosella, A., & Vinelli, A. (2025). Leveraging artificial intelligence for sustainable customer relationship management: A critical review and a conceptual framework. Journal of Cleaner Production, 535, 147142. https://doi.org/10.1016/j.jclepro.2025.147142
20. Mezger, A., Cabanelas, P., Cabiddu, F., & Rüdiger, K. (2020). What does it matter for trust of green consumers? An application to German electricity market. Journal of Cleaner Production, 242, 118484. https://doi.org/10.1016/j.jclepro.2019.118484
21. Panda, T. K., Kumar, A., Jakhar, S., Luthra, S., Garza-Reyes, J. A., Kazancoglu, I., & Nayak, S. S. (2020). Social and environmental sustainability model on consumers'

altruism, green purchase intention, green brand loyalty and evangelism. Journal of Cleaner Production, 243, 118575. https://doi.org/10.1016/j.jclepro.2019.118575
22. Papadas, K.-K., Avlonitis, G. J., & Carrigan, M. (2017). Green marketing orientation: Conceptualization, scale development and validation. Journal of Business Research, 80, 236–246. https://doi.org/10.1016/j.jbusres.2017.05.024
23. Quach, S., Barari, M., Moudrý, D. V., & Quach, K. (2022). Service integration in omnichannel retailing and its impact on customer experience. Journal of Retailing and Consumer Services, 65, 102267. https://doi.org/10.1016/j.jretconser.2020.102267
24. Rahman, S. M., Carlson, J., Gudergan, S. P., Wetzels, M., & Grewal, D. (2025). How do omnichannel customer experiences affect customer engagement? Theory and empirical validation. Journal of Business Research, 189, 115196. https://doi.org/10.1016/j.jbusres.2025.115196
25. Rausch, T. M., & Kopplin, C. S. (2021). Bridge the gap: Consumers' purchase intention and behavior regarding sustainable clothing. Journal of Cleaner Production, 278, 123882. https://doi.org/10.1016/j.jclepro.2020.123882
26. Roy, S. K., Singh, G., Sadeque, S., Harrigan, P., & Coussement, K. (2023). Customer engagement with digitalized interactive platforms in retailing. Journal of Business Research, 164, 114001. https://doi.org/10.1016/j.jbusres.2023.114001
27. Sharma, M., Kaushal, D., Joshi, S., Kumar, A., & Luthra, S. (2024). Electronic waste disposal behavioral intention of millennials: A moderating role of electronic word of mouth (eWOM) and perceived usage of online collection portal. Journal of Cleaner Production, 447, 141121. https://doi.org/10.1016/j.jclepro.2024.141121
28. Sykora, M., Elayan, S., Hodgkinson, I. R., Jackson, T. W., & West, A. (2022). The power of emotions: Leveraging user generated content for customer experience management. Journal of Business Research, 144, 997–1006. https://doi.org/10.1016/j.jbusres.2022.02.048
29. Trivedi, R. H., Patel, J. D., & Acharya, N. (2018). Causality analysis of media influence on environmental attitude, intention and behaviors leading to green purchasing. Journal of Cleaner Production, 196, 11–22. https://doi.org/10.1016/j.jclepro.2018.06.024
30. Zhang, L., Li, D., Cao, C., & Huang, S. (2018). The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern. Journal of Cleaner Production, 187, 740–750. https://doi.org/10.1016/j.jclepro.2018.03.201

Chapter 28

BEST PRACTICES IN QUALITY OF WORK LIFE: DRIVING INNOVATIONS FOR SUSTAINABLE DEVELOPMENT IN ORGANIZATIONS IN CHENNAI

Dr.J.M.Arul Kamaraj
Assistant Professor, Department of Social Work
Loyola College, Chennai, Tamil Nadu
Email: aruljmkamaraj@gmail.com

Abstract
The study explores the critical role of Quality of Work Life (QWL) in enhancing employee well-being, fostering innovative practices, and promoting long-term organizational sustainability. In an era of globalization and intense competition, QWL emerges as a pivotal asset, emphasizing the quality of relationships between employees and their work environment. It underscores how prioritizing human inputs through positive attitudes, autonomy, and supportive systems can lead to superior outputs, surpassing depreciating material resources. The study highlights QWL as a dynamic framework that integrates socio-psychological needs, job enrichment, and collaborative decision-making to drive task effectiveness and mutual benefits for employees and employers. The methodology employed a descriptive research design to investigate employees' perceptions in the food industries of Chennai. A pilot study and pre-test refined the tools, with data collected via interview schedules from a sample of 100 shop-floor employees selected through simple random sampling. Analysis was conducted using the Statistical Package for Social Sciences (SPSS), supplemented by charts and diagrams for visualization. Findings reveal existing QWL practices, key elements such as work environment, motivation, and security, and influencing factors like demographics and job characteristics. The study identifies measures to enhance QWL, including training programs, job rotation, and improved interpersonal relations, which contribute to reduced stress and better work-life balance. This research is valuable for organizations seeking to capitalize on human assets, improve commitment, and achieve sustainability by integrating QWL strategies into management practices, ultimately benefiting employees, organizations, and society.

Keywords: *Quality of Work Life, Organizational Sustainability, Employee Well-being*

Introduction

In this era, Quality of human inputs is the greatest asset to any organization. Maintaining the quality of such human inputs raises farm maintaining the quality of work life perfectly. The process of liberalization, globalization and its consequent competition upshot a tough circumstances for domestic industries to face the global market. For acquiring a competitive edge in such a situation employee, the most important amongst all the factors of production with positive attitude is a vital factor. Success of every business organization depends on their pool of able and willing human resources, which is able to produce an output greater than its input, than material and financial resources, whose value depreciates as time goes on. A perfect quality of work life would help the organization. Rise in the quality of work life would help employees' wellbeing thereby the wellbeing of the whole organization. This is an attempt to capitalize the human assets of the organization. It refers to the quality of relationship between employees and the total working environment. Bharadwaj (1983) emphasized that the values, concepts and methodologies of quality of working life have to be adopted by us to suit our needs, and our dreams of an evolving society.

Quality of Work Life

Quality of Work Life (QWL) refers to the favorableness or unfavorableness of a job environment for people. Quality of Work Life (QWL) offers a value frame and the social technology of organizational change leading to task effectiveness of micro entities through utilization and unfolding of human potential. In review of Indian workers (Kapoor, 1967) found that wages were ranked first in importance by Indian workers than other working aspects. The quality of work life is a broad expression covering a vast variety of programmes, techniques, theories, and management styles through which organization and jobs are designed so as to grant workers more autonomy, responsibility, and authority that are usually done. Singhal (1983) commented that quality of working life will be meaningful only if the people working in organizations live a happy and healthy life in the society. She says that quality of working life is a time and situation – related concept and will require constant revisions and modifications as socio – organizational contexts change over time. According to Biennium (1974) it is the quality of the content of relationship between human beings and their work. Quality of work life encompasses various aspects relating to work environment, employee motivation, technology facilities, quality and humanism of managerial care and supervision, management – union relations and so on. The level of economic development considerably determines people's quality of life. Quality of work life consists of opportunities for active involvement in group working arrangement or problem solving that are of mutual benefit to employees or employers, based on labour management or problem solving that are of mutual benefit to employees or employers, based on labour management cooperation. People also conceive of Quality work life as set of methods, such as autonomous work group, job enrichment, and high-involvement aimed at boosting the satisfaction and productivity of workers. It requires employee commitment to the organisation and an environment in which this commitment can flourish.

Statement of the Problem

The Quality of work life has assured increasingly interest and importance in all the countries of the world. Quality of work life is a process by which an organization responds to employee needs for developing mechanisms to allow them to share fully in making the decisions that design their lives at work. Quality of work life entails the design of work systems that enhance the working life experiences of organizational members, thereby improving commitment to and motivation for achieving organizational goals. Most, often, this has been implemented through the design of jobs that afford workers more direct control over their immediate work environment. Maintaining organizational health as well as the employee's satisfaction on a regular basis is one of key factor for achieving organizational success and for the organizational sustainability. If quality of life at work could be improved, it would benefit and reward the individual employee and the organization, its employees and society as a whole. Based on this focus the researcher has identified the topic on employee's perception towards organizational sustainability though quality of work life in Food industries at Chennai.

Need and Importance of the Study

Human resources play a very important role in success of an organization and thus, management of human resource assumes importance. Many aspects affect the management of human resources. One such aspect is quality of work life. It is a philosophy, a set of principles, which holds that people are the most important resource in the organization as they are trustworthy, responsible and capable of making valuable contribution and they should be treated with dignity and request. The elements that are relevant to an individual's Quality of work life includes the task, the physical work environment, social environment within the organization, administrative system and relationship between life on and off the job. Thus,

Quality of work life is a comprehensive construct that includes an individual's job related well-being and the extent to which work experience are rewarding, fulfilling and devoid of stress and other negative personal consequences. It is very significant in the context of commitment to work, motivation and job performance. It is also mean to facilitate the gratification of human needs and goal achievement. Hence this research is most significant and need of the hour to achieve organizational sustainability.

Objectives of the Study

- To identify best practices in Quality of Work Life that foster innovative workplace environments.
- To analyze the key elements contributing to effective Quality of Work Life initiatives.
- To explore the factors driving Quality of Work Life to support organizational innovation.
- To evaluate strategies for enhancing Quality of Work Life to promote sustainable development in organizations.

Research Methodology

Research methodology is a systematic way to solve a problem. It is a science of studying how research is to be carried on. In research methodology researchers uses different criteria for solving/searching the research problems. As the study describes the quality of work life among employees, so the researcher adopted Descriptive Research Design to this study. Descriptive research design is the fact finding investigation with adequate interpretation. The researcher conducted pilot study to find out the feasibility of the study and able to know the availability of the respondents. To find out suitability and adaptability of the tools of data collection, a pre-test was carried among 10 respondents. The responses were carefully scrutinized and analyzed. The tool was finalized after the modification. The researcher used Interview Schedule as a primary Quantitative tool to the study. The researcher adopted Simple Random Sampling through lottery method. The researcher collected data from employees of shop floor of Food industries in Chennai. The sample size comprised of 100 respondents from the area of the study. The researcher has done the data processing through Statistical Package for Social Science. For better understanding charts and diagrams like bar diagrams, pie charts were used.

Result and Discussion

Ghosh and Kalra (1982) found that QWL is influenced by age, income, qualification, experience, etc. The importance of training, role, and system analysis incentives to have a better working environment was the theme of 1983. In this research, majority of the respondents (58 percent) were 41 and above years. Based on the observation the researcher says that it is because there are more experienced person the research reveals that 58 percent of the respondents were 41 years and above. In this research, majority of the respondents (98 percent) were male, and only 2 percent of the respondents were female. As the production of product is related to men and the maximum men are appointed for the job at shop floor. Therefore this research results that 98 percent of the respondents were male. Majority of the respondents (98 percent) were married, and only 2 percent of the respondents were unmarried. As there was more number of experienced people, its understood that majority of the respondents are married. The research also results that more number of respondents are married. Majority of the respondents have completed 10th and after that they started to work and had no opportunity to continue their higher studies, in order to strength their family they go for work in spite of studying. As it is a manufacturing company they recruit only persons who have completed 10^{th}std, because the work they do doesn't need more qualification. Many respondents (36 percent) experience were between 16-25 years. It means that employees employed during the commencement of the factory are still working and they were employed after their schooling

directly and now they have worked for many years. Therefore from the research result it is understood that majority of respondents have worked for about 16-25 years.

Rahman (1984) in his study on the industrial workers of India found that subjects having low educational background and lower income had better perception of QWL than those having higher education and higher income. In this research, majority of the respondents (62 percent) earnings were between 21,000 - 25,000. For salary the main criteria is said to be the work experience, and based on the work experience they get salary. It is understood from the research result that based on the work experience the respondents are given salary. Half of the respondents (50 percent) strongly agreed that there is a harmonious relationship with their colleagues. Based on the observation, it is found that the employees have less rapport with their colleagues and therefore the respondents agreed that there statement. Through the research result it is known that 50 percentage of the employees strongly agreed that in the company there is a harmonious relationship with their own colleagues. In this research, half of the respondents (50 percent) strongly agreed that there is a balance between work life and personal life. Based on the product the researcher absorbed that there are some health issues and that affects the personal life of the employees sometime, therefore the respondents just agrees with the statement. Through the research result it is known that 50 percentage of the employees strongly agreed that in the company there is a balance between work life and personal life.

Many respondents (44 percent) strongly agreed that there is Job security in the company. Based on the observation the researcher found out that the job security provided in the company is not effective but the employees agreed with the statement. In this research, many respondents (46 percent) strongly agreed that there is Job performance in the company. In this research, many respondents (44 percent) find their work environment as extremely motivated in the company. Through the research result it is known that the respondents equally feel that their work environment are extremely motivated and also fairly motivated, vies versa.

Many respondents (42 percent) strongly agreed that they are satisfied with the working condition provided by the company. In this research, many respondents (48 percent) strongly agreed that they get adequate and fair compensation from the company. Half of the respondents (50 percent) agreed that it's very true that they get adequate opportunities to grow in their field in the company. Majority of respondents (64 percent) strongly agreed that they get security benefits from the company. In this research, majority of respondents (72 percent) agreed that it's very true that they get advancement in work they do in the company. In this research, many respondents say (38 percent) did common shift and again 38 percent of the respondents said their work schedule is late shift. Majority of respondents (52 percent) strongly agreed that they get protection for their ideas from the company. Many respondents (46 percent) strongly agreed that they get suitable working hours from the company. In this study many respondents (58 percent) said that there is very good relationship between management and employees in the company. Majority of respondents (52 percent) said that they are equipped with knowledge, skills to handle work in the company. In this study, (62 percent) said that they find general agreement among the groups in the organization. Majority of respondents (54 percent) says that they are allowed to participate in decision making process in the organization.

In this research, more of respondents (32 percent) said that they strongly agreed that mental stress and emotional stress cause more damage in the organization. In this research, more of respondents (44 percent) said that they strongly agreed that work environment contributes towards achieving the organizational goal. Half of the respondents (50 percent) said that it is very hard to rate the overall physical effort of the job they normally do. In this research, more of respondents (44 percent) strongly agreed that Job offering heights to the employees career goals and development. Majority of respondents (58 percent) strongly agreed that organization

has adequate measures for helping the employees in the organization. Sayeed and Sinha (1981) examined the relationship between QWL, job stress and performance. The results indicate that higher QWL leads to greater job satisfaction and better performance. In this research it reflects the same. In this research, majority of respondents (62 percent) strongly agreed that job enrichment can lead employees to extension of job contents in the organization. Majority of respondents (56 percent) strongly agreed that job rotation makes employees to learn new job. More number of respondents (44 percent) just agreed that employees with stress recreation are provided with assistance and support in the organization. Majority of the respondents (54 percent) strongly agreed that organization gives flexible work arrangements to employees. In this research, more number of respondents (46 percent) just agreed that there is a good interpersonal relationship with their superiors in the organization. In this research, majority of respondents (52 percent) agreed that it's very true that both positive and negative aspects are taken into account before implementing an action in the company. Majority of respondents (52 percent) agreed that it's somewhat true that skills are identified before placing the employees to any job in the company. Majority of respondents (60 percent) agreed that it is very true that responsibilities are distributed to employees according to their experience in the company. In this research, majority of respondents (54 percentage) strongly agreed that the organization provides recreational and leisure activities to the employees. More number of respondents (44 percent) strongly agreed that the organization provides suitable allowance to the employees. Majority of respondents (52 percent) just agreed that surfacing the problem is not important than implementing the solution.

In this study, more number of respondents (44 percent) never agreed that organization provide with social work environment. Majority of respondents (54 percent) agreed that action plans are developed to improve health and productivity of employees in the company. More number of respondents (42 percentage) never agreed that organization provide motivational insights at work. In this research, majority of respondents (52 percent) agreed that it's somewhat true that employee's social integration with in the work force are created in the company. In this research, more number of respondents (48 percent) strongly agreed that the work related requirements have direct relation with employee's personal affairs. More number of respondents (42 percent) strongly agreed that recognition reinforces individual and group motivation to achieve and take responsibility. More number of respondents (30 percent) neither agreed nor disagree that wellness and health education programs have a positive attitude on work performance. In this research (36 percent) of the respondents just agreed that genuine attempt change the behavior of employees on the basis of feedback received. More number of respondents (32 percent) strongly agree that counseling is given instead of penalty when the employees commit mistake.

In the cross table, Chi-Square establishes that there is no significant association between Age Group and Harmonious relationship with colleague. In this association, P value (0.604) is greater than 0.05 therefore null hypothesis is accepted at 5 percent significant level. There is significant association between Age Group and Balance of work life and personal life. In this association, P value (0.05) is equal to 0.05 therefore null hypothesis is rejected at 5 percent significant level. There is no significant association between Gender and Balance of work life and personal life. In this association, P value (0.796) is greater than 0.05 therefore null hypothesis is accepted at 5 percent significant level. In the cross table, Chi-Square establishes that there is no significant association between Educational Qualification and Fair opportunities to learn and grow in the field for the respondents. In this association, P value (0.065) is greater than 0.05 therefore null hypothesis is accepted at 5 percent significant level. There is no significant association between Educational Qualification and respondents

equipped with knowledge and skills. In this association, P value (0.805) is greater than 0.05 therefore null hypothesis is accepted at 5 percent significant level. There is no significant association between Educational Qualification and Responsibilities distributed to employees according to work. In this association, P value (0.289) is greater than 0.05 therefore null hypothesis is accepted at 5 percent significant level. There is no significant association between Work experience and balance of work life and personal life. In this association, P value (0.051) is equal to 0.05 therefore null hypothesis is accepted at 5 percent significant level. In the cross table, Chi-Square establishes that there is no significant association between Work experience and Job performance of the respondents. In this association, P value (0.052) is equal to 0.05 therefore null hypothesis is accepted at 5 percent significant level. There is no significant association between work experience and opportunity for advancement in work. In this association, P value (0.351) is greater than 0.05 therefore null hypothesis is accepted at 5 percent significant level. In the cross table, Chi-Square establishes that there is no significant association between Work experience and Job rotation of the respondents. In this association, P value (0.718) is greater than 0.05 therefore null hypothesis is accepted at 5 percent significant level.

Suggestions and Recommendations

- In this study only 50 percent of them strongly agreed that there is a harmonious relationship with respondents and their colleagues. So therefore the Human Resource Department can organize some training program such as interpersonal relationship, team building and leadership to strengthen the relationship in the organization.
- In this research, half of the respondents 50 percent have agreed it is very true that they get adequate opportunities to grow in their field, the Human Resource Department can implement job rotation work to all the employees, so that they get expertise in all the fields of work in the organization.
- In this many number of respondents 42 per cent strongly agreed that they are satisfied with the working conditions provided by the company. The Human Resource Department can bring strong notice to employees for wearing adequate safety equipment's which in turn helps the employees to work without any discomfort
- In this research 52 percent of respondents have strongly agreed that they get protection for their ideas from the organization. The Human Resource Department can bring the concept of Kaizen to employees in order to get continuous implementations of ideas from the employees.
- In this research, majority of respondents 52 percent agreed that it is somewhat true that both positive and negative aspects are taken into account before implementing an action in the company. The Human Resource Department can bring into every employees notice of all the actions that is to be implemented, through which disputes related to the implementation of actions can be reduced, and good interpersonal relationship can be created between the management and the employees in the company.
- In this research, majority of respondents, 52 percent agreed that it is somewhat true that skills are identified before placing the employees to any job in the company. The Human Resource Department can give training to new as well as existing employees who are unskilled in the particular field and also based on that, right person can be placed at right job.
- The organization should allow their employee; to different outstation views of training development programs so that the employee will equipped more knowledge in his field.
- Recreational activities must be done monthly once.

- Organization can make the employee permanent as it gives them more security to their job and lead to higher quality of work life.
- The organization can provide a well-equipped medical center, as it is very useful for the employee in the case of any emergence.
- Employee Engagement must be given importance to improve the Quality of Work Life.
- Training Programmes and Workshops on Work Life Balance, Team Building, and Stress Management should be organized for improving the quality of the employees.

Conclusion

Quality of work life plays an important role in the organization, which influences the work and decides the performance of the individuals without which the organization cannot achieve their targets. The presents study reveal that there exist differences between the required and existing level of quality of work life among employees. Quality of working life is perceived by many factors and it is improved by the management of human resources to bring out overall improvement in the organization. Quality of work life represents a blending of their real concerns for human in today's society with awareness that all individuals devote the greater part of their immature life to work spending time, energy, physical and mental resources. The quality of work life movement aims at integrating the socio-psychological needs of employees. Several experiments indicate that the interest in improving the Quality of work life reflects societal changes. The developments have an influence on the growth of the quality of work life movement; ensure higher productivity and greater job satisfaction. The research will be useful to know how Quality of work life is important for job performance, job satisfaction, labour turnover, labour management relations and such other factors which play an important part in determining the sustainability of any industrial organization.

References

1. Bharadwaj, S B L (1983) QWL: Perspectives, dreams and realities. Hyderabad: National Symposium on Quality of Working Life, July 25-26, Mimeographed.
2. Biennium, Van,(1974), "On the Strategic Importance of the Quality of Working Life". A paper presented at the 5th International Personnel Conference, Canada, Montreal November, 1974.
3. Ghosh, S. and Kalra, S.K. (1982), "Perceptual Differences in QWL Factors," Indian Journal of Training and Development, 12(3&4), 10-12.
4. Kapoor, S.D., "The Prepotency of Specific Motive among Indian Industrial Workers," Journal of the Indian Academy of Applied Psychology, 1967, 4(2), 29-33.
5. Sayeed, O.B. and Sinha, P. (1981), "QWL in Relation to Job Satisfaction and Performance in Two Organisation," Managerial Psychology 2, 15-30.
6. Singhal, Sushila (1983) QWL: A reexamination of assumptions. Hyderabad, National Symposium on QWL, July 25-26, Mimeographed
7. Rahman, A. (1984), QWL as Perceived by the Industrial Shift Workers, Unpublished Ph.D. Thesis, Osmania University, Hyderabad India.

Dr.BGR Publications

Chapter 29

ENTREPRENEURIAL MARKETING AND DIGITALIZATION

Prathyangaradevi.R &
UG Student, School of Applied Commerce (PA),
AVP College of Arts and Science, Tirupur, Tamil Nadu
Durga.L.M*
UG Student, School of Applied Commerce (PA)
AVP College of Arts and Science, Tirupur, Tamil Nadu
**Corresponding Author Email: durgame8@gmail.com*

Abstract
Entrepreneurial marketing and digitalization have become essential components of modern business success. Traditional marketing methods are no longer sufficient in a highly competitive and technology-driven environment. Entrepreneurs are increasingly adopting digital technologies such as social media, e-commerce, artificial intelligence (AI), search engine optimization (SEO), and data analytics to identify customer needs, promote products, and create sustainable competitive advantages. Entrepreneurial marketing focuses on innovation, customer orientation, opportunity recognition, and efficient utilization of limited resources. Digitalization enhances these capabilities by providing cost-effective platforms, real-time customer engagement, and data-driven decision-making. This paper explores the concept, importance, strategies, benefits, challenges, and future prospects of entrepreneurial marketing in the era of digitalization. It concludes that integrating entrepreneurial marketing with digital technologies enables businesses to achieve higher customer satisfaction, business growth, and long-term sustainability.

Keywords: *Entrepreneurial Marketing, Digitalization, Innovation, Social Media Marketing, E-commerce, Artificial Intelligence.*

Introduction

The rapid advancement of digital technologies has transformed the global business environment. Entrepreneurs face increasing competition and changing customer expectations. Digitalization has revolutionized marketing by enabling businesses to reach customers through online platforms, mobile applications, social media, and e-commerce. Entrepreneurial marketing combines entrepreneurial thinking with innovative marketing practices. Unlike traditional marketing, entrepreneurial marketing focuses on identifying opportunities, creativity, customer engagement, and value creation despite limited resources.

Digitalization supports entrepreneurial marketing by offering affordable and efficient tools that improve communication, customer relationship management, market research, and business performance. Today, startups and small businesses can compete with larger organizations through effective use of digital marketing strategies.

1. Objectives of the Study

The objectives of this paper are:

To understand the concept of entrepreneurial marketing.
To examine the role of digitalization in marketing.
To identify digital marketing strategies used by entrepreneurs.
To analyze the benefits and challenges of digitalization.
To suggest recommendations for effective entrepreneurial marketing.

2. Research Methodology

This paper is based on secondary data collected from books, research journals, government publications, websites, and online databases. The study is descriptive in nature and aims to explain the relationship between entrepreneurial marketing and digitalization.

3. Concept of Entrepreneurial Marketing

Entrepreneurial marketing is the proactive identification and exploitation of market opportunities through innovative marketing techniques. It emphasizes creativity, flexibility, calculated risk-taking, and customer-centric approaches.

Characteristics of Entrepreneurial Marketing

Innovation
Opportunity-driven approach
Customer orientation
Resource efficiency
Flexibility
Value creation
Relationship marketing
Risk management

Entrepreneurial marketing differs from traditional marketing because entrepreneurs often operate with limited resources and rely on innovative methods rather than large advertising budgets.

4. Concept of Digitalization

Digitalization refers to the integration of digital technologies into business operations and marketing activities. It enables organizations to improve efficiency, customer engagement, and decision-making.

Examples include:
E-commerce platforms
Mobile applications
Artificial Intelligence
Big Data Analytics
Cloud Computing
Digital Payment Systems
Customer Relationship Management (CRM)

Digitalization has changed how businesses communicate, advertise, sell, and provide customer support.

5. Relationship Between Entrepreneurial Marketing and Digitalization

Digitalization strengthens entrepreneurial marketing by providing entrepreneurs with advanced tools for reaching customers and analyzing market trends.

Integration Areas

Entrepreneurial Marketing
Digitalization
Innovation
AI & Automation
Customer Focus
CRM Software
Market Research
Data Analytics
Communication
Social Media

Sales
E-commerce
Branding
Digital Advertising
Together, they improve business efficiency and competitiveness.

7. Digital Marketing Strategies for Entrepreneurs

7.1 Social Media Marketing

Social media platforms like Facebook, Instagram, LinkedIn, and YouTube help entrepreneurs build brand awareness, interact with customers, and increase sales.

Benefits
Low-cost promotion
Customer engagement
Brand visibility
Instant feedback

7.2 Search Engine Optimization (SEO)

SEO improves website visibility on search engines such as Google.

Advantages include:
Organic traffic
Higher credibility
Long-term marketing benefits
Better customer acquisition

7.3 Content Marketing

Content marketing involves creating valuable information through blogs, articles, videos, podcasts, and infographics.

Benefits include:
Customer education
Brand authority
Improved trust
Better engagement

7.4 Email Marketing

Email marketing remains an effective digital strategy for maintaining customer relationships.

Benefits:
Personalized communication
Cost-effective promotion
Increased customer retention
Higher return on investment

7.5 Influencer Marketing

Entrepreneurs collaborate with social media influencers to promote products and services.

Advantages:
Increased credibility
Wider audience reach
Higher engagement
Improved sales

7.6 E-Commerce Marketing

Selling products through online marketplaces and business websites has become an essential entrepreneurial strategy.

Popular platforms include:
Amazon

Flipkart
Shopify
Woo Commerce
Benefits:
Global reach
24/7 availability
Reduced operational costs
Increased convenience

6. Role of Artificial Intelligence in Entrepreneurial Marketing

Artificial Intelligence (AI) has transformed marketing by automating business processes and improving customer experiences.
Applications include:
Chatbots
Product recommendations
Predictive analytics
Customer segmentation
Personalized advertising
AI enables entrepreneurs to make data-driven decisions and improve marketing effectiveness.

9. Benefits of Digitalization for Entrepreneurs

1. Cost Reduction

Digital marketing is significantly cheaper than traditional advertising.

2. Global Market Access

Entrepreneurs can reach international customers through online platforms.

3. Better Customer Engagement

Businesses interact directly with customers through social media and messaging apps.

4. Improved Decision-Making

Data analytics provide valuable customer insights.

5. Business Growth

Digital technologies accelerate sales and improve operational efficiency.

6. Competitive Advantage

Entrepreneurs can quickly adapt to changing market conditions.

10. Challenges of Entrepreneurial Marketing in the Digital ERA

Despite Many Advantages, Entrepreneurs Face Several Challenges

Cybersecurity Risks
Customer data protection remains a major concern.
High Competition
Digital platforms increase competition among businesses.
Rapid Technological Changes
Entrepreneurs must continuously update their digital skills.
Limited Financial Resources
Small businesses may struggle to invest in advanced technologies.
Digital Skill Gap
Many entrepreneurs lack expertise in AI, SEO, and digital analytics.

11. Case Study: Digital Success Of A Small Business

A home-based organic food startup began selling products through Instagram and WhatsApp Business. By using Facebook advertisements, influencer collaborations, and Google Business Profile, the entrepreneur increased monthly sales by over 250% within one year. Customer feedback was collected through online reviews, leading to continuous product improvements.

This case demonstrates how digitalization enables small businesses to compete successfully with larger companies.

12. Future Trends

Emerging trends include:
Artificial Intelligence-powered marketing
Voice Search Optimization
Virtual Reality (VR)
Augmented Reality (AR)
Blockchain in digital payments
Predictive Analytics
Personalized Marketing
Marketing Automation
Internet of Things (IoT)
Sustainable Digital Marketing
These innovations will further strengthen entrepreneurial marketing practices.

Suggestions

Invest in digital marketing training.
Adopt customer-centric marketing strategies.
Utilize AI and analytics for better decision-making.
Strengthen cybersecurity measures.
Focus on quality content creation.
Enhance social media engagement.
Encourage continuous innovation.
Build strong customer relationships.
Monitor digital marketing performance regularly.
Collaborate with technology partners.

Conclusion

Entrepreneurial marketing and digitalization are transforming modern business practices. Entrepreneurs who effectively utilize digital technologies can reach larger markets, build stronger customer relationships, reduce marketing costs, and improve business performance. Although challenges such as cybersecurity, technological changes, and skill gaps exist, continuous learning and innovation enable entrepreneurs to overcome these obstacles. The future of entrepreneurship depends heavily on digital transformation, making entrepreneurial marketing an essential strategy for sustainable business growth and global competitiveness.

References

1. Kotler, P., & Keller, K. L. (2022). Marketing Management (16th ed.). Pearson.
2. Chaffey, D. (2023). Digital Marketing: Strategy, Implementation and Practice. Pearson.
3. Hisrich, R., Peters, M., & Shepherd, D. (2020). Entrepreneurship. McGraw-Hill.
4. Ryan, D. (2022). Understanding Digital Marketing. Kogan Page.
5. Osterwalder, A., & Pigneur, Y. (2010). Business Model Generation. Wiley.
6. OECD. (2021). The Digital Transformation of SMEs.
7. World Bank. (2023). Digital Development Report.
8. Journal of Business Research.
9. International Journal of Entrepreneurial Behavior & Research.
10. Harvard Business Review articles on digital transformation.

Chapter 30

JOB-RELATED UNCERTAINTY IN THE AGE OF ARTIFICIAL INTELLIGENCE AND THE GIG ECONOMY

Dr.A.Vimaldevika
Assistant Professor, B.COM CA/ISM Department, A.M.Jain College (Shit-II)
Meenambakkam, Chennai, Tamil Nadu
Email: vimaldevika.a@amjaincollege.edu.in

Abstract
The convergence of two disruptive forces — the rapid diffusion of artificial intelligence (AI) technologies and the parallel expansion of gig and platform-based work — has fundamentally altered the nature of employment and introduced heightened levels of job-related uncertainty among the workforce. Traditional notions of job security, built around stable, long-term employer-employee relationships, are increasingly giving way to fragmented, algorithmically-mediated, and often precarious work arrangements. This study empirically examines the sources, extent, and psychological and economic consequences of job-related uncertainty experienced by workers navigating this dual transformation. Drawing on a structured survey of 200 respondents comprising both traditional salaried employees (across AI-exposed sectors such as IT, BPO, and finance) and gig/platform workers (ride-hailing, delivery, freelance/content platforms), the study measures perceived job insecurity, AI-displacement anxiety, income volatility, and coping mechanisms. The findings reveal that gig workers report significantly higher income volatility and lower access to social security, while traditional employees in AI-exposed roles report higher anxiety specifically related to skill obsolescence and role redundancy. Job-related uncertainty is found to be significantly correlated with reduced job satisfaction, higher reported stress, and lower long-term financial planning behavior across both groups, though the underlying drivers differ meaningfully between the two categories. The study concludes with recommendations for policymakers, platform companies, and traditional employers to mitigate the adverse effects of this uncertainty while preserving the efficiency and flexibility gains associated with AI adoption and gig work.

Keywords: *Job Insecurity, Artificial Intelligence, Gig Economy, Platform Work, Automation Anxiety, Precarious Employment, Future of Work*

1. Introduction

The nature of work has undergone profound transformation over the past decade, driven by two closely intertwined and mutually reinforcing developments: the accelerating adoption of artificial intelligence and automation technologies across industries, and the parallel rise of the gig and platform economy as an alternative mode of labor organization. Together, these forces have reshaped not only how work is performed, but how workers experience the fundamental question of job security.

On one hand, AI and automation technologies — ranging from robotic process automation in back-office functions to generative AI tools capable of performing tasks previously requiring human judgment and creativity (content generation, coding, customer service, basic analysis) — have raised widespread concern about job displacement, skill obsolescence, and the changing nature of "safe" career paths. Even roles historically considered insulated from automation, such as knowledge work in IT services, legal support, and creative industries, are now perceived as vulnerable, generating what has been termed "automation anxiety" among segments of the traditional workforce.

On the other hand, the gig economy — encompassing ride-hailing and delivery platforms

(Uber, Ola, Swiggy, Zomato), freelance and content platforms (Upwork, Fiverr, YouTube, content creation), and task-based platforms (Urban Company, TaskRabbit) — has grown rapidly, offering workers flexibility and low barriers to entry, but often at the cost of the stability, benefits, and legal protections associated with traditional employment. Gig work is frequently characterized by algorithmic management (where task allocation, performance evaluation, and even termination decisions are mediated by opaque platform algorithms), income volatility tied to demand fluctuations and platform incentive structures, and the absence of conventional employment benefits such as provident fund contributions, health insurance, or paid leave.

Crucially, these two phenomena are not independent. AI and automation are simultaneously creating the conditions that push workers out of traditional employment (through displacement or wage stagnation) and enabling the very platform technologies that structure gig work (through algorithmic matching, dynamic pricing, and performance monitoring). This convergence creates a distinctive and compounded form of job-related uncertainty — one that spans both the fear of displacement from stable employment and the inherent precarity of the flexible work arrangements increasingly positioned as the alternative.

1.1 Need for the Study

While considerable academic and policy attention has been devoted separately to the labor market effects of AI/automation and to the working conditions of gig economy participants, comparatively less empirical research examines job-related uncertainty as a unified phenomenon experienced across both traditional and gig employment contexts simultaneously. Understanding how these two populations experience, perceive, and cope with uncertainty — and how their experiences differ or converge — is essential for designing effective policy and organizational responses.

1.2 Objectives of the Study

1. To examine the nature and sources of job-related uncertainty among traditional employees in AI-exposed sectors and gig/platform workers.
2. To measure and compare the levels of perceived job insecurity, AI-displacement anxiety, and income volatility across these two worker categories.
3. To analyze the relationship between job-related uncertainty and outcomes such as job satisfaction, stress, and financial planning behavior.
4. To identify the coping mechanisms adopted by workers in response to job-related uncertainty.
5. To examine the role of demographic and job-related factors (age, sector, income level, education) in shaping perceived uncertainty.
6. To recommend measures for policymakers, employers, and platform companies to mitigate adverse effects of job-related uncertainty.

1.3 Scope of the Study

The study covers two respondent categories: (a) traditional salaried employees working in sectors widely considered exposed to AI-driven automation (IT/ITES, BPO, banking and financial services, content and media), and (b) gig/platform workers engaged in ride-hailing, delivery, freelance, or task-based platform work. The study is confined to urban and semi-urban working populations and does not extend to agricultural or purely informal (non-platform) unorganized sector workers.

1.4 Statement of the Problem

As AI adoption accelerates and gig work continues to expand as a share of overall employment, workers across both traditional and platform-based employment face growing uncertainty about the stability, predictability, and long-term viability of their livelihoods. This uncertainty

carries significant implications for individual financial well-being, mental health, and broader economic stability, yet remains inadequately understood as an integrated phenomenon. This study seeks to empirically investigate the sources, magnitude, and consequences of this uncertainty across both worker populations.

2. Literature Review

Job Insecurity Theory. Job insecurity has been conceptualized in organizational behavior literature as a subjective and multidimensional construct, encompassing both the perceived likelihood of job loss and the perceived severity of its consequences. Classic frameworks distinguish between quantitative job insecurity (fear of losing the job itself) and qualitative job insecurity (fear of losing valued job features, such as career progression, working conditions, or job content) — a distinction highly relevant to understanding AI-related anxiety, which often concerns role transformation rather than outright job loss.

Technological Unemployment and Automation Anxiety. A substantial body of economic literature, dating back to classical concerns about technological unemployment, has been reinvigorated by studies estimating the share of existing jobs susceptible to automation by AI and machine learning technologies. More recent literature specific to generative AI has extended this concern to knowledge-work and creative occupations previously considered relatively automation-resistant, generating what researchers term "AI-anxiety" — a distinct construct correlated with, but conceptually separate from, general job insecurity.

Precarious Work and the Gig Economy. Sociological and labor-economics literature on the gig economy has extensively documented the phenomenon of "precarious work" — characterized by uncertainty, instability, and insecurity, in which workers bear the economic risk traditionally absorbed by employers. Studies on platform work specifically highlight algorithmic management as a distinctive source of uncertainty, given the opacity of algorithmic decision-making around task allocation, ratings, and deactivation, which workers often experience as arbitrary and outside their control.

Income Volatility Among Gig Workers. Empirical studies measuring gig worker income patterns consistently find significantly higher income volatility compared to traditional salaried employment, driven by demand fluctuations, platform commission structures, and the absence of guaranteed minimum earnings in most jurisdictions. This volatility has been linked in the literature to reduced financial planning capacity and higher reported financial stress.

Psychological and Well-Being Consequences. Across both automation-anxiety and gig-precarity literatures, job-related uncertainty has been consistently linked to adverse psychological outcomes, including elevated stress, reduced job satisfaction, and in some studies, symptoms consistent with anxiety and depression. The mechanism commonly cited is the erosion of perceived control and predictability, both established psychological determinants of well-being.

Policy Responses. Comparative policy literature has examined emerging regulatory responses to gig worker precarity, including portable benefits models, minimum earnings guarantees (as introduced in some jurisdictions for platform workers), and algorithmic transparency requirements. In the Indian context, the Code on Social Security, 2020 represents a notable — though not yet fully implemented — legislative attempt to extend social security coverage to gig and platform workers.

Research Gap. Existing literature tends to examine AI-driven job insecurity and gig-economy precarity as largely separate research streams, with limited empirical work directly comparing the two worker populations using a common uncertainty framework. This study addresses this gap by applying a unified measurement approach across both groups.

3. Research Methodology

3.1 Research Design

The study employs a descriptive-cum-comparative research design using a quantitative, survey-based approach to measure and compare job-related uncertainty across traditional and gig/platform worker populations.

3.2 Sampling Design

- **Population:** Working individuals comprising (a) traditional salaried employees in AI-exposed sectors, and (b) gig/platform economy workers.
- **Sampling Technique:** Stratified convenience sampling, with strata defined by worker category (traditional vs. gig), supplemented by platform-based recruitment (e.g., contacting gig workers through platform-affiliated worker associations) and organizational contacts for traditional employees.
- **Sample Size:** 200 respondents (100 traditional employees in AI-exposed roles; 100 gig/platform workers).
- **Data Collection Method:** Structured questionnaire administered online and through in-person interviews at co-working spaces, IT parks, and gig worker aggregation points (e.g., delivery hubs).

3.3 Data Collection Instrument

A structured questionnaire comprising:

1. Demographic and employment profile (age, education, sector/platform, income level, tenure/experience).
2. Job insecurity measures (quantitative and qualitative dimensions) on a 5-point Likert scale.
3. AI-displacement anxiety scale — perceived likelihood of role automation, skill obsolescence concern, perceived organizational AI adoption pace (for traditional employees) / algorithmic management perception (for gig workers).
4. Income volatility and financial planning behavior (income predictability, savings behavior, access to credit/insurance).
5. Coping mechanisms (upskilling, income diversification, job search activity, reliance on social/family support).
6. Outcome measures: job satisfaction, perceived stress (using a condensed perceived stress scale), and overall life/financial security satisfaction.

3.4 Sources of Data

- **Primary Data:** Survey responses collected directly from both respondent groups.
- **Secondary Data:** Reports from the International Labour Organization (ILO), NITI Aayog (Report on gig and platform economy), World Economic Forum Future of Jobs Reports, McKinsey Global Institute automation research, and peer-reviewed journal literature.

3.5 Tools for Data Analysis

- **Descriptive Statistics:** Mean, standard deviation, and frequency distribution for profiling and comparison across groups.
- **Reliability Test:** Cronbach's Alpha for the job insecurity, AI-anxiety, and stress scales.
- **Independent Samples t-test:** To compare uncertainty and outcome measures between traditional and gig worker groups.
- **Correlation and Multiple Regression Analysis:** To examine the relationship between job-related uncertainty dimensions and outcome variables (job satisfaction, stress, financial planning).

- **One-Way ANOVA:** To test differences in uncertainty levels across income and education categories.
- **Software Used:** SPSS.

3.6 Hypotheses of the Study

- **H1:** Gig/platform workers report significantly higher income volatility than traditional employees.
- **H2:** Traditional employees in AI-exposed sectors report significantly higher AI-displacement/skill-obsolescence anxiety than gig workers.
- **H3:** Job-related uncertainty is significantly negatively correlated with job satisfaction across both groups.
- **H4:** Job-related uncertainty is significantly positively correlated with perceived stress across both groups.
- **H5:** There is a significant difference in coping mechanism adoption (upskilling vs. income diversification) between traditional and gig workers.
- **H6:** Income level is significantly negatively associated with perceived job-related uncertainty.

3.7 Limitations of the Study

- The use of convenience sampling limits generalizability of findings to the broader working population.
- Self-reported measures of stress, anxiety, and financial behavior are subject to social desirability and recall bias.
- The cross-sectional design captures uncertainty perceptions at a single point in time, in a period of rapidly evolving AI capability, meaning findings may shift quickly as technology and platform practices evolve.
- The study does not include objective clinical measures of psychological distress, relying instead on validated but self-reported scales.

4. Results

(Note: The figures below are illustrative placeholders structured as a typical comparative survey-analysis section. Replace with actual values once primary data collection and analysis are completed.)

Table 1: Demographic and Employment Profile of Respondents

Variable	Category	Traditional Employees (n=100)	Gig/Platform Workers (n=100)
Age Group	Below 30 years	38%	54%
	30–40 years	42%	32%
	Above 40 years	20%	14%
Education	Graduate & above	92%	46%
	Up to Higher Secondary	8%	54%
Monthly Income	Below ₹25,000	6%	48%
	₹25,000–₹50,000	34%	38%
	Above ₹50,000	60%	14%
Work Tenure/Experience	Less than 2 years	24%	46%
	2–5 years	38%	34%

Variable	Category	Traditional Employees (n=100)	Gig/Platform Workers (n=100)
	More than 5 years	38%	20%

4.2 Reliability Statistics

Cronbach's Alpha values: Job Insecurity Scale = **0.85**; AI-Displacement Anxiety Scale = **0.82**; Perceived Stress Scale = **0.79** — indicating good internal consistency across all measures.

Table 2: Comparison of Uncertainty Dimensions Between Groups

Dimension	Traditional Employees (Mean, /5)	Gig Workers (Mean, /5)	t-value	Significance	Result
Income Volatility	2.34	4.18	14.62	$p < 0.001$	Significant — **H1 accepted**
AI-Displacement/Skill-Obsolescence Anxiety	3.92	2.68	10.84	$p < 0.001$	Significant — **H2 accepted**
Algorithmic Management Concern (Gig) / AI Monitoring Concern (Traditional)	2.81	3.86	8.47	$p < 0.001$	Significant
Access to Social Security/Benefits (Reverse-scored: higher = less access)	1.92	4.24	17.03	$p < 0.001$	Significant
Overall Job-Related Uncertainty Index	3.21	3.68	4.12	$p < 0.001$	Significant

4.4 Correlation Analysis: Uncertainty and Outcomes

Table 3: Correlation Analysis

Relationship	Pearson r	Significance
Overall Uncertainty ↔ Job Satisfaction	−0.548	$p < 0.01$
Overall Uncertainty ↔ Perceived Stress	0.612	$p < 0.01$
Overall Uncertainty ↔ Financial Planning Behavior	−0.471	$p < 0.01$

The negative correlation with job satisfaction **supports H3**, and the positive correlation with perceived stress **supports H4**.

4.5 Coping Mechanisms Adopted (Multiple Response)

Table 4: Coping Mechanism

Coping Mechanism	Traditional Employees	Gig Workers
Upskilling/Reskilling (courses, certifications)	68%	31%
Income Diversification (multiple platforms/side income)	22%	74%
Active/Passive Job Search	54%	38%
Increased Savings/Reduced Discretionary Spending	41%	56%

Coping Mechanism	Traditional Employees	Gig Workers
Reliance on Family/Social Support Network	29%	47%

A chi-square test comparing upskilling vs. income diversification as primary coping strategy across groups yielded $\chi^2 = 38.6$, $p < 0.001$, confirming a significant difference in coping mechanism adoption — **supporting H5**.

4.6 Regression Analysis: Income Level and Perceived Uncertainty

Table 5: Regression Analysis

Predictor	Standardized Beta (β)	t-value	Significance
Monthly Income (higher = higher income)	−0.342	−5.68	0.000
Education Level	−0.196	−3.24	0.001
Work Tenure/Experience	−0.158	−2.61	0.010
Worker Category (Gig = 1, Traditional = 0)	0.221	3.42	0.001

Model Summary: $R^2 = 0.428$, Adjusted $R^2 = 0.412$, $F = 27.14$, $p < 0.001$

Income level shows a significant negative relationship with perceived uncertainty even after controlling for worker category, education, and tenure, **supporting H6**.

5. Discussion

The findings of this study reveal a nuanced and, in some respects, counterintuitive picture of job-related uncertainty across the two worker populations examined. While gig/platform workers report substantially higher income volatility and markedly lower access to social security benefits — consistent with well-established literature on platform work precarity — traditional employees in AI-exposed sectors report significantly higher levels of AI-displacement and skill-obsolescence anxiety. This suggests that job-related uncertainty in the current economic moment is not a phenomenon confined to precarious, non-standard employment, but increasingly permeates even traditionally "secure" salaried roles, driven specifically by the pace and visibility of AI capability advancement in knowledge-work domains.

Interestingly, the overall job-related uncertainty index, while higher for gig workers, does not diverge as dramatically between the two groups as the individual sub-dimensions might suggest — indicating that traditional employees' AI-anxiety is substantively closing the uncertainty gap that might otherwise be expected given their categorically more stable employment status. This finding carries an important implication: organizational and policy responses to job-related uncertainty cannot be neatly segmented by employment type alone, since meaningful uncertainty exists within formally "secure" employment as well.

The differential coping mechanisms observed — traditional employees leaning heavily toward upskilling/reskilling (68%) as compared to gig workers (31%), who instead favor income diversification (74%) — reflect rational adaptations to the distinct nature of the uncertainty each group faces. Traditional employees, facing a threat centered on skill relevance, logically invest in skill renewal; gig workers, facing a threat centered on income unpredictability, logically diversify income streams across multiple platforms or gigs rather than investing in a single skill trajectory. This has direct implications for how support interventions — such as government-sponsored upskilling programs — should be tailored, since a uniform approach assuming upskilling is the universal response may be poorly matched to gig workers' actual risk profile and coping logic.

The strong negative correlation between overall uncertainty and job satisfaction, and the strong positive correlation with perceived stress, affirm the broader psychological literature linking

uncertainty to diminished well-being, and underscore that job-related uncertainty in this AI-and-gig-economy context is not merely an abstract economic concern but carries tangible consequences for worker mental health and daily experience.

Finally, the finding that income level remains significantly negatively associated with perceived uncertainty even after controlling for worker category suggests that economic buffering — the financial cushion higher income provides — moderates uncertainty perception regardless of whether one is formally employed or engaged in gig work. This points to income adequacy, rather than employment form per se, as a potentially more fundamental lever for uncertainty mitigation.

6. Findings (Summary)

1. Gig/platform workers report significantly higher income volatility and significantly lower access to social security benefits compared to traditional employees.
2. Traditional employees in AI-exposed sectors report significantly higher AI-displacement and skill-obsolescence anxiety than gig workers.
3. Overall job-related uncertainty is significantly negatively correlated with job satisfaction and significantly positively correlated with perceived stress across both groups.
4. Traditional employees predominantly cope through upskilling/reskilling, while gig workers predominantly cope through income diversification — a statistically significant difference in strategy.
5. Higher income level is significantly associated with lower perceived job-related uncertainty, even after controlling for worker category, education, and experience.
6. The overall uncertainty gap between traditional and gig workers, while statistically significant, is narrower than the gap in any single sub-dimension alone — indicating meaningful uncertainty now exists within traditionally "secure" employment.

7. Suggestions

1. **Extend Portable Social Security to Gig Workers:** Accelerate implementation of the Code on Social Security, 2020 provisions for gig and platform workers, including portable benefits (health insurance, provident fund contributions) that follow the worker across platforms rather than being tied to a single employer.
2. **Introduce Income Stabilization Mechanisms:** Encourage platform companies to explore minimum earnings guarantees or demand-smoothing mechanisms to reduce income volatility for gig workers during low-demand periods.
3. **Embed Reskilling Programs Within Organizations:** Employers in AI-exposed sectors should proactively invest in structured, role-specific reskilling pathways rather than leaving upskilling entirely to individual employee initiative, to reduce AI-related anxiety and support internal mobility.
4. **Increase Algorithmic Transparency:** Platform companies should provide greater transparency around task allocation, rating, and deactivation algorithms to reduce the perceived arbitrariness that compounds gig worker uncertainty.
5. **Tailor Support Interventions to Worker-Specific Coping Logic:** Government and industry upskilling initiatives should be differentiated — offering skill-renewal support for traditional employees and income-diversification/financial-planning support (e.g., access to micro-insurance, flexible credit) for gig workers.
6. **Promote Financial Literacy and Planning Support:** Given the strong negative correlation between uncertainty and financial planning behavior, targeted financial literacy programs — particularly for gig workers with irregular income — could help mitigate downstream financial stress.

7. **Monitor AI Adoption Pace and Communication:** Organizations should proactively and transparently communicate AI adoption plans and their expected impact on roles, since ambiguity itself has been shown in the literature to exacerbate anxiety beyond the actual probability of displacement.

8. Conclusion

This study demonstrates that job-related uncertainty in the contemporary labor market is a multidimensional phenomenon shaped distinctly, but comparably in overall magnitude, by both AI-driven transformation of traditional employment and the structural precarity inherent in gig and platform work. While gig workers bear the brunt of income volatility and limited social protection, traditional employees are increasingly confronting a parallel — and in this study's findings, even more acute — form of uncertainty rooted in the fear of skill obsolescence and role displacement by artificial intelligence. Both forms of uncertainty carry significant consequences for job satisfaction, psychological stress, and financial planning behavior, underscoring that the future of work agenda must address uncertainty not as a gig-economy-specific challenge, but as a broader labor market condition affecting workers across the employment spectrum. As AI capabilities continue to advance and gig work continues to grow as a share of overall employment, coordinated action from policymakers, employers, and platform companies — spanning social security extension, transparent AI adoption practices, and tailored coping support — will be essential to ensuring that the efficiency gains of these transformations do not come at an unsustainable cost to worker well-being and economic security. Future research could adopt a longitudinal design to track how uncertainty perceptions evolve as AI capabilities and platform regulations continue to develop.

References

1. Autor, D. H. (2015). Why are there still so many jobs? The history and future of workplace automation. *Journal of Economic Perspectives*, 29(3), 3–30.
2. De Stefano, V. (2016). The rise of the "just-in-time workforce": On-demand work, crowdwork, and labour protection in the "gig-economy". *Comparative Labor Law & Policy Journal*, 37(3), 471–504.
3. Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, 114, 254–280.
4. Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, 9(3), 438–448.
5. International Labour Organization (ILO). (2021). *World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work*.
6. Kalleberg, A. L. (2009). Precarious work, insecure workers: Employment relations in transition. *American Sociological Review*, 74(1), 1–22.
7. McKinsey Global Institute. (2023). *Generative AI and the Future of Work in America*.
8. NITI Aayog, Government of India. (2022). *India's Booming Gig and Platform Economy*.
9. Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of Uber's drivers. *International Journal of Communication*, 10, 3758–3784.
10. Sverke, M., Hellgren, J., & Näswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7(3), 242–264.
11. World Economic Forum. (2023). *The Future of Jobs Report 2023*.
12. Government of India, Ministry of Labour and Employment. (2020). *The Code on Social Security, 2020*.

Note: The results in Section 4 (demographic comparison, t-tests, correlations, regression, and coping-mechanism data) are structured as a template consistent with standard comparative survey-analysis reporting. Please replace these illustrative figures with actual data generated from your own primary survey once fieldwork is complete, and verify/update the reference list against sources actually consulted before submission.

Chapter 31

AI-ENABLED DECISION MAKING AND ORGANIZATIONAL RESILIENCE IN THE DIGITAL BUSINESS ECOSYSTEM

S.Sruthi
Assistant Professor, PG& Research Department of Commerce
Sri Ramakrishna College of Arts and Science, Coimbatore, Tamil Nadu
Email: sruthiselvarajss@gmail.com

Abstract
The rapid growth of digital technology and artificial intelligence (AI) has completely changed how businesses handle risks, make choices, and react to shifting market conditions. Organizations can analyse massive amounts of real-time data, spot new trends, anticipate possible disruptions, and support quicker and better-informed strategic decisions thanks to AI-enabled decision making. Organizational resilience is now crucial for preserving business continuity, adjusting to technological advancements, and efficiently handling market uncertainties and disruptions in the increasingly interconnected digital business ecosystem. In the context of the digital business ecosystem, this study looks at how AI-enabled decision making might improve organizational resilience. It focuses on how AI features like automation, machine learning, predictive analytics, and real-time data processing support organizational agility, risk management, creativity, and adaptability. The impact of digital competencies, data-driven culture, technological preparedness, and leadership support on the successful implementation of AI for decision making is also considered. The study intends to offer insights for organizations looking to enhance their capacity to foresee disruptions, effectively address obstacles, and maintain competitive advantage in a quickly changing digital environment by comprehending the connection between AI-enabled decision making and organizational resilience.

Keywords: *Artificial Intelligence, AI-Enabled Decision Making, Organizational Resilience, Digital Business Ecosystem, Predictive Analytics*

1.Introduction

The contemporary corporate environment has undergone a fundamental transformation due to the rapid expansion of digital technologies. Customers, suppliers, rivals, technology providers, employees, and other stakeholders engage via digital platforms and networks in today's highly integrated digital business ecosystem. Artificial Intelligence (AI), big data analytics, cloud computing, the Internet of Things (IoT), and automation are examples of technologies that have given businesses new chances to boost customer satisfaction, increase operational effectiveness, and build creative business models. AI has become one of these technologies' key tools for assisting with corporate decision-making. However, corporations may now make decisions more quickly, accurately, and predictably because to the growing availability of real-time data and sophisticated analytical technologies.

The quality and speed of organizational responses can be enhanced by AI's ability to recognize patterns, predict future trends, identify hazards, automate routine actions, and give managers insightful information. Intense competition, shifting consumer expectations, supply-chain disruptions, cybersecurity risks, economic swings, and unforeseen catastrophes are all contributing factors to the increasing uncertainty that enterprises face. These difficulties emphasize the significance of organizational resilience, which is the capacity of an organization to foresee, endure, react to, and recover from disturbances while still accomplishing its goals. Organizations that are resilient can effectively respond to quickly shifting business conditions,

reallocate resources, adopt new technologies, and modify their strategies.

Organizational resilience can be greatly enhanced by AI-enabled decision making. While real-time data analysis allows managers to react swiftly to new disruptions, predictive analytics can assist firms in anticipating possible dangers. By decreasing reliance on human procedures, AI-driven automation can enable business continuity, and machine learning can constantly enhance organizational responses based on fresh data. However, a number of other criteria, including data quality, digital infrastructure, personnel competencies, corporate culture, ethical considerations, and leadership support, are also necessary for the successful application of AI. This study aims to investigate how an organization's capacity to foresee disruptions, adjust to changing conditions, effectively address obstacles, and maintain long-term performance and competitiveness is influenced by AI-based decision-making capabilities.

2.Objectives

- To examine the role of Artificial Intelligence in organizational decision making
- To assess the impact of AI-enabled decision making on organizational resilience,
- To analyse the factors influencing the adoption of AI-enabled decision making
- To identify the challenges associated with AI-enabled decision making

3.Statement of the Problem

- Organizations are operating in a rapidly changing digital business environment characterized by technological advancement and intense competition.
- Businesses face challenges such as changing customer expectations, economic uncertainty, cybersecurity threats, supply-chain disruptions, and market fluctuations.
- The increasing volume and complexity of business data make traditional decision-making methods less effective for responding to rapidly changing situations.
- Organizations require quick, accurate, and data-driven decisions to remain competitive and respond effectively to emerging business challenges.
- Artificial Intelligence (AI), machine learning, predictive analytics, and automation are increasingly being adopted to improve organizational decision making.

4.Need for the Study

- Organizations face economic fluctuations, technological changes, changing customer preferences, supply-chain disruptions, and competitive pressures. AI can help identify emerging patterns and support organizations in preparing for potential disruptions.
- Digital businesses generate large amounts of data through transactions, websites, social media, customer interactions, IoT devices, and digital platforms. AI helps convert large datasets into useful information for managerial decision making.
- Rapidly changing digital markets require organizations to make timely decisions. AI can support real-time data analysis and reduce the time required to collect, process, and interpret information.
- Organizations need the ability to anticipate, respond to, recover from, and adapt to disruptions. AI-enabled decision making can support resilience through timely information, risk identification, and predictive insights.

5.Overview of the Study

5.1. Role of Artificial Intelligence in Organizational Decision Making

5.1.1 Data-Driven Decision Making

AI enables organizations to analyse large volumes of structured and unstructured data and convert them into meaningful information. This helps managers make decisions based on data rather than relying solely on intuition or historical experience.

5.1.2 Predictive Analytics

AI-based predictive analytics helps organizations forecast customer demand, market trends,

financial conditions, operational requirements, and potential risks. This supports proactive rather than reactive decision making.

5.1.3 Real-Time Decision Support

AI can process real-time information and provide timely insights. This enables managers to respond quickly to changes in customer behaviour, market conditions, supply chains, and business operations.

5.1.4 Automation of Routine Decisions

AI can automate repetitive and rule-based decision-making activities. This reduces manual effort and allows employees and managers to concentrate on strategic and complex activities.

5.1.5 Risk Identification and Management

AI can identify unusual patterns, anomalies, and potential risks by analysing large datasets. This supports organizations in taking preventive measures and improving risk-management practices.

5.1.6 Improved Decision Accuracy

AI-supported analysis can reduce errors associated with manual data processing and provide managers with multiple insights for evaluating business alternatives.

5.2 AI and Organizational Resilience

5.2.1. Early identification of risks

AI systems can analyse historical and real-time information to identify unusual patterns and potential risks. This can help organizations develop preventive strategies.

5.2.2. Predictive decision making

Predictive analytics can support forecasting related to customer demand, inventory requirements, financial conditions, equipment performance, and operational disruptions. Better forecasting can improve organizational preparedness.

5.2.3. Real-time information processing

Traditional managerial analysis can take considerable time when large amounts of information are involved. AI can process information rapidly and provide managers with timely insights.

5.2.4. Operational automation

AI-powered automation can perform repetitive activities with limited human intervention. During disruptions, automation may help organizations maintain selected operational processes.

5.2.5. Resource optimization

AI can assist organizations in allocating financial, human, technological, and operational resources based on available information and predicted requirements.

5.2.6. Supply-chain resilience:

AI can support demand forecasting, inventory monitoring, supplier assessment, logistics planning, and identification of potential supply-chain disruptions.

5.2.7. Customer responsiveness

AI can analyse customer behaviour and preferences, allowing organizations to respond more effectively to changing market expectations.

5.3 Factors Influencing the Adoption of AI-Enabled Decision Making

5.3.1. Technological readiness

Adequate digital infrastructure, cloud systems, data management systems, cybersecurity, and computing capabilities are necessary for effective AI adoption.

5.3.2. Data quality

AI systems depend heavily on the quality, relevance, accuracy, completeness, and availability of data. Poor-quality data may result in unreliable outputs.

5.3.3. Digital competencies

Employees and managers need appropriate knowledge and skills to understand AI outputs and integrate them into organizational decisions.

5.3.4. Leadership support

Senior management plays an important role in allocating resources, establishing AI strategies, encouraging innovation, and managing organizational change.

5.3.5. Organizational culture

A culture that supports experimentation, innovation, learning, and evidence-based decision making can facilitate AI adoption.

5.3.6. Financial resources

AI implementation may require investment in software, infrastructure, employee training, cybersecurity, and technical expertise.

5.3.7. Employee acceptance

Employees may have concerns about job displacement, changes in responsibilities, or increased technological monitoring. Effective communication and training can support acceptance.

5.3.8. Ethical and regulatory considerations

Organizations need policies relating to privacy, transparency, accountability, fairness, security, and responsible use of AI.

5.4 Challenges of AI-Enabled Decision Making

5.4.1. Data Privacy and Security

AI-enabled decision-making systems require access to large amounts of organizational, customer, employee, and operational data. The collection, storage, and processing of such information create concerns regarding data privacy, unauthorized access, data leakage, and cybersecurity attacks**.** Organizations therefore need strong security measures, access controls, and appropriate data governance practices to protect sensitive information.

5.4.2. Algorithmic Bias

AI systems learn from the data used to train them. If the training data contains incomplete, inaccurate, or biased information, the AI system may produce biased or unfair recommendations**.** Such bias can affect areas such as recruitment, customer segmentation, credit assessment, and resource allocation. Regular monitoring and evaluation of AI systems are therefore necessary to identify and reduce potential bias.

5.4.3. Lack of Transparency

Some advanced AI models operate in ways that are difficult for managers and employees to understand. When decision makers cannot clearly identify how an AI system arrived at a particular recommendation, it may create difficulties in establishing accountability and trust. Organizations need appropriate explainability and documentation mechanisms, particularly when AI is used for important business decisions.

5.4.4. High Implementation Cost

Implementing AI requires investment in software, hardware, cloud infrastructure, data systems, cybersecurity, skilled professionals, employee training, and system maintenance**.** Small and medium-sized organizations may find these investments particularly challenging. In addition, organizations may incur ongoing costs for updating AI systems and integrating them with existing technologies.

5.4.5. Skill Shortage

Effective AI adoption requires employees with knowledge of artificial intelligence, data analytics, digital technologies, and business applications**.** Many organizations may face difficulties in recruiting or retaining professionals with these skills. Lack of appropriate expertise can limit the organization's ability to implement, operate, evaluate, and manage AI-based decision-

making systems effectively.

5.4.6. Resistance to Change

Employees may be reluctant to adopt AI because of concerns about changing job responsibilities, increased automation, job displacement, or unfamiliar technology. Resistance may reduce the effectiveness of AI implementation even when the technology itself is capable. Employee awareness programmes, training, communication, and participation in the implementation process can help organizations manage such resistance.

5.4.7. Integration with Existing Systems

Integrating AI applications with existing organizational systems can be technically and operationally complex. Organizations may already use enterprise resource planning systems, customer relationship management systems, accounting software, supply-chain systems, and other digital platforms**.** Differences in data formats, system architecture, and technological compatibility can create difficulties during AI implementation.

5.4.8. Ethical Issues

AI-enabled decision making raises important ethical concerns related to fairness, accountability, transparency, privacy, and responsible use of data**.** Organizations need to establish clear policies and governance mechanisms to ensure that AI is used appropriately. Ethical considerations become particularly important when AI decisions have significant effects on employees, customers, or other stakeholders.

5.4.9. Overdependence on Technology

Excessive dependence on AI-generated recommendations may reduce the role of human judgement, experience, creativity, and contextual understanding in decision making. AI may identify patterns from available data, but managers may still need to consider organizational values, stakeholder expectations, unexpected circumstances, and qualitative information. Therefore, AI should generally complement rather than completely replace managerial judgement.

5.4.10. Reliability of AI Outputs

The quality of AI-generated recommendations depends largely on the quality, completeness, relevance, and timeliness of the data used by the system. Inaccurate or outdated information may result in inappropriate recommendations. Technical errors, changes in market conditions, or unexpected events may also affect AI outputs. Consequently, organizations should regularly validate AI results and maintain appropriate human oversight.

6.Findings of the Study

- AI has an important role in modern organizational decision making. AI can support managers by processing large quantities of information and generating timely analytical insights.
- AI-enabled decision making can contribute to organizational resilience. Predictive analytics, automation, and real-time information processing can strengthen organizational preparedness and responsiveness.
- Predictive capabilities support risk management. AI can assist organizations in identifying patterns and potential risks before they develop into major operational challenges.
- Real-time data processing improves responsiveness. Access to timely information enables organizations to respond more rapidly to changes in customers, markets, operations, and supply chains.
- Automation can support business continuity. Automated processes can help maintain selected operations during periods of disruption.
- Digital competencies are essential for successful AI adoption. Employees need appropriate technical and analytical capabilities to interpret and use AI-generated information effectively.

- Leadership support influences implementation. Management commitment is important for providing resources, establishing appropriate policies, and integrating AI with organizational strategy.
- Data quality is a critical factor. The effectiveness of AI-based decision making is closely connected with the availability and quality of organizational data.
- Organizational culture influences AI acceptance. Organizations that encourage innovation, learning, experimentation, and data-driven decision making may find it easier to integrate AI into business processes.
- AI adoption involves significant challenges. Privacy, cybersecurity, ethical concerns, implementation costs, skill shortages, algorithmic bias, and resistance to change require appropriate organizational attention.
- AI should complement managerial judgement. Effective decision making requires an appropriate combination of AI-generated insights, human expertise, organizational knowledge, and managerial judgement.
- AI adoption should be strategically aligned. AI technologies are more useful when they are connected to organizational objectives rather than implemented solely because of technological trends.

Conclusion

Artificial Intelligence is transforming the way organizations collect information, analyse business conditions, manage risks, and make decisions. Within the digital business ecosystem, organizations increasingly require the ability to respond rapidly to changing market conditions, technological developments, customer expectations, and unexpected disruptions. AI-enabled decision making provides organizations with capabilities such as predictive analysis, real-time information processing, intelligent automation, pattern recognition, and data-driven decision support. The study indicates that AI can contribute to organizational resilience by strengthening the ability of organizations to anticipate risks, prepare for disruptions, respond rapidly, maintain business operations, and adapt to changing circumstances. Predictive analytics can support early identification of potential risks, while automation and real-time analytics can contribute to operational continuity and faster responses.

AI can also facilitate better resource allocation, supply-chain monitoring, customer analysis, and strategic planning. However, the benefits of AI-enabled decision making depend on more than technological investment. Data quality, digital infrastructure, employee competencies, organizational culture, leadership support, financial resources, and responsible AI governance are important conditions for successful implementation. Organizations must also address challenges associated with privacy, cybersecurity, algorithmic bias, transparency, employee resistance, and technological dependence. In conclusion, the effective integration of AI-enabled decision making with organizational capabilities can strengthen adaptability, risk management, agility, and business continuity.

References

1. Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company.
2. Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116.
3. Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research*, 13, 215–246.
4. Ivanov, D., & Dolgui, A. (2020). Viability of intertwined supply networks: Extending the supply chain resilience angles towards survivability. *International Journal of Production Research*, 58(10), 2904–2915.

5. Kane, G. C., Phillips, A. N., Copulsky, J. R., & Andrus, G. R. (2019). *The Technology Fallacy: How People Are the Real Key to Digital Transformation*. MIT Press.
6. Raisch, S., & Krakowski, S. (2021). Artificial intelligence and management: The automation–augmentation paradox. *Academy of Management Review*, 46(1), 192–210.
7. Shrestha, Y. R., Ben-Menahem, S. M., & von Krogh, G. (2019). Organizational decision-making structures in the age of artificial intelligence. *California Management Review*, 61(4), 66–83.
8. Teece, D. J., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review*, 58(4), 13–35.
9. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144.

Chapter 32

AI-DRIVEN LOGISTICS AND SUPPLY CHAIN RESILIENCE: EVIDENCE FROM MANUFACTURING FIRMS

S.Sruthi
Assistant Professor, PG & Research Department of Commerce
Sri Ramakrishna College of Arts and Science, Coimbatore, Tamil Nadu
Email: sruthiselvarajss@gmail.com

Abstract
Artificial Intelligence (AI) is increasingly influencing the way manufacturing firms plan, execute and monitor logistics and supply chain activities. Manufacturing supply chains operate in an environment characterized by demand fluctuations, transportation delays, supplier dependency, inventory uncertainty, geopolitical disruptions, labour shortages and unexpected operational interruptions. In this context, supply chain resilience has become an important capability for maintaining business continuity and recovering from disruptions. AI-based technologies such as machine learning, predictive analytics, intelligent demand forecasting, automated decision-making, route optimization, computer vision and real-time data analytics can support firms in identifying risks and responding to disruptions more rapidly. Recent empirical research indicates that AI adoption can strengthen supply chain resilience by improving transparency, operational efficiency, innovation, resource allocation and organizational agility. The present article examines the role of AI-driven logistics in strengthening supply chain resilience among manufacturing firms. The study focuses on four major dimensions: AI adoption in logistics operations, AI-enabled supply chain visibility, AI-supported risk management and the contribution of AI to resilience and business continuity. The article is based on a review of contemporary academic literature on artificial intelligence, logistics, supply chain management and resilience. The findings indicate that AI can contribute to improved demand prediction, inventory management, transportation planning, disruption identification, supplier monitoring and recovery decision-making. However, successful implementation depends on data quality, technological infrastructure, employee capabilities, organizational readiness, cybersecurity and investment capacity. The article concludes that AI should not be considered merely as an automation technology; rather, it can function as a strategic capability for developing agile, adaptive and resilient manufacturing supply chains.
Keywords*: Artificial Intelligence, AI-Driven Logistics, Supply Chain Resilience, Manufacturing Firms, Predictive Analytics, Logistics Management, Supply Chain Risk, Digital Transformation*

1. Introduction

Manufacturing firms operate through complex networks involving suppliers, manufacturers, logistics service providers, distributors and customers. The performance of a manufacturing organization is therefore closely associated with the effectiveness of its logistics and supply chain activities. Traditionally, logistics management has concentrated on transportation, warehousing, inventory management, material handling, order processing and delivery. However, the increasing complexity of modern supply chains has created a need for faster, more accurate and technology-supported decision-making.

Supply chains have become increasingly vulnerable because of globalization, geographical dispersion of suppliers, dependence on external logistics providers and pressure to reduce inventories and operating costs. Christopher and Peck highlighted that increasing supply chain

complexity and vulnerability create a need for resilient supply chains capable of managing and mitigating risks. Disruptions may arise from natural disasters, transportation failures, supplier problems, cyber incidents, market fluctuations, labour shortages, geopolitical developments and sudden changes in customer demand. For manufacturing firms, such disruptions can result in production stoppages, raw-material shortages, excess inventory, delayed deliveries and increased logistics costs. Consequently, resilience has become an important strategic requirement rather than simply an operational concern.

Supply chain resilience refers broadly to the capability of a supply chain to prepare for disruptions, respond effectively when disruptions occur and recover while maintaining or restoring operations. The concept is closely associated with agility, adaptability, visibility, collaboration and the ability to reorganize supply chain resources. Ivanov's viable supply chain perspective further connects resilience with agility and sustainability, emphasizing the ability of supply chains to survive and adapt to changing environments.

At the same time, Artificial Intelligence is becoming an important component of digital transformation in logistics and supply chain management. AI enables organizations to process large volumes of structured and unstructured data, identify patterns, predict future events and support complex decisions. Machine learning can be used for demand forecasting, predictive maintenance, inventory planning and risk prediction. AI-based optimization can support transportation planning, route selection and warehouse operations.

Recent systematic literature reviews indicate that AI research in supply chain management covers technological, organizational, human and environmental factors, together with operational, economic, social and environmental outcomes. Recent empirical research specifically involving manufacturing firms has also reported a positive association between AI usage and supply chain resilience. For example, a 2025 study of 285 Chinese manufacturing firms found that AI usage enhanced both proactive and reactive supply chain resilience. A 2026 study using data from Chinese listed manufacturing firms similarly reported that AI significantly enhanced supply chain resilience, with productivity and technological innovation identified as important mechanisms.

Therefore, the relationship between AI-driven logistics and supply chain resilience provides an important area for contemporary research. The present study examines how AI can support manufacturing firms in anticipating disruptions, improving logistics visibility, optimizing resources and strengthening their ability to respond and recover.

2.Objectives of the Study

- To examine the adoption and application of Artificial Intelligence in logistics operations of manufacturing firms.
- To examine the role of AI-driven logistics in improving supply chain visibility and operational efficiency.
- To analyse the contribution of AI to supply chain resilience and disruption management.
- To identify the major challenges associated with implementing AI-driven logistics in manufacturing firms.

3. Need for the Study

- To understand the growing importance of Artificial Intelligence in improving logistics and supply chain operations of manufacturing firms.
- To examine the need for AI-based technologies to improve demand forecasting, inventory management, transportation planning and warehouse operations.
- To identify how AI can help manufacturing firms predict potential supply chain disruptions and improve their preparedness.

- To understand the importance of AI-driven logistics in improving supply chain visibility, flexibility, responsiveness and overall resilience.

4.Statement of the Problem

- Manufacturing firms face frequent challenges such as demand fluctuations, transportation delays, supplier disruptions, inventory shortages and production interruptions.
- Traditional logistics and supply chain management practices may not provide timely information and predictive insights required to respond effectively to unexpected disruptions.
- Limited supply chain visibility makes it difficult for manufacturing firms to monitor suppliers, inventory, transportation and delivery activities in real time.
- Although AI-driven logistics can improve forecasting, risk identification and decision-making, manufacturing firms may face challenges such as high implementation costs, inadequate data, lack of skilled employees and difficulties in integrating AI with existing systems.

5. Overview of the Study

5.1 AI in Logistics Management

Artificial Intelligence refers to computational systems capable of performing tasks that normally require human intelligence, including learning, prediction, pattern recognition, reasoning and decision support. In logistics, AI can transform conventional processes by enabling data-driven and predictive decision-making. Manufacturing firms can use AI in several logistics functions:

- ✓ Demand forecasting
- ✓ Inventory optimization
- ✓ Warehouse management
- ✓ Transportation planning
- ✓ Route optimization
- ✓ Supplier evaluation
- ✓ Predictive maintenance
- ✓ Delivery scheduling
- ✓ Risk identification
- ✓ Customer demand analysis

AI-driven logistics therefore moves logistics management from a primarily reactive approach towards a more predictive and proactive approach.

5.2 AI-Based Demand Forecasting

Demand forecasting is an important logistics function because production and inventory decisions depend on expected customer demand. Traditional forecasting approaches often rely on historical sales patterns and managerial judgment.

AI and machine learning models can analyse large datasets involving historical demand, seasonal patterns, market conditions, customer behaviour and other relevant variables. Recent literature specifically reviewing AI applications in supply-chain demand planning identifies AI tools, applications and performance impacts as important research clusters.Accurate forecasting can help manufacturing firms:

- ✓ Reduce stock-outs.
- ✓ Reduce excessive inventory.
- ✓ Improve production planning.
- ✓ Improve warehouse utilization.
- ✓ Improve customer service.

Thus, AI-based forecasting can indirectly contribute to supply chain resilience by helping firms anticipate demand fluctuations.

5.3 AI in Inventory Management

Inventory represents a major component of manufacturing logistics. Maintaining excessive inventory increases holding costs, while insufficient inventory can cause production interruptions.AI can support inventory decisions by analysing demand patterns, lead times, supplier performance and historical inventory movements. Predictive systems can provide alerts regarding potential shortages or excess stock.

5.4 AI in Transportation and Route Optimization

Transportation represents an important logistics activity and contributes significantly to delivery time and logistics cost. AI-based route optimization can analyse factors such as distance, traffic conditions, delivery priorities, vehicle availability and transportation capacity.AI can help logistics managers identify alternative routes and schedules when disruptions occur. This can improve transportation flexibility and reduce delays.

In a resilient logistics system, the objective is not merely to select the lowest-cost route under normal conditions. It is also important to identify alternative routes and transportation options that can be used during disruptions.

5.5 AI in Warehouse Management

Warehousing involves receiving, storing, picking, packing and dispatching goods. AI can support warehouse operations through demand prediction, inventory positioning, automated picking and computer vision.AI-enabled warehouse systems can help organizations determine where products should be positioned based on expected demand and movement frequency. This may reduce unnecessary movement and improve order-processing efficiency. Automation combined with AI can also support inventory identification and error detection.

5.6 AI and Supply Chain Visibility

Supply chain visibility refers to the ability of an organization to obtain timely and accurate information about activities occurring across the supply chain.AI can analyse information from:

- ✓ Enterprise resource planning systems
- ✓ Transportation management systems
- ✓ Warehouse management systems
- ✓ IoT sensors
- ✓ Supplier databases
- ✓ Customer orders
- ✓ Logistics tracking systems

Improved visibility allows managers to identify unusual patterns and potential disruptions earlier. Recent empirical evidence indicates that transparency is one of the mechanisms through which AI adoption can contribute to supply chain resilience.

6. AI-Driven Logistics and Supply Chain Resilience

Supply chain resilience can be considered through three major stages:

6.1 Preparation:

Before a disruption occurs, organizations need to identify potential risks and prepare appropriate responses.AI can support preparation through:

- ✓ Predictive risk analysis
- ✓ Supplier risk assessment
- ✓ Demand forecasting
- ✓ Scenario analysis
- ✓ Inventory optimization

- ✓ Predictive maintenance

6.2 Response

When a disruption occurs, organizations need to respond quickly.AI can support response through:

- ✓ Real-time monitoring
- ✓ Alternative route identification
- ✓ Supplier substitution
- ✓ Dynamic inventory allocation
- ✓ Transportation rescheduling
- ✓ Automated alerts

6.3 Recovery

After disruption, organizations need to restore normal operations.AI can support recovery through:

- ✓ Recovery planning
- ✓ Production rescheduling
- ✓ Demand reassessment
- ✓ Supplier performance analysis
- ✓ Logistics network redesign
- ✓ Learning from previous disruptions

Recent research examining AI and resilience specifically distinguishes preparation, response and recovery and reports positive effects of AI adoption across these stages.

7. AI Capabilities Supporting Supply Chain Resilience

7.1 Predictive Capability

Predictive AI helps firms anticipate future conditions. It can be used to forecast demand, identify potential supplier delays and predict transportation problems.

7.2 Visibility Capability

AI can combine information from multiple sources and identify important patterns. This increases visibility and allows managers to detect deviations from expected logistics performance.

7.3 Optimization Capability

AI can evaluate multiple alternatives and identify potentially efficient solutions for transportation, inventory and resource allocation.

7.4 Learning Capability

AI systems can learn from historical information. After a disruption, organizations can use data to understand what happened and improve future responses. Recent research using a dynamic capabilities perspective suggests that AI can strengthen resilience through supply chain learning and supply chain innovation.

8. AI and Manufacturing Supply Chain Resilience

Manufacturing firms are particularly dependent on the continuous availability of raw materials, components, machinery and transportation services. A disruption at one point can affect the entire production network. Recent evidence from manufacturing research is particularly relevant. A 2025 study involving 285 Chinese manufacturing firms found that AI usage enhanced both proactive and reactive supply chain resilience.

Similarly, a 2026 empirical study of manufacturing companies reported that AI significantly improved supply chain resilience and identified productivity and technological innovation as important mechanisms. The study also found that organizational agility influenced the strength of the AI-resilience relationship. Another 2026 study examining manufacturing firms found that intelligent development strengthened resilience through internal capabilities and external

linkages, including information transparency and supply-demand relationships. These studies indicate that AI should be examined not only as a technology but also as an organizational capability.

9. Challenges in Implementing AI-Driven Logistics

9.1 High Initial Investment

AI implementation may require investment in software, hardware, cloud infrastructure, data systems and employee training. Smaller manufacturing firms may face greater financial constraints.

9.2 Data Quality

AI systems require reliable and relevant data. Inaccurate, incomplete or inconsistent data can reduce the usefulness of AI-generated predictions.

9.3 Lack of Skilled Employees

Manufacturing firms require employees who understand both logistics and AI technologies. Shortages of appropriately skilled employees can limit successful implementation.

9.4 Cybersecurity and Data Privacy

Greater digital integration increases dependence on information systems. Organizations therefore need appropriate cybersecurity mechanisms to protect operational and supply-chain information.

9.5 Organizational Resistance

Employees may resist AI implementation because of concerns about changing work roles or increased technological complexity. Effective communication and training are therefore important.

9.6 Integration with Existing Systems

Manufacturing firms may already use ERP, warehouse management and transportation management systems. Integrating AI with existing systems can be technically challenging.

10. Findings

- The literature indicates a positive relationship between AI adoption and supply chain resilience. Manufacturing-focused empirical research has reported that AI can improve both proactive and reactive resilience.
- AI provides manufacturing firms with stronger predictive capabilities. Demand forecasting, supplier monitoring and risk prediction allow organizations to identify potential problems before they become major disruptions.
- AI can integrate and analyse information from different supply-chain sources. Improved transparency allows managers to identify deviations and respond more quickly. Recent empirical research identifies supply chain transparency as one pathway connecting AI adoption with resilience.
- AI can improve logistics planning through route optimization, inventory management, warehouse planning and resource allocation. Research also identifies operational efficiency as an important mechanism through which AI can reduce supply-chain risk.
- AI technology alone does not automatically create resilience. Organizational capability is also important. Recent manufacturing research found that enterprise agility moderates the relationship between AI and supply chain resilience.
- AI can encourage technological innovation and improve organizational capabilities. Recent evidence from manufacturing firms identifies productivity and continuous technological innovation as mechanisms through which AI contributes to resilience.
- The literature identifies technological, organizational, economic and human barriers to AI adoption. Therefore, firms need to address infrastructure, investment, skills, data and organizational readiness simultaneously.

- AI becomes more effective when integrated with technologies such as IoT, cloud computing, big-data analytics and other Industry 4.0 technologies. Recent research examining AI and Industry 4.0 identifies resilience as an important link between technology adoption and sustainable supply-chain performance.

Conclusion

Artificial Intelligence is emerging as an important technology for transforming logistics and strengthening supply chain resilience in manufacturing firms. Manufacturing organizations operate in increasingly complex and uncertain environments where disruptions can affect procurement, production, transportation, inventory and customer delivery. Under such conditions, traditional reactive logistics approaches may be insufficient.

The review indicates that AI-driven logistics can contribute to resilience through predictive analytics, real-time visibility, intelligent forecasting, inventory optimization, transportation planning and data-driven decision-making. Recent manufacturing studies provide empirical evidence of positive relationships between AI adoption and supply chain resilience. The study also demonstrates that the benefits of AI are not limited to operational efficiency. AI can contribute to organizational learning, innovation, transparency and adaptability. At the same time, technology adoption alone does not guarantee resilience. Data quality, organizational agility, employee competencies, technological infrastructure and management support are important conditions for successful implementation.

References

1. Christopher, M., & Peck, H. (2004). Building the resilient supply chain. The International Journal of Logistics Management, 15(2), 1–14.
2. Ivanov, D. (2022). Viable supply chain model: Integrating agility, resilience and sustainability perspectives—lessons from and thinking beyond the COVID-19 pandemic. Annals of Operations Research, 319, 1411–1431. https://doi.org/10.1007/s10479-020-03640-6
3. Culot, G., Podrecca, M., & Nassimbeni, G. (2024). Artificial intelligence in supply chain management: A systematic literature review of empirical studies and research directions. Computers in Industry, 162, 104132. https://doi.org/10.1016/j.compind.2024.104132
4. Shahzadi, G., Jia, F., & Chen, L. (2024). AI adoption in supply chain management: A systematic literature review. Journal of Manufacturing Technology Management, 35(6), 1125–1150. https://doi.org/10.1108/JMTM-09-2023-0431
5. Spreitzenbarth, J. M., Bode, C., & Stuckenschmidt, H. (2024). Artificial intelligence and machine learning in purchasing and supply management: A mixed-methods review of the state-of-the-art in literature and practice. Journal of Purchasing and Supply Management, 30(1), 100896. https://doi.org/10.1016/j.pursup.2024.100896
6. Samuels, A. S. (2025). Examining the integration of artificial intelligence in supply chain management from Industry 4.0 to 6.0: A systematic literature review. Frontiers in Artificial Intelligence, 7.
7. Li, J., Yi, M., & Sun, Q. (2025). Artificial intelligence and supply chain risk: Mediating effects of supply chain efficiency and resilience. International Review of Financial Analysis, 108, 104700.
8. Zhu, J., & Zheng, Q. (2026). The impact mechanism of artificial intelligence on the resilience of manufacturing supply chains and empirical examination. Journal of Manufacturing Technology Management. https://doi.org/10.1108/JMTM-09-2025-0956
9. Wang, S., Chen, X., & Han, N. (2026). Intelligent development of manufacturing enterprises and supply chain resilience: A perspective based on internal capabilities and external

linkages. Expert Systems with Applications, 310, 131338. https://doi.org/10.1016/j.eswa.2026.131338
10. Pu, G., Gao, Y., Wang, Y., & Qiao, J. (2026). Impact of artificial intelligence on supply chain resilience: A dynamic capabilities perspective. Technological Forecasting and Social Change, 230, 124773. https://doi.org/10.1016/j.techfore.2026.124773

Chapter 33

AI-DRIVEN MARKETING AND CONSUMER BEHAVIOUR: IMPLICATIONS FOR RESPONSIBLE CONSUMPTION (SDG 12) AND SUSTAINABLE BUSINESS GROWTH

Dhanya.K*
Assistant Professor, School of Commerce
A.V.P. College of Arts & Science (Autonomous), Tirupur, Tamil Nadu
Harini.G
Assistant Professor, Department of BBA
Theeran Chinnamalai College of Arts and Science for Women Tiruppur, Tamil Nadu
**Corresponding Author Email: dhanyaavpcas@gmail.com*

Abstract
Artificial Intelligence (AI) has moved from a back-office technology to the centre of how firms understand, reach and influence consumers. Recommendation engines, programmatic advertising, conversational agents, sentiment analytics and dynamic pricing now shape every stage of the consumer decision journey. This paper examines how AI-driven marketing influences consumer behaviour and what this means for responsible consumption and sustainable business growth, with reference to SDG 12 (responsible consumption and production), SDG 9, SDG 10, SDG 16 and ESG principles. The study is conceptual and analytical and rests on secondary sources: peer-reviewed marketing and information-systems literature, policy documents and legal instruments such as India's Digital Personal Data Protection Act, 2023, and draws on key references including Huang and Rust (2021), Luo et al. (2019) and Floridi et al. (2018). Using the five-stage consumer decision process as a lens, the paper maps AI tools to each stage, develops an integrated framework linking AI personalisation, perceived value, trust and purchase behaviour, and derives six testable propositions. The analysis indicates that AI can raise relevance, convenience and engagement, and can promote sustainable choices when recommendation systems surface eco-labelled products and reduce waste through demand forecasting. It also shows that the same tools can encourage impulsive buying, exploit behavioural biases, erode privacy and entrench algorithmic bias, which weaken trust and long-term brand equity. The paper argues that trust, transparency and perceived fairness mediate the effect of AI personalisation on loyalty. It recommends ethical-by-design marketing systems, explainable recommendations, consent-based data practices, algorithmic audits, consumer digital literacy and ESG-linked reporting of AI use. The paper contributes an SDG-oriented framework for researchers and a practical checklist for marketers, and suggests empirical validation through consumer surveys.

Keywords: *Artificial Intelligence, AI-Driven Marketing, Consumer Behaviour, Personalisation, Responsible Consumption, SDG 12, ESG*

1. Introduction

Marketing has always depended on understanding what consumers want and why they behave as they do. For much of the twentieth century this understanding came from surveys, focus groups and sales records. Today, every search, click, location ping, voice command and purchase leaves a digital trace, and AI systems convert these traces into predictions about individual preferences in real time. Rust (2020) describes this shift as a move from mass marketing to marketing that treats each consumer as a market of one, and Davenport et al. (2020) argue that AI will change both the strategies firms follow and the way customers

experience brands.

In India the shift is especially visible. Wide smartphone use, low-cost data, digital payments and regional-language interfaces have brought millions of first-time users into e-commerce, social commerce and app-based services. Retailers, banks, telecom firms and consumer-goods companies now deploy AI to recommend products, personalise offers, answer queries and adjust prices. These developments raise a question that is both commercial and social: does AI-driven marketing simply sell more, or can it help consumers choose better and help businesses grow responsibly?

The question matters because the United Nations 2030 Agenda (United Nations, 2015) asks business to contribute to sustainable development, and SDG 12 specifically calls for sustainable consumption and production patterns. AI is regarded both as an enabler and as a possible inhibitor of the SDGs (Vinuesa et al., 2020). Marketing is the function that directly shapes consumption, and so it is a useful place to examine this dual role. This paper therefore studies the influence of AI-driven marketing on consumer behaviour and connects the findings to responsible consumption, ethical governance and ESG-oriented business growth.

2. Review of Literature

2.1 AI in marketing

Huang and Rust (2021) propose a strategic framework in which AI performs mechanical, analytical, intuitive and empathetic tasks, and they relate these to marketing research, strategy and action. Kietzmann et al. (2018) show how AI can support marketers along the consumer journey, from awareness to advocacy, through tools such as chatbots, image recognition and programmatic advertising. Kumar et al. (2019) explain how AI enables personalised engagement marketing by combining large data sets with automated decisions on content, timing and channel. Grewal et al. (2020) review the wider relationship between emerging technology and marketing and highlight both the opportunities and the new responsibilities that come with them.

2.2 Consumer behaviour and technology acceptance

Classic behavioural models help explain how consumers react to AI-enabled services. The Theory of Planned Behaviour (Ajzen, 1991) links intention to attitude, social norms and perceived control. The Technology Acceptance Model (Davis, 1989) identifies perceived usefulness and perceived ease of use as the main drivers of adoption, and the unified theory of acceptance (Venkatesh et al., 2003) adds social influence and facilitating conditions. For AI-driven marketing, these models suggest that consumers will welcome personalisation when it is useful and easy, but will resist it when it feels intrusive or beyond their control.

2.3 Trust, transparency and ethics

Luo et al. (2019) found in a field experiment that disclosing that a chatbot is not human changed purchase outcomes, which shows that transparency affects consumer response. Zuboff (2019) warns that large-scale behavioural data collection can turn consumers into sources of raw material for prediction, which raises serious questions of autonomy and consent. Floridi et al. (2018) propose principles of beneficence, non-maleficence, autonomy, justice and explicability for a good AI society, and Dwivedi et al. (2021) set out a research agenda that includes bias, privacy, accountability and societal impact. Strubell et al. (2019) add an environmental dimension by drawing attention to the energy cost of training large models.

2.4 Research gap

Existing studies treat AI in marketing mainly as a source of efficiency, revenue and customer experience. Fewer studies connect AI-driven marketing to responsible consumption and to the SDG and ESG agenda, and fewer still do so for emerging markets such as India where regional language, first-generation digital users and new data protection law shape the context. This

paper addresses that gap through an integrated conceptual framework.

3. Objectives of the Study

(1) To identify the major AI tools used in marketing across the consumer decision journey.
(2) To analyse how AI-driven marketing influences consumer perceptions, trust and buying behaviour.
(3) To examine the ethical and social risks associated with AI-driven marketing.
(4) To relate AI-driven marketing to SDG 12 and other relevant SDGs and ESG principles.
(5) To propose a conceptual framework, testable propositions and practical recommendations.

4. Research Methodology

The study is descriptive, conceptual and analytical in design. It is based on secondary data collected from peer-reviewed journals in marketing and information systems, United Nations documents and Indian legal instruments. Sources were selected for relevance, academic standing and recency. Content analysis was used to classify AI tools by stage of the consumer decision process, and thematic synthesis was used to derive the framework and propositions. Because the paper is conceptual, it does not report primary survey data; instead, it specifies the relationships that future empirical work can test. All sources are acknowledged in the references in APA style.

5. AI Tools across the Consumer Decision Journey

The traditional consumer decision process has five stages: need recognition, information search, evaluation of alternatives, purchase and post-purchase behaviour. AI is present at each stage, as summarised in Table 1.

Table 1: AI tools and their likely effect on consumer behaviour

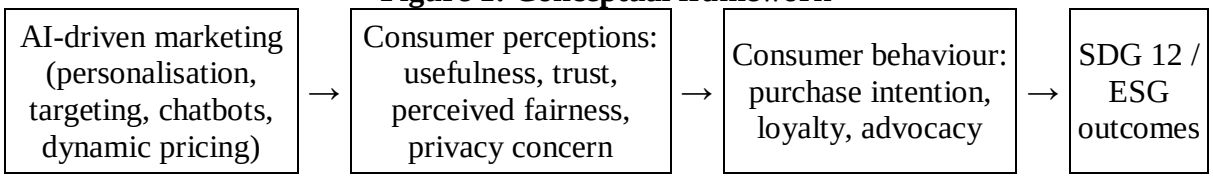
Decision stage	AI tools used	Likely effect on consumer behaviour
Need recognition	Predictive analytics, programmatic and targeted advertising, social listening	Triggers needs earlier; raises awareness of products the consumer had not considered
Information search	Recommendation engines, voice assistants, AI search, chatbots	Reduces search effort; narrows the choice set through filtering
Evaluation of alternatives	Personalised rankings, review summarisation, virtual try-on	Improves confidence in choice; may create filter bubbles
Purchase	Dynamic pricing, one-click checkout, conversational commerce	Speeds up buying; raises risk of impulse purchase
Post-purchase	Sentiment analysis, churn prediction, automated service	Strengthens loyalty when service is fair and responsive

At the need-recognition stage, predictive models identify moments when a consumer is likely to need a product and deliver targeted messages at that time. During information search, recommendation engines and conversational assistants reduce the time and effort of searching, so that the consumer sees a smaller and more relevant set of options. At the evaluation stage, personalised rankings, summarised reviews and visual tools such as virtual try-on increase confidence. At purchase, dynamic pricing and one-click payment shorten the path to buying. After purchase, sentiment analysis and automated support allow firms to identify dissatisfaction early and to predict which customers may leave.

6. Conceptual Framework and Propositions

Drawing on the technology acceptance and planned behaviour literature, the paper proposes that AI-driven marketing does not influence behaviour directly. Its effect passes through consumer perceptions, namely perceived usefulness, trust, perceived fairness and privacy concern. These perceptions in turn shape purchase intention, loyalty and advocacy, and the pattern of these behaviours determines whether outcomes align with responsible consumption. Figure 1 presents the framework.

Figure 1: Conceptual framework



On the basis of the framework, the following propositions are put forward for empirical testing.

P1: The perceived relevance of AI personalisation is positively related to purchase intention.

P2: Perceived usefulness and ease of use of AI-enabled services positively influence consumer acceptance of AI-driven marketing.

P3: Perceived privacy intrusion weakens the positive effect of personalisation on trust.

P4: Transparency about the use of AI and of personal data increases consumer trust and mediates the relationship between personalisation and loyalty.

P5: Perceived algorithmic unfairness, such as differential pricing, reduces loyalty and increases negative word of mouth.

P6: Recommendation systems that give prominence to sustainable alternatives increase the likelihood that consumers choose eco-labelled products, particularly among consumers with higher environmental concern.

7. Influence of AI-Driven Marketing on Consumer Behaviour

7.1 Positive influences

The first positive influence is relevance. Consumers who receive offers matched to their needs spend less time searching and are more satisfied with outcomes. The second is convenience. Chatbots and voice assistants provide round-the-clock service, and when delivered in regional languages they bring first-generation digital users into the market. The third is engagement. Personalised content and loyalty programmes encourage repeat interaction and strengthen the relationship between consumer and brand. The fourth is support for better decisions. Review summaries, price comparisons and product-information tools can help consumers judge quality and value more accurately.

7.2 Negative influences

AI can also steer behaviour in ways that do not serve consumers. Targeting based on behavioural patterns can exploit moments of weakness and encourage impulse buying. Filter bubbles narrow exposure to alternatives, which may reduce genuine choice. Dynamic pricing can lead to different prices for similar consumers and creates perceptions of unfairness. Constant tracking creates privacy concerns and a sense of being watched, which may lead to avoidance or distrust (Zuboff, 2019). Over-reliance on recommendations can also reduce consumers' own deliberation and weaken their sense of autonomy.

7.3 The role of trust

Trust emerges from the literature as the central mediating variable. When consumers believe that a firm uses data responsibly, explains how recommendations are made and treats them fairly, personalisation raises loyalty. When they believe the opposite, the same personalisation becomes a source of suspicion. The disclosure experiments reported by Luo et al. (2019)

illustrate that even the knowledge that one is dealing with a machine can change behaviour, and therefore transparency cannot be treated as an afterthought.

8. Ethical, Legal and Environmental Issues

Four groups of issues deserve attention. The first is privacy and consent. India's Digital Personal Data Protection Act, 2023 (Government of India, 2023) places obligations on organisations that process personal data and gives individuals rights over it, which makes lawful, purpose-limited and consent-based data use a requirement rather than a courtesy. The second is bias. Training data that reflect historical patterns may lead models to under-serve or overcharge certain groups, which is contrary to the principle of justice proposed by Floridi et al. (2018). The third is manipulation. Design choices that exploit psychological biases to push consumption conflict with the principle of autonomy and with the spirit of SDG 12. The fourth is environmental cost. Training and running large models consumes considerable energy (Strubell et al., 2019), and constant personalised advertising increases digital resource use. Firms that claim sustainability credentials should therefore account for the footprint of their own AI systems.

9. Linkage with SDGs and ESG

Table 2 relates AI-driven marketing to the SDGs and ESG areas most relevant to commerce.

Table 2: AI-driven marketing, SDGs and ESG

SDG / ESG area	How AI-driven marketing contributes	Associated risk
SDG 12: Responsible consumption and production	Demand forecasting reduces unsold stock and waste; recommendations can highlight eco-labelled and refurbished products	Hyper-personalised promotions may encourage overconsumption
SDG 9: Industry, innovation and infrastructure	Encourages digital innovation among small sellers and start-ups through low-cost analytics	Concentration of data and advantage in a few large platforms
SDG 10: Reduced inequalities	Vernacular chatbots and voice search include low-literacy and regional-language users	Biased models may exclude or overcharge certain groups
SDG 16: Strong institutions	Transparent, consent-based data use builds trust in digital markets	Manipulative design and weak grievance redress erode trust
ESG: Governance and Social	Ethical AI policies, audits and disclosure improve corporate accountability	Lack of explainability weakens accountability

The table shows that the same technology carries both benefit and risk for each goal. The decisive factor is the objective for which the system is optimised. A recommendation engine tuned only for short-term sales will favour impulse and volume, whereas one tuned also for customer well-being and environmental impact can nudge consumers toward durable, repairable and lower-impact products.

10. Findings of the Study

- ✓ AI is now present at every stage of the consumer decision journey and acts mainly by reducing search effort and increasing relevance.
- ✓ The effect of AI personalisation on loyalty is not automatic; it depends on trust, perceived fairness and privacy comfort.

- ✓ The same tools that improve convenience and inclusion can also encourage impulsive consumption, create filter bubbles and enable unfair pricing.
- ✓ AI-driven marketing can support SDG 12 through demand forecasting, waste reduction and promotion of sustainable products, but this outcome depends on the design goals set by the firm.
- ✓ Legal frameworks on data protection and ethical principles of explicability and justice are essential conditions for sustainable adoption.
- ✓ The energy footprint of AI is an under-reported part of marketing's environmental impact.

11. Suggestions and Managerial Implications

Marketers should adopt an ethical-by-design approach in which fairness, transparency and well-being are built into the system and not added later. Recommendation systems should be explainable, so that a consumer can see why an item is suggested and can change the settings. Data collection should be limited to what is needed, based on clear consent and consistent with the Digital Personal Data Protection Act, 2023. Firms should audit pricing and targeting algorithms periodically for bias and publish a summary of the findings. Where chatbots are used, their non-human identity should be disclosed and a human escalation route should always be available. Sustainability should be treated as a design objective, by giving visibility to eco-labelled, refurbished and durable products and by using forecasting to avoid overproduction.

Policy makers and regulators can support these practices through guidance on automated decision-making, dark patterns and advertising disclosure. Educational institutions, including commerce departments, can contribute through consumer digital-literacy programmes in local languages. Companies should also include the use of AI in their ESG and sustainability reports, covering data governance, algorithmic audit results and the energy use of AI systems.

12. Limitations and Scope for Future Research

The study is conceptual and depends on secondary sources, so the propositions have not been tested empirically. Future researchers may collect primary data from online shoppers through a structured questionnaire, measure constructs such as perceived relevance, trust, privacy concern and purchase intention on a five-point scale, and analyse the relationships through structural equation modelling. Comparative studies across product categories, age groups and urban and rural consumers, and longitudinal studies on whether sustainable nudges change long-term habits, would also add to the field.

13. Conclusion

AI-driven marketing has changed consumer behaviour by making search easier, offers more relevant and service more continuous. Yet its influence on consumers is double-edged. Where it is transparent, fair and aligned with consumer well-being, it builds trust, loyalty and inclusion and can support responsible consumption. Where it is built only to maximise short-term sales, it risks manipulation, bias and loss of trust. The paper concludes that the sustainability of AI-driven marketing depends less on the sophistication of the technology and more on the governance, ethics and objectives that direct it. For commerce students, teachers and practitioners, the task is to treat consumer trust and the SDG and ESG agenda as part of business performance and not as constraints upon it.

References

1. Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179–211.
2. Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. Journal of the Academy of Marketing Science, 48(1), 24–42.

3. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and acceptance of information technology. MIS Quarterly, 13(3), 319–340.
4. Dwivedi, Y. K., Hughes, L., Ismagilova, E., et al. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. International Journal of Information Management, 57, 101994.
5. Floridi, L., Cowls, J., Beltrametti, M., et al. (2018). AI4People—An ethical framework for a good AI society. Minds and Machines, 28(4), 689–707.
6. Government of India. (2023). The Digital Personal Data Protection Act, 2023. Ministry of Law and Justice.
7. Grewal, D., Hulland, J., Kopalle, P. K., & Karahanna, E. (2020). The future of technology and marketing: A multidisciplinary perspective. Journal of the Academy of Marketing Science, 48(1), 1–8.
8. Huang, M.-H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. Journal of the Academy of Marketing Science, 49(1), 30–50.
9. Kietzmann, J., Paschen, J., & Treen, E. (2018). Artificial intelligence in advertising: How marketers can leverage artificial intelligence along the consumer journey. Journal of Advertising Research, 58(3), 263–267.
10. Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. California Management Review, 61(4), 135–155.
11. Luo, X., Tong, S., Fang, Z., & Qu, Z. (2019). Frontiers: Machines vs. humans: The impact of artificial intelligence chatbot disclosure on customer purchases. Marketing Science, 38(6), 937–947.
12. Rust, R. T. (2020). The future of marketing. International Journal of Research in Marketing, 37(1), 15–26.
13. Strubell, E., Ganesh, A., & McCallum, A. (2019). Energy and policy considerations for deep learning in NLP. Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics, 3645–3650.
14. United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. United Nations.
15. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478.
16. Vinuesa, R., Azizpour, H., Leite, I., et al. (2020). The role of artificial intelligence in achieving the Sustainable Development Goals. Nature Communications, 11, Article 233.
17. Zuboff, S. (2019). The age of surveillance capitalism: The fight for a human future at the new frontier of power. PublicAffairs.

About the Editors



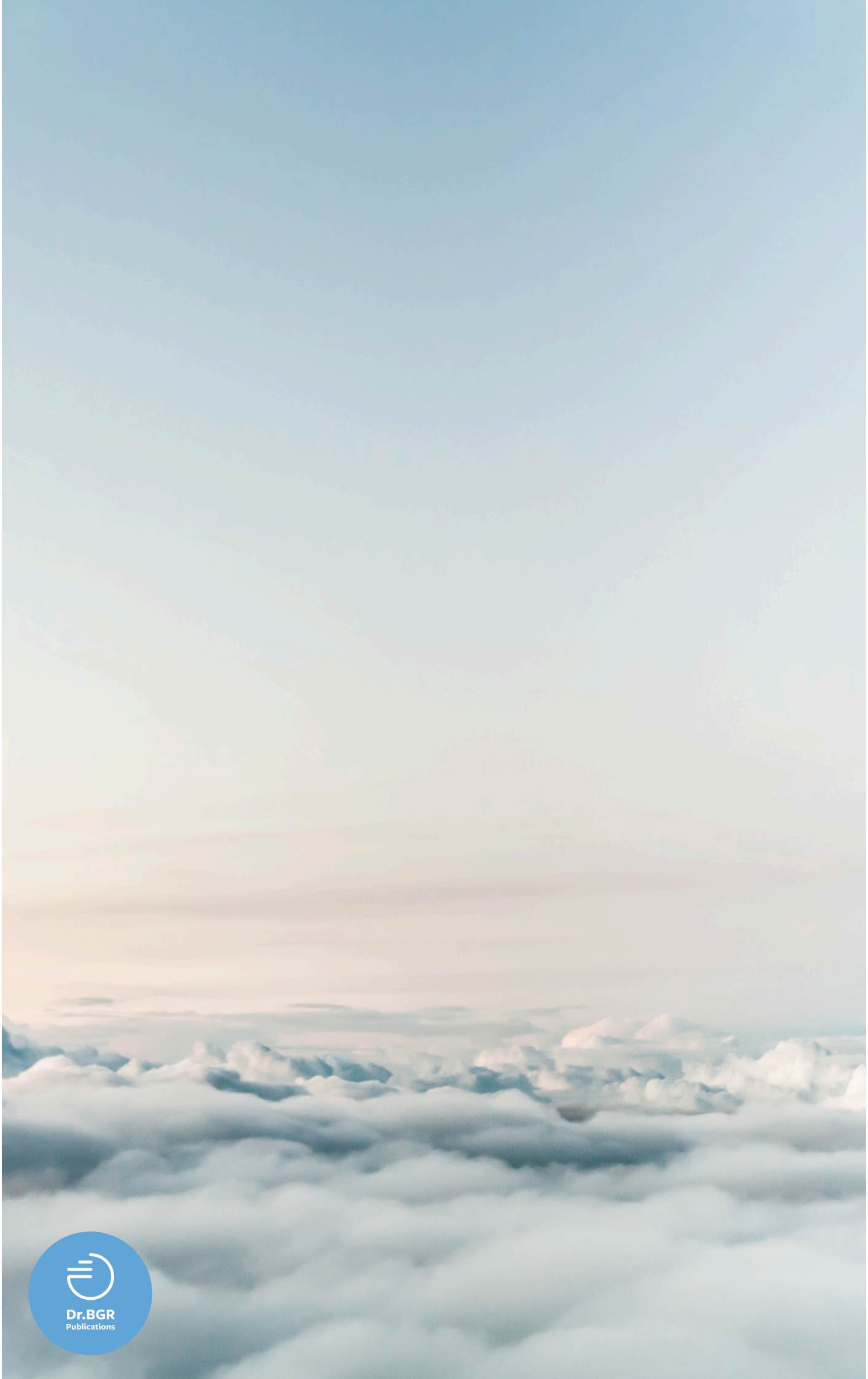
Dr.S.Selvanathan is currently employed in Virudhunagar Hindu Nadars' Senthikumara Nadar College (Autonomous), Virudhunagar, Tamil Nadu, as the Head and Assistant Professor of Commerce (SF). He worked as an Assistant Professor for fourteen years. In addition to 75 research articles published in National and International Journals, he has authored 39 Edited Books and 16 E-ISSN Special Issue Journals. In addition to winning awards for five of the finest paper presentations in the same field, he has delivered 106 papers at Conferences and Seminars at the International, National, and State Levels. In a number of Workshops, Conferences, and Seminars, he has also served as a Convener, Co-ordinator, and Member of the organizing committee. He has given 92 Lectures at Conferences, Seminars, Workshops and Guest Lectures at different establishments. Two Best Teacher Awards, the Dr. Sarvepalli Radhakrishnan National Award, the Best Guide Teacher Award, and the Best Human Resource Award were all given to him. Presently he acted as Public Relation Officer in our college and Treasurer for VHNSNC Alumni Association. Active member in Lions Clubs of International, Got Best Secretary Award. Many service projects conducted such as Feed the Hunger, Blood Donation Camp, Environmental Awareness, Eye Checkup Camps and other Social Welfare activities.



Mrs.A.N.Bhuvaneswari is working as an Assistant Professor of Commerce (CA) in the prestigious institution Ayya Nadar Janaki Ammal College (Autonomous), Sivakasi, Tamil Nadu. She has more than 10 years of teaching Experience in the field of Commerce and Management. She has published many articles in various National and International Journals and 20 Edited Book Chapters, 9 E-ISSN Journals and one Book titled “Hotel Management”. She has specialized in Direct Tax, Corporate Accounting and Financial Management. She has received the Best Women Faculty Award from RIJJAH Human Resource Development Centre, Srilanka. She has received the Best Paper Presentation Award.

Print: 978-81-69360-80-7
Digital: 978-81-69360-81-4

Dr.BGR Publications


Dr.BGR
Publications