Analysing the Role of Innovation in Enhancing Women-Led Entrepreneurial Ventures

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Abstract. Women-led enterprises can bring about change and foster the economy. However, gender-based challenges like access to finance, policy restrictions, and access to education and technology hinder the full realisation of this power. This research article critically examines how innovation can be a transformational instrument for overcoming the barriers to success for women entrepreneurs. The exhaustive literature review, policy analysis, and comparative case studies highlight the critical success factors for women to prosper in complex settings: access to mentorship, education, resilience, and the ability to undertake frugal innovations. The study also lists other ongoing structural impediments, including financial hindrances, cultural norms, digital divides, and regulatory bottlenecks.

The research discusses the relevance of policy frameworks, education, and technology in determining women's entrepreneurial outcomes. Policies relating to gender responsiveness, inclusive regulatory frameworks, and public-private partnerships have proved critical in access to resources and opportunities. Education, especially entrepreneurial and STEM education, further boosts innovation, informed risk-taking, and scaling of women's ventures. Women have increasingly accessed broader markets, been connected to global networks, and conducted their businesses more efficiently owing to technological tools, particularly mobile access and digital payments.

The study proposes potential actionable strategies and policy interventions for fostering a women-friendly ecosystem conducive to innovation, including gender-inclusive innovation hubs, gender-lens investing, simplifying business regulations, digital capacity-building, and targeted mentorship programs. Innovation enables women entrepreneurs to create scalable, sustainable, and socially impactful businesses. It concludes that fostering innovation among women entrepreneurs is not merely an issue of gender equity but a central driver for inclusive and resilient economic development. Furthermore, it calls for intersectional research approaches that account for caste, class, and geographical differences to inform further policy and programmatic interventions.

Keywords: Women entrepreneurs, innovation, entrepreneurship, gender equality, policy, education, technology.

1 Introduction

For ages, entrepreneurship has been acknowledged as a vehicle for economic growth, job creation, and social change. Entrepreneurship in the world today has redefined industries, disrupted conventional business models, and provided innovative solutions to long-standing social issue [4]. In this entrepreneurial upheaval, women entrepreneurs have emerged as formidable forces in both economic activities and social development. Many of their businesses fill in the gaps in underserved markets while adding inclusive perspectives to business and empowering communities. Yet, with growing numbers comes proof of capability and opportunities; women entrepreneurs face considerable barriers that hinder their participation and success in every entrepreneurial ecosystem.

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Historically, the concepts of entrepreneurship and economic contribution in general refer to women being undervalued and underreported. Portraying the traditional image of an entrepreneur, high-growth startups have focused on male leadership; these sectors often use technology as a primary driver. This perception has opened avenues for systematic under-funding and mentorship, skewed policy design, and prestige [6]. Women-led enterprises operate in comparatively lower-margin and informal sectors, partially due to access to capital, education, and business networks. Inherently, these barriers perpetuate all the phenomena that dim the light on women as highly innovative entrepreneurs with a profound impact on society.

Innovation- creating or adopting new goods, services, processes, or business models- has been recognised as the most important facilitator of entrepreneurship. Through innovation, renderers differentiate themselves, adapt to an evolving market, and earn a competitive advantage. Women entrepreneurs would find innovation to hold much more promise in creating economic benefits and as an avenue to escape structural and social constraints. Frequently, innovations developed by or for women precisely target specific community needs, enhance social welfare, and foster sustainability [8]. Yet, as in the whole field of entrepreneurship, innovation is also a male-oriented phenomenon. Women have a disproportionately unfavourable representation in STEM fields in terms of patent ownership and high-tech startups. This gap shows a more significant problem and the wider missing opportunities in the innovation ecosystems.

The urgency to address these disparities has been heightened by global movements advocating for gender equality, digital inclusion, and economic justice. International frameworks such as the United Nations Sustainable Development Goals (SDGs)—particularly Goal 5 (Gender Equality) and Goal 9 (Industry, Innovation, and Infrastructure)—have underscored the importance of supporting women in entrepreneurship and innovation. Policymakers, academics, and development practitioners have increasingly acknowledged the need to remove barriers for women entrepreneurs and to create ecosystems that nurture and reward their innovations [3]. Yet, progress remains uneven across regions, with cultural norms, institutional inertia, and digital divides continuing to restrict the agency and capabilities of women entrepreneurs.

This research article critically analyses its nexus concerning women's entrepreneurial ventures. It notes how innovation could serve as a strategic lever in empowering women entrepreneurs, making them more competitively relevant in the market and even making their social and economic impact more significant. The paper currently addresses three main objectives, which are first to establish success factors and challenges female entrepreneurs face; second, to invoke policy frameworks, education, and technology as having influenced their entrepreneurial outcomes; and finally, to give suggested actions and policies that lead to the entire stimulation of woman's innovative potential and hence their enterprises.

This study performs a literature review and case study analysis to explore how innovation, especially frugal and digital innovation, empowers women entrepreneurs. It is evident that innovation greatly helps women in their entrepreneurial endeavours, with prerequisites being access to capital and credit, relevant curricula, enabling ecosystem, and technology. Otherwise, intersectionality matters: caste, class, geography, disability, and so on directly impinge upon women's experiences of innovation.

Frugal innovation speaks of low-cost, resource-efficient solutions to meet the needs of underprivileged communities, an approach typically followed by women in developing countries-from green products that satisfy the needs of rural communities to the digital products used to aid education and health [5]. Yet, it is this very type of innovation that finds itself largely absent from mainstream discourses celebrating high-tech innovations.

There still exist barriers such as a lack of funds, poor digital infrastructure, exclusion from networks, and underrepresentation in decision-making. Such gaps will be closed through coordinated efforts of governments, academia, representatives of civil society, and those of international institutions through inclusive education, digital access, and gender-sensitive policies.

These women find opportunities through digital platforms by using the bypass of traditional gatekeepers, but the digital gender divide is still another major hurdle, especially in low-income areas [1]. Educational and capacity-building initiatives that could include mentoring and digital literacy will have to be developed with consideration given to social and cultural constraints in order to empower women in their ability to innovate [2]

Ultimately, the support of innovation among women entrepreneurs stands as an instrument not only for gender equity but as a vehicle for inclusive economic growth, job creation, and sustainable development [7]

2 Objectives , Research Question and Hypothesis

2.1. Objectives

- To identify the key success factors and challenges women entrepreneurs face.
- To explore the impact of policy frameworks, education, and technology on women entrepreneurs.
- To recommend actionable strategies and policy interventions to foster innovation and support women entrepreneurs.

2.2. Research Question

- How does innovation influence the growth and resilience of women-led entrepreneurial ventures in the context of systemic gender-based challenges?
- What are the key success factors and structural challenges that influence the growth and sustainability of women-led entrepreneurial ventures in diverse socio-economic contexts?
- How do policy frameworks, access to education, and technological innovations impact the entrepreneurial outcomes of women in both urban and rural settings?
- In what ways does innovation—particularly frugal and digital innovation—serve as a strategic tool for overcoming gender-specific barriers in entrepreneurship?
- What actionable strategies and policy interventions can be implemented to foster a more inclusive, innovation-driven ecosystem that supports and scales women's entrepreneurial initiatives?

2.3. Hypothesis

If innovation—particularly through inclusive technology, supportive policy, and entrepreneurial education—is made accessible to women, then women-led enterprises will demonstrate higher resilience, growth potential, and community impact despite structural barriers.

3 Literature Review

This research applied a PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach to identify and include high-quality, peer-reviewed literature relevant to women-led entrepreneurship and innovation. A total of 49 studies were selected, all sourced from the Scopus database, ensuring scholarly credibility and thematic alignment. The selection process involved a comprehensive review of articles published between 2013 and 2025, focusing on empirical and theoretical works related to gendered entrepreneurship, innovation ecosystems, policy frameworks, financial inclusion, digital transformation, and socio-cultural constraints.

Initial searches yielded over 150 studies using keywords such as *"women entrepreneurship," "innovation," "gender digital divide," "policy frameworks,"* and *"entrepreneurial success factors."* After applying inclusion criteria—such as relevance to women-led enterprises, empirical evidence, and Scopus indexing—and removing duplicates and off-topic papers, 49 studies were finalized for thematic synthesis. These sources span various disciplines including economics, management, development studies, and technology, and were instrumental in shaping the theoretical framework, identifying research gaps, and supporting the findings. The review was conducted with a focus on diversity of geographic contexts (India, South Asia, MENA, Europe), methodological robustness, and relevance to innovation as a tool for gender empowerment.

Gender and entrepreneurship have attracted considerable scholarly attention, and this focus has revealed that women often experience some challenges compared to men. According to the Global Entrepreneurship Monitor (GEM), women entrepreneurs are continuously shown to be the minority in high-growth sectors and tend to have low innovation rates. Both developed and developing economic literature show that systemic inequality colours women's experiences in entrepreneurship [45]. Lately, the role of innovation in increasing the viability of women-led entrepreneurial ventures has become the subject of considerable scholarly attention. This literature review synthesises existing literature thematically along several key dimensions: structural barriers, innovation and technology, education and capacity building, networks and ecosystems, socio-cultural contexts, stakeholder engagements, and future gaps. The review reflects on topics that require research while identifying critical gaps requiring investigation.

It is a consistent observation across research that entrepreneurs in developing economies face structural barriers. Access by [16] [10] [12] categorise influences as lack of accessing finance, absence of regulatory support, social expectations, and familial roles. Finance was the most cited barrier recognised across regions, including Kosovo, Saudi Arabia, and rural India, and it was most often tied to a lack of government implementation of support schemes [22]. They thus agree with [29] who categorised barriers within five significant themes: financial, socio-cultural, educational, legal-political, and market challenges.

There is ample literature on how technology can be an instrument to bridge gender gaps in entrepreneurship. [11] maintain that social commerce platforms serve to innovate and promote women's economic empowerment during the crisis. [19] argue that digitalisation can be offered to reduce gender bias in funding processes while opening access to previously untapped markets through innovative fintech platforms. In turn, [9] bring empirical evidence to bear in making the case that innovation, particularly in the sphere of product-based innovation, is associated with heightened female leadership in enterprises across worldwide longitudinal research exists, though, which aims to study the sustained impact of technology adoption in enterprises started by rural and low-income women [34]. Future studies could be interested in the long-term mechanism through which AI, blockchain, and gig work will sustain and scale women-led innovations, which is a good tool that could favour women's prosperity and success. According to [23] complex thinking and AI models may be used for education for new decision-making for women in Mexico. The link between formal education and systematic entrepreneurial behaviour was corroborated through studies by [24][27] and others. This stream of literature emphasises the need to incorporate STEM, digital skills, and entrepreneurship education as bedrock tools for innovation. Practical applications, however, remain few and far between. [22] show that despite the availability of cooperative services in Ethiopia, access to finance and effectiveness in implementation have been considerably low. Therefore, further studies must determine what aspects of the education program could make it more accessible, scalable, and result-oriented.

In general, networks influence innovation and resource promotion for women entrepreneurs. [21] make a special Network Analysis (SNA) showing that women's seigneurial networks are predominantly familial rather than diverse but more inclusive. The gender-diverse networks facilitate broader access to informal capital as well as market intelligence that they provide. Similarly, [13] describe the importance of institutional ecosystems, party in placing high-growth women-led ventures meritocracy, support programs, and the networking infrastructure that makes up that institution; in place of such hopeful insight, the attention seems scant on how women from marginalised groups engage in such networks, and how these informal or purposedly virtual-like ecosystems may bridge those gaps.

Untold studies about the deepened roots of culture and institutional models affecting the innovation journey for women. [25] in Iran and [31] in India mentioned that the factors affecting women’s entrepreneurial self-efficacy are patriarchal norms, inaccurate perceptions surrounding entrepreneurship and non-recognition. Most of these sociocultural challenges also coincide with legal and institutional inefficiencies. Further, [15] conducted a comparative study for the EU about the regional differences in how institutional frameworks affect women in accessing entrepreneurship. They highlight the dual relationship between societal and entrepreneurial norms, thus establishing a case for nuanced policy design.

Researching a string of well-painted cultures and seemingly institutionalised norms will show how they will influence women in their innovation journeys. Patriarchal norms, societal perceptions toward entrepreneurship and lack of recognition played essential roles in blocking entrepreneurial self-efficacy for women in studies by [25] from Iran and [31] from India. Social and cultural challenges, inter alia, have overlapped with legal and institutional constraints. Also, [15] conducted a regional EU study to look into the regional differences in how institutional frameworks impact women's access to readership. They emphasise societal and entrepreneurial norms, arguing for their nuanced policy design.

[26] [20] continue the discourse to position entrepreneurs in larger sustainability and climate change discourses. Nair's conceptual framework promotes long-term stakeholder engagement to co-create value, while [20] advocate for more women in innovation to attain climate targets. These works speak to the intersection of innovation, gender, and sustainability. However, little empirical work has been undertaken to validate these frameworks. Some scope exists for field research into the environmental and social impacts of innovation-led enterprise studies, which generally analyse the effects of dedicated institutional initiatives, such as India's Atal Incubation Centres (AICs), on women entrepreneurs through mentorship, training, and incubation services within them. Thus, findings indicate positive impacts but also underline existing issues regarding outreach and equity. This finding relates to the larger calls for more gender-sensitive incubator design and funding strategies. Nevertheless, no longitudinal studies have so far been conducted to assess the grouch initiatives or innovation impact of such-level analyses on how innovation ecosystems differ from one country to another. [24][9] have made such analyses. They urge the establishment of models based on the Quadruple Helix involving government, academia, industry, and civil society to ensure inclusive digital innovation.

Yet, more granular research is needed to understand how such models function across socio-economic contexts. Cross-country comparative studies should examine what makes policies work in one setting and fail in another.

Research Gaps and Future Directions

While there is a body of literature on innovation and entrepreneurship, prominent gaps remain. First, there is hardly any systematic analysis from an international perspective. Most of the studies tend to homogenise against the gender category without considering how factors such as caste, tribe, disability, geography, and age combine and yield differential access to the resources for innovation as well as outcomes through entrepreneurship. Research documenting these intersectional dimensions is necessary to address the differences in experiences between the diverse groups of women and their needs.

Another gap remains the digital divide and unequal access to technology. Among the supposed "enablers" of innovation are digital tools; however, it has failed to consider the disparity in digital literacy, affordability, and infrastructural development in the rural and low-income contexts. Most studies tend to rate mostly urban or upper-middle-class women and say nothing of those who may not have smartphones, stable internet connections, or the technical know-how to access digital platforms.

Long-term effects of innovation-related interventions remain under-researched. While a few studies have documented immediate short-term outcomes from capacity-building programs, training sessions, or financial inclusion initiatives, we have attempted to analyse whether further innovation or growth for the venture over time will result even with systemic change. Longitudinal studies tracking the evolution of women-led enterprises over several years would give much sounder elucidation regarding the effectiveness of these programs. Longitudinal studies tracking the evolution of women-led ventures over several years provide a more robust picture of the program's effectiveness.

Thus, the area of climate innovation is still quiet in the literature. There may be very few papers that recognise the potential of women entrepreneurs in contributing toward environmental sustainability, but not much research has been conducted on how women innovate to reduce the climate challenge and how green entrepreneurship relates to gender and Indigenous knowledge systems. While often well-received in theory, an exam examining policies is essential. There may be talking points about the numerous initiatives worldwide, from funding, but very few evaluations have examined real-world implementation, the scale or equity outcomes. It is critical to know which policies work under what conditions or for whom so that this success can be replicated and not a generalised risk of misapplication.

These gaps also present rich opportunities for future research, which may benefit from interdisciplinary, longer-term, and context-sensitive approaches that inform the development of inclusive innovation ecosystems.

4 Research Methodology

This study aims to analyse a qualitative research design within the framework of interpretivist epistemology to evaluate the nexus between innovation and the success of women-led entrepreneurial ventures. Due to the intricate nature of and sociocultural considerations surrounding the subject matter, a qualitative approach provides the researcher with insight into women's entrepreneurship experiences, institutional contexts, and innovation practices.

Research methodology embraces three major significances: literature review, case study analysis and policy evaluation. Thus, the literature review explored existing academic debates, such as those gaps that needed attention, and built a theoretical argument on innovation and women's entrepreneurship. Journals, government reports, publications from development agencies, and working papers in innovation, entrepreneurship, and policy provided some of the sources for the review.

The qualitative data collection strategy's purpose was to capture the complexities and lived experiences of women entrepreneurs under innovation-driven arrangements. The central mode of data-gathering selection was a systematic review of secondary sources, which included peer-reviewed journal articles, government reports, policy briefs, and working papers of development organizations. To complement the literature review, illustrative case studies were thoughtfully chosen across regions and sectors so as to be broadly representative of women-led entrepreneurial activities. These cases thus became both examples and empirical lenses for exploring recurrent themes. Furthermore, document analysis was carried out on institutional policies to scrutinize gender responsiveness and the existence of innovation-enabling provisions. Data-analysis proceedings followed a thematic coding framework so as to afford triangulation and pattern identification across literature, policy, and case studies.

The illustrative case-study method employed above has further illuminated the actual rather than fictional application of innovation in different socioeconomic and geo-ecological contex of different women's venturests. Such case studies are designed to represent all possible dimensions, including region, sector, and scale, from rural micro-enterprises to a sizeable urban tech-upserve to present thick context and reveal how women entrepreneurs use innovation strategically and adaptively.

Third, a policy analysis framework was adopted to examine how existing institutional mechanisms affect women entrepreneurs. This included a study of national and international policies, programs, and funding schemes that pertain to entrepreneurship and innovation, specifically addressing how policies recognise intersectional issues such as those found with caste, class, and digital access.

The thematic content analysis dealt with the data where the recurring patterns, strategies, and barriers were coded to elicit major themes consonant with the research objectives. Reliability and depth of insights were ensured by triangulation across the data sources. Ethical considerations on issues like gender sensitivity and confidentiality were exercised throughout the different processes of the research. This methodology creates a grounded, contextual understanding of how options enter into and create pathways for women entrepreneurs' trajectories while delivering evidence-based recommendations for interventions to support them.

5 Key Success Factors and Challenges Faced by Women Entrepreneurs

Today, women entrepreneurs are an increasingly important part of the economy worldwide. Their contributions span every sector, from agriculture, technology, retail, and health care to education. Despite the strides women have made, they still face multiple barriers that inhibit their complete participation in entrepreneurship ecosystems [47]. Thus, understanding the main success factors and challenges women entrepreneurs face, they fasten the design of appropriate, effective interventions that foster inclusive innovation.

5.1. Women, Innovation, and Enterprise: Empirical Reflections and Trends

Empirical data from Indian and international sources attest to the importance of innovation, particularly digital innovation, in aiding women toward successful entrepreneurship. The GSMA (2023) and NSSO consistently reported the existence of a gender digital divide, putting the number of women in India owning phones at 64% and those accessing the internet at 33%, against 85% and 58% of their male counterparts. Such poses barriers to the use and access of digital tools toward growth and innovation. Alongside innovation, otherwise called support, better outcomes have been attained. According to a case study of the Karnataka Start-up Mission, women who were tech-trained have sustenance rates at 74% and a revenue growth rate of 28%, against those without such training with sustenance rates of 39% and a revenue growth rate of 12%. Besides, digitally connected women entrepreneurs worldwide are far more likely to access markets and grow revenues (World Bank, UNCTAD, 2023).

Participation among women in innovation ecosystems has for a long time remained scarce. In India, 17% of start-up founders and 13% of patent applicants are women, respectively (AIM, IPO, 2023). Besides schemes such as the Stand-Up India, there is hardly any uptake of the benefits due to poor outreach and implementation. Consequently, women still constitute the major proportion of frugal and community-driven innovations, especially in agriculture, health, and education, with 27–41% of such initiatives being attributed to them (UN Women, FAO, UNESCO, 2023).

5.2 Key Success Factors

Several critical factors come into play that make women-led entrepreneurial undertakings successful. Education and skill development are the cornerstone, giving women the ability and confidence to engage in strategic planning, finance management, and innovation. Entrepreneurial and vocational training sharpen their adaptability and leadership in an ever-evolving business world. Mentorship and role models are equally important when it comes to directing, providing moral support, and opening up opportunities for networking. Access to capital is also of paramount importance; women with access to micro credit, venture capital, and gender-lens investment are well-positioned to introduce innovation and scale their businesses.

Technology will only empower women more by providing them avenues toward market reach and increasing operational efficiencies. This means that technology brings competitive advantages and increased productivity through the use of digital tools and online commerce, plus mobile marketing. Likewise, accessing powerful professional and social networks enable women to find resources, markets, and partner with others. Government policies alone, subsidising and fast-tracking licenses, building innovation hubs, and so forth would create an inclusive entrepreneurial ecosystem. Resilience, perseverance, and a strong entrepreneurial mindset help some women navigate through systemic problems. Most of them succeed through frugal innovation wherein they are able to creatively use limited resources to meet local needs and to adapt to changing market conditions.

5.3 Key Challenges Faced by Women Entrepreneurs

Several systemic obstacles prevent women from growing and thriving as entrepreneurs. Among the biggest problems is limited access to capital: collateral and formal credit histories or guarantors are often unavailable to them, besides there being the extra layer of bias from most investors. Gender stereotypes and societal norms further marginalize women, questioning their leadership or business acumen, especially in sectors dominated by men. Time poverty caused by the double burden of household work and business responsibilities limits away from networking, training, and scaling opportunities.

The legal and policy frameworks are inadequate or poorly enforced in many cases, the land issues, inheritance rights, and red tape stifling formalization. Market intelligence and procurement opportunities, along with customer data, are unavailable for women, especially in rural or informal sectors, decreasing competitiveness. The digital divide for women lacks internet access, digital skills, and affordability of devices, thus limiting women from making full use of the crucial technologies for entrepreneurship.

In place, sociocultural restrictions, mobility constraints, and patriarchal norms impede engagement in the entrepreneurial ecosystem. Even where government support schemes exist, poor implementation mechanisms and gender-insensitive design mechanisms often hinder outreach and meaningful impact. These challenges demand intersectional, structural solutions to create an inclusive and empowering entrepreneurial environment for women.

6 Impact of Policy Framework, Education, and Technology

The technological landscape is regarded as a foundational variable concerning innovation in the entrepreneurial environment, especially in the case of women-led ventures. In turn, where digital tools have eased entry barriers and increased operating efficiencies, technology is a key enabler of information, finance, networks, and broader markets. Women entrepreneurs benefit within the limits and constraining factors because technology becomes a channel through empowerment, freedom, and global competitiveness [42]. This section discusses how technology impacts the innovation landscape within different parameters of women-led entrepreneurship, substantiated with examples, numbers, and strategic viewpoints.

6.1. Digital Platforms as Innovation Enablers

Such digital platforms, e-commerce sites, media, and cloud-based enterprise solutions provide an inexpensive and scalable avenue to create, manage, and grow their business. On platforms like Shopify, Amazon, and Facebook Marketplace, women sell products on a global market without having a storefront. Social media is also channelled for marketing and customer engagement, where entrepreneurs create the brand and establish a loyal customer base at a low cost.

The rise of these digital marketplaces has particularly affected women in rural and marginalised areas to evade distribution bottlenecks and build direct links with their buyers [43]. Further, integrated logistics and payment systems have rendered supply chain processes frictionless while driving down transaction costs and improving cash flows.

6.2. Mobile Technology and Financial Inclusion

Though it may seem obvious, mobile technology, especially smartphones, has transformed how women entrepreneurs access financial services, meet customers and manage business operations. Mobile banking, digital wallets, and fintech solutions, such as M-Pesa and Google Pay, have put financial access at an entirely new level. These alternatives are helpful for women, traditionally excluded from formal banking systems, providing access to credit, safe transactions, and business accounts [40].

In addition to financial technology, the company has been creating products, especially for micro-entrepreneurs, that include short-term lines, mobile point-of-sale systems, and peer-to-peer lending channels. Such innovations reduce reliance on intermediaries and further grant women business owners autonomy.

6.3. E-Learning and Capacity Building

Education and skills development have thoroughly been transformed in such a way that all the devices and tools are used for the online learning platforms: Massive Open Online Courses, webinars, YouTube tutorials, and special apps provide individuals with a low-cost alternative to acquire knowledge and experience in specific areas-for instance, business management; digital marketing; programming; finance; product innovation; and so much more [39]. In emerging markets across the world, South Koreans have Udemy, and Indonesia has joined Khan Academy to offer massive entrepreneurship courses.

These tools continued to prove a lifeline for those, especially during times of restrictions on physical movement, as during COVID-19. They are also equipping women to scale professionally and personally and shift their business models as required for competitiveness.

6.4. Remote Work and Gig Economy

The rise of the remote-working model and the establishment of gig platforms have created further issues for women entrepreneurs, especially those tied down by household chores or mobility constraints [36]. Fiverr, Upwork, Freelancer, and other freelance platforms are now ways for women to turn their abilities while staying at home, with applications like Zoom, Slack, and Trello assisting in remote team workflows and productivity management.

They empower innovation through flexible working design, rapid prototyping, and agile business practices [38]. Now, women-led businesses can form teams in any location, conduct rapid tests of new business concepts, and provide services to diverse geographical markets.

6.5. Artificial Intelligence (AI) and Automation

With the increased access to AI and automation tools for small enterprises, women entrepreneurs are now better positioned to make efficient decisions, enhance customer experience, and optimise. An example would be AI chatbots, which could give the company 24/7 customer service without draining resources [33]. Predictive analytics would help the entrepreneur see trends, alert her to inventory needs, and personalise approaches.

Automating tasks like bookkeeping, email campaigns, and inventory management provides more time for strategic innovation and growth. Women entrepreneurs adopting these tools can set themselves apart in terms of efficiency and decision-making.

6.6. Blockchain and Decentralised Finance (DeFi)

Blockchains and decentralised finance would have revolutionary impacts on women entrepreneurs within developing economies. Through removing intermediaries and providing safe, transparent, and immovable transactions, trust has been built through blockchain-based ecosystems for business [48]. They allow women to bank on blockchain for trustless contracts, microfinancing, and international payments, streamlining the process without needing conventional banks.

Although at the early stage of development, the blockchain could now be used for small business women's organisations, which even allows a woman to become a global trader, crowd source investments, and find instant property gain.

6.7. Challenges in Adopting Technology

Yet, numerous challenges still women entrepreneurs' mit the effective uptake of tecreneurs. For example:

- Digital Literacy: Most women cannot use advanced digital tools and modes due to a lack of digital skills.
- Cost: Device, software, and data access prices can increase significantly in low-income conditions.
- Snafus in Infrastructure: Poor connectivity through the internet and unreliable power supply, especially in rural or underdeveloped areas, would affect the smooth adoption of digital tools.
- Cultural Barriers: How societies are organised and set certain gender norms that restrict women's use of digital devices or public spaces.
- Cyber security Risks: Limited awareness about online safety makes women vulnerable to various online threats, including data breaches.

Such constraints require interventions, including digital literacy training, subsidised service, and advocacy for women-friendly tech policies.

6.8. Policy Recommendations and Strategic Solutions

Advanced technology is used to promote women's entrepreneurship and innovation. Here are suggested strategies:

- Digital Literacy Investment: Designed digital skills to be provided by government and non-governmental programs to women in coding, e-commerce, and cybersecurity training.
- Subsidising access: Avail affordable smartphones, tablets, and internet data packages to women entrepreneurs in rural after-school communities.
- Infrastructure Strengthening: Expand broadband coverage and access to electricity through partnerships between the public and private sectors.
- Promoting Women in STEM: Stimulate more women to join sciences, technology, engineering, and math and, therefore, set a new foundation for future innovation in technology.
- Tech Hubs: Establish technology hubs for women, create innovation labs, and co-working spaces for female entrepreneurs with mentorship and funding training opportunities.
- Cyber Safety: Establish online safety campaigns and measures for women to tailor and safeguard against cybersecurity threats.

This technology-revolutionising tradition opens a door towards a new horizon under which women will pioneer innovations. Digital platforms, fintech, artificial intelligence, and blockchain concepts will be the main tools through which women will today initiate, run, and scale their businesses [36]. However, this actualisation comes with some debate efforts to close the digital divide between the genders to achieve such a purpose. In the wake of inclusive policy, strategic funding, and capacity building, technology will enable women entrepreneurs to overcome barriers and ultimately redefine entrepreneurship in the future through innovation [42].

6.9. Real Life Cases

Various real cases demonstrate how women harness innovation to transform their communities and businesses. In India, the Selco Foundation has trained women in rural Karnataka to assemble and distribute solar lighting systems, thus creating sustainable livelihoods while addressing energy poverty. SheSays Digital Clinics in Kenya provide legal and financial assistance to women entrepreneurs over the internet, helping them to overcome the traditional barriers of geography and cost. In the United States, FarmHer is a media and technology-based initiative that promotes women in agriculture by providing them with visibility and access to larger markets.

Within the informal sector in India, women-led enterprises under the auspices of Goonj engage in the upcycling of waste into cheap clothes and sanitary products, addressing both environmental and health concerns. Even though it is led by a male entrepreneur, the initiative empowers thousands of women who work in production and logistics. Another example is Honest Tea, a sustainable beverage enterprise in the United States that partners with women-led cooperatives in its worldwide supply chain to provide them with fair wages and leadership development. These examples show that women's innovations are often rooted in community needs, sustainability, and inclusive business models that benefit society at large.

7 Implementing Policies: Role of Governments, Companies, and Educators

Governments play the enabling role of designing an ecosystem wherein women entrepreneurs can thrive through strategic policy intervention. First, the regulatory process has to be streamlined with the opening of one-stop-shop portals facilitating registration of businesses, tax compliance, and licensing. This reduces the bureaucratic impediments in the way of an aspiring woman entrepreneur starting her very first business, particularly if she happens to reside in a rural area. Realizing this, national statistics offices should institutionalize gender-disaggregated data collection to establish policy gaps and monitor outcomes. Governments should also channel funds and support into grassroots innovation, especially that which comes from the tribal community or underserved communities, and work towards a cross-ministerial approach to entrepreneurship policy involving departments for women's welfare, finance, education, and digital development.

On the private side, the inclusive innovation process should be promoted through gender-lens investing. Thus, venture capitalists and banks should develop evaluation criteria that distinguish women from geographically specific business and innovation approaches, including informal and social entrepreneurs. Companies can now run corporate mentoring programs to manage formal guidance, incubation, and marketing support for women-led companies. Similarly, inclusive procurement policies prioritizing women-owned SMEs as vendors would yield huge market potential. To further empower with technology, companies must create women-friendly digital tools, which include multilingual features, mobile-first interfaces, and offline capabilities for the commonly low-resource setting.

Educational institutions and training providers wield much power in shaping the productive capacities of women. By infusing their OK curriculum with entrepreneurship, design thinking, digital skills, and financial literacy courses, they can foster confidence and technical know-how; the earlier the better. Innovation labs, co-working spaces, and hackathons must be fully gender-inclusive and actively support hands-on learning and peer-to-peer engagements. In the rural areas, mobile workshops, community learning centers, and partnerships with NGOs can take capacity-building programs closer to the grassroots [49]. Finally, creating visibility for women innovators through events and lectures and connecting them in mentorship chains will help break stereotypes and plant seeds of aspiration for the next generation of women entrepreneurs.

8 Recommendations and Policy Interventions

8.1 Strategic Recommendations

- Create Innovation Hubs for Both Genders: Create incubators and accelerators that focus on the needs of women in their enterprises. Such facilities would be comprehensive, offering seed funding, mentoring, technical assistance, co-working, and access to prototype laboratories. Hubs should actively scout out women mentors and investors to create a nurturing ecosystem that responds to their unique needs. These centres are developed as public-private partnerships and funded through them for sustainability beyond short-term premiums [46].

- Women's funding has to be integrated into gender-lens investing: Integrate gender analysis within investment frameworks into all decision-making processes. Such a practice would entail financial institutions and venture capitalists adopting gender-sensitive credit scoring mechanisms with women's specific funds. These may include performance incentives for gender-balanced portfolios and alternative financing mechanisms for women-operated-risk or underfunded sectors [41].

- Foster STEM Education for Girls: From a very early age, especially in underserved communities, it is vital to integrate coding, digital literacy, and entrepreneurship education. Even better, schools should have innovation labs, hands-on science projects, and competitions that could spark curiosity and inspire confidence. After all, work with tech companies and NGOs for workshops, scholarships, and mentorship chains of students with female professionals in STEM.

- Strengthen Legal and Financial Literacy: Organise community-based training programs that train women to start and register a business, understand tax obligations, draw up contracts, and navigate property rights. Collaborating with legal aid organisations and financial institutions so that those services can either be free or subsidised through mobile apps and community radio will help them reach the semi-literate and rural populations [35].

- Enable Global Networking: Hook all women entrepreneurs with one another across digital networks to enable cross-border cooperation, investments, and idea-sharing. Virtual trade fairs, hackathons, peer mentoring programs, and global boot camps can expose women to the best international practices while bringing understanding and cooperation across cultures.

- Keep regulations simple: Limitations on red tape should be used to formalise business establishments owned by women. The governments must develop one-stop digital platforms for online business applications from registration to licensing to tax filing and compliance. Would cost-cutting systems signify significant women entrepreneurs?

- Scheduled Maintenance of Gender-Disaggregated Data Collection: Implement gender-disaggregated data collection and dissemination frameworks for entrepreneurship. That data helps identify gaps, know the policy impact, and develop targeted support programs. National statistical agencies must collaborate with the private sector to enhance accuracy and coverage.

- Incentives for Corporate Mentoring of Women Startups: Tax rebates or CSR credits should be created providing time and resources to mentor women entrepreneurs. Public procurement policies should introduce minimum quotas for women-led SMEs to increase market access and revenue potential.

- Monitoring and Evaluation of Existing Programs: Robust M&E systems should be instituted along with KPIs, feedback loops, and independent evaluations. Women beneficiaries should participate in the evaluation process to ensure that pos is attuned to lived realities. The results should also be publicly accessible in the interests of transparency and for enhancing the credibility.

- Strengthening Institutional Coordination: Foster inter-ministerial coordination between departments dealing with women's affairs, innovation, education, finance, and rural development. Design joint programs with common outcomes and budgets, thus reducing duplication and enhancing impact.

- Support Grassroots Innovations: Allocate funding for grassroots innovators, especially in rural and tribal areas, where women often develop frugal, sustainable solutions to local problems. Establish innovation awards, incubator linkages, and market access channels for such ventures.

- Encourage Inclusive Urban Planning: Ensure entrepreneurs are considered in urban policies, such as transport planning, market zoning, and digital infrastructure, to create safe, accessible, and business-friendly environments.

9 Findings

According to the study, accessing education and skill development appears to be the bedrock upon which women develop entrepreneurial success. Women who have undergone formal education and have received training in aspects relating to business, technology, or any vocational skill fare better in facilitating the operations, and executing decision-making and innovations. As a force of empowerment, digital innovations aid women through tools such as mobile platforms, e-commerce, and fintech services to transcend customary barriers and stretch their marketing realms. Yet, the entrenched gender digital divide, wherein limited internet access and digital literacy apply to women, remains a constraining force turning many away from full exploitation of these technologies.

Another nearly constant challenge is access to finance. Women entrepreneurs on several occasions suffer an exclusion from getting credit and venture capital due to lack of collateral, gender biases in financial systems, and nonexistence of gender lens investing. Policies supporting women entrepreneurs, such as Stand-Up India and Mudra Yojana, are either rendered ineffective by poor implementation, low awareness, or absence of a gender lens in design. Consequently, such benefits occasionally fail in reaching women in rural or marginal settings.

Cultural and structural constraints remain a barrier to progress in entrepreneurial endeavors. Patriarchal norms, household responsibilities, and mobility restrictions diminish the participation of women in entrepreneurial ecosystems, particularly in conservative or rural communities. Yet, women are resilient and find ways to counter these barriers through frugal innovation, developing low-cost solutions that meet the needs of communities in areas such as agriculture, health, and education.

This study notes that some help networks are crucial and distinguish mentoring, peer networks, and professional communities. Social and business networks provide the support necessary to raise confidence and provide a level of collaboration and market visibility. Taken together, these findings highlight the need to foster an inclusive, innovation-led ecosystem for women entrepreneurs at all levels.

10 Conclusion

Innovation is a powerful changer of the landscape for women-led entrepreneurship. As discussed throughout the study, innovation cannot be defined in any other way for women entrepreneurs than a way of surviving, sustaining, and scaling. Through innovative approaches such as technology adoption, creative problem-solving, new business models, and new product development, women have managed to find their way through the challenges of entrepreneurship while simultaneously creating avenues for inclusive and impactful growth.

On the other hand, women are progressing; however, environmental barriers and structures that still erect hurdles against women's full participation remain: These include limited access to funding, gender biases in financial systems, inadequate legal protections, societal expectations, and underrepresentation in strategic sectors such as STEM. Still, innovation offers a way for women to leapfrog many of these barriers. Digital technologies empower women to keep their businesses working remotely, open up options for market opportunities globally, and even automate some activities- something crucial for rural and underserved areas.

Strategic intervention, policy, and institutional support will create an enabling ecosystem for women entrepreneurs. This research has shown that STEM and entrepreneurship education at the grassroots level empower girls to build skills and confidence from an early age. These foundations will nurture innovation and pipeline future women leaders. Policy frameworks recognising female-specific challenges, such as gender-lens investing, simplified regulations, and targeted mentorship, hold promise to level the playing field while encouraging more women into entrepreneurial ambitions.

Most importantly, civil society and the private sector cannot be neglected. A cross-sectoral collaborative effort must reflect practicalities and allow innovative women entrepreneurs to enjoy uninterrupted access to capital, networks, and knowledge. Platforms for mentorship, peer learning, and exposure on an international scale could be a game-changer for women to scale their ventures globally.

This study highlights the importance of intersectionality in future research and intervention design. Women do not form a homogeneous group; their entrepreneurial journeys are predicted based on cast, class, ethnicity, age, disability, and geography. Understanding these dynamics when designing innovation strategies ensures they are inclusive and equitable. Rural women, tribal communities, disabled women, and women from disadvantaged backgrounds have to be provided with different support systems that take their particular circumstances into account.

In conjunction with intersectionality, monitoring and evaluation are key to the sustainable development of innovation-driven entrepreneurship. Policymakers and stakeholders should foster data-driven decision-making by collecting gender-disaggregated data and monitoring the outcomes of innovation-promoting programs. Centralistic feedback should be obtained from women entrepreneurs so that these policies can remain responsive to and informed by the lived realities of these women.

In conclusion, empowering women through innovation is both a moral imperative and a strategic opportunity for nations desirous of inclusive economic development. When women entrepreneurs are equipped with the tools, resources, and institutional support to innovate, the ripple effects originating from their respective ventures extend well beyond their individual ventures. They create jobs, develop communities, and foster national prosperity. Therefore, to realise this idea, holders must continue investing in a broad approach that actively promotes innovation, equity, and empowerment for all women entrepreneurs.

References

1. Expósito, A., Sanchis-Llopis, A., & Sanchis-Llopis, J. A. (2023). Entrepreneurs' gender and SMEs performance: The mediating effect of innovations. *Journal of the Knowledge Economy*. https://doi.org/10.1007/s13132-023-01555-8

2. Giorbelidze, M., & Jibladze, N. (2025). Enhancing sustainable development through gender equality: The role of mentorship in empowering women-led SMEs in Georgia's economy. *OIDA International Journal of Sustainable Development*, *18*(2), 11–28.

3. Kyrgidou, L. P., & Petridou, E. (2013). Developing women entrepreneurs' knowledge, skills and attitudes through e-mentoring support. *Journal of Small Business and Enterprise Development*, *20*(3), 548–566.

4. Mari, M. (2024). Innovative women entrepreneurs: Reviewing the literature. In *Current Trends in Female Entrepreneurship: Innovation and Immigration* (pp. 5–39). Emerald Publishing Limited.

5. Sadraei, R. (2024). Role of networks in driving innovation and global growth: Enhancing women-led start-ups in the internationalisation arena. *The International Journal of Entrepreneurship and Innovation*. https://doi.org/10.1177/14657503241294194

6. Siddiqua, S., & Chan, Y. E. (2024). *Women Entrepreneurs and Technology: A Scoping Review*. 30th Americas Conference on Information Systems, AMCIS 2024. Association for Information Systems.

7. Taleb, T. S. T., Hashim, N., & Zakaria, N. (2023). Mediating effect of innovation capability between entrepreneurial resources and micro business performance. *The Bottom Line Managing Library Finances*, *36*(1), 77–100.

8. Vershinina, N., Rodgers, P., Tarba, S., Khan, Z., & Stokes, P. (2020). Gaining legitimacy through proactive stakeholder management: The experiences of high-tech women entrepreneurs in Russia. *Journal of Business Research*, *119*, 111–121.

9. Alexeeva-Alexeev, I., Guaita-Fernandez, P., & Mazas-Perez-Oleaga, C. (2025). Cross-country analysis of sustainable innovation and female entrepreneurship and their influence on the presence of women in managerial positions. *Sustainable Technology and Entrepreneurship*, *100102*, 100102.

10. Alhothali, G. T. (2020). Challenges facing women entrepreneurs running home-based business in Saudi Arabia. *Periodicals of Engineering and Natural Sciences (PEN)*, *8*(3), 1386–1397.

11. Al-Omoush, K. S., & Al-Qirem, R. M. (2023). Social commerce and its role in women's empowerment and innovation in crises. *Journal of Small Business Strategy*, *33*(2). https://doi.org/10.53703/001c.77945

12. Aravamudhan, V., Sivakumar, K., Vishnu, C. R., & Mohanasundaram, K. (2024). Challenges faced by women entrepreneurs in rural India: A mixed-method study on perception. *The International Journal of Entrepreneurship and Innovation*. https://doi.org/10.1177/14657503241254954

13. Bullough, A., Edelman, L., Hechavarría, D., & Brush, C. (2019). *High-growth women's entrepreneurship*. Edward Elgar Publishing.

14. *Document details - INNOVATION UNLEASHED: MEASURING THE EFFECTIVENESS OF ATAL INCUBATION CENTRES IN NURTURING WOMEN ENTREPRENEURS*. (n.d.). https://doi.org/10.24857/rgsa.v18n9-055

15. Gafu, C., Gheorghe, I. G., & Sima, V. (2024). Current challenges facing women entrepreneurs in contemporary economics. In *Emerging Patterns and Behaviors in a Green Resilient Economy* (pp. 129–151). Emerald Publishing Limited.

16. Gashi, R., Ahmeti, H. G., & Baliu, E. (2022). Challenges of women entrepreneurs in the developing economy. *Corporate Governance and Organizational Behavior Review*, *6*(2), 134–142.

17. Generalov, A., & Generalova-Kutuzova, O. (2021). Economics, legal, political and social environment of entrepreneurs in Kyrgyzstan. In *Engines of Economic Prosperity* (pp. 337–357). Springer International Publishing.

18. Hassan, H., Mahdee, J., Rahman, M. S., & Sade, A. B. (2017). Key success factors and challenges in harnessing the power of women entrepreneurs. *World Review of Entrepreneurship Management and Sustainable Development*, *13*(4), 450.

in innovation processes as a solution to climate change: A systematic literature review and an agenda for future research. *Technological Forecasting and Social Change*, *164*(120440), 120440.

21. Lucarelli, C., Marinelli, N., Micozzi, A., Palazzo, M., Covucci, C., & Sica, G. (2025). Analysing the influence of gender and gender diversity in network-building behaviour and entrepreneurial ecosystem. *International Entrepreneurship and Management Journal*, *21*(1). https://doi.org/10.1007/s11365-025-01086-5

22. Mamo, Y. A., Sisay, A. M., Gilo, B. Y., Gebreselassie, H. G., & Debisa, M. A. (2023). Women entrepreneurs in Southern Ethiopia: Capacity building programs for women empowerment and challenges in implementation. *Community Development (Columbus, Ohio)*, *54*(3), 395–410.

23. Medina-Vidal, A., Alonso-Galicia, P. E., González-Mendoza, M., & Ramírez-Montoya, M. S. (2025). Financial inclusion of vulnerable sectors with a gender perspective: risk analysis model with artificial intelligence based on complex thinking. *Journal of Innovation and Entrepreneurship*, *14*(1). https://doi.org/10.1186/s13731-025-00463-2

24. Miah, M. T., Aiupova, N., Erdei-Gally, S., & Fekete-Farkas, M. (2025). Digital entrepreneurship ecosystems: Then vs. now-a future perspectives. *Digital Business*, *5*(1), 100110.

25. Modarresi, M., & Arasti, Z. (2021). Cultural challenges of women entrepreneurs in Iran. In *The Emerald Handbook of Women and Entrepreneurship in Developing Economies* (pp. 229–245). Emerald Publishing Limited.

26. Nair, S. R. (2020). The link between women entrepreneurship, innovation and stakeholder engagement: A review. *Journal of Business Research*, *119*, 283–290.

27. Noor, S., Isa, F. M., & Shafiq, A. (2022). Entrepreneurial success: Key challenges faced by Malaysian women entrepreneurs in the aged care industry. *Business Perspectives and Research*, 227853372210874.

28. Preethu Gowramma, A. A., & Ranjith Kumar, S. (2018). Challenges of women entrepreneurs ? a case study with special reference to SME industries in coorg, Karnataka. *International Journal of Mechanical Engineering and Technology*, *9*(1), 266–275.

29. Rahman, M. M., Salamzadeh, A., & Dana, L. P. (2024). Shackled feet: A review of women entrepreneurs' challenges in developing countries. *Entrepreneurial Business and Economics Review*, *12*(1), 177–193.

30. Salisbury, E. J., & Crawford, A. (2025). Gender-responsive treatment to improve outcomes for women and girls in correctional settings: foundations, limitations and innovations. *Health & Justice*, *13*(1), 11.

31. Shastri, S., Shastri, S., & Pareek, A. (2019). Motivations and challenges of women entrepreneurs: Experiences of small businesses in Jaipur city of Rajasthan. *The International Journal of Sociology and Social Policy*, *39*(5/6), 338–355.

32. Zainuddin, A., Ahmad, J., Puteh, F., Chandran, S. D., Hassim, A. A., & Ismail, T. N. T. (2017). The 21st century challenges among women entrepreneurs: Revisiting the literature. *Advanced Science Letters*, *23*(8), 7845–7848.

33. Abrar ul Haq, M., Victor, S., & Akram, F. (2021). Exploring the motives and success factors behind female entrepreneurs in India. *Quality & Quantity*, *55*(3), 1105–1132.

34. Amrita, K., Garg, C. P., Raghuvanshi, J., & Singh, S. (2024). An integrated model to prioritize the strategies for women entrepreneurship development to overcome its barriers: Case of Indian MSMEs. *IEEE Transactions on Engineering Management*, *71*, 3964–3978.

35. Awasthi, K., Kumaraswamy, K., & Boeri, N. (2021). Helping when it matters: Optimal time for supporting women's self-employment in India. *Development Policy Review: The Journal of the Overseas Development Institute*, *39*(6), 971–989.

36. Balasundaram, E., Kannan, A. S., & Sudheer, A. K. (2024). Exploring the moderating effect of generational status on the link between external environment and entrepreneurial motivation of Indian women entrepreneurs. *Vision The Journal of Business Perspective*. https://doi.org/10.1177/09722629241244592

37. Banerjee, R., & Desai, A. (2021). A study of competencies and challenges of Indian women entrepreneurs. *Ikonomičeski Izsledvaniâ*, *30*(4), 105–130.

38. Dhal, S., Mishra, N., Mahapatra, P., & Nayak, B. (2023). A machine learning approach for entrepreneurial competencies and economic growth of women entrepreneurs from kandhamal district.

In *Lecture Notes in Networks and Systems* (pp. 323–339). Springer Nature Singapore.

39. Kruthika S., Arifulla, A. M., & Jain, P. (2023). Enhancements of women's entrepreneurship: A theme-based study. In *Advances in Human Resources Management and Organizational Development* (pp. 136–153). IGI Global.

40. Mahato, J., & Jha, M. K. (2023). Does financial inclusion promote sustainable livelihood development? Mediating effect of microentrepreneurship. *Journal of Financial Economic Policy*, *15*(4/5), 485–499.

41. Mehta, S., & Bhattacharjee, M. (2021). DETERMINANTS OF WOMEN ENTREPRENEURSHIP FOR THEIR EMPOWERMENT IN AGRICULTURE AND OTHER SECTOR'S OF India. *International Journal of Agricultural and Statistical Sciences*, *17*(2), 493–499.

42. Noor, S., Fatima Jinnah Women University, Rawalpindi, Pakistan, Md. Isa, F., Shafiq, A., Associate Professor, Faculty of Business, Taylors University, Lakeside Campus, Malaysia, & Lecturer School of Marketing and Management, Faculty of Business and Law Coventry University, UK. (2022). Women's entrepreneurial success models: A review of the literature. *World Journal of Entrepreneurship Management and Sustainable Development*, *18*(1), 137–162.

43. Sachdeva, G. (2023). Indian women's entrepreneurship: A study of issues, opportunities, and development. In *Advances in Human Resources Management and Organizational Development* (pp. 184–200). IGI Global.

44. Sadraei, R. (2024). Role of networks in driving innovation and global growth: Enhancing women-led start-ups in the internationalisation arena. *The International Journal of Entrepreneurship and Innovation*. https://doi.org/10.1177/14657503241294194

45. Saxena, C., Khatri, B., & Khan, S. A. (2023). Factors hindering women entrepreneurs' access to institutional finance: An empirical study from the banker perspective. In *Advances in Business Strategy and Competitive Advantage* (pp. 101–114). IGI Global.

46. Singh, A., Das, U., & Kumar, S. (2022). Gender, technology and innovation: the role of women in Indian micro, small and medium enterprises. *World Review of Entrepreneurship Management and Sustainable Development*, *18*(4), 429.

47. Sundarakumar, S., Selvi, J. T., Ilangovan, K., Srinivasan, V., Kannan, A. S., & Arunachalam, V. (2023). Influence of government initiatives and information on Indian women entrepreneurial ventures. In *Advances in Business Information Systems and Analytics* (pp. 209–220). IGI Global.

48. Tyagi, N., Sharma, R., & Jain, P. (2021). Policy approaches to promote women entrepreneurship in India. In *Sustainable and Responsible Entrepreneurship and Key Drivers of Performance* (pp. 147–165). IGI Global.

49. Singh, A. (2024).Information Asymmetry and High Transaction Costs: Challenges for MSMEs In Securing Financial Support. *GNLU Journal of Law and Economics*, 7(2) https://doi.org/10.1007/978-981-99-7802-1_29