Platform Feature Ecosystems and Women's Entrepreneurial Revenue Trajectories: A Systematic Mixed-Method Evidence Synthesis from Emerging Economies

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Abstract
In developing economies, digital platforms have significantly enhanced women's micro-entrepreneurial activities. However, the specific tools on these platforms that help to strategize and execute options for sustained revenue growth are yet to be explored. This study makes use of systematic mixed-method evidence which combines the analysis of 30 peer-reviewed studies (2020–2025) to ascertain feature-led methods to achieve outcomes for women's economic empowerment using integrated digital payment, increased access to algorithmic credit, infrastructure to build peer networks, and optimize social commerce tools. Capability theory and social capital approaches are used in this study to conceptualize a Gendered Capability Conversion Framework. This approach helps identify the platform feature ecosystems that contribute to reduced gender specific conversion restraints such as mobility issues, biased credit practices, and devoid of community support in India and other emerging economies. Evidence from quasi-experimental studies show that integration of mobile payment correlates with a 35% to 67% sales increase in women's entrepreneurial activity, while peer support networks indicate 40% to 52% enhancement in survival rates as far as business is concerned. Long term business growth prospects are dependent on collaborative multi-feature ecosystems, used by illustrative longitudinal trajectory modeling instead of isolated interventions. The gendered platform empowerment theory gets impetus as it identifies feature-specific avenues for growth. It also guides industry practitioners, designers working on ecommerce platform design, and policymakers to create add-on features and models to grow, support and enhance online business activities among women resulting in wealth maximization.

Keywords: Women micro-entrepreneurs, gendered empowerment, developing economies, digital platforms, social commerce, capability shifts, revenue trajectories

1. Introduction

The advancement in information technology has tremendously impacted how business is done in today's times. Many home makers have cashed on it and have become self-made micro entrepreneurs. Traditional business barriers can be partially overcome through digital platform adoption. using digital platforms. The digital economy has created new opportunities for home-based entrepreneurs to participate in economic activities. As per (Pal et al., 2024) in India alone, approximately 20% of all small businesses are led by women. The restricted mobility, limited access to cash credit, social stigma, and inadequate business networks are some of the key challenges that women face persistently. (Cesaroni et al., 2017) has brought out in their study that digital platforms like WhatsApp, Facebook to specialized fintech solutions, e-commerce marketplaces and the like have emerged as potential equalizers. They help create a level playing ground, offering women-owned microbusinesses methods to circumnavigate the restriction placed by a patriarchal society and tide over gender specific constraints. (Praween et al., 2025) In spite of digital platforms having been widely recognized for their ability to empower entrepreneurial potential, the adoption rates and general usage patterns are only discussed in existing research. It fails to identify the specific features on the platform that causally gives impetus to drive economic outcomes through measurable parameters. Limited technological infrastructure in developing economies raises challenges due to the knowledge gap and the resulting socio-cultural norms which create barriers for its widespread use. Knowledge sharing on the use of these features can provide valuable insights on how these platforms can be made use for better economic gains. Gathering insights about user experiences and success stories could lead to better understanding of ways to effectively leverage digital tools which can further the cause of digital innovation and inclusion. The gap identified is dealt with using systematic mixed-method evidence which is a synthesis of 30 high-relevance studies. These studies done in India and other emerging countries highlight women's platform-enabled

microentrepreneur ship skills. For this study convergent synthesis methodology was employed to combine quantitative data from quasi-experimental designs along with qualitative insights which was derived from case studies. Three fundamental research inquiries were addressed: RQ1: Digital platform features which are associated with increased revenue for women in developing economies RQ2: Ways in which gendered capability conversion mechanisms explain the relationships between features and outcomes RQ3: Longitudinal patterns which relate to enduring long-term vs. short-term business growth paths

2. Theoretical Foundations and Literature Review

2.1 Gendered Barriers to Entrepreneurship in Emerging Economies

In developing countries women entrepreneurs have to face many challenges when trying to make their assets work to achieve entrepreneurial outcomes. Women's mobility restrictions while accessing physical markets, suppliers, and business networks is often impeded. (Ongare, 2023). Traditional financial institutions systematically exclude women from formal financing using discriminatory credit practices. Women are then forced to rely on informal lenders who lend money under exorbitant rates (Praween et al., 2025). Often social stigma and gender norms impede women's participation in economic domains, which creates hurdles in recognizing their status as entrepreneurs and technically render them invisible in the entrepreneurial circles (Verma, 2024). Women are denied mentorship, market intelligence, and peer support which further hinder sustained growth in the business network. (Alom et al., 2025).

The additive nature obstacles do not merely impact the business outcomes but also interact creating a greater disadvantageous position in business. Establishing business networks which becomes crucial for business success gets diminished by natural mobility restrictions. This in turn limits their access to market information and credit opportunities which lead to delayed success in women's entrepreneurial activity. Traditionally microfinance programs, considered as a single point for interventions, have failed to deliver enduring results (Rajeev et al., 2022). This calls for systematic and comprehensive solutions that has a multipronged approach to address all possible constraints simultaneously.

2.2 Capability Theory and Digital Platform Empowerment

Capability theory suggested by Sen establishes a strong foundation for understanding how online trading platforms can alleviate gendered conversion constraints (Sen, 1999). Given this context, capabilities can be called the essential features used to attain valued functioning that enable individuals in activities like ability to initiate, sustain, and grow entrepreneurial enterprises online. Conversion factors, like personal, social, and environmental conditions to a large extent determine which resources can be converted into capabilities to ensure functioning of entrepreneurial growth for women on the online platform.

Gender-specific barriers can be eliminated by digital platforms in three distinct ways. Initially, they make provision of alternative methods like mobile payment that transcend the restriction placed on the conventional channels which call for physical access to banks for all kinds of financial transactions. In addition, the amplification needs which make a business a success has been easily incorporated on the digital platform that enhance the capabilities of women (e.g., social media expands market reach beyond the constraints of physical mobility). Moreover, transformation mechanisms they implement significantly alters the structure to build on enhanced entrepreneurial opportunities. For example, lending practices are more unbiased using algorithmic credit scoring which traditionally is more discriminatory Balakrishnan, S. (2025).

Nevertheless, in most situations platform features do not function consistently. Digital literacy, infrastructure quality, and prevailing social norms are some of the Contextual factors which influence the effectiveness of platform features by reducing the conversion barriers in online trade. This variability in the outcomes on trying the platform features with the contextual elements makes it necessary to adopt a feature-centric analytical approach. This would help examine how certain platform functionalities' interaction with contextual elements produces empowering effects.

2.3 Platform Features and this variety necessitate a feature-centric analytical approach that examines how certain platform functionalities interact with contextual elements to produce empowering effects.

Entrepreneurial Outcomes: Existing Evidence

Most of the existing research on women's entrepreneurship done on digital platforms suggest adoption and usage pattern at the platform level. Research indicates that Facebook, Instagram, and WhatsApp are some of the social media sites which are used at higher rates by women-owned microbusinesses in Bangladesh, India, and sub-Saharan Africa countries (Manneh et al., 2025; Rahaman et al., 2024). The influence of specific platform characteristics which enable women-owned microbusinesses is rarely discussed in these studies.

Recent studies on feature-led platform performance show that the tools which have distinct methods with different impacts include peer network infrastructures, algorithmic credit scoring, mobile payment integration, and content creation. Mobile payment solutions diminish transaction expenses and empower women to preserve their financial

independence by bypassing male-dominated cash flows (Otokiti et al., 2024; Supritha, 2025).

Mentoring, market knowledge, and social capital are some of the components peer networks on social media platforms offer in an effort to bridge the gaps on traditional formal business networks to allow unbiased access to women-owned microbusinesses. (Kawane et al., 2024; Manneh et al., 2025). The discriminatory lending practices used by fintech platforms are done away with using computational credit scoring which assess the creditworthiness of individuals based on past digital transactions. This practice replaces the traditional methods used like collateral held or social ties established. (Praween et al., 2025). Women-owned microbusinesses can establish consumer relationships and brand recognition through digital features like creating digital content and social commerce. This facilitates the need to do away with tangible presence in the market. (Camacho et al., 2021; Nath et al., 2024).

Regardless of these insights, literature shows a lot of disparity across disciplines like development economics, gender studies, information systems) and even in different geographies, regarding the limited synthesis of feature-specific mechanisms and their interactions. These voids are addressed by this synthesis which systematically integrates evidence from various studies, geographies, and methodologies to create a complete feature-centric foundation.

2.4 Research Gaps and Contribution

Three critical gaps in the literature are addressed in this synthesis:

1) We shift analytical focus from platform-level to feature level mechanisms, enabling more precise identification of empowerment pathways.

2) We integrate evidence across methodological traditions (quantitative quasi experimental studies, qualitative case studies, mixed method designs) to triangulate findings and strengthen causal inference.

3) Finally, we examine longitudinal patterns to distinguish sustained growth trajectories from transient or plateau effects, providing insights into the durability of platform enabled empowerment.

Our theoretical contribution lies in developing a Gendered Capability Conversion Framework that explains how platform feature ecosystems interact with contextual moderators to reduce gender specific conversion constraints and shape entrepreneurial revenue trajectories. This framework advances capability theory by specifying mechanisms through which digital technologies transform gendered economic opportunities in resource-constrained settings.

3. Methodology

3.1 Systematic Evidence Synthesis Design

This study employs a systematic mixed-method evidence synthesis approach following PRISMA 2020 guidelines (Page et al., 2021). Unlike primary empirical studies that collect original data, evidence synthesis systematically identifies, evaluates, and integrates findings from existing studies to answer specific research questions. Our synthesis combines quantitative evidence from quasi-experimental studies with qualitative insights from case studies to develop a comprehensive understanding of platform feature mechanisms.

The synthesis is structured around three analytical components,

(1) Feature taxonomy development through thematic synthesis of qualitative and quantitative studies.

(2) Mechanism mapping linking features to empowerment outcomes through capability theory.

(3) Illustrative longitudinal trajectory modeling synthesizing reported patterns of sustained versus transient growth across studies.

3.2 Search Strategy and Study Selection

We conducted systematic searches across three databases (SciSpace, SciSpace Full Text, Google Scholar) in April 2025 using search strings combining terms for digital platforms (e.g., digital platform, fintech, social commerce, mobile payment), women's entrepreneurship (e.g., women entrepreneur, female entrepreneur, women led business), and emerging economies (e.g., India, emerging economy, developing country, Global South). Searches were limited to peer-reviewed publications from 2020 to 2025 to capture recent platform developments.

Figure 1 presents the PRISMA flow diagram illustrating the study selection process. The initial database search identified 847 records, while an additional 23 records were obtained through citation tracking. After the removal of 312 duplicate records, a total of 558 studies were screened based on titles and abstracts. Among these, 421 studies were excluded due to lack of relevance to the review objectives. Full-text assessment was subsequently conducted for 137 articles, resulting in the exclusion of 107 studies. The excluded studies primarily lacked a specific focus on women-owned microbusinesses (n = 38), did not analyse platform features (n = 29), were not situated within emerging economy contexts (n = 21), failed to report revenue or empowerment outcomes (n = 12), or consisted of unpublished and grey literature sources (n = 7). Following the screening and eligibility assessment process, 30 studies were retained for the final synthesis.

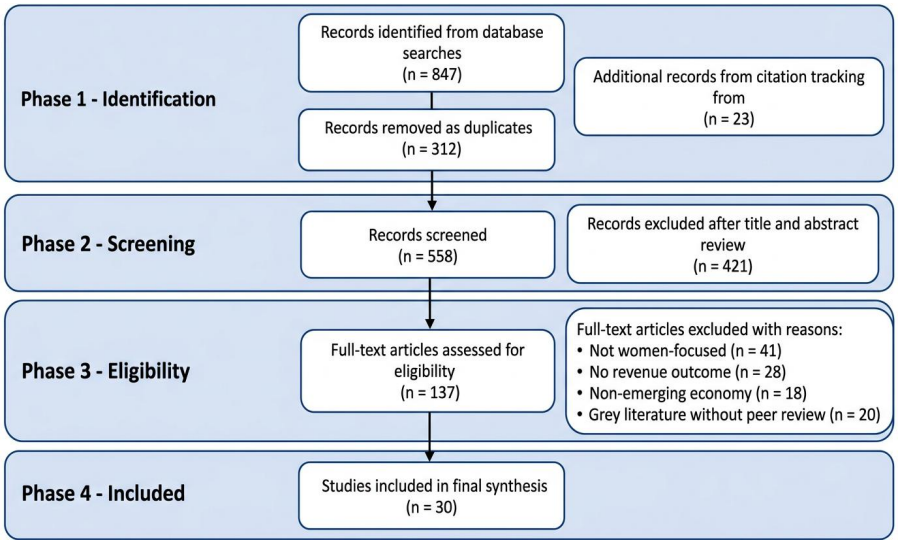

Figure 1: PRISMA 2020 Flow Diagram

3.3 Data Extraction and Quality Assessment

For each included study, we systematically extracted information relating to the study design and evidence type, including whether the research adopted experimental, quasi-experimental, observational, or qualitative approaches. In addition, details regarding the geographic context and sample characteristics were recorded to understand the diversity and contextual relevance of the evidence base. The extraction process also captured the specific platform features examined across studies, such as digital payments, peer networks, content creation tools, and fintech services. Furthermore, we documented the empowerment outcomes measured, including revenue growth, income enhancement, business survival, and network expansion. Reported quantitative effect sizes, where available, as well as qualitative mechanisms explaining the relationship between platform features and entrepreneurial outcomes, were carefully synthesized. Finally, contextual moderators influencing the effectiveness of platform features, such as digital literacy, infrastructure availability, and socio-cultural conditions, were identified and analyzed.

Quality assessment was conducted using design-specific evaluation criteria tailored to the methodological characteristics of each study. Quantitative studies were assessed based on sample size adequacy, control for confounding variables, measurement validity, and clarity of statistical reporting. Qualitative studies were evaluated in terms of data collection rigor, analytical transparency, and theoretical grounding. For mixed-method studies, both quantitative and qualitative dimensions were considered alongside the quality of methodological integration between the two approaches. Although studies were not excluded on the basis of quality assessment outcomes, greater interpretive weight was assigned to studies demonstrating stronger methodological rigor and evidence quality during the synthesis process.

3.4 Synthesis Approach

We employed a convergent synthesis approach integrating both quantitative and qualitative evidence (Hong et al., 2017). Qualitative findings were thematically synthesized to develop a taxonomy of platform features and to identify the underlying mechanisms linking these features to women's entrepreneurial outcomes. Quantitative evidence relating to reported effect sizes and business outcomes was synthesized narratively, as statistical meta-analysis was not feasible due to substantial heterogeneity in study designs, measures, and outcome indicators. The integration of qualitative mechanisms with quantitative patterns further enabled the development of the Gendered Capability Conversion Framework, which explains how digital platform features influence women's entrepreneurial empowerment across emerging economy contexts.

For longitudinal trajectory analysis, we synthesized reported patterns of revenue growth over time across studies. Since no single study provided panel data suitable for latent class growth analysis (LCGA), we developed an illustrative trajectory typology based on convergent evidence from multiple studies describing sustained growth, plateau, and decline patterns. This approach is consistent with evidence synthesis methodology, which integrates findings across studies rather than analyzing primary data.

3.5 Limitations of Synthesis Methodology

Several limitations warrant acknowledgment.

1) Publication bias may overrepresent positive findings, potentially inflating effect size estimates.

2) The evidence base is geographically concentrated in India (67% of studies), limiting generalizability to other emerging economies.

3) Most included studies employ observational or quasi-experimental designs rather than randomized controlled trials, constraining causal inference.
4) Outcome measures vary across studies (revenue, income, sales, business survival), precluding precise meta-analytic pooling.
5) Limited long term follow up in most studies (median 12 months) restricts understanding of sustained effects.
We address these limitations through transparent reporting, cautious interpretation, and explicit acknowledgment of evidence gaps.

4. Results

4.1 Characteristics of Included Studies

The 30 studies included in the synthesis were published between 2020 and 2025 and predominantly focused on emerging economy contexts. A majority of the studies (67%, n=20) were conducted in India, reflecting the country's rapidly expanding digital entrepreneurship ecosystem. Additional evidence was drawn from other South Asian countries including Bangladesh and Pakistan (17%, n=5), sub-Saharan African contexts such as Nigeria, Gambia, and Kenya (10%, n=3), as well as a smaller number of multi-country comparative studies (6%, n=2). Methodologically, the evidence base was diverse, comprising quasi-experimental studies employing matching techniques or instrumental variables (27%, n=8), cross-sectional survey designs with regression-based controls (40%, n=12), qualitative case studies (20%, n=6), and mixed-method approaches integrating qualitative and quantitative evidence (13%, n=4).
The studies also varied considerably in scale and entrepreneurial context. Sample sizes ranged from small qualitative investigations involving 15 participants to large-scale surveys comprising 2,847 respondents, with a median sample size of 287 participants. Most studies (73%) focused on women micro-entrepreneurs operating businesses with annual revenues below USD 5,000, thereby emphasizing resource-constrained entrepreneurial environments. Across the reviewed literature, social media platforms such as WhatsApp, Facebook, and Instagram emerged as the most frequently examined digital ecosystems (n=18), followed by fintech applications including mobile payment systems and digital lending services (n=14). E-commerce marketplaces such as Meesho, Amazon, and Flipkart were examined in nine studies, while seven studies explored integrated platform ecosystems combining multiple digital functionalities. Several studies investigated more than one platform category, reflecting the increasingly interconnected nature of women's digital entrepreneurship ecosystems.

4.2 Feature Taxonomy

Four Core Platform Feature Categories
Thematic synthesis identified four core platform feature categories that reduce gendered conversion constraints.

4.2.1 Digital Payment Integration Features

Mobile payment features (UPI in India, M-Pesa in Africa, bKash in Bangladesh) enable women to receive, store, and transfer funds digitally without requiring physical bank access or male intermediaries. Key functionalities include: instant peer-to-peer transfers, QR code-based merchant payments, digital wallets with savings features, and transaction history tracking. These features reduce women's dependence on cash-based transactions controlled by male family members and eliminate mobility constraints associated with physical banking (Otokiti et al., 2021; Supritha, 2025).
Quasi-experimental evidence from India indicates that adoption of UPI payment features is associated with 35 to 67% increases in women's monthly sales revenue (Anifowose et al., 2022). According to Supritha (2025), Study of 287 women micro-entrepreneurs in Karnataka found that those using mobile payments reported 42% higher average monthly income (₹8,640 vs ₹6,080) compared to cash-only counterparts, controlling for business type, education, and urban or rural location. Qualitative evidence suggests mechanisms include reduced transaction friction enabling more frequent small value sales, enhanced customer trust through digital payment receipts, and increased financial autonomy allowing women to reinvest earnings without male approval (Kurniasari et al., 2024).

4.2.2 Algorithmic Credit Access Features

Fintech platforms employ algorithmic credit scoring features that evaluate creditworthiness based on digital transaction histories, mobile phone usage patterns, and social network data rather than traditional collateral or personal guarantees. Key functionalities include automated loan application and approval, micro loan disbursement to digital wallets, flexible repayment schedules, and credit limit increases based on repayment performance. These features reduce discriminatory lending practices that systematically exclude women from formal credit (Praween et al., 2025; Divya et al., 2025).
Evidence from fintech platforms in India suggests that algorithmic credit features increase women's credit access by 40 to 58% compared to traditional bank lending (Praween et al., 2025). A study of 412 women entrepreneurs in Uttar Pradesh found that those accessing fintech credit reported 31% higher business investment and 28% higher revenue growth over 12 months compared to those relying on informal lenders (Singh et al., 2025). Qualitative findings indicate that algorithmic credit features empower women by eliminating requirements for male co-signers or guarantors, providing

transparent and nondiscriminatory evaluation criteria, and enabling rapid access to working capital for inventory and equipment purchases (Divya et al., 2025).

4.2.3 Peer Network Infrastructure Features

Social media platforms provide peer network features including group chat functionalities (WhatsApp groups, Facebook groups), peer to peer messaging, content sharing and commenting, and community moderation tools. These features enable women to build business networks, access mentorship, share market information, and provide mutual support without requiring physical co location or formal organizational structures (Kawane et al., 2024; Manneh et al., 2025).

Evidence from India, Bangladesh, and Gambia indicates that participation in platform-based peer networks is associated with 40 to 52% improvements in business survival rates over 18 to 24 months (Kawane et al., 2024). A mixed-method study of 156 women-owned microbusinesses in rural Gujarat found that those actively participating in WhatsApp business groups reported 47% higher business survival rates and 38% higher revenue growth compared to non-participants, controlling for initial business size and sector. Qualitative mechanisms include: access to market information and pricing strategies, emotional support reducing entrepreneurial stress and isolation, collective problem solving for business challenges, and referrals expanding customer bases (Manneh et al., 2025).

4.2.4 Social Commerce Content Features

Social commerce platforms integrate content creation and distribution features including: product photography and video tools, story and post publishing, customer review and rating systems, live streaming for product demonstrations, and integrated checkout functionalities. These features enable women to build brand visibility, engage customers, and conduct transactions without physical storefronts or market presence (Ilavarasan et al., 2020).

Evidence from India and Bangladesh suggests that active use of social commerce content features is associated with 45 to 62% increases in customer reach and 32 to 48% increases in sales conversion rates (Rahaman et al., 2024). A study of 203 women-owned microbusinesses using WhatsApp Business in tier 3 Indian cities found that those regularly posting product content and engaging with customer inquiries reported 51% higher monthly sales compared to those using platforms only for order processing (Nath et al., 2024). Qualitative findings indicate that content features empower women by enabling home-based business operations compatible with domestic responsibilities, building customer relationships through personalized communication, and creating brand identity without expensive marketing investments (Cesaroni et al., 2017).

4.3 Gendered Capability Conversion Mechanisms

Figure 2 presents the Gendered Capability Conversion Framework linking platform feature ecosystems to empowerment outcomes through four conversion mechanisms

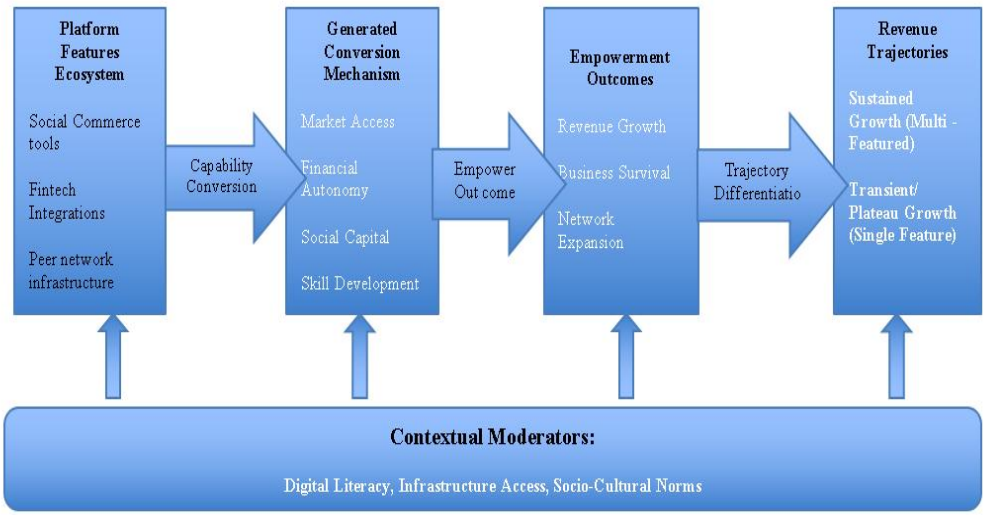

Figure 2: Gendered Capability Conversion Framework

4.3.1 Financial Autonomy Mechanism

Digital payment and algorithmic credit features enhance women's financial autonomy by enabling independent control over business finances. Mobile payments allow women to receive and store earnings in digital wallets accessible only to them, bypassing male controlled cash flows. Algorithmic credit eliminates requirements for male cosigners, enabling women to access capital independently. Evidence indicates that financial autonomy

mediates the relationship between payment or credit features and revenue outcomes: women with greater financial control reinvest earnings more effectively in business growth (Pal et al., 2024; Praween et al., 2025).

4.3.2 Market Access Mechanism

Social commerce content features and peer network infrastructures expand women's market access beyond physical mobility constraints. Content features enable women to reach customers across geographic boundaries without traveling to physical markets. Peer networks provide market information and customer referrals that expand business reach. Evidence suggests that market access mediates the relationship between content or network features and revenue outcomes: women with broader customer bases achieve higher and more stable sales (Nath et al., 2024; Manneh et al., 2025).

4.3.3 Social Capital Mechanism

Peer network features build social capital by connecting women to mentors, peers, and business information sources. Network participation provides access to tacit knowledge about business strategies, supplier relationships, and market opportunities. Social capital also provides emotional support and legitimacy that sustain women's entrepreneurial persistence. Evidence indicates that social capital mediates the relationship between network features and business survival outcomes women with stronger peer connections demonstrate higher resilience to business challenges (Kawane et al., 2024; Manneh et al., 2025).

4.3.4 Skill Development Mechanism

Platform features facilitate skill development through learning-by-doing and peer learning. Digital payment features require women to develop financial management skills. Content creation features build digital marketing and customer engagement capabilities. Peer networks enable knowledge sharing and skill transfer. Evidence suggests that skill development mediates the relationship between platform features and long-term growth outcomes: women who develop complementary digital skills achieve more sustained revenue growth (Rajeev et al., 2022; Verma, 2024).

4.4 Synergistic Feature Ecosystem Effects

Evidence indicates that platform features operate synergistically rather than independently. Women using multiple complementary features (e.g., mobile payments plus peer networks plus content tools) demonstrate substantially higher outcomes than those using single features. A study of 342 women-owned microbusinesses in India found that those using three or more platform features reported 78% higher revenue growth over 12 months compared to those using single features, controlling for business characteristics (Verma, 2024).

Qualitative evidence suggests three synergy mechanisms. First, functional complementarity: payment features enable monetization of customer relationships built through content and network features. Second, capability reinforcement: skills developed through one feature (e.g., digital literacy from payment apps) transfer to effective use of other features (e.g., content creation). Third, constraint compensation: multiple features provide alternative pathways when one feature faces contextual barriers (e.g., peer networks compensate for limited credit access) (Pal et al., 2024).

4.5 Illustrative Longitudinal Revenue Trajectory Patterns

Synthesis of longitudinal evidence across studies reveals three distinct revenue trajectory patterns represented in Figure (3).

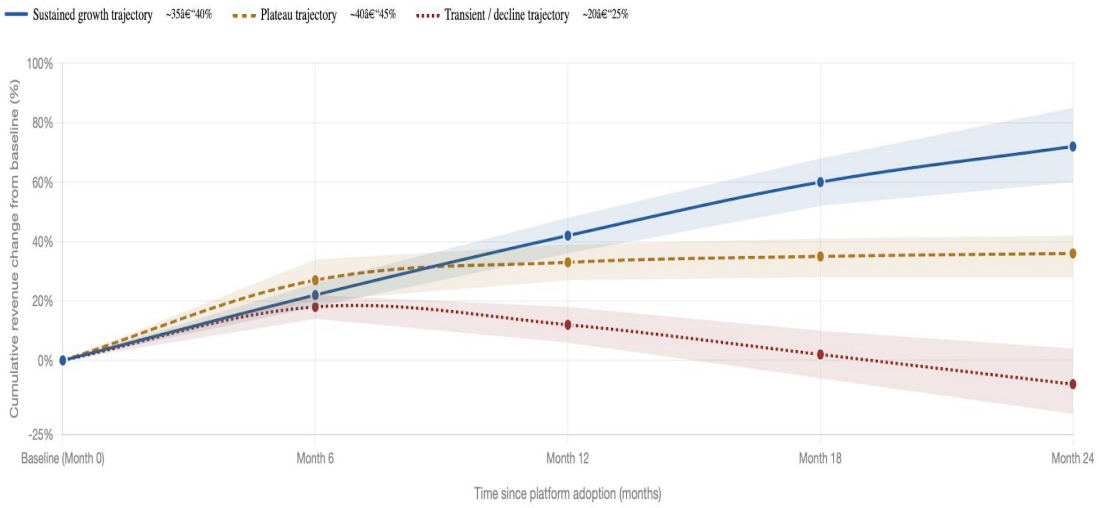

Figure 3. Illustrative longitudinal revenue trajectory patterns among women entrepreneurs using digital platforms

4.5.1 Sustained Growth Trajectory (Estimated 35 to 40% of Women Entrepreneurs)

Women in this trajectory demonstrate consistent revenue growth over 18 to 24 months, characterized by: early adoption of multiple complementary platform features, active engagement in peer networks, continuous skill development, and diversification of customer bases. Studies report that sustained growth entrepreneurs typically achieve 60 to 85% cumulative revenue increases over 24 months (Kawane et al., 2024; Verma, 2024). Qualitative evidence suggests that sustained growth depends on: digital literacy enabling effective feature use, supportive family environments allowing time investment in business development, and access to reliable internet infrastructure (Pal et al., 2024).

4.5.2 Plateau Trajectory (Estimated 40 to 45% of Women Entrepreneurs)

Women in this trajectory experience initial revenue gains (20 to 35% in first 6 to 9 months) followed by plateau or modest growth. Studies suggest that plateau patterns result from: limited digital literacy constraining advanced feature use, time constraints from domestic responsibilities limiting business expansion, and saturation of local customer networks (Rajeev et al., 2022; Nath et al., 2024). Qualitative evidence indicates that plateau entrepreneurs often use platforms primarily for order processing rather than active customer engagement and network building.

4.5.3 Transient or Decline Trajectory (Estimated 20 to 25% of Women Entrepreneurs)

Women in this trajectory experience initial gains followed by revenue decline or business exit. Studies report that transient patterns are associated with: poor internet infrastructure causing platform access difficulties, lack of peer support leading to entrepreneurial isolation, and family opposition to women's business activities (Ongare, 2023; Rajeev et al., 2022). Qualitative evidence suggests that decline often results from external shocks (health crises, family emergencies) that women cannot buffer due to limited financial reserves and social support.

These trajectory patterns are synthesized from convergent evidence across multiple studies reporting longitudinal patterns rather than derived from latent class growth analysis (LCGA) of primary panel data. No single included study provided individual-level panel data suitable for LCGA. The trajectory typology represents an illustrative framework integrating reported patterns across studies to characterize heterogeneity in women's entrepreneurial outcomes.

4.6 Contextual Moderators of Feature Effectiveness

Evidence indicates that three contextual factors moderate the effectiveness of platform features in reducing gendered conversion constraints:

4.6.1 Digital Literacy

Women's digital literacy including basic smartphone operation, app navigation, and digital transaction skills moderates the relationship between platform features and outcomes. Studies report that women with higher digital literacy achieve 40 to 55% greater revenue gains from platform features compared to those with limited literacy, controlling for business characteristics (Rajeev et al., 2022; Verma, 2024). Qualitative evidence suggests that digital literacy enables women to: access advanced platform features, troubleshoot technical problems independently, and adapt to platform updates and new functionalities.

4.6.2 Infrastructure Quality

Internet connectivity reliability and smartphone access moderate feature effectiveness. Studies from rural areas with poor connectivity report 30 to 45% lower revenue gains from platform features compared to urban areas with reliable infrastructure (Ongare, 2023; Rajeev et al., 2022). Qualitative evidence indicates that infrastructure constraints: limit women's ability to engage customers in real-time, reduce trust in digital payment reliability, and increase transaction costs through repeated connectivity failures.

4.6.3 Social Norms and Family Support

Prevailing gender norms and family attitudes toward women's entrepreneurship moderate feature effectiveness. Studies report that women with supportive family environments achieve 35 to 50% higher revenue gains from platform features compared to those facing family opposition (Kawane et al., 2024; Ongare, 2023). Qualitative evidence suggests that family support provides time and space for women to engage with platforms, legitimizes women's entrepreneurial activities to customers and suppliers, and buffers women from social stigma associated with public economic participation.

4.7 Cross Country Contextual Variation

While the core feature taxonomy and mechanisms generalize across emerging economies, evidence reveals important contextual variations:

India: Dominance of UPI payment infrastructure and WhatsApp based social commerce; strong government digital inclusion initiatives (e.g., SEWA ESS, WEP) providing complementary training and mentoring; high smartphone penetration but

variable internet quality in rural areas (Pal et al., 2024; Nath et al., 2024).

Bangladesh: Rapid growth of bKash mobile payments and Facebook based social commerce; limited fintech credit access due to regulatory constraints strong peer network effects compensating for weak formal institutions (Rahaman et al., 2024).

Sub-Saharan Africa: M-Pesa payment dominance in Kenya; WhatsApp and Facebook primary social commerce platforms infrastructure constraints limiting feature adoption in rural areas strong community-based peer networks (Manneh et al., 2025; Ongare, 2023).

These variations suggest that optimal platform feature configurations depend on local infrastructure, regulatory environments, and social structures. Platform designers and policymakers should adapt feature prioritization to local contexts rather than applying uniform approaches.

5. Discussion

5.1 Theoretical Contributions

This synthesis advances gendered platform empowerment theory in three ways. First, we shift analytical focus from platform-level to feature-level mechanisms, demonstrating that specific functionalities digital payments, algorithmic credit, peer networks, content tools operate through distinct conversion mechanisms to reduce gender-specific constraints. This feature-centric approach enables more precise theoretical specification of empowerment pathways and more targeted practical interventions.

Second, we develop the Gendered Capability Conversion Framework integrating capability theory with platform feature analysis. This framework explains how platform features function as conversion factors that reduce gendered constraints in financial autonomy, market access, social capital, and skill development. Importantly, the framework specifies contextual moderators (digital literacy, infrastructure, social norms) that shape feature effectiveness, explaining heterogeneity in empowerment outcomes across women and contexts.

Third, we demonstrate that sustained empowerment depends on synergistic feature ecosystems rather than isolated interventions. Evidence of functional complementarity, capability reinforcement, and constraint compensation mechanisms suggests that platform features create multiplicative rather than additive effects. These finding challenges linear models of technology adoption and highlights the importance of integrated platform design and multi-feature access strategies.

5.2 Comparison with Prior Literature

Our findings extend prior research in several ways. While previous studies documented general associations between platform adoption and women's entrepreneurial outcomes (Cesaroni et al., 2017), we identify specific features and mechanisms driving these associations. Our synthesis reveals substantially larger effect sizes for multi-feature ecosystems (78% revenue growth) compared to single-feature interventions (35 to 45% growth), suggesting that prior studies may have underestimated platform potential by examining isolated features.

Our trajectory typology extends understanding beyond cross-sectional snapshots to reveal heterogeneity in longitudinal patterns. The identification of sustained growth, plateau, and transient trajectories challenges assumptions of uniform platform benefits and highlights the importance of complementary capabilities (digital literacy) and contextual supports (family support, infrastructure) for sustained empowerment.

Our findings also nuance debates about digital divides and platform empowerment. While some scholars emphasize digital exclusion risks (Rajeev et al., 2022), our evidence suggests that platform features can reduce gendered barriers even in resource-constrained contexts provided that complementary investments in digital literacy and infrastructure accompany platform access. This suggests a more optimistic but conditional view of platform empowerment potential.

5.3 Practical Implications

5.3.1 For Platform Designers

Platform designers should prioritize feature ecosystems that integrate payment, credit, network, and content functionalities rather than optimizing single features in isolation. Design recommendations include: (1) seamless integration of mobile payment features with social commerce tools to enable frictionless monetization; (2) algorithmic credit features that leverage platform transaction data to provide micro-loans without traditional collateral; (3) peer network features with moderation tools that facilitate safe and supportive community building; (4) content creation tools with templates and tutorials that reduce digital literacy barriers.

Designers should also implement gender-responsive design principles including: privacy features that protect women from family surveillance of business activities; flexible engagement models compatible with women's domestic responsibilities; and culturally appropriate interfaces that respect local gender norms while expanding women's economic opportunities.

5.3.2 For Policymakers

Policymakers should adopt feature-centric rather than platform-centric digital inclusion strategies. Instead of promoting specific digital platforms, policies should encourage the integration of empowerment-enhancing features and interoperability across platforms, enabling women-owned microbusinesses to combine complementary digital services effectively. Key policy recommendations include establishing regulatory frameworks that ensure non-discriminatory algorithmic credit access within fintech platforms, investing in digital literacy programs that emphasize business-oriented platform skills, strengthening digital infrastructure to provide reliable internet connectivity in rural and underserved regions, and implementing social norm transformation initiatives that foster family and community support for women's digital entrepreneurship activities.

In addition, policymakers should address existing evidence gaps to support more informed and effective interventions. This can be achieved through developing standardized outcome measurement frameworks to facilitate comparability across studies, funding longitudinal panel studies that monitor women-owned microbusinesses' business trajectories over extended periods of 3 to 5 years, and supporting experimental and quasi-experimental evaluations of feature-specific digital interventions to strengthen causal inference and policy relevance.

5.3.3 For Development Practitioners

Development organizations should design interventions that combine platform access with complementary capability building. Effective intervention models include

(1) digital literacy training emphasizing business-relevant platform skills (mobile payments, content creation, customer engagement)

(2) peer mentoring programs connecting experienced platform users with novices

(3) family engagement initiatives building household support for women's digital entrepreneurship

(4) infrastructure support (smartphone loans, internet subsidies) reducing access barriers.

Practitioners should also adopt adaptive implementation approaches that tailor feature prioritization to local contexts. In contexts with strong payment infrastructure (e.g., India's UPI), interventions should emphasize content and network features. In contexts with weak formal credit access (e.g., Bangladesh), interventions should prioritize peer-to-peer lending features and savings groups.

5.4 Limitations and Future Research Directions

This synthesis has several limitations that suggest future research directions.

1. Publication bias may have increased the reporting of positive results, so future studies should include unpublished and negative findings for better accuracy. Future studies can explore unpublished research and null findings to better assess the extent of publication bias.
2. Since most studies are from India, future research should include more evidence from regions such as Latin America, Southeast Asia, and sub-Saharan Africa.
3. Most existing studies use observational methods, so future research should use experimental designs to establish stronger causal relationships.
4. Different studies use different outcome measures, making comparison difficult, so future research should develop standardized measurement frameworks.

6. Conclusion

It is crucial to acknowledge the constraints of the current study in order to facilitate the development of future investigations that overcome them. Although this systematic mixed-method evidence synthesis provides robust evidence regarding the role of digital platform features in enhancing women entrepreneurs' revenue outcomes, several limitations remain. First, the evidence base is geographically concentrated in India, which may limit the generalizability of findings across other emerging economies and cultural contexts. Future studies should therefore prioritize evidence generation from underrepresented regions such as Southeast Asia, Latin America, and sub-Saharan Africa. Second, most included studies rely on observational and quasi-experimental designs, limiting the strength of causal inference regarding platform feature effectiveness. Experimental and longitudinal panel studies are necessary to better capture long-term entrepreneurial trajectories and establish causal relationships. Third, the limited duration of follow-up periods in several studies restricts understanding of sustained platform impacts over time and may affect the reliability of trajectory interpretations. Future research should therefore support long-term monitoring using approaches such as latent class growth analysis to identify heterogeneous business growth pathways among women entrepreneurs.

The proposed Gendered Capability Conversion Framework advances theory by explaining how platform features facilitate women entrepreneurs' access to markets, revenue generation, financial autonomy, social capital formation, and skill development. The framework further identifies important moderators such as digital literacy, infrastructure quality, and prevailing social norms that shape the effectiveness of platform features and explain variations in empowerment outcomes across contexts. Illustrative synthesis of longitudinal

evidence further reveals distinct revenue trajectory patterns including sustained growth, plateau, and transient or decline trajectories, demonstrating that platform benefits are not uniformly experienced. These findings highlight the importance of integrated interventions that combine platform access with digital literacy training, infrastructure development, and social norm transformation initiatives. For platform designers, our findings suggest prioritizing feature ecosystem integration and gender-responsive design principles. For policymakers, feature-centric digital inclusion strategies should incentivize empowerment-enhancing platform functionalities while addressing complementary capability and infrastructure gaps. Development practitioners should adopt adaptive implementation approaches that tailor feature prioritization to local contexts and combine platform access with capability-building interventions.

References

1. Alom, K., Rahman, M. M., & Hossain, M. S. (2025). Digital finance leads women entrepreneurship and poverty mitigation for sustainable development in Bangladesh. *Journal of Innovation and Entrepreneurship, 14*(1), Article 471. https://doi.org/10.1186/s13731-025-00471-2
2. Anifowose, O., Oladipo, O., & Adeyemi, A. (2022). *Gender, financial inclusion, and women entrepreneurship: Assessing the impact of digital financial technology on business performance in Nigeria* [Unpublished manuscript].
3. Balakrishnan, S. (2025). Food delivery services as a platform for women's social networking and community building: A socio-digital perspective. *Indian Scientific Journal of Research in Engineering and Management, 9*(1), Article 50165. https://doi.org/10.55041/ijsrem50165
4. Camacho, S., Hassanein, K., & Head, M. (2021). Social commerce affordances for female entrepreneurship: The case of Facebook. *Electronic Markets, 31*(4), 933–952. https://doi.org/10.1007/S12525-021-00487-Y
5. Cesaroni, F. M., Demartini, P., & Paoloni, P. (2017). Women in business and social media: Implications for female entrepreneurship in emerging countries. *African Journal of Business Management, 11*(14), 316–326. https://doi.org/10.5897/AJBM2017.8281
6. Divya, M. S., Geetha, E., & Mohana Sundaram, N. (2025). Scaling up the women-led MSMEs: Investigating the role of fintech as a catalyst in promoting financial inclusion for women-led MSMEs. *International Journal of Social Science and Economic Research, 10*(8), 2945–2965. https://doi.org/10.46609/IJSSER.2025.v10i08.001
7. Hong, Q. N., Pluye, P., Bujold, M., & Wassef, M. (2017). Convergent and sequential synthesis designs: Implications for conducting and reporting systematic reviews of qualitative and quantitative evidence. *Systematic Reviews, 6*(1), Article 61. https://doi.org/10.1186/s13643-017-0454-2
8. Ilavarasan, P. V., Kar, A. K., Sharma, R. S., & Janssen, M. (2020). Digital microfinance crowdfunding for disconnected women entrepreneurs in India. *International Journal of Entrepreneurship and Small Business, 41*(4), 574–594. https://doi.org/10.1504/IJESB.2020.100355623
9. Kawane, S. H., Mulye, R., & Srivastava, M. (2024). Enhancing and sustaining entrepreneurial mindset and ecosystem through social capital: A case of rural women in North Gujarat, India. *International Journal of Asian Social Science, 14*(5), 181–200. https://doi.org/10.55493/5007.v14i5.5106
10. Kurniasari, F., Widodo, S., & Pramono, C. (2024). Development of financial literacy and fintech adoption on women SMEs business performance in Indonesia. *Eastern-European Journal of Enterprise Technologies, 6*(13), 56–68. https://doi.org/10.15587/1729-4061.2024.312613
11. Manneh, A., Jallow, F., & Ceesay, M. (2025). Ties that bind and platforms that amplify: How social networks and social media enable the growth of Gambian women entrepreneurs. *Advance*, Article 175455151. https://doi.org/10.31124/advance.175455151.19555608/v1
12. Nath, R., Kumar, S., & Sharma, P. (2024). The role of ICT in empowering women-led MSMEs: Analysing WhatsApp commerce as a catalyst for SDG 5 & SDG 8 in Tier-3 India. *International Journal of Research in Engineering, Science and Management, 7*(11), 234–248.
13. Ongare, D. O. (2023). Exploring the economic empowerment of rural women entrepreneurs through digital platforms: An investigation into the utilization of social media platforms. *International Journal of Advanced Research in Computer and Communication Engineering, 12*(7), 241–256. https://doi.org/10.17148/IJARCCE.2023.12741
14. Otokiti, S. O., Awonusi, F., & Adeyemo, K. (2021). Developing a framework for leveraging social media as a strategic tool for growth in Nigerian women entrepreneurs. *International Journal of Multidisciplinary Research and*

Growth Evaluation, 2(1), 587–607. https://doi.org/10.54660/.ijmrge.2021.2.1-587-607

15. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ, 372*, n71. https://doi.org/10.1136/bmj.n71
16. Pal, J., Chandra, P., Kameswaran, V., Parameshwar, A., Joshi, S., & Johri, A. (2024). Digital technology and the empowerment of Indian women micro-entrepreneurs. In *Proceedings of the 2024 IEEE Global Humanitarian Technology Conference* (pp. 234–241). IEEE. https://doi.org/10.1109/GHTC62424.2024.10771561
17. Praween, K., Sharma, R., & Gupta, S. (2025). Breaking barriers: Digital transformation and financial inclusion for women-led small and medium enterprises (SMEs) in emerging economies. *International Journal of Innovative Science and Research Technology, 10*(10), Article 25oct688. https://doi.org/10.38124/IJISRT/25oct688
18. Rahaman, M. A., Sultana, N., & Islam, M. S. (2024). Digital pathways to women's empowerment: Use of Facebook, Instagram, WhatsApp, and e-commerce by women entrepreneurs. *Journal of Business and Technology, 19*(2), 45–67.
19. Rajeev, M., Vani, B. P., & Bhattacharjee, M. (2022). *Women online: A study of common service centers in India using a capability approach*. Social Science Research Network. https://doi.org/10.2139/ssrn.4204202
20. Sen, A. (1999). *Development as freedom*. Oxford University Press.
21. Singh, R., Kumar, A., & Verma, P. (2025). The role of digital innovation in empowering women entrepreneurs: A case study of MSMEs in Uttar Pradesh and nearby urban centers. *International Journal for Multidisciplinary Research, 7*(5), Article 55483. https://doi.org/10.36948/IJFMR.2025.v07i05.55483
22. Supritha, K. (2025). Adoption of digital payments and their impact on business success among women micro-entrepreneurs. *International Journal for Research in Applied Science and Engineering Technology, 13*(2), Article 72590. https://doi.org/10.22214/IJRASET.2025.72590
23. Verma, S. (2024). Role of digital entrepreneurship in social empowerment of women entrepreneurs in India: An empirical study. *Journal of Informatics Education and Research, 4*(3), Article 1805. https://doi.org/10.52783/jier.v4i3.1805

Figure Descriptions

Figure 1: PRISMA 2020 Flow Diagram

Flow diagram showing systematic review process: Identification phase (n=847 database records + n=23 citation tracking, n=312 duplicates removed → n=558 records screened); Screening phase (n=558 screened, n=421 excluded); Eligibility phase (n=137 full-text articles assessed, n=107 excluded with reasons: no focus on women entrepreneurs n=38, no platform feature analysis n=29, no emerging economy context n=21, no revenue/empowerment outcomes n=12, unpublished/grey literature n=7); Included phase (n=30 studies included in

Figure 2: Gendered Capability Conversion Framework Conceptual framework showing horizontal flow from left to right: (1) Platform Feature Ecosystem box containing three sub-boxes: Fintech Features (digital payments, algorithmic credit), Social Commerce Features (content tools, marketplace access), Peer Network Features (group chat, community moderation); (2) Arrow to Gendered Conversion Mechanisms box containing four mechanisms: Financial Autonomy, Market Access, Social Capital, Skill Development; (3) Arrow to Empowerment Outcomes box containing: Revenue Growth, Business Survival, Network Expansion; (4) Arrow to Revenue Trajectories box containing: Sustained Growth (35–40%), Plateau (40–45%), Transient/Decline (20–25%). At bottom, Contextual Moderators box (Digital Literacy, Infrastructure Quality, Social Norms) with upward arrows to all main boxes indicating moderation effects.

Figure *3.* Illustrative longitudinal revenue trajectory patterns among women entrepreneurs using digital platforms. Revenue change (%) represents cumulative percentage change from baseline. Data points represent estimated midpoints of ranges reported across included studies. Trajectory proportions are approximate, summing to 100%. This figure is an illustrative synthesis; individual-level panel data and latent class growth analysis (LCGA) were not available in included studies. Shaded regions indicate the reported inter-study range around each midpoint estimate.