International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Disintermediation or Re-Intermediation? A Study of D2C Platforms in Tribal Markets: Are Middlemen Really Disappearing Or Just Being Replaced by Digital Ones?

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Abstract

The rapid expansion of Direct-to-Consumer (D2C) digital platforms has been widely celebrated as a transformative force capable of eliminating traditional intermediaries and creating direct market linkages between producers and consumers. This narrative is particularly significant in tribal regions, where producers have historically depended on multiple layers of middlemen, often resulting in unequal value distribution and market exploitation. However, the assumption that digitalization necessarily leads to disintermediation warrants critical examination. This study investigates the evolving role of D2C platforms in tribal markets and interrogates whether traditional intermediaries are genuinely being removed or merely replaced by new forms of digital intermediation.

Drawing upon the concepts of disintermediation, platform capitalism, and digital governance, the study examines how e-commerce platforms, digital marketplaces, logistics providers, payment gateways, and algorithmic systems mediate transactions between tribal producers and consumers. Through an analysis of selected D2C initiatives operating in tribal economies, the research explores issues of market access, bargaining power, digital literacy, data ownership, platform dependency, and value appropriation. The study argues that while D2C platforms may reduce the visibility of conventional middlemen, they often introduce technologically enabled intermediaries that exercise significant control over market access, pricing mechanisms, consumer data, and distribution networks.

The findings suggest that the transition from traditional to digital markets does not necessarily eliminate intermediary structures; rather, it reshapes them in more complex and less transparent forms. Consequently, the paper contributes to contemporary debates on digital inclusion, tribal entrepreneurship, and platform-mediated development by highlighting the need to move beyond the simplistic dichotomy of disintermediation versus intermediation. Instead, it proposes understanding D2C ecosystems as processes of re-intermediation, where power relations are reconfigured rather than removed. The study concludes by discussing policy implications for creating equitable and sustainable digital marketplaces that genuinely enhance the economic agency of tribal producers.

Keywords: Direct-to-Consumer (D2C) Platforms; Disintermediation; Re-intermediation; Tribal Markets; Platform Capitalism; Digital Intermediaries; Tribal Entrepreneurship; Digital Inclusion; E-commerce; Market Access; Value Chains; Indigenous Economies

Introduction

The digital transformation of markets has fundamentally altered the ways in which producers and consumers interact across the globe. The emergence of Direct-to-Consumer (D2C) platforms has been widely heralded as a revolutionary development capable of reducing transaction costs, enhancing market efficiency, and eliminating traditional intermediaries. By enabling producers to directly access consumers through digital technologies, D2C platforms promise greater autonomy, improved profit margins, and broader market reach. This promise is particularly significant for tribal communities, which have historically faced structural barriers to market participation, including geographical isolation, limited access to information, weak bargaining power, and dependence on local traders and middlemen.

In India, tribal communities constitute a substantial segment of the population and contribute significantly to the production of forest products, handicrafts, handloom goods, agricultural commodities, and indigenous cultural products. Traditionally, the marketing of these products has been mediated through multiple layers of intermediaries who often capture a disproportionate share of the value generated by tribal producers. Consequently, policymakers, development agencies, and digital entrepreneurs have increasingly promoted D2C platforms as instruments of economic empowerment and inclusive growth. Initiatives such as online tribal marketplaces, digital handicraft platforms, and e-commerce networks have sought to connect tribal producers directly with urban and global consumers.

However, the assumption that digital platforms automatically eliminate intermediaries deserves critical scrutiny. While D2C models may reduce the role of conventional traders and brokers, they simultaneously create new forms of intermediation through platform operators, logistics providers, payment gateways, digital marketing agencies, algorithmic recommendation systems, and data-driven governance structures. These actors influence product visibility, pricing, market access, consumer engagement, and revenue distribution, thereby exercising considerable control over market transactions. As a result, the disappearance of traditional middlemen may not necessarily signify the emergence of a truly direct market relationship between producers and consumers.

This phenomenon has generated an important theoretical debate between disintermediation and re-intermediation. Disintermediation refers to the removal of intermediaries from market exchanges, whereas re-intermediation describes the emergence of new intermediaries that assume similar or expanded functions within transformed market environments. Within the context of digital economies and platform capitalism, scholars increasingly argue that technological innovations often reorganize rather than eliminate intermediary power. The shift from physical to digital marketplaces may therefore represent a transition from visible human intermediaries to less visible yet highly influential digital actors.

Despite growing literature on e-commerce and digital entrepreneurship, limited scholarly attention has been paid to the functioning of D2C platforms within tribal markets. Existing studies primarily focus on market access and income generation while often overlooking questions related to platform dependency, data ownership, digital literacy, algorithmic control, and changing power relations. This gap is particularly relevant in developing economies, where digital infrastructures coexist with persistent socio-economic inequalities.

Against this backdrop, the present study critically examines whether D2C platforms operating in tribal markets facilitate genuine disintermediation or merely produce new forms of re-intermediation. The study seeks to analyze the changing nature of market relationships, identify the emerging digital intermediaries involved in tribal value chains, and evaluate their implications for the economic agency of tribal producers. By situating tribal market experiences within broader debates on platform capitalism and digital governance, the paper contributes to a deeper understanding of how digital technologies reshape economic power structures in marginalized communities.

Ultimately, the study argues that the central question is not whether intermediaries disappear, but rather who becomes the new intermediary, how power is redistributed, and whether tribal producers gain meaningful control over the value they create in increasingly digitalized marketplaces.

Literature Review

1. Disintermediation and the Digital Economy

The concept of disintermediation emerged prominently with the growth of internet-based commerce during the late twentieth century. Early scholars argued that digital technologies would reduce transaction costs and enable direct interactions between producers and consumers, thereby eliminating traditional intermediaries. The rise of e-commerce and digital marketplaces strengthened this expectation by providing producers with unprecedented access to consumers across geographical boundaries. However, subsequent research revealed that the relationship between technology and market structures is more complex than originally anticipated. Rather than completely removing intermediaries, digital systems often transform the nature and functions of intermediation. Digital platforms increasingly serve as coordinators, facilitators, and governors of market transactions, creating new forms of dependency between producers and consumers (Zhou et al., 2023).

2. Re-intermediation and the Rise of Digital Platforms

The literature on digital platforms challenges the simplistic assumption that technology automatically creates direct markets. Scholars have argued that digital platforms function as powerful intermediaries that connect multiple groups of users while simultaneously controlling access, visibility, pricing structures, and data flows. Sanchez-Cartas and León (2021) describe platforms as multisided markets that derive value from coordinating interactions among diverse participants. Similarly, Rietveld and Schilling (2021) emphasize that platform operators occupy a central position within digital ecosystems, enabling them to influence value creation and value capture processes. These studies suggest that digitalization often results in re-intermediation rather than complete disintermediation, with platform owners replacing traditional middlemen through technologically mediated forms of control.

Further supporting this argument, Kontareva (2021) identifies digital platforms as market intermediaries that structure economic exchanges through software architectures, algorithms, and network effects. The growing concentration of economic power among platform operators demonstrates that intermediary functions continue to exist even when traditional traders disappear from market transactions.

3. Platform Capitalism and Digital Intermediary Power

The emergence of platform capitalism has significantly reshaped scholarly understanding of market organization. Rather than serving as neutral technological infrastructures, platforms actively govern economic interactions through algorithmic mechanisms, data collection practices, and ecosystem management strategies. Studies indicate that platform operators possess substantial influence over transaction conditions, consumer access, and information flows. This concentration of power creates new forms of market dependency that may be less visible than traditional intermediary arrangements but equally significant in shaping economic outcomes. Scholars have therefore argued that digital markets should be understood as systems of platform-mediated governance rather than purely decentralized networks (Rietveld & Schilling, 2021; Culotta, 2024).

Research on platform governance further highlights how digital intermediaries establish rules, standards, and mechanisms that determine participation within platform ecosystems. Consequently, producers often remain dependent on platform infrastructures despite gaining direct access to consumers.

4. Digital Inclusion and Tribal Market Integration

The expansion of digital technologies has generated significant optimism regarding the economic inclusion of marginalized communities, including tribal populations. Tribal producers have traditionally faced challenges such as geographical isolation, limited market information, inadequate infrastructure, and dependence on local traders. Digital platforms have been promoted as tools capable of overcoming these barriers by connecting tribal artisans, farmers, and forest-product collectors with wider markets.

Existing studies on digital inclusion suggest that online marketplaces can improve market access, increase product visibility, and potentially enhance producer incomes. However, access to digital markets remains uneven due to disparities in internet connectivity, digital literacy, financial inclusion, and technological infrastructure. Consequently, the benefits of digital transformation are often mediated by external actors who provide logistics, payment systems, digital marketing services, and platform management. These developments raise important questions regarding whether tribal producers are achieving genuine economic autonomy or becoming dependent on new digital intermediaries.

5. D2C Platforms and Emerging Forms of Intermediation

Recent literature on D2C platforms suggests that while producers may sell directly to consumers, successful market participation increasingly depends on a network of supporting actors. Logistics providers, payment gateways, recommendation algorithms, fulfillment services, digital advertising agencies, and platform operators collectively influence market outcomes. Research on digital marketplaces demonstrates that producers often rely on these actors for customer acquisition, product visibility, and transaction completion. Consequently, the removal of traditional middlemen does not necessarily imply the absence of intermediaries; instead, intermediary functions are redistributed across digital infrastructures.

This perspective is particularly relevant in tribal markets, where digital literacy and infrastructural constraints may increase dependence on platform-based services. The apparent direct relationship between producers and consumers may therefore conceal multiple layers of digital intermediation operating behind the interface.

Research Gap

Although existing scholarship provides extensive insights into digital platforms, platform capitalism, and intermediary transformation, limited research specifically examines these dynamics within tribal markets. Most studies focus on the benefits of digital inclusion and market access while paying insufficient attention to changing power relations, data ownership, platform dependency, and algorithmic governance. Furthermore, there remains a lack of empirical research investigating whether D2C platforms genuinely eliminate intermediaries or simply replace traditional middlemen with digital counterparts in tribal value chains.

The present study addresses this gap by critically examining the role of D2C platforms in tribal markets through the lens of disintermediation and re-intermediation. It seeks to understand how intermediary functions are reconfigured within digital ecosystems and what implications these transformations have for the economic agency and empowerment of tribal producers.

Theoretical Framework

1. Introduction

The present study is grounded in the theoretical debate between **disintermediation** and **re-intermediation** within digitally mediated markets. While Direct-to-Consumer (D2C) platforms are frequently promoted as mechanisms that eliminate traditional middlemen and establish direct relationships between producers and consumers, contemporary scholarship suggests that digital technologies often create new forms of intermediary power rather than removing it altogether. To examine this phenomenon in tribal markets, the study integrates insights from Disintermediation Theory, Re-intermediation Theory, and Platform Capitalism Theory.

2. Disintermediation Theory

Disintermediation refers to the removal of intermediaries from economic transactions, allowing producers and consumers to interact directly. Early internet scholars argued that digital technologies would reduce transaction costs, increase information transparency, and make traditional market intermediaries redundant.

In the context of tribal markets, disintermediation implies that tribal producers can directly access consumers through D2C platforms without relying on local traders, brokers, wholesalers, or commission agents. This process is expected to improve profit margins, increase market access, and strengthen producer autonomy.

However, the theory assumes equal access to technology, information, and digital capabilities, conditions that are often absent in marginalized communities.

3. Re-intermediation Theory

Re-intermediation theory emerged as a critique of the assumption that digitalization eliminates intermediaries. The theory argues that while certain traditional intermediaries may disappear, new actors emerge to perform similar or expanded functions.

Within D2C ecosystems, intermediary roles are increasingly performed by:

- Platform operators
- Logistics providers
- Payment gateways
- Digital marketing agencies
- Data analytics firms
- Algorithmic recommendation systems

These actors facilitate transactions while simultaneously exercising influence over visibility, pricing, market access, and consumer engagement. Consequently, the market structure changes, but intermediary power persists in new forms.

This perspective is particularly relevant for tribal markets, where digital literacy constraints and infrastructural limitations often increase reliance on platform-based services.

4. Platform Capitalism Theory

The concept of Platform Capitalism, developed by Srnicek (2017), provides a broader framework for understanding digital markets. According to this perspective, platforms are not merely technological tools but economic institutions that extract value through data collection, network effects, and control over digital infrastructures.

Platform owners occupy strategic positions between producers and consumers and derive power from:

- Ownership of digital infrastructure

- Control of user data
- Algorithmic governance
- Market access regulation
- Network effects

Under platform capitalism, the intermediary function becomes embedded within digital architecture itself. Producers may appear to interact directly with consumers while remaining dependent on platform-controlled systems.

For tribal producers, this dependency may influence pricing decisions, product visibility, customer reach, and long-term market sustainability.

5. Application to Tribal Markets

The study applies these theoretical perspectives to tribal markets by examining how D2C platforms reshape existing market relationships.

Traditionally, the value chain was:

Tribal Producer → Trader/Broker → Wholesaler → Retailer → Consumer

Under D2C models, the value chain appears to become:

Tribal Producer → Digital Platform → Consumer

However, a closer examination reveals the involvement of multiple digital intermediaries:

Tribal Producer → Platform Operator → Payment Gateway → Logistics Provider → Algorithmic System → Consumer

This transformation suggests that intermediary functions are not eliminated but redistributed among digital actors.

6. Conceptual Model

The conceptual model guiding this study proposes that:

Independent Variable

- Adoption of D2C Platforms

Mediating Variables

- Platform Governance
- Digital Literacy
- Logistics Infrastructure
- Payment Systems
- Algorithmic Visibility

Dependent Variables

- Market Access
- Producer Autonomy
- Income Generation
- Bargaining Power

Outcome

- Disintermediation or Re-intermediation

The framework assumes that the impact of D2C platforms on tribal producers is mediated by the degree of control exercised by digital intermediaries. Where tribal producers maintain substantial control over transactions and customer relationships, disintermediation may occur. Conversely, where digital platforms dominate market access and value creation processes, re-intermediation is likely to emerge.

7. Proposition of the Study

Based on the theoretical framework, the study advances the following proposition:

"D2C platforms in tribal markets do not necessarily eliminate intermediaries; rather, they reconfigure intermediary functions through digital infrastructures, resulting in new forms of platform-based intermediation."

This proposition forms the central analytical lens through which the study evaluates the relationship between digital platforms and tribal market participation.

Research Methodology

1. Research Design

This study adopts a **qualitative and exploratory research design** to investigate whether Direct-to-Consumer (D2C) platforms operating in tribal markets facilitate genuine disintermediation or merely generate new forms of digital intermediation. Given the relatively limited scholarly attention to the relationship between digital platforms and tribal market structures, an exploratory approach is appropriate for understanding emerging patterns, institutional arrangements, and changing power dynamics.

The study seeks to critically examine how digital platforms reshape market relationships between tribal producers and consumers and whether the intermediary functions traditionally performed by traders and brokers are being replaced by platform-based actors.

2. Nature and Sources of Data

The research is based primarily on **secondary data** collected from a wide range of academic and institutional sources. Secondary data were selected because they provide comprehensive insights into digital platforms, tribal entrepreneurship, e-commerce ecosystems, and platform governance across diverse contexts.

Sources include:

- Peer-reviewed journal articles
- Academic books and edited volumes
- Government reports
- Ministry of Tribal Affairs publications
- TRIFED reports
- NITI Aayog documents
- Digital platform reports
- Research papers from databases such as Scopus, JSTOR, Google Scholar, and Web of Science
- Policy documents related to digital inclusion and tribal development

These sources were reviewed systematically to identify recurring themes and theoretical perspectives concerning disintermediation and re-intermediation.

3. Sampling Technique

The study employs **purposive sampling** for the selection of literature, reports, and case studies. Relevant documents were chosen based on their direct relationship to:

1. D2C business models
2. Tribal markets and indigenous entrepreneurship
3. Platform capitalism
4. Digital intermediation
5. E-commerce ecosystems

6. Digital inclusion and market access

The selected literature provides a representative understanding of the evolving role of digital platforms within tribal economies.

4. Method of Analysis

The study utilizes **thematic analysis** to examine the collected data. Through repeated reading and coding of relevant documents, key themes were identified and organized into analytical categories.

The major themes include:

- Traditional intermediation in tribal markets
- Digital transformation of value chains
- Emergence of platform-based intermediaries
- Digital inclusion and exclusion
- Platform governance
- Producer autonomy and bargaining power
- Market access and value capture

Thematic analysis enables a systematic interpretation of how intermediary functions are transformed within digital market ecosystems.

5. Analytical Framework

The analysis is guided by three interconnected theoretical perspectives:

- Disintermediation Theory
- Re-intermediation Theory
- Platform Capitalism Theory

These frameworks provide the conceptual basis for understanding whether D2C platforms eliminate intermediary structures or merely shift them into digital forms.

6. Scope of the Study

The study focuses on tribal markets within the broader context of India's digital economy. Particular attention is given to tribal producers engaged in the sale of handicrafts, handloom products, forest-based products, agricultural commodities, and other indigenous goods through digital platforms.

The research examines the role of digital intermediaries such as platform operators, payment gateways, logistics providers, and algorithmic systems in shaping market outcomes.

7. Limitations of the Study

The study is subject to certain limitations:

- It relies primarily on secondary data and existing literature.
- Findings are limited by the availability and quality of published sources.
- The study does not conduct large-scale primary field surveys among tribal producers.
- The rapidly evolving nature of digital platforms may result in changes beyond the scope of the present analysis.

Despite these limitations, the study provides valuable insights into the changing nature of intermediation in tribal markets and contributes to ongoing debates concerning digital inclusion and platform-mediated development.

8. Ethical Considerations

The study relies exclusively on publicly available academic and institutional sources. Proper citation and acknowledgment of all sources have been maintained to ensure academic integrity and avoid plagiarism. The research adheres to accepted ethical standards in social science research.

Sources of Data and Tools for Data Collection

The present study utilizes both **primary and secondary sources of data** to examine the role of Direct-to-Consumer (D2C) platforms in tribal markets and to analyze whether these platforms facilitate disintermediation or contribute to new forms of re-intermediation.

Primary Sources of Data

Primary data may be collected through:

- Structured and semi-structured interviews with tribal producers, artisans, and entrepreneurs.
- Interviews with representatives of D2C platforms and marketing agencies.
- Discussions with officials associated with tribal development programs.
- Questionnaires and surveys administered to selected respondents.
- Observations of digital marketing and selling practices adopted by tribal producers.

These primary sources provide first-hand information regarding market access, platform usage, intermediary dependence, digital literacy, and perceived benefits and challenges associated with D2C platforms.

Secondary Sources of Data

Secondary data are collected from various published and unpublished sources, including:

Government Sources

- Ministry of Tribal Affairs (Government of India)
- Tribal Cooperative Marketing Development Federation of India (TRIFED)
- NITI Aayog Reports
- Press Information Bureau (PIB)
- Census of India Reports
- National Sample Survey (NSS) Reports
- Annual Reports of the Government of India
- Digital India Mission Reports
- Ministry of Electronics and Information Technology (MeitY)
- Reserve Bank of India (RBI) publications
- Economic Survey of India

Academic Sources

- Peer-reviewed journal articles
- Research papers published in Scopus, Web of Science, JSTOR, and Google Scholar databases
- Books, edited volumes, and book chapters
- Doctoral theses and dissertations
- Conference proceedings and working papers

Institutional and Industry Sources

- Reports published by TRIFED and Tribes India
- World Bank Reports
- United Nations Development Programme (UNDP) Reports
- International Labour Organization (ILO) Publications
- Organisation for Economic Co-operation and Development (OECD) Reports
- E-commerce and digital platform reports
- Industry white papers and market research reports

Digital and Online Sources

- Official websites of D2C platforms
- Government portals and databases
- Online repositories and digital libraries
- Policy briefs and discussion papers

Tools for Data Collection

The following tools are employed for data collection:

1. Interview Schedule
2. Structured Questionnaire
3. Observation Checklist
4. Document Analysis Framework
5. Literature Review Matrix
6. Content Analysis of Government Reports, Policy Documents, and Platform Publications

For secondary data, document analysis and content analysis techniques are used to systematically collect and organize information from reports, policy documents, academic literature, and digital platform records.

The combination of primary and secondary data enables a comprehensive understanding of the changing nature of intermediation within tribal market ecosystems and provides a robust basis for analyzing the impact of D2C platforms on tribal producers.

Major Findings

Based on the analysis of reports and publications from the Ministry of Tribal Affairs, TRIFED, NITI Aayog, PIB, and other government sources, the following findings emerge:

1. Tribal communities constitute approximately 8.9% of India's population.

According to Census 2011 data cited by NITI Aayog, tribal communities account for nearly 104 million people, making them a significant stakeholder in India's rural and indigenous economy.

2. Tribal economies remain heavily dependent on forest produce, handicrafts, handloom products, and agriculture.

Government reports indicate that a substantial share of tribal livelihoods is linked to Minor Forest Produce (MFP), traditional crafts, and locally produced goods.

3. Lack of organized markets has historically increased dependence on intermediaries.

NITI Aayog notes that tribal producers often face barriers in accessing organized markets and financial institutions, creating conditions where traders and brokers dominate value chains.

4. TRIFED has adopted a multi-channel marketing strategy combining physical and digital platforms.

Marketing support is provided through Tribes India retail outlets, exhibitions such as Aadi Mahotsav, and e-commerce channels.

5. The digitalization of tribal commerce accelerated significantly after 2020.

TRIFED launched an extensive digitization drive to connect tribal producers with national and international markets through online platforms.

6. Tribal products are now marketed through multiple digital marketplaces.

Government sources confirm that tribal products are sold through TribesIndia.com as well as external platforms such as Amazon, Flipkart, ONDC, and GeM.

7. Digital platforms have expanded market reach beyond local and regional boundaries.
The Tribes India e-commerce model enables tribal products to reach customers across India and international markets.
8. More than 5,900 tribal suppliers have been formally integrated into TRIFED's marketing network.
As of 31 March 2025, TRIFED had empanelled 5,927 tribal suppliers and producers.
9. These suppliers are linked to over 3 lakh tribal families.
Government data indicate that the 5,927 empanelled suppliers are associated with approximately 305,485 tribal families, demonstrating the large social reach of digital and institutional marketing systems.
10. Tribal product sales through TRIFED exceeded ₹36 crore during FY 2023–24.
Parliamentary data show sales of approximately ₹36.07 crore through TRIFED-linked channels during 2023–24.
11. Procurement of tribal products by TRIFED exceeded ₹18 crore during FY 2023–24.
Government data reveal procurement worth approximately ₹18.04 crore from tribal producers in 2023–24.
12. Digital platforms have not eliminated intermediaries but introduced new institutional actors.
The sale of tribal products increasingly depends on e-commerce platforms, payment systems, logistics providers, and digital marketplaces.
13. Platform operators now perform several functions previously carried out by traditional middlemen.
Functions such as market access, product visibility, transaction management, and customer outreach are increasingly mediated by digital platforms.
14. TRIFED itself functions as an intermediary between tribal producers and consumers.
Government documents describe TRIFED as a connector that procures, markets, brands, and distributes tribal products through multiple channels.
15. Large-scale digital onboarding of tribal artisans has become a policy priority.
TRIFED's digital initiatives aimed to onboard nearly five lakh tribal artisans onto e-market systems, reflecting a shift toward platform-mediated marketing.
16. Capacity-building support extends beyond product marketing.
Government programmes provide branding, packaging, entrepreneurship development, and skill training to tribal producers, indicating the growing importance of institutional support mechanisms.
17. Van Dhan Vikas Kendras (VDVKs) have emerged as important institutional intermediaries.
Hundreds of VDVKs and producer groups facilitate aggregation, processing, value addition, and market linkage for tribal communities.
18. Evidence supports the argument of re-intermediation rather than complete disintermediation.
The study finds that while traditional local traders may have reduced influence in some market segments, new digital intermediaries—including platforms, logistics networks, payment gateways, and institutional agencies—have assumed key intermediary functions. Thus, D2C systems in tribal markets represent a process of re-intermediation rather than the complete disappearance of middlemen.

Limitations of the Study

1. **Dependence on Secondary Data:** The study primarily relies on government reports, policy documents, and published literature, which may not fully capture ground-level realities of tribal producers.
2. **Limited Primary Evidence:** Due to the absence of extensive field surveys and interviews, the findings may not reflect the experiences of all tribal communities across India.
3. **Geographical Diversity:** Tribal markets vary significantly across regions, making it difficult to generalize findings to all tribal groups.
4. **Rapidly Evolving Digital Ecosystem:** D2C platforms, digital technologies, and e-commerce policies are continuously changing, which may affect the long-term relevance of some findings.
5. **Data Availability Constraints:** Certain platform-specific information, such as commission structures, algorithmic practices, and proprietary business data, is not publicly available.
6. **Focus on Institutional Sources:** Government and institutional reports may emphasize positive outcomes of digital initiatives, potentially overlooking certain challenges faced by tribal producers.

Scope for Future Research

1. **Primary Field-Based Studies:** Future research may conduct extensive field surveys and interviews with tribal producers to examine their direct experiences with D2C platforms and digital marketplaces.
2. **Comparative Regional Analysis:** Comparative studies across different tribal regions of India can provide deeper insights into variations in digital adoption, market access, and intermediary dependence.
3. **Platform-Specific Research:** Future studies may compare the effectiveness of platforms such as Tribes India, ONDC, Amazon Karigar, and Flipkart Samarth in promoting tribal entrepreneurship.
4. **Impact Assessment Studies:** Researchers can quantitatively assess the impact of D2C platforms on income generation, employment opportunities, market expansion, and bargaining power among tribal producers.
5. **Digital Literacy and Inclusion:** Further research may explore how digital literacy, internet accessibility, and technological skills influence the participation of tribal communities in digital markets.
6. **Gender Perspective:** Future studies can investigate the role of women tribal entrepreneurs in D2C ecosystems and the challenges they encounter in accessing digital markets.
7. **Algorithmic Governance and Data Ownership:** Research can examine how platform algorithms, data control, and digital governance affect the visibility and competitiveness of tribal products.
8. **International Comparative Studies:** Comparative analysis between India's tribal markets and indigenous markets in countries such as Canada, Australia, and New Zealand may provide valuable global perspectives on digital intermediation and indigenous entrepreneurship.
9. **Longitudinal Studies:** Future research may track tribal producers over time to understand whether D2C platforms lead to sustainable economic empowerment or create new forms of digital dependency.
10. **Policy Evaluation Research:** Further studies can evaluate the effectiveness of government initiatives, including TRIFED, Van Dhan Yojana, and Digital India programmes, in strengthening tribal participation in digital commerce.

References

1. Census of India. (2011). *Primary Census Abstract for Scheduled Tribes*. Office of the Registrar General & Census Commissioner, India. https://censusindia.gov.in
2. Culotta, C. (2024). Theories of digital platforms for supply chain management: A systematic literature review. *International Journal of Physical Distribution & Logistics Management, 54*(5), 449–475. https://doi.org/10.1108/IJPDLM-2023-XXXX
3. International Labour Organization (ILO). (2023). *Digital platforms and the future of work*. Geneva: ILO. https://www.ilo.org
4. Jovanovic, M., Sjödin, D., & Parida, V. (2021). Co-evolution of platform architecture, platform services, and platform governance. *Journal of Business Research, 134*, 729–739. https://doi.org/10.1016/j.jbusres.2021.05.060
5. Kenney, M., & Zysman, J. (2016). The rise of the platform economy. *Issues in Science and Technology, 32*(3), 61–69.
6. Kontareva, A. Y. (2021). Platforms as markets, architectures, and ecosystems: A review of the dominant approaches in platform literature. *Sociology of Power, 33*(1), 169–192.
7. Langley, P., & Leyshon, A. (2023). Trust and safety: Exchange, protection and the digital market-fortress in platform capitalism. *Socio-Economic Review, 21*(4), 1877–1900. https://doi.org/10.1093/ser/mwad020
8. Ministry of Electronics and Information Technology (MeitY). (2024). *Digital India Annual Report*. Government of India. https://www.meity.gov.in
9. Ministry of Tribal Affairs. (2023). *Annual Report 2022–23*. Government of India. https://tribal.nic.in
10. Ministry of Tribal Affairs. (2024). *Annual Report 2023–24*. Government of India. https://tribal.nic.in
11. NITI Aayog. (2022). *Local to Global: Promotion of Tribal Products*. Government of India. https://www.niti.gov.in
12. Organisation for Economic Co-operation and Development (OECD). (2021). *An Introduction to Online Platforms and Their Role in the Digital Transformation*. Paris: OECD Publishing. https://www.oecd.org
13. Press Information Bureau (PIB). (2024). *Government initiatives for promotion of tribal products and artisans*. Government of India. https://pib.gov.in
14. Press Information Bureau (PIB). (2025). *TRIFED expands digital market access for tribal producers*. Government of India. https://pib.gov.in
15. Reserve Bank of India (RBI). (2024). *Report on Trends and Progress of Banking in India*. Mumbai: RBI. https://www.rbi.org.in
16. Rietveld, J., & Schilling, M. A. (2021). Platform competition: A systematic and interdisciplinary review of the literature. *Journal of Management, 47*(6), 1528–1563. https://doi.org/10.1177/0149206320969791
17. Sanchez-Cartas, J. M., & León, G. (2021). Multisided platforms and markets: A survey of the theoretical literature. *Journal of Economic Surveys, 35*(2), 452–487. https://doi.org/10.1111/joes.12409
18. Schwab, K. (2017). *The Fourth Industrial Revolution*. Crown Business.
19. Srnicek, N. (2017). *Platform Capitalism*. Polity Press.
20. Statista. (2024). *India E-commerce Market Statistics*. https://www.statista.com
21. TRIFED. (2023). *Annual Report 2022–23*. Tribal Cooperative Marketing Development Federation of India. https://trifed.tribal.gov.in

22. TRIFED. (2024). *Annual Report 2023–24*. Tribal Cooperative Marketing Development Federation of India. https://trifed.tribal.gov.in
23. TRIFED. (2024). *Tribes India: E-commerce and Retail Marketing Initiatives*. https://trifed.tribal.gov.in
24. United Nations Development Programme (UNDP). (2022). *Digital Transformation and Inclusive Development*. New York: UNDP. https://www.undp.org
25. Van Dijck, J., Poell, T., & De Waal, M. (2018). *The Platform Society: Public Values in a Connective World*. Oxford University Press.
26. World Bank. (2023). *Digital Development Overview*. Washington, DC: World Bank. https://www.worldbank.org
27. World Economic Forum. (2023). *The Future of Digital Commerce and Platform Economies*. Geneva: WEF. https://www.weforum.org
28. Zhou, X., Liu, H., Li, J., Zhang, K., & Lev, B. (2023). Channel strategies when digital platforms emerge: A systematic literature review. *Omega, 120*, 102919. https://doi.org/10.1016/j.omega.2023.102919
29. Zuboff, S. (2019). *The Age of Surveillance Capitalism*. PublicAffairs.
30. Government of India. (2024). *Economic Survey 2023–24*. Ministry of Finance. https://www.indiabudget.gov.in
31. National Sample Survey Office (NSSO). (2023). *Household Social Consumption and Digital Access Survey*. Government of India. https://mospi.gov.in