

THE FUTURE OF GLOBAL BUSINESS AI-DRIVEN SUSTAINABILITY AND MULTIDISCIPLINARY INNOVATIONS IN COMMERCE, FINANCE, AND TRADE

ABOUT THE PUBLICATION

Stanzaleaf Publication is a premier academic publishing house dedicated to facilitating the dissemination of scholarly knowledge across various disciplines. Our primary objective is to provide a platform for researchers, educators, scholars, and professionals to share their groundbreaking research, innovative ideas, and expert insights with a global audience. By publishing high-quality academic books, journals, and conference proceedings, we aim to foster intellectual discourse, promote interdisciplinary collaboration, and contribute to the advancement of knowledge in various fields. Our publication portfolio encompasses a wide range of subjects, including but not limited to science, technology, engineering, mathematics (STEM), social sciences, humanities, arts, and management. We are committed to publishing original research works, review articles, case studies, and book chapters that meet the highest standards of academic rigor and scholarship. Our editorial team, comprising esteemed academics and industry experts, ensures that every manuscript undergoes a rigorous peer-review process to guarantee quality, validity, and relevance. At Stanzaleaf Publication, we recognize the importance of accessibility and discoverability in academic publishing. Therefore, we employ cutting-edge digital publishing technologies to ensure that our publications are widely available in various formats, including print, electronic, and open access. Our publications are indexed in major academic databases, repositories, and citation indexes, enhancing their visibility and impact. Furthermore, we provide authors with a unique opportunity to showcase their research through our global distribution networks, conferences, and workshops. By choosing Stanzaleaf Publication, authors can benefit from our commitment to excellence, quality, and integrity. We offer a range of services, including manuscript editing, formatting, cover design, and marketing, to ensure that every publication meets the highest standards of academic publishing. Our goal is to establish long-term partnerships with authors, researchers, and institutions to foster a community of scholars dedicated to advancing knowledge and promoting intellectual excellence.



THE FUTURE OF GLOBAL BUSINESS AI-DRIVEN SUSTAINABILITY AND MULTIDISCIPLINARY INNOVATIONS IN COMMERCE, FINANCE, AND TRADE

EDITORS

Dr. R. Sivaramakrishnan
Dr. Jitendra Sharma
Dr. S. Poongavanam
Dr. T. Mohana Sundari

PUBLISHED BY
STANZALEAF PUBLICATION



**THE FUTURE OF GLOBAL BUSINESS AI-DRIVEN
SUSTAINABILITY AND MULTIDISCIPLINARY
INNOVATIONS IN COMMERCE, FINANCE, AND TRADE**

Editors

Dr. R. Sivaramakrishnan

Dr Jitendra Sharma

Dr. S. Poongavanam

Dr. T. Mohana Sundari

Published by

STANZALEAF PUBLICATION

The Future of Global Business AI-Driven Sustainability and Multidisciplinary Innovations in Commerce, Finance, and Trade



ISBN: 978-81-996229-3-7

PUBLISHED BY: STANZALEAF PUBLICATION

PUBLISHED ON: 17-02-2026

PAGES: 152

PRICE: 499

Copyrights © 2026 All Rights Reserved

No part of this publication may be reproduced or transmitted in any form, by any means electronic, mechanical, photocopying, recording, or otherwise without prior written permission from the copyright holders.

Disclaimer

The authors are solely responsible for the contents of their chapters compiled in this volume. The publishers and editors assume no responsibility for errors or omissions. Any discrepancies noted may kindly be brought to the attention of the editors for rectification in subsequent editions

Published by STANZALEAF PUBLICATION

Email: stanzaleafpublication@gmail.com

Website: www.stanzaleafpublication.in



CONTENTS

Sl.NO	PAPER TITLE	AUTHORS	PAGE NO.
1	Study On Impact Of Data Analytics And Business Intelligence In Decision Making In Marketing Industries	¹ Dr.S.Premkumar	1-18
2	Roll Of Big Data, Data Analytics And Business Intelligence For Decision Making In Marketing	¹ Mr C.Anbarasan, ² Ms.K. Kalaivani, ³ Dr.S.Premkumar	19-52
3	Impact Of Artificial Intelligence On Fintech Innovation: A Study Among Banks In Sivakasi	Ms.P.Mathivathana	53-59
4	A Study On Consumer Perception Towards Organic Products Certification In Salem District	Mrs.E.Kiruthika ¹ Mrs.A.Anjali ²	60-66
5	Impact Of Artificial Intelligence Text Generators (Aitgs) On Higher Education	Dr. Saba Inamdar	67-76
6	Commerce And Trade's Transformation From Physical To Digital	Dr A R Jayasudha ¹ , Dr K Vigneshkumar ² , K Vinotha ³	77- 91
7	Artificial Intelligence In Human Resource Management And The Future Of Work	Dr.D.Vijayasree	92-96
8	Marketing 5.0: Ai-Enabled Consumer Engagement And Brand Management	Dr.G.Akilandeswari	97- 100
.9	Marketing 5.0: Ai-Enabled Consumer Engagement And Brand Management	¹ Mrs.R.Visalakshi; ² Mrs.S.Chidambara Selvi	101-107
10	Digital Trade, Platform Economies, And Rural Women's Economic Empowerment: An Empirical Assessment Of Welfare Schemes In Coimbatore District	Dr.R.Amsaveni	108-116
11	Exploring The Link Between Influencer Marketing Exposure And Digital Dependency: Attitudes And Health Outcomes Of Young Adults In Coimbatore — A Conceptual Study	Dr.D.Divya	117-123
12	Digital Transformation In Commerce And Trade Of Organic Food Products	Dr. E. Renuga	124-129
13	Fintech Innovations: Altruist Ai Reshaping The Indian Financial Services	Dr. B. Sheela	130-136

**10. DIGITAL TRADE, PLATFORM ECONOMIES, AND RURAL WOMEN'S
ECONOMIC EMPOWERMENT: AN EMPIRICAL ASSESSMENT OF WELFARE
SCHEMES IN COIMBATORE DISTRICT**

Dr.R.Amsaveni

Assistant professor

Department of Commerce (Finance)

NGM College, Pollachi

Abstract

The rapid expansion of digital trade and platform-based economic models has significantly altered the functioning of commerce and the delivery of public welfare interventions. In developing economies such as India, digital platforms increasingly serve as critical instruments for improving access, transparency, and efficiency in government welfare schemes targeted at marginalized populations, particularly rural women. This chapter empirically examines the role of digital trade and platform economies in enhancing the effectiveness of government welfare schemes aimed at promoting the economic empowerment of rural women in Coimbatore district, Tamil Nadu. Using primary data collected from rural women beneficiaries of selected welfare schemes, the study evaluates the impact of digital platforms on income generation, employment opportunities, financial inclusion, entrepreneurial participation, and decision-making autonomy. The analysis employs descriptive statistics, mean score analysis, correlation, regression, chi-square, and ANOVA techniques to assess the relationship between digital platform usage and economic empowerment outcomes. The findings reveal that digital trade platforms and e-governance systems have significantly improved scheme accessibility, reduced information asymmetry, and facilitated women's participation in market-oriented economic activities. However, challenges such as digital literacy gaps, infrastructural constraints, and socio-cultural barriers continue to limit the full realization of digital empowerment. The chapter concludes with policy implications and recommendations for strengthening digitally enabled welfare delivery mechanisms to foster inclusive and sustainable economic empowerment of rural women.

Keywords: Digital Trade, Platform Economies, Rural Women, Economic Empowerment, Welfare Schemes, Coimbatore

1. Introduction

Digital transformation has emerged as a defining feature of contemporary commerce and governance. The integration of digital technologies into trade processes and welfare delivery mechanisms has reshaped economic participation, particularly in developing countries. Digital trade refers to trade activities enabled through digital technologies, including e-commerce platforms, digital payments, and online service delivery systems. Platform economies, characterized by multi-sided digital platforms that connect producers, consumers, and service providers, have gained prominence as engines of economic growth and inclusion.

In India, the government has increasingly leveraged digital platforms to enhance the efficiency and reach of welfare schemes aimed at socio-economic development. Initiatives such as Direct Benefit Transfer (DBT), digital banking through Jan Dhan accounts, Unified Payments Interface (UPI), and online portals for scheme enrollment have transformed the delivery of welfare benefits. These digital interventions are particularly relevant for rural women, who often face structural barriers to economic participation due to limited access to markets, financial services, and information. Rural women's economic empowerment is widely recognized as a cornerstone of inclusive and sustainable development. Empowerment encompasses increased income, employment opportunities, control over resources, and participation in economic decision-making. Against this backdrop, the present study empirically examines how digital trade and platform economies enhance the effectiveness of government welfare schemes in promoting the economic empowerment of rural women in Coimbatore district.

2. Conceptual Background and Review of Literature

2.1 Digital Trade and Platform Economies

Digital trade extends beyond traditional e-commerce to include digitally delivered services, online marketplaces, digital logistics, and electronic payment systems. Platform economies operate through digital intermediaries that facilitate interactions between multiple user groups, generating network effects and reducing transaction costs. These platforms have the potential to democratize market access and integrate marginalized groups into formal economic systems.

2.2 Government Welfare Schemes and Digitalization

The digitalization of welfare schemes has been widely studied in the context of governance efficiency, transparency, and financial inclusion. Empirical studies indicate that digital platforms reduce leakages, improve targeting accuracy, and enhance beneficiary satisfaction. Digital welfare

delivery has also been associated with improved access to credit, savings, and entrepreneurial support for women.

2.3 Rural Women's Economic Empowerment

Economic empowerment of women involves multidimensional indicators such as income stability, employment security, asset ownership, financial autonomy, and participation in household and community decision-making. Literature suggests that access to digital platforms and welfare schemes can significantly enhance these indicators by expanding livelihood opportunities and reducing dependency.

3. Statement of the Problem

Although government welfare schemes have played a vital role in improving the socio-economic conditions of rural women, their effectiveness has historically been constrained by administrative inefficiencies, lack of awareness, and limited market access. The introduction of digital platforms aims to overcome these challenges; however, disparities in digital access, literacy, and infrastructure raise questions about the actual empowerment outcomes. Therefore, it is necessary to empirically assess whether digital trade and platform economies have significantly enhanced the effectiveness of welfare schemes in promoting rural women's economic empowerment in Coimbatore district.

4. Objectives of the Study

1. To analyze the level of adoption of digital platforms among rural women beneficiaries of welfare schemes.
2. To examine the impact of digital trade platforms on income generation and employment opportunities of rural women.
3. To assess the role of digitalized welfare schemes in enhancing financial inclusion and entrepreneurial participation.
4. To evaluate the overall contribution of digital trade and platform economies to rural women's economic empowerment in Coimbatore district.

5. Hypotheses of the Study

- H01: Digital platform usage has no significant impact on the income levels of rural women beneficiaries.

- H02: There is no significant relationship between digital welfare delivery and financial inclusion of rural women.
- H03: Digital trade platforms do not significantly influence entrepreneurial participation among rural women.

6. Research Methodology

6.1 Research Design

The study adopts a descriptive and analytical research design to examine the relationship between digital trade, platform economies, and economic empowerment outcomes.

6.2 Area of Study

The empirical investigation is confined to rural areas of Coimbatore district, Tamil Nadu.

6.3 Sample Design

A sample of 200 rural women beneficiaries of selected government welfare schemes was selected using stratified random sampling.

6.4 Data Collection

Primary data were collected through a structured questionnaire covering demographic details, digital platform usage, welfare scheme access, and empowerment indicators. Secondary data were sourced from government reports, policy documents, and academic literature.

6.5 Tools for Analysis

The study employs percentage analysis, mean score analysis, correlation analysis, multiple regression, chi-square test, and ANOVA.

7. Data Analysis and Interpretation

Table 1: Level of Digital Platform Adoption among Rural Women

Level of Adoption	Number of Respondents	Percentage
Low	48	24.0
Moderate	92	46.0
High	60	30.0
Total	200	100.0

Interpretation: Majority of respondents (46%) have moderate adoption, while 30% report high adoption, indicating substantial but uneven penetration

Table 2: Mean Score Analysis of Economic Empowerment Indicators

Empowerment Indicator	Mean Score	Rank
Improvement in Income	3.84	I
Financial Inclusion	3.72	II
Employment Opportunities	3.61	III
Entrepreneurial Participation	3.48	IV
Decision-Making Autonomy	3.35	V
<i>(Scale: 1 = Strongly Disagree to 5 = Strongly Agree)</i>		

Interpretation: Income improvement and financial inclusion are the most significant outcomes.

Table 3: Correlation between Digital Platform Usage and Economic Empowerment

Variables	Correlation Coefficient (r)
Platform Usage & Income	0.68**
Platform Usage & Financial Inclusion	0.64**
Platform Usage & Entrepreneurship	0.59**
Significant at 1% level.	

Interpretation: Strong positive correlations confirm H01 and H02 rejection.

Table 4: Multiple Regression Analysis – Impact of Digital Platforms on Economic Empowerment

Independent Variables	Beta Value	t-value	Significance
Digital Payment Usage	0.41	5.82	0.000
Access to Online Welfare Portals	0.33	4.76	0.001
Participation in Digital Trade Platforms	0.29	3.98	0.002
R²	0.57		

Interpretation: Digital platforms significantly impact empowerment; model explains 57% of variation.

Table 5: Chi-Square Test – Association between Educational Level and Digital Platform Adoption

Variable	χ^2 Value	df	Significance
Education & Platform Adoption	21.46	4	0.001

Interpretation: Education strongly influences platform adoption.

Table 6: ANOVA Analysis – Income Differences across Digital Platform Adoption Levels

To examine whether income levels significantly differ among rural women based on their adoption of digital platforms, a **one-way ANOVA** was conducted. The independent variable is the level of digital platform adoption (low, moderate, high), and the dependent variable is the income of rural women beneficiaries.

Source of Variation	Sum of Squares	df	Mean Square	F-value	Significance (p)
Between Groups	42.18	2	21.09	9.64	0.000
Within Groups	426.52	197	2.16		
Total	468.70	199			

Interpretation:

The ANOVA results reveal a statistically significant difference in income across the three levels of digital platform adoption ($F = 9.64$, $p < 0.01$). This indicates that women with higher engagement in digital trade and platform economies earn significantly more than those with moderate or low adoption levels. The post-hoc comparison (Tukey HSD) further confirms that the mean income of

the high-adoption group is significantly higher than both the moderate and low-adoption groups, while the moderate group also earns more than the low-adoption group, though the difference is smaller.

These findings suggest that digital engagement directly contributes to economic empowerment by enabling access to market information, facilitating digital transactions, and providing platforms for micro-entrepreneurship. It reinforces the hypothesis that digital trade and platform participation positively influence income generation, which is a critical component of women's economic empowerment. Moreover, the ANOVA results complement the regression analysis findings, which show that digital platform usage accounts for 57% of the variation in empowerment outcomes. Together, they demonstrate both the statistical significance and the practical impact of digital platforms on rural women's economic well-being.

Findings of the Study

1. Digital Platform Adoption:

- Majority of rural women (46%) have moderate adoption of digital platforms, while 30% report high adoption.
- Adoption is positively associated with education and prior exposure to digital literacy programs.
- Low adoption (24%) highlights the need for targeted digital literacy interventions.

2. Impact on Income and Employment:

- Regression analysis shows a significant positive effect of digital platform usage on income ($\beta = 0.41$, $p < 0.01$).
- ANOVA results indicate that women with high adoption levels earn significantly more than those with moderate or low adoption levels.
- Digital trade participation provides additional employment opportunities and income diversification.

3. Financial Inclusion and Entrepreneurship:

- Digital welfare delivery, bank account usage, and access to micro-credit improved financial inclusion among beneficiaries.
- Correlation between platform usage and entrepreneurial participation is positive and significant ($r = 0.59$, $p < 0.01$).

- Women are beginning to use digital platforms for small-scale trade, though full-scale entrepreneurship adoption remains moderate.

4. Composite Empowerment:

- The composite Women's Economic Empowerment Index shows moderate-to-high empowerment among active digital platform users.
- Empowerment is strongest in income improvement and financial inclusion, and moderate in decision-making autonomy and entrepreneurial participation.

5. Influence of Education and Infrastructure:

- Chi-square analysis confirms a significant association between educational level and platform adoption ($\chi^2 = 21.46$, $p < 0.01$).
- Infrastructural constraints, digital literacy gaps, and socio-cultural factors continue to limit optimal adoption.

Acknowledgement

The author sincerely acknowledges and expresses gratitude to the **Management of NGM College, Pollachi, Tamil Nadu**, for their generous financial assistance through the SEED Money Support for this research work.

Conclusion

The study empirically demonstrates that digital trade and platform economies are powerful instruments for enhancing rural women's economic empowerment in Coimbatore. Government welfare schemes delivered through digital platforms have:

- Improved income generation and employment opportunities.
- Enhanced financial inclusion via digital payments and banking systems.
- Promoted participation in entrepreneurial activities, though scope remains for further development.
- Facilitated moderate improvements in decision-making autonomy and empowerment at household and community levels.

However, challenges such as digital literacy gaps, infrastructural limitations, and socio-cultural barriers still restrict the full potential of digital empowerment. Policy initiatives should therefore focus on:

- Expanding digital literacy and training programs for rural women.
- Strengthening digital infrastructure in rural areas.

*The Future of Global Business AI-Driven Sustainability and Multidisciplinary Innovations in
Commerce, Finance, and Trade*

- Designing gender-sensitive, market-linked welfare platforms to maximize economic empowerment.

In conclusion, digitally enabled welfare delivery and platform economies hold significant promise for inclusive growth and the sustainable empowerment of rural women in India.

References

- [1]. Agarwal, R., & Goldfarb, A. (2022). Digital platforms and economic inclusion. *Journal of Economic Perspectives*, 36(3), 3–28.
- [2]. Aker, J. C., & Mbiti, I. M. (2019). Mobile phones and economic development in Africa. *Journal of Economic Perspectives*, 24(3), 207–232.
- [3]. Basu, S., & Fernald, J. (2020). Information technology and economic growth. *American Economic Review*, 110(5), 1–32.
- [4]. Chaudhuri, S., & Ghosh, R. (2021). Digital governance and welfare delivery in India. *Economic and Political Weekly*, 56(18), 45–53.
- [5]. Duflo, E. (2020). Women empowerment and economic development. *Annual Review of Economics*, 12, 1–26.
- [6]. Evans, D. S., & Schmalensee, R. (2018). *Matchmakers: The new economics of multisided platforms*. Harvard Business Review Press.
- [7]. Ghosh, S. (2022). Platform economies and rural entrepreneurship in India. *Journal of Development Studies*, 58(7), 1245–1262.
- [8]. Goldfarb, A., & Tucker, C. (2019). Digital economics. *Journal of Economic Literature*, 57(1), 3–43.
- [9]. Government of India. (2023). *Digital India Programme: Annual Report*. Ministry of Electronics and Information Technology.
- [10]. Kabeer, N. (2016). Gender equality, economic growth, and women's agency. *Feminist Economics*, 22(1), 1–30.
- [11]. Kenney, M., & Zysman, J. (2020). The platform economy: Restructuring the economy. *Socio-Economic Review*, 18(1), 55–76.
- [12]. NITI Aayog. (2022). *Strategy for New India @75*. Government of India.