JOURNAL OF CULTURAL ANALYSIS AND SOCIAL CHANGE

Journal of Cultural Analysis and Social Change,
2025, 10(4), 2619-2633
ISSN: 2589-1316

Cultural Negotiations of Digital Transformation: Womenpreneurs and Social Media in Rural India's Domiciliary Enterprises

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Citation: Shukla , T., Nirban, V. S., Das, M., Nadig, R. S., & Buttan, D. (2025). Cultural Negotiations of Digital Transformation: Womenpreneurs and Social Media in Rural India's Domiciliary Enterprises. *Journal of Cultural Analysis and Social Change*, *10*(4), 2619–2633. https://doi.org/10.64753/jcasc.v10i4.3297

Published: December 14, 2025

ABSTRACT

The global expansion of digital ecosystems, particularly social media and communication technologies, is widely positioned as a catalyst for inclusive entrepreneurship. These platforms promise new forms of market engagement, visibility, and networking. However, their design and deployment often reflect logics that privilege formal, urban, and male-dominated entrepreneurial models, for women engaged in domiciliary enterprises, micro-enterprises operated from within the home, such digital transformations remain unevenly realised. This study emphasises how women actively interpret, accommodate and challenge digital expectations within their socio-domestic environments. Doing so positions digital adoption as a continuous process of cultural negotiation. This study further adopts a techno-feminist perspective to interrogate how women entrepreneurs in rural and semi-urban India navigate the affordances and constraints of digital technologies within gendered domestic, cultural, and policy structures. Employing an ethno-narrative methodology, the research explores how digital access is mediated by familial obligations, socio-cultural norms, and policy regimes that frequently overlook the informal labour economy. The findings reveal a complex negotiation between enabling factors, such as mobile connectivity, digital financial tools, and peer support networks, and enduring inhibitors, including digital illiteracy, restricted mobility, and limited awareness of digital governance initiatives. Social media emerges as both an enabler and a barrier: it facilitates entrepreneurial outreach and communication while simultaneously reinforcing structural exclusions. These dynamics demonstrate how digital transformation is not just technological but also culturally embedded and negotiated. In response, the study proposes the Digitally Intervened Domiciliary Womenpreneurship Model, a conceptual framework that reframes digital inclusion not as a purely technical matter, but as a socio-political, cultural and governance issue. By centring the lived experiences of womenpreneurs, the study contributes to broader debates on gender, digital equity, and participatory governance, underscoring the need for inclusive digital ecosystems that recognise and support informal, home-based enterprises.

Keywords: Domiciliary, Digital Education, Womenpreneurship, Digital Entrepreneurship, Technology-driven business, cultural stereotypes, Gender Equality, techno-feminism

INTRODUCTION

Digital ecosystem tools and social interaction-based platforms, including content-sharing platforms, facilitated women entrepreneurs in broader arenas towards capitalising on ordered technical skills. A decade-long synthesis by Ishmuradova et al. (2024) emphasises the pivotal role of mobile and communication technologies in promoting digital inclusion, particularly in underserved regions. Their literature review highlights how digital ecosystems have transformed from isolated ICT infrastructures into integrated systems that mediate access to services, knowledge, and participation in public life. These ecosystems also give rise to new forms of information consumption, which can both empower and mislead. Jácobo-Morales and Marino-Jiménez (2024) provide a systematic review of research on clickbait, demonstrating how digital media strategies increasingly leverage emotional and sensational cues to capture user attention. Within digital ecosystems, such engagement mechanisms have become normalised, often at the expense of informational integrity.

The rural economy has been intertwined with rural entrepreneurship as it has been considered a solution for unemployment, minimising poverty, and migration towards the progress of backward regions. Within this sphere, the influence of women entrepreneurs is enormous yet latent due to a lack of empirical evidence. The entrepreneurial potential of women remains largely unrecognised and untapped, as indicated by the International Labour Organisation. The popular techno-feminist research validates that the male supremacy of the tech-savvy arena is a forceful catalyst in engraving gender-based standards. Policies emphasise the digital economy, fintech, and technology-enabled ecosystem towards digital inclusion. However, evidence suggests that women struggle due to gender order and socio-cultural dynamics, resulting in gender inequality towards dynamic digital requirements. These struggles and challenges show that women's use of digital tools is a process of cultural negotiation, where digital expectations clash with pre-established norms and household duties rather than just being a technical problem.

Centuries of overt and covert gender partisanship have resulted in power disparity among men and women, and it has manifested itself in numerous ways across social and scientific domains. Gender inclusion approaches are required in all social realms. Such inclusion must acknowledge how cultural scripts influence digital labour, digital access and entrepreneurial participation in the context of digital transformation. The findings further substantiate the idea that the accelerated growth of women's entrepreneurship is facilitated by potential drives (Olarewaju & Fernando, 2020).

The Union Budget of India 2022 emphasises the digital economy, fintech, and technology-enabled ecosystem towards digital inclusion; however, evidence suggests that women struggle due to gender order and socio-cultural dynamics, resulting in gender inequality due to the dynamic digital requirements. The Global Gender Gap Report (WEF 2018) displayed marginal women's participation in the workforce. As per the data, the overall global gender gap could be closed in 108 years. The report used population-weighted group averages of many countries on their progress toward gender parity across Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment. A noteworthy constraint for women entrepreneurs is the lack of funding. Women-led start-ups obtain less than 3% of all venture capital in semi-urban to rural setups. This difference is more visible in places. Moreover, the new media platforms allow for connecting with people around the globe to create and sustain personal and professional relationships.

The Digital Ecosystem encompasses the artefacts of information and communication technology (including devices, software, and hardware technologies such as internetworks) embedded in broader technology accessories such as telecommunication and electrical infrastructure. The creation of computers evolved over the last six decades, with the design of UNIVAC-I in 1952 and later with MIT's minicomputers in 1975, Apple's microcomputer in 1977, and IBM's personal computer in 1981. In the 1990s, we witnessed the creation of the World-Wide-Web, the Internet, and the Digital ecosystem we encounter today. Information and Communication Technologies are an amalgamation of diverse platforms. It serves as products built over the computers and internetworks to create, disseminate, assimilate, and analyse user information.

Within a given domain, there are agents of the digital ecosystem. These agents include general citizens, specific demographic and geographic populations, customers, suppliers, regulators, service providers, governments, for-profit and non-profit organisations, etc. These agents and the affordances of the digital ecosystem, broadly referred to as the 'Network Capital', provide a suitable testbed for women-to-be-entrepreneurs from home to experiment with their ideas. The last two decades have improved female student enrollment, aligning with the 'Beti padhao, beti bachao' initiative. Government initiatives such as 'Vigyan Jyoti' would help female students in classes 9 to 12 to further the cause of empowerment. Women Entrepreneurship and Empowerment Foundation (WEE) is not a DSTDST-supported initiative to bolster an entrepreneur ecosystem for women, irrespective of age, qualification, caste, class, and geography, leading to 174 start-ups. Empower is another initiative that encourages and supports women entrepreneurs within the larger canvas of technology for business. The complex relationship between education, opportunities, social fabric, and women's access to and use of technology remains debated, particularly

in rural and semi-urban geographies. Working within social constraints, executing multiple business roles, managing financial resources, and showcasing entrepreneurial competencies bundled together into a colossal tomorrow, a prospective women entrepreneur assumes that Low-Order Technology Skills (LOTS) will act as a catalyst to deal with these challenges. The techno-feminist theoretical lens and gender-blind phenomenon have been used to understand digital affordances' adsorption, absorption and desorption. The ethno-narrative approach has been used to weave in these processes using techno-feminist theory within the context of domiciliary ecology, a constituent of cultural, social, physical, and literary contexts. The study is an enquiry into the phenomenon of women entrepreneurship in rural India, focusing on women entrepreneurship's access to and use of affordances offered by the Digital Ecosystem. Extending this study towards cultural negotiations of digital transformation, it tends to bring forth that instead of being linear or a strict process, women's use of digital tools is constantly shaped and reinterpreted by gendered norms, household expectations and community-based cultural logics. There also exists a growing concern among scholars regarding the long-term effects of clickbait on public trust, information overload, and the erosion of critical media literacy. This reflects an emergent contradiction in digital ecosystems: while they are expanding access to content, they are simultaneously complicating users' ability to navigate that content meaningfully (Jácobo-Morales & Marino-Jiménez, 2024).

A feminist technoscience approach in this context explores the deeply embedded social and historical implications of science and technology within the purview of identity and social location, meaning that there is a conspicuous dialogue between technology and originality in their mutual development. Techno-feminism propounded intersecting vectors of gender and technology studies (Wajcman, 2004). This approach reflects the design and usage of everyday technologies.

Gendered conventions are persistent in this manner within the technology arena. Existing studies substantiate that the sole usage of technology was symbolic of masculine power (Wajcman, 2004). The interplay between the participants, particularly the marginalised female entrepreneurs and their usage of digital platforms, can be effectively understood using a techno-feminist approach. This approach enables the analysis of the socio-cultural settings that act as critical actors to alter technological interfaces for the overall career trajectories of womenpreneurs.

To understand the interplay between gender and technology more nuancedly, this study combines the techno-feminist discourse with a gender-blind sexist paradigm. Here, a gender-blind framework implies that technology and other factors operate as a site of gender blindness that inadvertently privileges men over women. Moreover, popular analysis of "techno feminism" shows that techno feminism is an approach "in which technology is both a source and consequence of gender relations" and also uses media intervention in propagating digital usage patterns (Wajcman, 2004). Here, the microwave example was used as an unsuccessful marketing attempt for men. As the sales dropped, the marketing of the products was mainly working women who wanted to cook for their families despite busy days, and the microwave became a handy cooking tool. This event highlighted the intervention of gender in technology through advertising and marketing, further highlighting how cultural negotiations such as gender norms, domestic responsibilities, and societal perceptions reshape how a device is framed, used, and valued. It also accentuated the gendered impact of the pattern. For example, the microwave, symbolic of domestic space, became synchronous with feminine usage. The mutual dialogue between the two has been mapped and called "co-production" concerning gender and technology (Jasanoff, 2004). The interplay between gender and other socio-cultural identities and technology correlates to society and all constructions of not just gender but also technology as a performed protectorate rather than given and unchanging.

Working within social constraints, executing multiple business roles, managing financial resources, and showcasing entrepreneurial competencies bundled together into a colossal tomorrow, a prospective women entrepreneur assumes that Low-Order Technology Skills (LOTS) will act as a catalyst to deal with these challenges. Gender relations are rooted in the social structure in India; they identify the attributes embedded in the social-cultural matrix affecting women's opportunities and functionalities (Kumar & Shukla, 2017). Research suggests a digital skills crisis among women towards digital exclusion. It is more evident when reinforced with the gender dimension and other subjugation-leading dimensions such as age, race, experience, and socio-cultural-economic factors.

The study is a qualitative inquiry into women's access to and use of technology for entrepreneurial undertakings and how it helps them deal with the barriers. The objectives include examining the driving factors responsible for breaking the ceiling of an entrepreneurial sphere and identifying the enablers and inhibitors for the successful scaling of small-scale and entrepreneurial employment in the digital ecosystem.

For the present study, the employed constructs have been operationally defined as Domiciliary Womenpreneurship: It has been described as an entrepreneurial endeavour initiated, organised and gendered by women within the family or household premises. Gender-blind Phenomenon refers to the practice of not accounting for the inherent structural gender patterns by favouring men over women, thereby overlooking latent,

rooted sexism. Digital Education and Ecology: It is a set of complex but seamlessly entangled information and communication technology education that enables business functions.

Techno-Feminist Perspectives on Digital Inclusion and Entrepreneurship

Techno-feminism as a theoretical framework has evolved from the time of intervention on the cyborg concept as a hybrid figure that aims to challenge the traditional limits and boundaries between machines and humans, and the gender categories. The historical context of feminists' engagement with technology highlights the transformation of techno-feminism as a critical perspective that addresses both opportunities and challenges posed by technological advancements (Wajcman, 2004).

The discussion around techno-feminism also maps onto the design of technology and its development. The designing of technological artefacts has inherently kept the feminist perspective out of their purview and curated structures that are masculinist. Demand is directed towards the critical and inclusive design of technology (Bardzell & Bardzell, 2013) that is culturally embedded. The socio-cultural implications are, therefore, an integral component of analysis to evaluate the interplay between gender and technology. A feminist perspective, in this case, can thus make technology interfaces and accessibility more inclusive (Warschauer & Matuchniak, 2010). The discussion around inclusivity in the construction of digitality harps on intersectionality (Crenshaw, 2015), which advocates for inclusive online spaces. These inclusive online spaces can be achieved through a techno-feminist approach that mitigates perpetuating racialised, gendered and sexualised marginalisation in digital communities like gaming and social networking (Nakamura, 2014). Recent focus has shifted to how women entrepreneurs perform and scale their undertakings (Bardasi, Sabarwal & Terrell, 2011).

The digital ecosystem was perceived as a catalyst to bridge the gap between the haves and have-nots, leading to the development and empowerment of gender state data in the global south (Bhatnagar & Schware, 2000). The positive effect of social media on entrepreneurship, as media offers new prospects and augments networking skills and entrepreneurship, has been observed in research over the last two decades (Friedman, 2005; Hafkin & Huyer, 2006; Hafkin & Taggart, 2001; Huyer & Mitter, 2003; Francesca et al., 2017). Fewer lacunas exist due to a lack of basic digital skills crucial for ensuring entrepreneurs and socio-cultural difficulties, inviting work-home imbalance. It has also been inferred that "gender discrimination operates through covert mechanisms of gender-blindness, and such practices are normalised institutionally as a brand-new form of sexism" (Shukla, Das & Nirban, 2022).

The broader digital ecosystem of the online marketplace also assists womenpreneurs in reaching out to potential customer bases. The e-marketplaces generate a practical storefront for their business. Before starting online services, people rarely believed that online retail services would be successful. They had been battling for success continually, which is evident in the inherent prejudice regarding women's competencies, especially in the digital sphere. Research also suggests that gender mindfulness with rewarding gender-neutral standards could promote gender inclusion (Kamberidou & Pascall, 2020).

LITERATURE REVIEW

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The intersection of social media, entrepreneurship, and rural development has garnered significant scholarly attention, particularly concerning how digital platforms can empower rural entrepreneurs. Recent literature provides insights into the opportunities and challenges faced by rural entrepreneurs in leveraging social media and digital technologies.

A systematic literature review focusing on the adoption of digital marketing by rural micro-entrepreneurs in India was conducted by Goel, Veluri, and Mishra (2024). Their study highlights that while rural entrepreneurs are

increasingly recognising the potential of digital marketing to expand their businesses, there exists a considerable variation in adoption levels. Factors such as limited digital literacy, inadequate infrastructure, and lack of targeted training programs contribute to this disparity. The authors emphasise the need for tailored interventions to enhance digital competencies among rural entrepreneurs (Goel et al., 2024).

In a broader context, Olalekan (2023) provides a systematic review exploring the dynamics of rural entrepreneurship in the digital age. The study underscores the transformative impact of digital technologies on rural economies, facilitating access to wider markets and resources. However, it also points out challenges such as infrastructural deficits and the digital divide that hinder the full realisation of these benefits. The author advocates for policy measures that address these barriers to foster inclusive digital entrepreneurship in rural areas (Olalekan, 2023).

Focusing on the role of social networks, Tiwasing (2021) examines the performance of SMEs in rural and urban settings, emphasising the influence of social media business networks. The study reveals that rural SMEs often face limitations in network diversity and reach, impacting their performance compared to urban counterparts. The research suggests that enhancing digital networking opportunities could bridge this performance gap (Tiwasing, 2021).

In the context of rural women entrepreneurs, a study by Hidayat et al. (2022) investigates the social media behaviours and barriers impacting women e-commerce entrepreneurs in rural Australia. The findings indicate that despite challenges such as limited access to formal training and unreliable internet services, these entrepreneurs exhibit resilience by adopting innovative self-learning strategies. The study highlights the importance of supportive policies and infrastructure to empower women entrepreneurs in rural settings (Hidayat et al., 2022).

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METHODOLOGY

The study involves a qualitative approach to explain the objectives enumerated. The qualitative approach here allows sample study subjects to be themselves and helps cover the breadth and depth of the inquiry questions. The study employs an ethno-narrative approach, as depicted in Figure 1, which encompasses a hermeneutic examination of a phenomenon. The hermeneutic method incorporates multiple literary, physical and cultural contexts. Physical context is defined as digital ecology using a domiciliary set-up in rural settings. Literary context uses interviews as a method for detailed examination. Cultural context is explained as a feminist arena using gender as an analytical category. Gender is observed and interpreted as a techno-feminist frame. The approach employed is a subset of ethnography where observations become essential to explain the context. Figure 1 shows the description of the hermeneutic method encompassing the multi-layers and the meaning of each context to provide a comprehensive and vivid description.

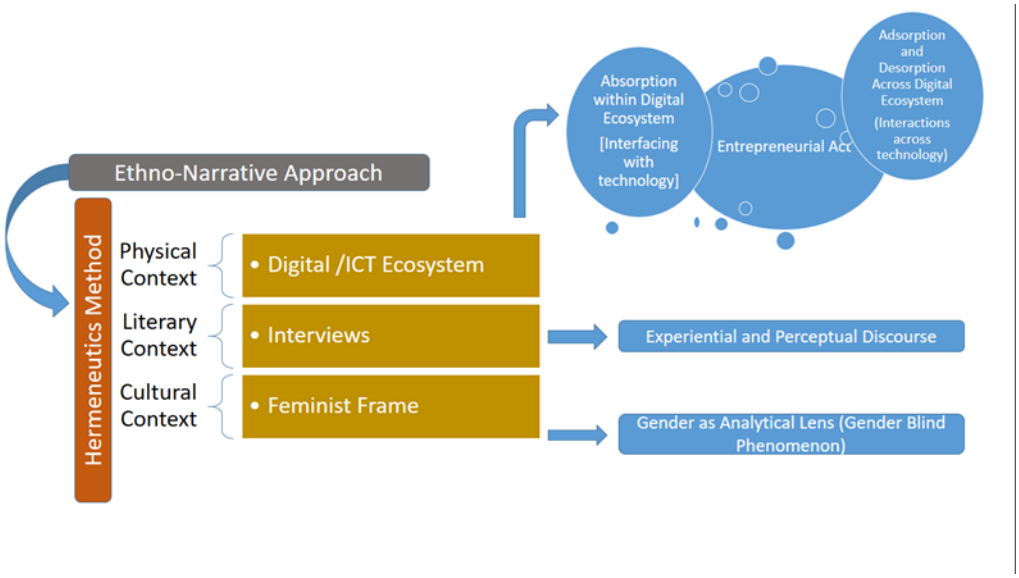

Figure 1 -Research Design for the study- Ethno-narrative Approach

Entanglements with technology artefacts in the Digital Ecology context can be understood through the dichotomy of exchange and consumption of information across organisational entities (Pee et.al., 2019). The authors connotated the phenomenon by using the processes of absorption, adsorption and desorption of information through technology artefacts. These processes denote engagements with the technology interface, retrieving and disseminating information through technology. While absorption within digital ecology encompasses users' direct connection with technology (hence creating a direct bond with it), adsorption and desorption encompass the transaction interactions of users with other stakeholders.

The intensity of absorption, adsorption and desorption is dictated by technology complexity, ease of use, education level, and access to technology. Similarly, the literary context embodies the experiential and perceptual behaviours of the womenpreneurs within the socio-technical context. This addresses the women's social placement (in entrepreneurial space) and their proximity towards technology use. This placement and proximity are driven mainly by their experiences with technology and perceptions about technology. Moreover, the cultural context provides a gender lens that addresses and gives insights into the gendered biases in the entrepreneurial space that male counterparts have historically dominated. These biases contribute to the complexity of the domiciliary womenpreneurship space.

A lens was required to develop a model that examined the objectives of representing a multidimensional picture based on the evidence obtained from the field. It would examine the structural blockades and facilitators to young women's empowerment embedded in the digital ecosystem. The challenge was to identify the women entrepreneurs as they are not a homogeneous group, so the issues faced by such entrepreneurs also vary concerning the technology aspect of their entrepreneurial activity. This study assimilated meaningful insights through interviews into the technology access and use phenomenon and the entrepreneurial practice phenomenon. Accordingly, women across various domains of entrepreneurship were chosen for a comprehensive picture. The scope of the study was so broad that any number was insufficient for such an investigation, so it was imperative to find respondents who had witnessed transitions in life. Hence, the convenient sampling methodology identified ten women entrepreneurs from semi-urban geography and middle-income backgrounds. It allows us to understand the attitudes and experiences of people for a definitive explanation of a given phenomenon.

Research questions derived from the objectives were used to draft an inventory of interview questions. The inventory was shared with the identified sample subjects for experiential retrieval before the interviews. The interviews were recorded in the form of narratives. Content analysis was conducted to determine the enablers and inhibitors of their entrepreneurial experiences. The details of the sample subjects are presented in Table I.

Table I Participant Profile

Participant ID	Category of Business	Age	Education	Digital device owned	Access to the Internet	Presence on Social Media	Experience with Digital artefacts	Work Experience	Family Structure
P_1	Home-based Garment Sales	41	Graduate	Mobile Smart Phone	Yes	Facebook Whatsapp Youtube	Yes	No	Joint
P_2	Home-based Cosmetic Sales	35	Graduate	Mobile Smart Phone	Yes	Facebook Whatsapp Youtube	Yes	No	Joint
P_3	Home-based Tutor services	32	Graduate	Mobile Smart Phone	Yes	Facebook Whatsapp Youtube	Yes	No	Joint
P_4	Home-based Tailoring Services	38	School Educated	Mobile Smart Phone	Yes	Facebook Whatsapp	Yes	No	Joint
P_5	Home-based Ladies Garments-Specialized	42	School Educated	Mobile Smart Phone	Yes	Facebook Whatsapp	Yes	No	Joint
P_6	Home-based Food / Tiffin Services	43	School Educated	Mobile Smart Phone	Yes	Whatsapp	Yes	No	Nuclear
P_7	Home-based Bakery Services	34	Graduate	Mobile Smart Phone	Yes	Facebook Whatsapp Youtube	Yes	No	Nuclear
P_8	Home-based Lifestyle Services	32	Graduate	Mobile Smart Phone	Yes	Facebook Whatsapp Youtube	Yes	No	Nuclear
P_9	Home-based Seasonal food/Pickle Items	45	School Educated	Mobile Smart Phone	Yes	Whatsapp	No	No	Joint

Participant ID	Category of Business	Age	Education	Digital device owned	Access to the Internet	Presence on Social Media	Experience with Digital artefacts	Work Experience	Family Structure
P_10	Home-based Garment Sales	36	School Educated	Mobile Smart Phone	Yes	Facebook Whatsapp	Yes	No	Joint

FINDINGS AND DISCUSSION

A detailed look into the profiles of the womenpreneur participants reveals a set of characteristics outlined below. These were generated through a meticulous ethno-narrative approach based on the content obtained from interviews and discussions they generated. As presented in Table II, these attributes have been divided into two categories - Strong Ties and Weak Ties. The notion of strong and weak ties in this study has been contextualised to represent the mixed baggage of elements that the womenpreneurs bring along as a baseline to start an entrepreneur journey and which have the potential to influence the outcome of the endeavour.

A techno-feminist approach scopes out the link between gender and technology; however, the actualisation of the relationship between the two is often missing in the discourse. To actualise the relationship between gender and technology, the material and cultural ecosystem are vital factors. In this study, the material and cultural tenets of the ecosystem are operationalised as the inhibitors and enablers for the womenpreneurs.

Table II. Strong and Weak Ties Elements

STRONG TIES	WEAK TIES
• Had prior mediocre to minimal exposure to • using a computer and the internet • Used feature phones and smartphones • Had a general awareness of mobile data usage • Had at least one social media platform account • They could find and connect to relevant resources online [people, vendors, experts, etc.] • Over a while, they could identify influencers in their online social networks	• Middle-class income group • School educated to graduation • Non-Working • Home Based • Middle-Aged • Living in a Family [Joint and Nuclear] • Comes from Semi-Urban geography

Strong Ties

The strong ties include elements that had a positive causal impact on the entrepreneurial activity. These elements helped, fast-tracked, and partially solved one or more entrepreneurial tasks. All subject womenpreneurs had minimal to mediocre experience using computers and the Internet, which requires low-order technology skills; most participants self-taught these skills. They never owned a device like a computer, but learned through their children or husbands, who owned one. This element gave them the baseline requisite for operating in a digital ecosystem.

Similarly, all participant womenpreneurs had access (owned) to either a mobile feature phone or a smartphone. This element gave them a digital ecosystem capacity to directly connect with the other stakeholders in the business activities, such as clients, potential customers, vendors, wholesalers, bankers, transporters, etc. This capacity enabled communication without space-time barriers.

Most of the participants had a general awareness of data usage on smartphones. The understanding and use of data and the Internet allowed them to access and share multimedia audio-visual content, which helped them educate themselves, attract more customers, and make meaningful decisions (such as the voice of colour, size, and shape of some products). All the participants had at least one and sometimes multiple social network accounts on platforms like Facebook, WhatsApp, YouTube, and Instagram. They replicated their entire social network on the virtual social network. By doing

so, they got access to network capital in real time. The strong ties within the womenpreneur's virtual social network immediately affected the growth of the business. Over time and frequent usage of the digital ecosystem elements, the participants developed skills in certain aspects of digital usage.
The access to various forms of sexist patterns embedded in female entrepreneurs' networks and connections creates a "digital field" for these women. Their networks operate as gender-blind enablers to eliminate sexist patterns embedded in the interplay between gender and technology as a masculinist space.

Weak Ties
The weak ties include elements that have a restraining causal impact on the entrepreneurial activity. These elements acted as barriers, slowed down, and created bottlenecks in one or more entrepreneurial tasks. All of the participating womenpreneurs came from the middle-class income population. The measures primarily include education, income, and lifestyle. In this context, any entrepreneurial endeavour by middle-class actors, particularly women, comes with the negative baggage of liabilities. Financial resources, meagre at hand, would be stretched for child education, daily chores, lifestyle sustenance, healthcare, and necessities.
Another important weak link is the education level of womenpreneurs from the middle class. Some participants were only school-educated, while a few were general arts and science graduates. None of the participants had professional qualifications. The reality left them handicapped in the baseline knowledge of a startup/ entrepreneurship/ business. Since these womenpreneurs played most business roles by themselves, they outscored themselves in competencies and skills.
Since the study focuses on domiciliary womenpreneurs, the home-based attribute is marked with many challenges. Some of these women's obstacles were space for office, front desk, business space, and homely intrusions. Most participants could squeeze out a small portion of their household budget for these requirements. However, the same space was used by such women for home and business in a few cases, such as using the same kitchen in the food catering business. Also, since most participants lived in a joint family setup, the 'crowd' in the house created hindrances to optimal space and resources, including financial resources. Though age is not a significant barrier, it becomes crucial in cases where the business requires manual effort, such as tailoring and food catering businesses. In addition, all participants were mothers with children to take care of and routine household chores to complete. In these circumstances, their fluid intelligence combines age, experience, and life skills that save the day for them.
The study was situated in a semi-urban geography. The purchasing power of the semi-urban population is low. Hence, it is challenging for domiciliary entrepreneurs to target the volume and competitive pricing of the product or service. Other significant implications of semi-urban geography are the shortage of financial assistance and the pursuit of profits. Hence, in this context, the "co-production" of the "digital field" is an outcome of multiple factors that apparently look gender-blind but inadvertently create systems of discrimination that do not allow women entrepreneurs to attain success. Issues embedded in reproductive labour and caregiving responsibilities, geographic location, age, and others operate as inhibitors to the success of female entrepreneurs. Also, factors like funding and usage of the socialisation process. Their blindness reinforces sexism that inadvertently privileges men over women.

Systemic Analysis
Enablers
In the digital ecosystem, the cornerstone is the entanglement of the user with the digital artefacts. The most used digital artefacts were laptops, smart mobile phones, and social networking platforms such as Facebook, WhatsApp, Twitter, YouTube, and Instagram. Most women had prior experience using a smart mobile phone with functional know-how of operating the interface. Also, most women had an online presence on at least one of the social networking platforms, mainly WhatsApp, with Facebook as the second most used platform. The 'enablers' in this context further exemplify the understanding of co-production because of the interplay between marginalised bodies (women entrepreneurs in this case) and digital artefacts (Jasanoff, 2004). The rampant usage of these artefacts and platforms, particularly by women, results in meaningful channels of gender-based economic empowerment. However, all the participants had different experiences with these technology artefacts. As one of the Participants pointed out –

"I had a feature phone of my own that I used to make and receive calls. Sometimes I would send an SMS also, but I always found it challenging to type… After a long time, I transitioned to an intelligent mobile phone. This was the one my son used to have. It was fancy but seemed complicated."

Womenpreneurs' social network played an important role in conceiving, starting up, running, managing the business, and motivating and supporting the whole exercise. Most subjects received support from family members, friends, and acquaintances. This infused the participants with a favourable prognosis of their business idea and an initial consumer base that would act as influencers in the marketing exercise. Women face problems in executing negotiating skills for

building networks. Information and communication technology is ubiquitous and has become an instrumental factor in entrepreneurial exercise.
A womenpreneur participant asserted-

"One of the early believers in my capability as an entrepreneur is my son and daughter, who became promoters of my idea of a homemade tiffin service. They connected their social networks with mine and vitalised my social network, which became the backbone of my business. New media platforms such as Facebook, WhatsApp, and the e-commerce marketplace gave me the confidence to reach a more comprehensive customer base and identify procurement resources."

Blockades to women's growth do not unexpectedly surface. At the same time, they enter the entrepreneurial world, and digital obstructions, too, emerge from the socialisation process. Their rational selections regarding such endeavours out of opportunities are all designed by gender customs and standards. It is accentuated when they lack strong network skills that are essential for personal and professional benefits. Digital friendliness increases visibility by building networks for customer sharing, even in semi-urban areas. Any business activity requires risk-taking behaviour, an essential attribute of an entrepreneur. Risk can be broadly defined as an adverse consequence of the failure of an undertaking or loss of resources. Most womenpreneurs in this study knew the risk and made calculated decisions. They started small and scaled up as they made progress. The small-scale nature and domiciliary setup helped them in calculating risks.
An imperative attribute that helped them deal with risk was the confidence in their knowledge of the core work they wanted to scale. Before making a decision such as investing money in solving issues related to taxation, logistics, or capital investment, the women educate themselves through open sources available online, explore all alternatives, and talk to an advisor (lawyer, accountant, vendor, online merchants, etc.) and make the best choice. All this was done sitting at home as technology was again instrumental because face-to-face interactions and travel would consume resources. One of the participants explained –

"I knew essential resources were involved in my endeavour- time, space, money, and reputation. The thought of failure frightened me sometimes, but I was confident in my knowledge of women's garments and my skills in managing multiple tasks. I would talk to my advisors over audio and video conference calls. It saves a lot of time and money apart from educating me."

Another participant elaborated that:
"I knew the risks involved- venture failure, loss of funds, mismanagement, and friends losing confidence in me. However, I decided to toil with hard work, persistence, and perseverance. If you don't even start because of the risks involved, you will never be able to do it. Give yourself a chance."

The vital obstacle in startup endeavours is risk perception. Women perceive higher levels of risk perception than men (Wagner, 2007). It can be evident that the gender discrepancy in entrepreneurship and differences in perception of both genders are shaped by the environment (Langowitz & Minniti, 2007). Innovativeness is an essential ingredient of any business activity, given the very competitive nature of the market. The innovativeness of the idea, innovativeness in initiating the business, innovativeness in acquiring and sustaining the customers, and innovativeness in dealing with bottlenecks play a remarkable role in venture success. The conversations mostly referred to innovation as converting knowledge into a socially functioning output. The critical aspect for efficient entrepreneurship is the digital skills needed in technology-driven milieus. One of the participants explained her experience-

"Within the neighbourhood, there was a similar service provider. His business was doing well. I had to think hard about how I would compete with him. I started by differentiating my menu for three meals. I offered a free meal per week to my customers… Indians have a sweet tooth, so I included a homemade sweet for lunch and dinner… I provided a part of the meal free… such as on birthdays… and anniversaries on special occasions."

Women are seen as having natural adeptness in carrying out multiple business roles. They are mothers, wives, family caretakers, working professionals, etc. This innate nature helps them manage their time, duties, lives, and responsibilities within limited resources. Most of the womenpreneurs in the study pointed out that when they started their business, they had little idea about business functions such as finance management, marketing, procurement, sales, banking, etc. However, when they faced the need to act in one of these roles, they could do it. A participant opined the following-

"I was quickly able to make a sales pitch to a potential customer, I negotiated the pricing for wholesale procurement, I could talk to the bank manager for the loan, and I went to the local press and put up an advertisement for my store. I wasn't aware of these role requirements, but I could work as I engaged in them, which helped."

Inhibitors

Factors like self-sufficiency, incapability to take risks, sponsorship, and required aggression at work inhibit their self-developed competency from using technology for needed tasks. There has been a remarkable absence of women's contribution to tech-based endeavours, as reproductive labour and caregiving responsibilities are considered the primary aspects of her existence.

"My confidence judges me to present my thoughts to anyone, as my husband pointed out that less aggression is observed in terms of work. However, I know the mathematical requirement of my input money, which was used in the initial phase of my business. Overall, I lose faith in myself as I am expected to work within my allotted space and sometimes feel unable to manage pressure."

The digital ecosystem gadgetry is pure and complex technology products by themselves. However, these technological marvels do not require high-order skills, innovation, user experience, and a universal schema. However, even low-order technology skills also require a certain threshold of acquaintance to engage with these artefacts meaningfully. Operational and functional digital know-how impeded those womenpreneurs who were only school-educated and were late adopters of these technological artefacts. As one of the participants highlighted her initial misery with the technology,

"I sought help from my husband and children to get used to the interface. I tried to remember the icons and functions. It took me quite a while to get comfortable typing, uploading images, video conferencing, etc. I wished I had prior experience with all that."

Most of the subject womenpreneurs opined that they lived in nuclear families, and with persistence, they could convince their family members to support them. But those subjects who lived with joint family members, implying a more significant number of family members to convince, more hours and effort for a double shift, initially faced more resistance. Womenpreneurs with infants and young children also faced difficulties convincing their immediate family members. A participant explained the scenario as follows-

"Though my working husband supported me, my mother-in-law was furious when she first heard of my shop in the house from my husband. She insisted that I first had to take care of my infant son, which would consume much of my time… when I would do business and would possibly waste family money."

Hence, the apparent gender-blindness of the entrepreneurial ecosystem, where it is assumed that women and men can participate equally, often becomes a myth because of certain implicit factors in gender-based stereotypes, joint-family structures, and traditional, feminised caregiving responsibilities, which inadvertently reinforce sexism in entrepreneurship. As a result, there needs to be more exposure to business functions' procedures, regulations, and paperwork know-how. According to one of the participants –

"Initially, I needed to learn about paperwork. I knew what I wanted to do. I knew my core work and had an idea of how to attract customers…. An acquaintance helped me to learn basic bookkeeping. Later, I also learned how to use Excel to keep records."

Multiple business roles need to be fulfilled for any successful venture. These functions have specific profiles, such as Financing, Marketing, Advertising, Procurement, Sales, and Budgeting. Only the owner/founder can carry out all these functions in domiciliary entrepreneurial endeavours. As a result, opportunities for sales growth, funding, and customer retention are missed. As one of the participants pointed out

"Initially, I focused on concretising and differentiating my business…. Talking to people and advertising my service through word of mouth and networking. Once I started, I focused on relevant and quality procurement of raw materials… I would lose time for marketing most of the days… seeking financial resources was an initial focus, but once the daily cycle of the business started functioning, I lost focus on that… It isn't easy to fulfil those roles."

Funding remains one of the most critical factors for an entrepreneurial endeavour. All startups, big and small, from the tech/non-tech domain to the non-agriculture part, require initial fundraising to initiate the process of entrepreneurship. In all cases, initial money comes from self-sourced savings, family, friends, etc. Most respondents in this study used self-sources to begin their entrepreneurial journey, and since these womenpreneurs came from middle-class income groups, their finances remained tight. A noteworthy barrier remains exterior sponsorship for womenpreneurs who lack equal chances to generate capital, hampering their endeavour's scalability. Thus, it hinders their ability to change and expand.

The disparity between genders in the capital is disheartening, leading to access to venture capital. Women entrepreneurs usually have smaller and more informal networks than their male counterparts. Thus, they have limited possibilities for interaction with individuals who control vital resources.

Among all inhibitors, funding was the most critical. Personal savings, small bank loans, and money from friends helped start the business. In due course, the income from the company was infused into the industry. For most womenpreneurs, it took some time to materialise some net revenue after all expenses. A participant explained-

"There were times when I reflected that I wouldn't be able to sustain myself without enough money. Moreover, raising funds was not easy. Even family, friends, and personal investors will need more confidence that it is wise to give funding to female entrepreneurs from a background such as ours. Procuring raw materials and equipment and asking for materials to cover logistics and recurring expenses, were beyond my personal savings range. So, I took a loan from a government scheme. During the business, I infused the revenue into capital expenses. It was challenging to persist and convince my family that funding would be overcome over time."

Extracted Conceptual Model

The extracted conceptual model represents the domiciliary womenpreneurship in the digital ecosystem. With the systematic analysis of participants' profiles, interview discourse, ground observations, and the ubiquitousness of digital interventions in all spheres of life, the researchers propose a Digitally Intervened Domiciliary Womenpreneurship Model [DIDWM] for home-based entrepreneurial activities. Two critical facets were extracted from domiciliary womenpreneurship: Enablers and Inhibitors. These two facets are proposed to be situated within the digital eco-space to facilitate three essential meta-operations of any entrepreneurial endeavour: Information and Interaction, Inquiry and Addressal, and scaling up the uptake risk.

Enablers have been represented as factors that play a positive role in conceiving, starting, running, and scaling the domiciliary entrepreneurial endeavour. On the other hand, inhibitors, in the context of this study, have been defined as factors that play a negative role in conceiving, starting, running, and scaling the domiciliary entrepreneurial endeavour. These are listed below in Table III.

Table III Extracted Enablers and Inhibitors

Enablers	Inhibitors
• Digital Experiences and Know-how • Network Capital • Positive Risk-Taking Behavior • Innovativeness • Managing Multiple Roles	• E-Commerce Technology Know-how • Double Shift • Lack of Procedural Knowledge • Lack of Confidence • Multitasking • Funding/Finances

Gender-blindness in this context is viewed as a phenomenon that amplifies sexism as technology influences womenprenuership along with many causal mechanisms, inclusive of socio-economic and cultural factors. For example, funding in this context can be theorised as a gender-blind factor, but it differentially impacts women's and men's access. This differential access eventually affects the possibility of entrepreneurial success. The standpoint of gender blindness also corroborates the techno-feminist framework, which underscores the interplay between gender and technology within the entrepreneurial ecosystem as a complicated co-production site, considering several integral factors.

The digital interventions were not commonly shared by all womenpreneurs, depicting distinct characteristics. A balanced ecosystem should result in digital functioning, which must be efficient and effective. The embedded system imbues multifaceted factors as facilitators and inhibitors. Still, there appears to be a requirement for pressing digital interventions to shift the ecosystems for such female aspirants, break ceilings for upward mobilisation of women's empowerment, and build a balanced ecosystem where digital functionality is valued from all ends. Based on the extraction through an ethno-narrative approach, an analytical model of Domiciliary Womenpreneurship is developed as presented in Figure 2.

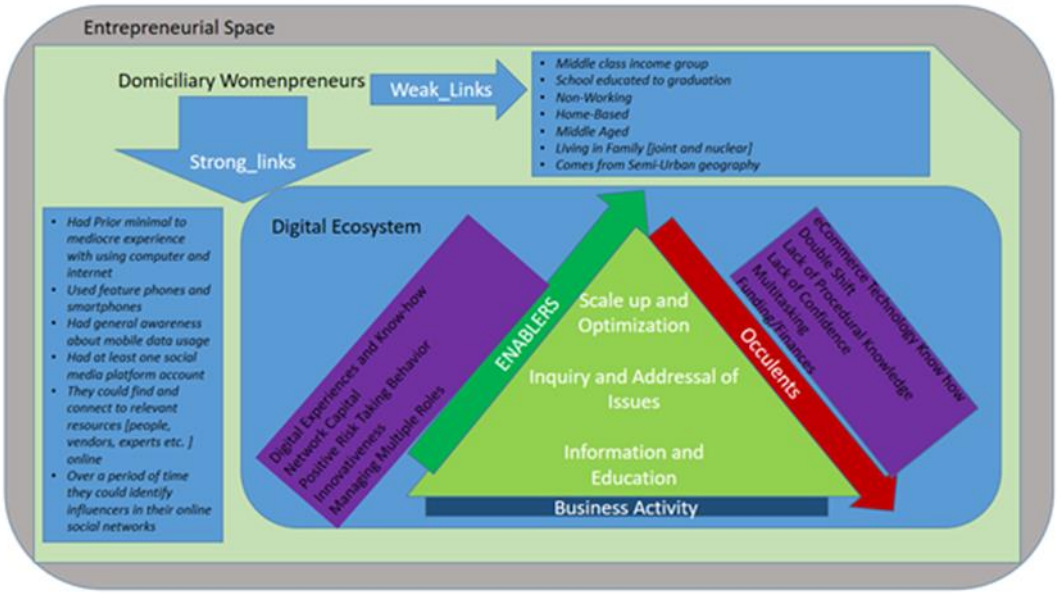

Figure 2. Digitally Intervened Domiciliary Womenpreneurship Model [DIDWM]

Techno-feminism is determined in its approach towards shaping feminist methodology as mechanical and a unified association of people and culture. The physical and cultural beliefs of the womenpreneurs, which derive from respective contexts, have been indicated as inhibitors and enablers for the ecosystem referred to aforesaid in the domiciliary space. Technology is no longer a product of rational technical rules, as artefacts are intricate parts of society where men and women are collectively supposed to contribute towards the larger good for society beyond the idea of technical or social. Here, the discrepancy in terms of the operations between both genders is quite evident, leading to inequality in the workspace.

CONCLUSIONS

Women are underrepresented in the world of entrepreneurs, and identified challenges are represented only as socio-cultural markers, especially in the digital world across distinct cultures. The reality encompasses many other factors far beyond these documented obstructions. Yet, they have not surfaced much; it is seldom a misconception that the elementary duty of women is to perform household tasks.

A techno-feminist analysis enables one to comprehend multiple layers through ethno-narrative enquiry as to how women employ technology towards a quality life, irrespective of distinct socio-cultural contexts of digital spaces. The gender-blind phenomenon amplifies the techno-feminist framework and demonstrates the interaction between gender and technology as a complex co-production towards disparity in the entrepreneurial ecosystem. Women's digital participation becomes an ongoing process of cultural negotiation within this co-production where norms of respectability, mobility, privacy and domesticity influence how technologies are accessed, interpreted and repurposed.

Encompassing digital knowledge, access, resources, and digital devices for lower-income women could bring meaningful transformations. The research could be helpful in categorising enablers and inhibitors and mapping the strategies to unlock the entrepreneurial possibilities of young women in the digital environment. With the rise in the number of governmental measures, only policy intervention would not suffice to achieve the purpose unless the rigid mindset does not change against the role stereotypes. Social media and communication platforms emerge as critical, though contested, tools in this journey. For rural women, these platforms offer low-barrier entry points to visibility, networking, marketing, and peer support. WhatsApp, Facebook, and Instagram are frequently used to showcase products, connect with local and diasporic markets, and participate in informal knowledge-sharing communities. However, these same spaces can reproduce gendered expectations and limit access through algorithmic biases, lack of digital literacy, or restrictive norms around online presence. Social media must therefore be viewed not merely as a communication channel, but as a socio-technical space shaped by both potential and constraint.

The socio-psychological inhibitor to the patriarchal "gender-appropriate" role must be omitted with the acceptance of gender neutrality. The study suggests that entrepreneurship significantly contributes to technology innovation with financial stimulus to accomplish the vision of the Indian government's flagship programs like “Atmanirbhar

Bharat" (self-reliant) to make India self-dependent. The findings suggest that women, irrespective of their background, are willing to take risks associated with the stated domiciliary entrepreneurial endeavours. The finding is substantiated by the observation of recent research - "The fluid and shifting gender identities of female programmers may allow them to readjust the gender boundaries" (Sun, 2021).

However, the challenges of scaling and sustaining the business with financial and technical know-how remain a dominant concern. The cases mentioned earlier reflect that 'independent decision-making and 'family support' are crucial to their entrepreneurship journey. This would help address intersectionality, the problem of the techno-feminist paradigm, and also aid in bridging the historical techno-gender divide, showing the gender blind phenomenon. This study also sets out robust implications on a policy level towards refining the structures of the digital education system to make it inclusive and gender-egalitarian.

Fostering linkages between urban and rural women entrepreneurs would facilitate the rural economy by encouraging women in the informal sector to emerge as representative voices in policy formation. It would provide women with access to build an ecosystem for a growing economy.

AI Disclosure Statement: No AI tools were used in the preparation and writing of this paper.

REFERENCES

Bardasi, E., Sabarwal, S., & Terrell, K. (2011). How do female entrepreneurs perform? Evidence from three developing regions. Small Business Economics, 37(4), 417–441. https://doi.org/10.1007/s11187-011-9374-z

Bardzell, J., & Bardzell, S. (2013). What is critical about critical design? Proceedings of the SIGCHI Conference on Human Factors in Computing Systems.

Bhatnagar, S., & Schware, R. (2000). Information and communication technology in development: Cases from India. Sage Publications.

Crenshaw, K. (2015). Say her name: Resisting police brutality against Black Women. African American Policy Forum, Columbia Law School.

Francesca, M. C., Paola, D., & Paola, 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

Friedman, E. J. (2005). The reality of virtual reality: The Internet and gender equality advocacy in Latin America. Latin American Politics and Society, 47(3), 1–34. https://doi.org/10.1111/j.1548-2456.2005.tb00317.x

Goel, R., Veluri, K. K., & Mishra, S. (2024). Understanding the use of digital marketing by rural micro entrepreneurs of India: A systematic literature review. Educational Administration: Theory and Practice, 30(5), 7629–7638. https://doi.org/10.53555/kuey.v30i5.4217

Hafkin, N. J., & Huyer, S. (Eds.). (2006). Cinderella or cyberella? Empowering women in the knowledge society. Kumarian Press.

Hafkin, N., & Taggart, N. (2001). Gender, Information Technology, and Developing Countries: An Analytic Study. USAID Office of Women in Development.

Hidayat, R., et al. (2022). Social media behaviors and barriers impacting women e-commerce entrepreneurs in rural Australia: A pilot study. Journal of Small Business & Entrepreneurship. https://doi.org/10.1080/15575330.2024.2339279

Huyer, S., & Mitter, S. (2003). ICTs, globalisation and poverty reduction: Gender dimensions of the knowledge society. United Nations Commission on Science and Technology for Development (UNCTAD).

Ishmuradova, I. I., et al. (2024). A decadal review of the role of communication-mobile technologies in promoting digital inclusion: Digital divide. Online Journal of Communication and Media Technologies, 14(3). https://doi.org/10.30935/ojcmt/14709

Jácobo-Morales, D., & Marino-Jiménez, M. (2024). Clickbait: Research, challenges and opportunities – A systematic literature review. Online Journal of Communication and Media Technologies, 14(4). https://doi.org/10.30935/ojcmt/15267

Jasanoff, S. (2004). States of knowledge: The co-production of science and social order. Routledge.

Kamberidou, I., & Pascall, N. (2020). The Digital Skills Crisis: Engendering Technology–Empowering Women in Cyberspace. European Journal of Social Sciences Studies, 4(6), 1–33.

Kumar, K. K., & Shukla, T. (2017). Towards social justice in institutions of higher learning: Addressing gender inequality in science & technology through capability approach. Administrative Sciences, 7(3). https://doi.org/10.3390/admsci7030022

Langowitz, N., & Minniti, M. (2007). The entrepreneurial propensity of women. Entrepreneurship: Theory and Practice. https://doi.org/10.1111/j.1540-6520.2007.00177.x

Nakamura, L. (2014). Indigenous circuits: Navajo women and the racialization of early electronic manufacture. American Quarterly, 66(4), 919–941.

Olalekan, O. O. (2023). Rural entrepreneurship in the digital age: A systematic review. International Journal of Sustainable Rural Development, 1(1). https://doi.org/10.54536/ijsrd.v1i1.2586

Olarewaju, T., & Fernando, J. (2020). Gender inequality and female entrepreneurship in developing countries. In Encyclopaedia of the UN Sustainable Development Goals. https://doi.org/10.1007/978-3-319-71058-7_92-1

Pee, L. G., Pan, S. L., Mingwel, L., & Jia, S. (2019). Social informatics of information value co-creation: A case study of Xiaomi's online user community. Journal of the Association for Information Science and Technology, 71(4), 409–422.

Shukla, T., Das, M., & Nirban, V. S. (2022). The persistence of gender-blind phenomena in Indian science academia. Journal of International Women's Studies, 24(1), 31.

Sowmya, B., & Pai, R. (2025). Digital inclusion of women entrepreneurs in the unorganized sector – A systematic review. Advances in Consumer Research, 2, 71–85.

Sun, P. (2021). Straddling between technology and gender boundaries: The identity negotiation of female programmers in China. Information, Communication & Society, 24(1), 19–34. https://doi.org/10.1080/1369118X.2019.1623905

Tiwasing, P. (2021). Social media business networks and SME performance: A rural–urban comparative analysis. Growth and Change, 52(1), 385–403. https://doi.org/10.1111/grow.12501

Wajcman, J. (2004). TechnoFeminism. Polity Press.

World Economic Forum. (2018). The Global Gender Gap Report 2018.

Wagner, J. (2007). What a difference a Y makes: Female and male nascent entrepreneurs in Germany. Small Business Economics, 28(1), 1–21.

Warschauer, M., & Matuchniak, T. (2010). New technology and digital worlds: Analyzing evidence of equity in access, use, and outcomes. Review of Research in Education, 34(1), 179–225.

