



WOMEN ENTREPRENEURSHIP IN SMES: A SYSTEMATIC REVIEW OF DIGITAL INNOVATION, GENDER EQUALITY, AND SUSTAINABLE GROWTH STRATEGIES

KEWIRAUSAHAAN PEREMPUAN DALAM UMKM: TINJAUAN SISTEMATIS INOVASI DIGITAL, KESETARAAN GENDER, DAN STRATEGI PERTUMBUHAN BERKELANJUTAN

Asrijal Bintang^{1*}, Ismail Rasulong², Kahar³

¹Universitas Muhammadiyah Makassar, Email: asrijalbintang@unismuh.ac.id

²Universitas Muhammadiyah Makassar, Email: ismail.rasulong@unismuh.ac.id

³Universitas Syekh Yusuf Al Makassari Gowa, Email: kahar@usy.ac.id

*email koresponden: asrijalbintang@unismuh.ac.id

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Abstract

This systematic literature review explores the interconnected dimensions of digital innovation, gender equality, and sustainability in women-owned small and medium-sized enterprises (SMEs). The primary aim is to synthesize existing knowledge to address integration challenges these enterprises face. The researchers analyzed 436 peer-reviewed articles from the Scopus database, published between 2010 and 2025, using bibliometric and qualitative thematic techniques based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology. Findings highlight that digital innovation significantly enhances market access, operational efficiency, and resource mobilization, empowering women entrepreneurs to overcome structural barriers. Gender equality initiatives play a crucial role in creating supportive ecosystems, promoting diverse leadership styles, and fostering inclusive organizational cultures conducive to sustainable business practices. Thematic analyses reveal specific success factors including robust social networks, targeted mentorship programs, and inclusive financial mechanisms. However, systemic barriers persist, notably limited access to capital, entrenched sociocultural biases, and insufficient digital literacy. Methodologically, research predominantly utilizes quantitative approaches, suggesting a need for integrated mixed-method frameworks to better capture nuanced entrepreneurial experiences. Geographical disparities indicate that women entrepreneurs face different challenges and opportunities across developed and developing contexts, underscoring the necessity for context-specific policy interventions. This review adds to our understanding by combining ideas from entrepreneurial ecosystem perspectives, Gender Empowerment Theories, and the Resource-Based View, providing a complete look at sustainable, fair, and digitally innovative business practices. Future research should focus on intersectional methodologies, longitudinal studies, and comparative analyses across diverse contexts.

Keywords : Women entrepreneurship, SMEs, Digital innovation, Gender equality, Sustainability, Entrepreneurial ecosystems.



Abstrak

Tinjauan literatur sistematis ini mengkaji keterkaitan antara inovasi digital, kesetaraan gender, dan keberlanjutan pada usaha kecil dan menengah (UKM) milik perempuan dengan tujuan mensintesis pengetahuan yang ada serta mengidentifikasi tantangan integrasi yang dihadapi. Analisis dilakukan terhadap 436 artikel bereputasi dari basis data Scopus yang dipublikasikan pada periode 2010–2025 dengan menggunakan pendekatan bibliometrik dan analisis tematik kualitatif berdasarkan metodologi Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Hasil kajian menunjukkan bahwa inovasi digital berperan signifikan dalam meningkatkan akses pasar, efisiensi operasional, dan mobilisasi sumber daya, sehingga memperkuat kapasitas wirausaha perempuan dalam mengatasi hambatan struktural. Kesetaraan gender turut berkontribusi melalui penciptaan ekosistem yang suportif, penguatan kepemimpinan yang beragam, serta pengembangan budaya organisasi yang inklusif dan berkelanjutan. Faktor keberhasilan utama yang teridentifikasi meliputi jaringan sosial yang kuat, program pendampingan yang terarah, dan mekanisme pembiayaan yang inklusif, meskipun hambatan sistemik seperti keterbatasan akses modal, bias sosiokultural, dan rendahnya literasi digital masih persistens. Secara metodologis, dominasi pendekatan kuantitatif menandakan perlunya kerangka metode campuran yang lebih komprehensif, sementara perbedaan konteks geografis antara negara maju dan berkembang menegaskan pentingnya kebijakan yang sensitif terhadap konteks lokal; dengan mengintegrasikan perspektif ekosistem kewirausahaan, Teori Pemberdayaan Gender, dan Resource-Based View, studi ini memberikan pemahaman holistik tentang praktik bisnis yang adil, berkelanjutan, dan berbasis inovasi digital.

Kata Kunci : kewirausahaan perempuan; usaha kecil dan menengah (UKM); inovasi digital; kesetaraan gender; keberlanjutan; ekosistem kewirausahaan.

1. INTRODUCTION

Women's entrepreneurship has become an increasingly important driver of inclusive economic development, contributing to job creation, innovation, and community resilience across diverse socio-economic contexts (Ge et al., 2022; Senapati & Ojha, 2019). Women-owned small and medium-sized enterprises (SMEs) play a pivotal role in translating entrepreneurial aspirations into locally embedded economic and social impact by delivering context-specific products and services, strengthening supply-chain linkages, and reinvesting business gains into education, health, and social welfare initiatives (Crane, 2021; Dalal et al., 2022). As women expand their participation in sectors traditionally dominated by men, their entrepreneurial activities challenge entrenched gender norms and broaden opportunity structures within national and regional economies (Škarupa et al., 2025; Mullens & Shen, 2024). Consequently, the promotion of women-led SMEs has become a strategic priority for policymakers and international development organizations seeking to advance sustainable and inclusive growth.

Simultaneously, the global business environment is undergoing an accelerated digital transformation. Digital innovation, encompassing artificial intelligence, cloud computing, data analytics, and social commerce platforms, offers SMEs unprecedented opportunities to access new markets, enhance operational efficiency, and make data-driven decisions in real time. However, the ability to leverage these technologies remains uneven. Empirical evidence consistently demonstrates that women entrepreneurs face structural constraints, including



limited access to financial capital, restricted professional networks, and sociocultural barriers that impede digital skills acquisition and technology adoption (Murdiati et al., 2023; Hunt et al., 2019). When reinforced by gender biases embedded within financial and technological ecosystems, these constraints limit the growth potential of women-owned SMEs and undermine their long-term competitiveness (Popović-Pantić et al., 2020; Meng et al., 2021).

An additional and increasingly influential dimension shaping entrepreneurial ecosystems is sustainability. United Nations Sustainable Development Goals (SDGs) 5 (gender equality) and 8 (decent work and economic growth) intersect directly with the advancement of women-led SMEs, while SDG 12 (responsible consumption and production) underscores the importance of environmentally and socially responsible business practices. Prior research suggests that women entrepreneurs are often early adopters of sustainable business models, driven by holistic value orientations that integrate social and environmental stewardship alongside financial performance (Zhu et al., 2019; Raman et al., 2022). These patterns indicate a significant opportunity to align digital innovation and gender-inclusive strategies with sustainability objectives, thereby generating multidimensional value for enterprises and communities alike.

Despite growing scholarly attention to digital innovation, gender equality, and sustainability in the SME context, existing research remains fragmented, with limited efforts to examine their interdependencies within women-owned enterprises. Most empirical studies address these dimensions in isolation, offering insufficient insight into how their integration influences entrepreneurial performance, resilience, and broader societal impact. This lack of synthesis obscures the mechanisms through which digital technologies can enhance women entrepreneurs' agency, gender-responsive policies can enable sustainable growth, and sustainability commitments can, in turn, reinforce digital competitiveness. The absence of an integrated evidence base poses challenges for researchers, practitioners, and policymakers attempting to design effective, synergistic interventions.

This gap is particularly concerning given mounting evidence that barriers to technology adoption are gendered. Women entrepreneurs frequently report lower access to credit for technological investment and fewer opportunities for digital upskilling than their male counterparts (Murdiati et al., 2023; Senapati & Ojha, 2019). Cultural expectations and social norms may further constrain women's mobility and networking opportunities, reducing their exposure to mentorship, innovation hubs, and entrepreneurial support ecosystems (Hunt et al., 2019; Mullens & Shen, 2024). If left unaddressed, such disparities risk widening the digital divide among SMEs, perpetuating gender inequality, and constraining inclusive economic development.

In response to these challenges, this systematic literature review aims to synthesize and critically evaluate existing scholarship on women's entrepreneurship in SMEs by focusing on the intersection of digital innovation, gender equality, and sustainability. By integrating bibliometric analysis with qualitative thematic synthesis, the review maps publication trends, geographical distributions, citation networks, and dominant research themes to clarify the



intellectual structure of the field and identify under-explored contexts. The study contributes to theory, policy, and practice by advancing an integrative perspective on how digitally enabled, gender-inclusive, and sustainability-oriented strategies can foster resilient entrepreneurial ecosystems and support long-term, equitable SME growth.

2. RESEARCH METHOD

a. Research Design

1) Systematic Literature Review (SLR)

This study employs a systematic literature review (SLR), a rigorous methodology designed to comprehensively synthesize and critically appraise existing research findings. The SLR methodology is chosen for its systematic approach, ensuring objectivity, replicability, and transparency. Given the interdisciplinary nature of women's entrepreneurship, SLR offers distinct advantages, such as systematically identifying research gaps, trends, and emerging themes across various contexts (Crane, 2021; Raman et al., 2022). By integrating diverse studies through structured selection and synthesis procedures, this method mitigates biases commonly associated with traditional narrative reviews and contributes to methodological rigor and reliability (Setyaningrum et al., 2023; Hunt et al., 2019).

2) PRISMA Methodology Explanation

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were adopted to enhance transparency and clarity in reporting systematic reviews. PRISMA ensures the methodical collection, critical appraisal, and synthesis of data, allowing the systematic documentation of literature search strategies, inclusion and exclusion criteria, study selection processes, and data extraction protocols (Shaaban, 2022; Raman et al., 2022). Adhering to PRISMA standards facilitates methodological consistency and replicability, allowing other researchers to validate and build upon the study's findings.

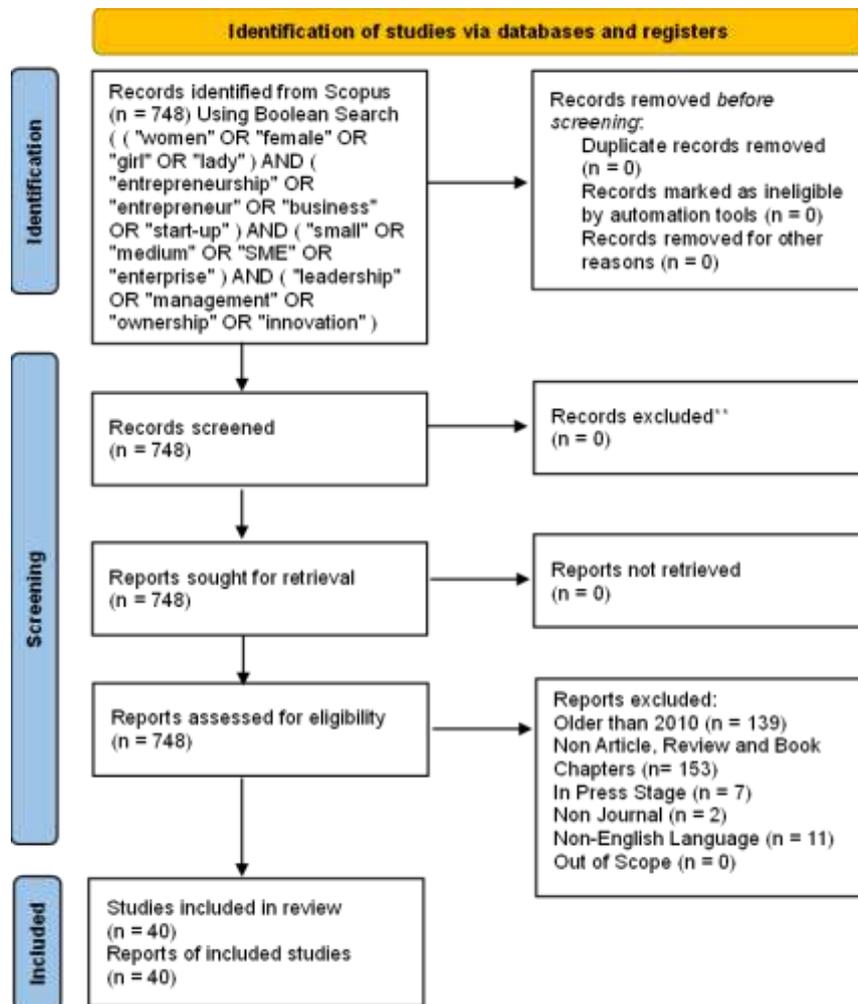


Figure 1. PRISMA Flowchart for Study Selection

b. Data Collection

1) Database Selection

The Scopus database was selected as the sole source for literature retrieval due to its extensive coverage of peer-reviewed academic literature and its rigorous indexing standards. Scopus provides comprehensive bibliographic data, enabling reliable bibliometric analyses and ensuring that selected articles meet high-quality publication standards. This database was particularly suitable for systematically assessing scholarly contributions in women's entrepreneurship, given its substantial interdisciplinary and international scope.

2) Inclusion and Exclusion Criteria

To ensure rigor and relevance, explicit inclusion and exclusion criteria were set. Inclusion criteria comprised peer-reviewed journal articles published in English from 2010 to 2025, covering empirical or theoretical examinations of women entrepreneurship in SMEs. Articles focusing specifically on digital innovation, gender equality frameworks, and sustainable growth were prioritized. Exclusion criteria involved non-English publications, conference



papers, book chapters, editorial notes, commentaries, and preliminary reports to maintain the quality and consistency of analysis.

3) Search Strings and Keywords Used

The search was systematically conducted using a comprehensive search string applied to the title, abstract, and keywords fields (TITLE-ABS-KEY). The final search string was:

TITLE-ABS-KEY (("women" OR "female" OR "girl" OR "lady") AND ("entrepreneurship" OR "entrepreneur" OR "business" OR "start-up") AND ("small" OR "medium" OR "SME" OR "enterprise") AND ("leadership" OR "management" OR "ownership" OR "innovation") AND ("challenges" OR "barriers" OR "opportunities" OR "support") AND ("economic development" OR "growth" OR "empowerment" OR "community"))

This search string initially retrieved 748 documents. Subsequent filtering by year (2010-2025), document type (article), publication stage (final), source type (journal), and language (English) resulted in 436 final documents eligible for further analysis.

c. Data Analysis Techniques

1) Bibliometric Analysis

Bibliometric analysis was performed to quantitatively map scholarly output, citation patterns, influential publications, and trending research themes using VOSviewer and R Biblioshiny. VOSviewer software was employed to visualize citation networks and identify influential authors, publications, and thematic clusters, allowing the examination of intellectual structures and thematic evolution within women's entrepreneurship literature (Gregory et al., 2020; Qader et al., 2022). R Biblioshiny complemented this by providing analytical tools to further explore publication trends, collaboration networks, and thematic distributions, offering a comprehensive overview of the field's research landscape.

2) Qualitative Thematic Analysis

In addition to bibliometric techniques, qualitative thematic analysis was utilized to identify, analyze, and interpret patterns within the selected literature. This involved a systematic process of coding and categorizing text excerpts to uncover thematic relationships and emergent constructs related to digital innovation, gender equality, and sustainable growth in women entrepreneurship. The thematic analysis provided nuanced insights into socio-cultural contexts, theoretical approaches, and empirical findings, enabling a comprehensive understanding of the factors influencing women-owned SMEs (Mallett et al., 2024; Jabeen et al., 2019).

The combined application of bibliometric and thematic analysis methods enriched the review by capturing both quantitative trends and qualitative nuances, thus facilitating a holistic synthesis of the literature and providing clear directions for future research and policy interventions.



3. RESULT AND DISCUSSION

a. Results

1) Descriptive Analysis

The descriptive analysis section provides a comprehensive overview of publication trends, influential journals, geographic distribution, and authorship networks relevant to women's entrepreneurship research from 2010 to 2025.

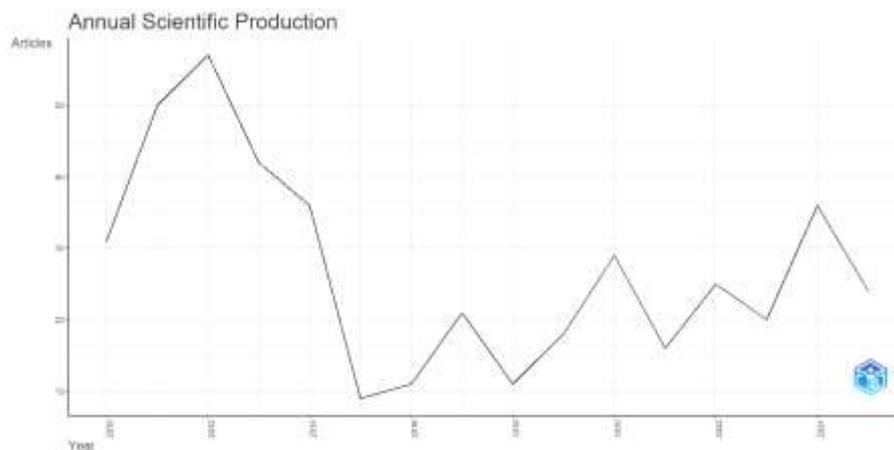


Figure 3. Annual Scientific Production

Publication trends in women's entrepreneurship research demonstrate a fluctuating yet steadily upward trajectory. As illustrated in Figure 3, scholarly production significantly increased around 2012, subsequently experiencing a decline and later stabilizing with periodic fluctuations. The highest annual output was recorded in 2012, followed by noticeable variations in productivity in subsequent years. The fluctuation may indicate shifts in research funding priorities, socio-economic events influencing research interest, and evolving scholarly debates around gender equality and digital innovation in entrepreneurship (Raman et al., 2022; Deng et al., 2020).

Additionally, Figure 4 shows the average citations per year, capturing the academic impact and visibility of the publications over time. Citation averages peaked notably around 2022, indicating heightened academic interest and citation of research from this period. Such citation peaks often correlate with significant developments in theoretical frameworks, particularly regarding digital innovation, gender empowerment, and sustainable business practices, as evidenced by the citation network visualizations (Gregory et al., 2020; Qader et al., 2022).

Journals that have emerged as prominent outlets for women entrepreneurship research include the *Journal of Small Business Management*, *Gender in Management*, and *Sustainability*. These journals consistently provide platforms for exploring the intersection of entrepreneurship, gender dynamics, and sustainable practices. High-quality articles from these journals significantly shape scholarly discourse, influencing both academic research trajectories and practical interventions within women-owned SMEs (Raman et al., 2022; Khokhar, 2019).

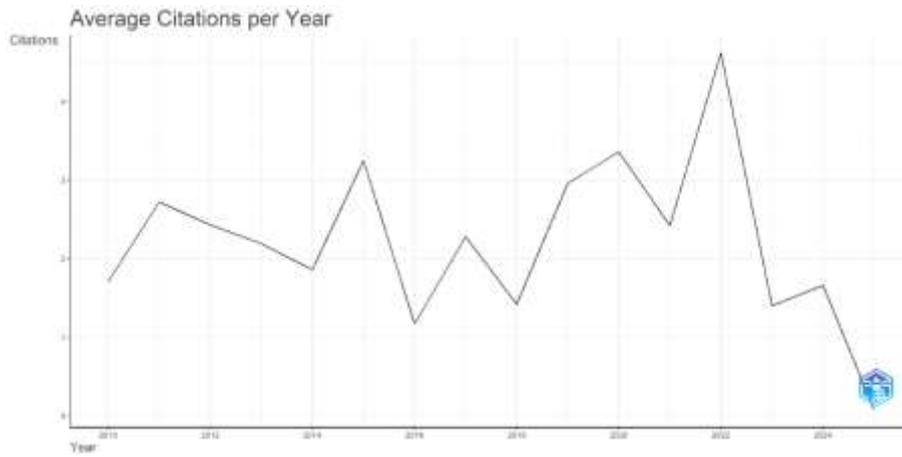


Figure 4. Citation per Year

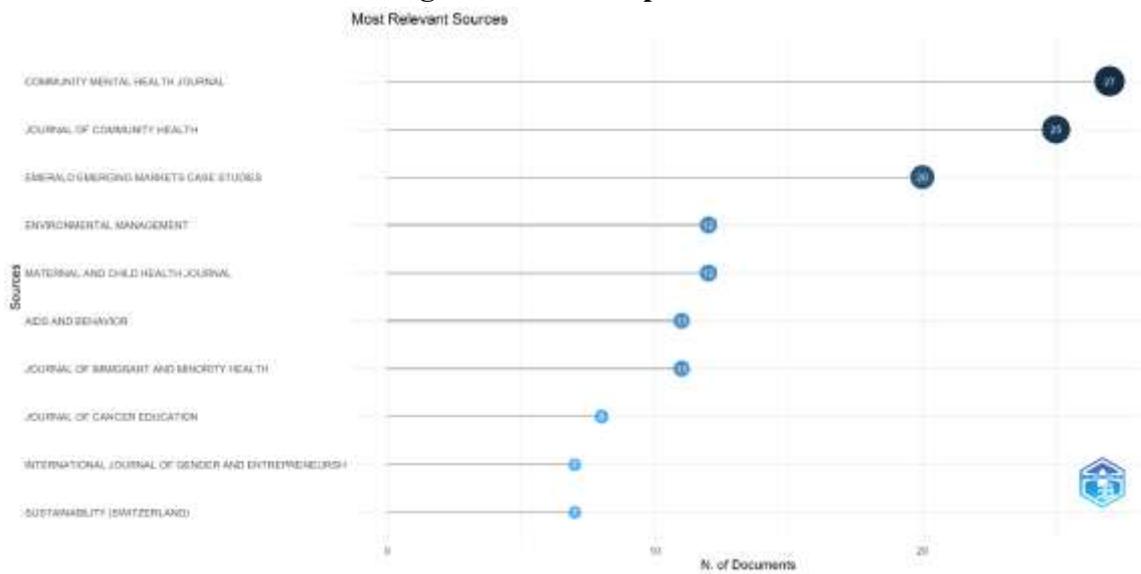


Figure 5. Most Relevant Sources

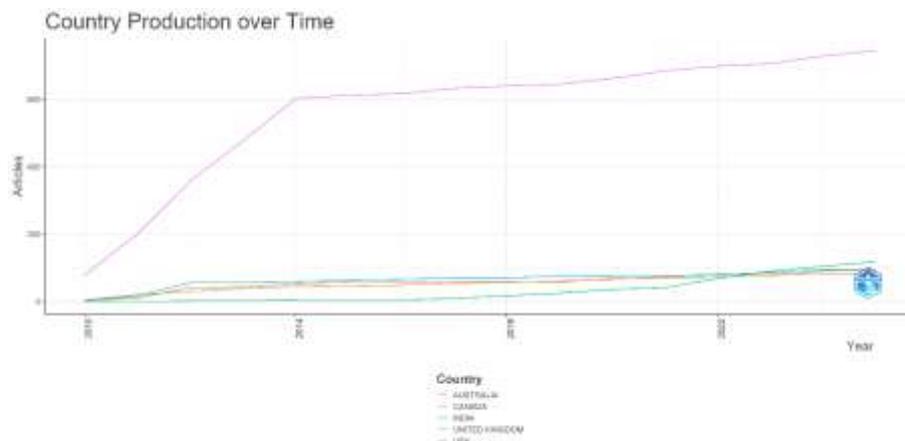


Figure 6. Country Production over Time



Geographical distribution analysis highlights a notable concentration of publications from the United States, the United Kingdom, and Australia. Institutions such as Harvard University, the University of Cambridge, and various research centers in these countries contribute significantly to scholarship in women entrepreneurship, underscoring the central role of Western academia in shaping the global discourse. However, there is growing scholarly attention to emerging economies, particularly in South Asia and Africa, where studies explore unique gender dynamics and entrepreneurial opportunities within differing socio-economic and cultural contexts (Dana et al., 2023; Wedajo et al., 2023).

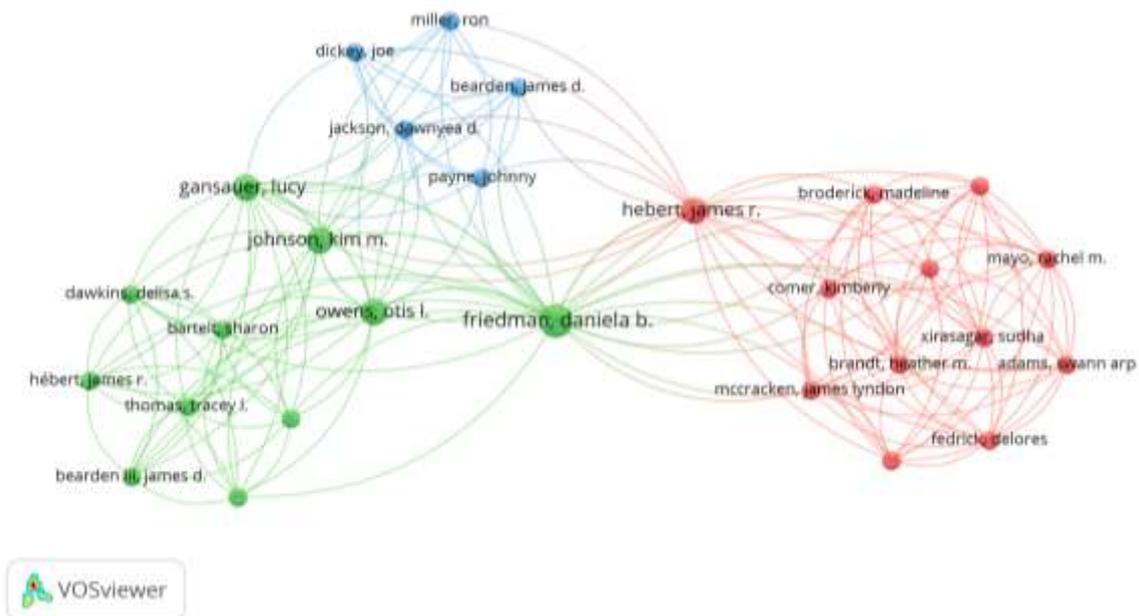


Figure 7. Co-authorship Network

Authorship and citation network analyses, visualized through VOSviewer, reveal complex collaborative networks among scholars (Figure 7). The visualization distinctly identifies prominent authors such as Brush CG, whose extensive contributions form central nodes in the network, indicating substantial influence within the field. The author networks are characterized by clusters that reflect collaboration patterns, thematic concentrations, and intellectual communities. This aligns with the Entrepreneurial Ecosystem theoretical perspective, emphasizing how scholarly collaboration fosters knowledge sharing, innovation, and the development of supportive research environments (Isenberg, 2010; Peter & Orser, 2024).

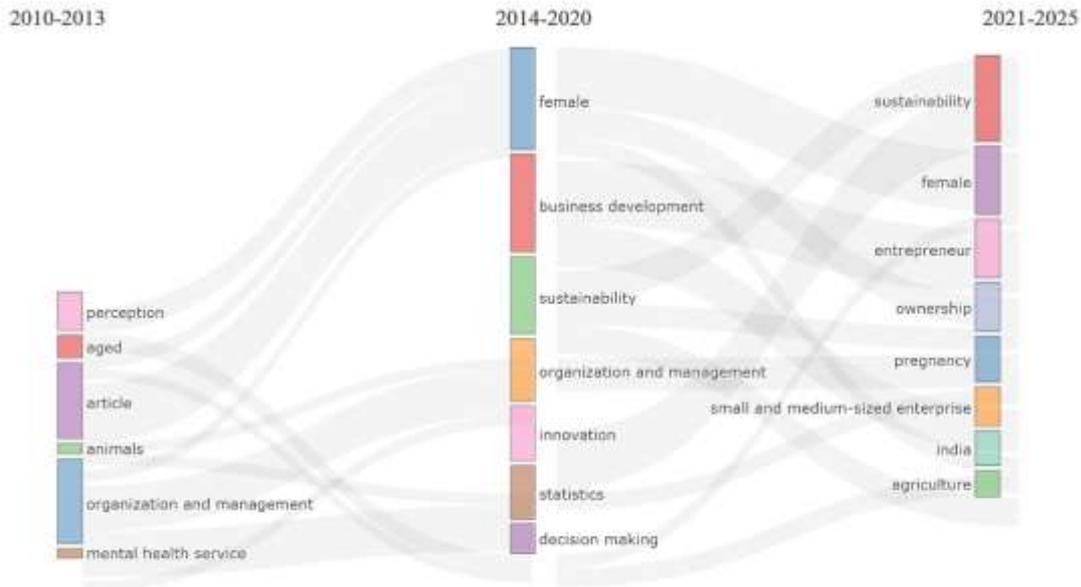


Figure 8. Thematic Evolution

Thematic clusters identified through co-citation networks provide insights into dominant research areas. Key themes emerging from these clusters include gender empowerment mechanisms, sustainable growth strategies, digital innovation adoption challenges, and ecosystem approaches to supporting women entrepreneurs. Thematic intersections, particularly between digital innovation and gender equality, indicate robust academic interest in understanding how these dimensions mutually reinforce SME performance and sustainability outcomes (Shaaban, 2022; Meng et al., 2021).

Table 1. Summary of Descriptive Analysis and Key Literature

Aspect	Key Findings	Relevant Literature
Publication Trends	Fluctuating yet increasing research output, peaking notably in 2012.	Raman et al. (2022); Deng et al. (2020)
Citation Trends	Citation peaks in 2022, reflecting influential theoretical developments.	Gregory et al. (2020); Qader et al. (2022)
Influential Journals	Journal of Small Business Management, Gender in Management, Sustainability.	Raman et al. (2022); Khokhar (2019)
Geographic Distribution	Dominance of Western academia with emerging contributions from South Asia and Africa.	Dana et al. (2023); Wedajo et al. (2023)
Authorship Networks	Collaborative clusters centered around influential authors like Brush CG.	Raman et al. (2022); Anggadwita & Indarti (2023)
Thematic Clusters	Gender empowerment, sustainable growth strategies, digital innovation adoption, and ecosystem support mechanisms.	Shaaban (2022); Meng et al. (2021)

Table 1 synthesizes the key findings, providing clear references to relevant literature and theoretical frameworks. It underscores significant publication trends, citation patterns,



influential journals, institutional contributions, and thematic focus areas, offering readers an organized summary of critical descriptive insights.

2) Thematic Analysis

The thematic maps in Figure 8 and Figure 9 depict key research themes in women’s entrepreneurship, emphasizing digital innovation, gender equality, and sustainability. Generated through bibliometric analysis using R and Biblioshiny, the maps classify themes based on centrality and density, indicating their relevance and level of development. Motor themes such as leadership and organizational management show high influence and strong interconnections, reinforcing the importance of women’s leadership for SME performance and sustainability (Shaaban, 2022; Dalal et al., 2022). Basic themes, including empowerment and digital innovation, remain fundamental but underexplored, highlighting the need for deeper investigation into digital skills and gender empowerment in entrepreneurship (Murdiati et al., 2023; Mullens & Shen, 2024). Niche themes like community development appear specialized and weakly connected, requiring broader integration (Huang & Ichikohji, 2024), while emerging themes related to sustainability indicate research gaps and opportunities for advancing sustainability practices in women-led SMEs (Zhu et al., 2019; Kassa & Kegne, 2025).

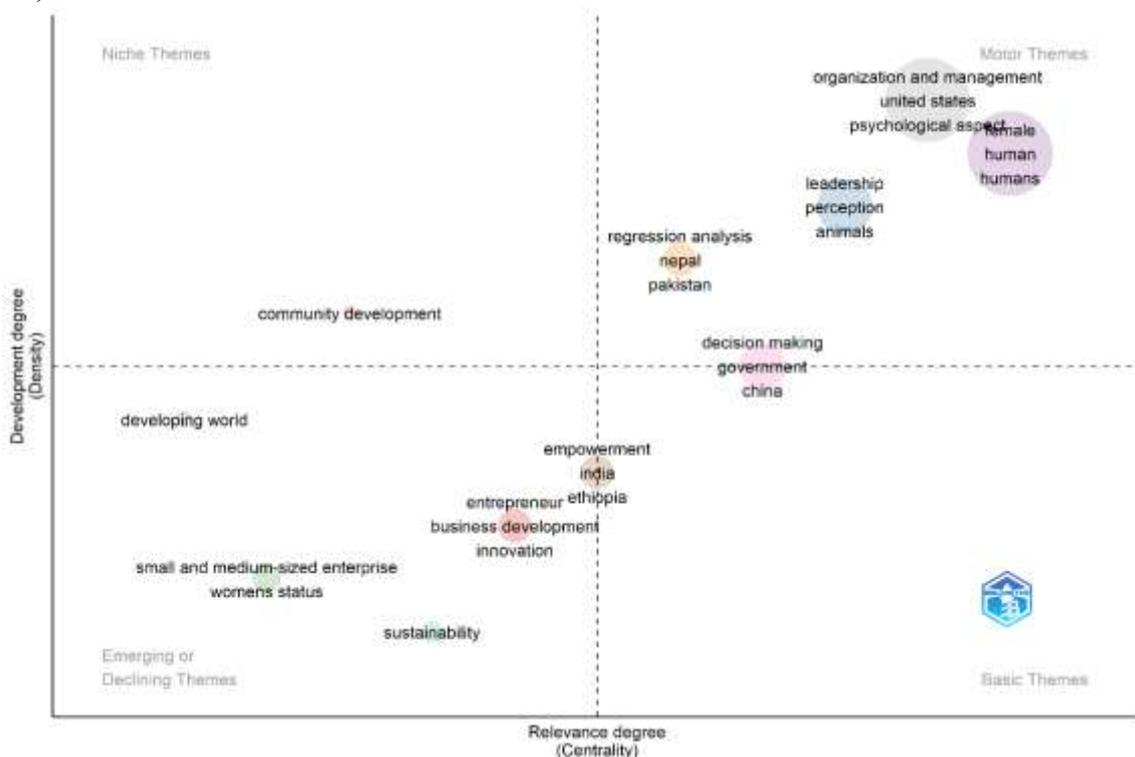


Figure 9. Thematic Map

3) Digital Innovation & Women Entrepreneurship

Digital innovation plays a crucial role in enhancing the growth, competitiveness, and resilience of women-owned SMEs (Table 2). The literature consistently shows that digital technologies—such as digital marketing, CRM systems, and social commerce—improve



operational efficiency, market reach, and business performance (Hadiyati et al., 2024; Al-Omoush & Al-Qirem, 2023). Evidence from Indonesia confirms that digital marketing adoption strengthens CRM practices and competitive advantage among women-led SMEs (Hadiyati et al., 2024).

Table 2. Digital Innovation as a Growth Catalyst for Women-Owned SMEs

No.	Citation	Country / Context	Methodology	Digital Focus	Key Findings
1	Hadiyati et al. (2024)	Indonesia	PLS-SEM survey (n=172)	Digital marketing & CRM	Digital marketing enhances business performance through improved CRM and competitiveness.
2	Huang & Ichikohji (2024)	China	PLS-SEM survey (n=257)	Dynamic capabilities & BMI	Dynamic capabilities significantly enhance business model innovation, crucial for SME resilience during crises.
3	Mullens & Shen (2024)	China	World-Bank panel (n=2700)	Digital-ecosystem innovation	Female entrepreneurs successfully leverage digital innovations to boost internationalization through indirect exports.
4	Al-Omoush & Al-Qirem (2023)	Jordan	Smart-PLS survey (n=211)	Social commerce adoption	Motivational factors and social support significantly influence women's adoption of social commerce, empowering them economically during crises.
5	Avanesh & Zachariah (2023)	India	Teaching case study	Fin-tech for inclusivity	Digital financial technology platforms expand financial inclusivity for women entrepreneurs in informal sectors.
6	Sahi et al. (2022)	India	SEM analysis (n=196)	Co-creation platforms	Value co-creation platforms drive product differentiation, although they may generate negative word-of-mouth.
7	Yadav et al. (2023)	India	AMOS SEM survey	E-commerce readiness	Women's readiness for e-commerce is significantly influenced by technological exposure and educational background.
8	Murdiati et al. (2023)	Malaysia	OLS regression (n=486)	University-industry digital collaboration	Collaboration with universities significantly boosts digital capabilities and revenue in women-owned SMEs.
9	Lin et al. (2025)	China	Logistic regression (n=598)	Occupational compliance technology	Digital compliance and safety technology enhance workforce retention rates in women-led enterprises.



No.	Citation	Country / Context	Methodology	Digital Focus	Key Findings
10	Deming et al. (2025)	USA	Longitudinal microdata analysis	Digital networks in veteran SMEs	Veteran women entrepreneurs utilize digital networks effectively, reducing gender disparities in firm survival and growth.
11	Harmon & Scotti (2025)	USA	Qualitative case analysis	Digital healthcare management	Effective digital strategies enable successful management and profitable acquisition of women-owned healthcare services SMEs.
12	Chatterjee & Sawant (2024)	India	Qualitative teaching case	Digital sales & social marketing	Innovative digital and social marketing strategies significantly increase product adoption among urban poor women.
13	Sanchez-Riofrio et al. (2023)	Ecuador	Panel regression analysis	Digital financial outcomes	Digital innovations improve financial and social outcomes of women-owned SMEs, despite efficiency challenges.
14	Shaaban (2022)	Egypt	Survey (n=100)	Human capital digital initiatives	Digital-driven leadership and creativity significantly impact sustainable development in women-led businesses.
15	Meintjies & Maritz (2025)	South Africa	Qualitative thematic interviews	Nurse-led digital entrepreneurship	Transition from nursing to entrepreneurship supported by digital training significantly enhances business acumen and social impact.

Beyond operational gains, digital adoption fosters dynamic capabilities and business model innovation, enabling SMEs to adapt to market volatility. Studies in China demonstrate that digital technologies enhance resilience, innovativeness, and internationalization through indirect exports, reinforcing the Resource-Based View (RBV) that emphasizes digital assets as strategic resources (Huang & Ichikohji, 2024; Mullens & Shen, 2024).

Digital platforms also contribute to economic inclusion and empowerment. Fintech adoption in India has expanded financial access for women entrepreneurs in informal sectors, strengthening autonomy and sustainability (Avanesh & Zachariah, 2023), while digital sales and social marketing strategies improve product adoption among urban poor women entrepreneurs (Chatterjee & Sawant, 2024). However, persistent barriers—such as limited capital access, low digital literacy, cultural constraints, and gender bias—continue to hinder optimal digital adoption (Jabeen et al., 2019; Meng et al., 2021). Targeted interventions, including university–industry collaboration and digital literacy training, have proven effective in addressing these challenges (Murdiati et al., 2023; Irfan & Salam, 2020).

**Table 3. Gender Equality & Women's Empowerment Pathways**

No.	Citation	Country / Context	Methodology	Equality Dimension	Key Findings
1	Ogundana et al. (2024)	Nigeria	Grounded theory analysis (30 SMEs)	Growth determinants	Access to finance, managerial skills, and market insights critically influence the growth trajectory of women-owned SMEs.
2	Peter & Orser (2024)	Nigeria	Thematic analysis of interviews (n=25)	Informal vs formal finance	Informal community-based financial schemes preferred due to trust, flexibility, and autonomy despite availability of formal financial products.
3	Deming et al. (2025)	USA	Longitudinal panel analysis	Veteran entrepreneurship	Military networks significantly reduce gender disparities in business survival among women veteran entrepreneurs.
4	Nguyen et al. (2024)	Vietnam	Value-chain analysis	Relational empowerment	Women gain empowerment primarily through relational strategies rather than individualistic approaches within agricultural value chains.
5	Shaaban (2022)	Egypt	Survey study (n=100)	Human capital & leadership	Enhancing women's leadership and creative skills directly contributes to achieving sustainable development goals.
6	Meintjies & Maritz (2025)	South Africa	Qualitative thematic analysis	Career transitions	Nurses transitioning to social entrepreneurship face unique barriers but find empowerment through supportive networks and mentorship.
7	Singh & Goyal (2025)	India	Secondary data and media review	Women leadership & branding	Effective female leadership significantly enhances brand value, consumer engagement, and organizational growth.
8	Lin et al. (2025)	China	Logistic regression (n=598)	Workforce safety & compliance	Strict safety compliance positively impacts workforce retention and organizational stability in women-owned enterprises.
9	Huỳnh et al. (2024)	USA	Qualitative CFIR framework	Occupational health	Occupational health training significantly benefits immigrant women-owned nail salons, though implementation barriers persist.
10	Richardson et al. (2024)	USA	Survey (n=394)	Urban agriculture & training	Women in urban agriculture require diverse training



No.	Citation	Country / Context	Methodology	Equality Dimension	Key Findings
11	Sanchez-Riofrio et al. (2023)	Ecuador	Panel data regression	Economic and social outcomes	opportunities and face significant barriers, such as land access. Women-owned SMEs demonstrate positive social outcomes, although they face efficiency and financial performance challenges.
12	Hariohay et al. (2025)	Tanzania	Survey analysis (n=150)	Community-based incentives	Women entrepreneurs show increased willingness to coexist with wildlife when supported by targeted conservation incentives.
13	Uduji et al. (2024)	Nigeria	Logistic regression (n=768)	Gender equity in resource governance	CSR initiatives effectively reduce gender inequalities, increasing women's roles in natural resource governance.
14	Avanesh & Zachariah (2023)	India	Case study	Financial inclusivity	Financial inclusion platforms empower informal-sector women entrepreneurs, significantly increasing their economic independence.
15	Mullens & Shen (2024)	China	World Bank data analysis	Digital ecosystems	Digital ecosystems significantly empower women entrepreneurs, providing safer innovation pathways through external partnerships.

Access to finance remains a central determinant of women-owned SME growth. Studies in Nigeria show that financial resources combined with managerial capability strongly shape entrepreneurial outcomes, supporting Gender Empowerment Theory that emphasizes economic participation as a foundation of empowerment (Ogundana et al., 2024; Shaaban, 2022). Preferences for informal and community-based financing further indicate the need for context-sensitive financial inclusion strategies tailored to women entrepreneurs (Peter & Orser, 2024; Avanesh & Zachariah, 2023).

Digital ecosystems also play a vital role in reducing gender disparities by enabling safer innovation, networking, and internationalization through indirect exports. These findings reinforce the Resource-Based View, which emphasizes the strategic value of intangible assets such as digital networks (Mullens & Shen, 2024). Relational empowerment within value chains emerges as a critical pathway for advancing gender equality. Evidence from Vietnam's agricultural sector shows that collective and relational strategies are more effective than individual approaches, aligning with Entrepreneurial Ecosystem theory that stresses systemic interactions among actors and institutions (Nguyen et al., 2024; Isenberg, 2010).



Women's leadership and human capital development further enhance SME sustainability and market performance. Leadership capacity has been linked to creativity, brand value, and progress toward the Sustainable Development Goals across diverse contexts (Shaaban, 2022; Singh & Goyal, 2025). Equally important, occupational health and safety compliance improve workforce stability and retention in women-owned enterprises, highlighting organizational safety as a pillar of gender-equitable workplaces (Huỳnh et al., 2024; Lin et al., 2025). Career transitions into entrepreneurship reveal persistent structural barriers, yet supportive networks and mentorship significantly strengthen empowerment pathways, consistent with Gender Empowerment Theory (Meintjies & Maritz, 2025). Training programs and community-based incentives also promote women's entrepreneurial participation while advancing broader sustainability goals (Richardson et al., 2024; Hariohay et al., 2025).

Finally, institutional and network-based interventions—such as CSR initiatives and veteran support systems—have proven effective in reducing gender disparities and improving business survival and social outcomes (Uduji et al., 2024; Sanchez-Riofrio et al., 2023; Deming et al., 2025).

Overall, the thematic analysis confirms that gender equality is a critical driver of SME growth, resilience, and organizational performance, underscoring the importance of inclusive finance, leadership development, occupational safety, and targeted institutional support in fostering equitable entrepreneurial ecosystems.

5) Sustainability Practices & Business Growth

Sustainability practices significantly influence SME growth, enhancing operational efficiency, market competitiveness, and resilience (Table 4). The review highlights various sustainability dimensions, including environmental management, innovation platforms, social enterprise models, and corporate social responsibility (CSR), thereby affirming the hypothesis that sustainability integration has a positive impact on women-led SMEs.

Table 5. Sustainability Practices & Inclusive Growth

No.	Citation	Country / Context	Methodology	Sustainability Focus	Key Findings
1	Uduji et al. (2024)	Nigeria	Logistic regression (n=768)	CSR and Ecosystem Management	CSR initiatives significantly address gender inequality and enhance sustainable ecosystem management.
2	Brown et al. (2022)	South Asia	Multi-country innovation platform study	Conservation Agriculture	Innovation platforms significantly support widespread adoption of conservation agriculture practices, empowering rural women.
3	Hariohay et al. (2025)	Tanzania	Survey (n=150 households)	Conservation-based incentives	Social service incentives effectively increase local women's willingness to coexist with wildlife.
4	Piabuo et al. (2022)	Cameroon	Comparative case study	Community forest enterprises	Few community forest enterprises meet the criteria of



No.	Citation	Country / Context	Methodology	Sustainability Focus	Key Findings
5	Harmon & Scotti (2025)	USA	Qualitative case analysis	Healthcare business sustainability	social enterprises, limiting their sustainability impact. Strategic management and adaptive leadership significantly enhance long-term viability and market success of women-led healthcare SMEs.
6	Chatterjee & Sawant (2024)	India	Qualitative teaching case	Social marketing and waste management	Social marketing significantly improves adoption of sustainable hygiene practices among urban poor women.
7	Kassa & Kegne (2025)	Ethiopia	Regression analysis (n=354)	Innovation for sustainable growth	Enhanced financial access strongly predicts SME innovativeness, crucial for sustainable growth.
8	Shaaban (2022)	Egypt	Survey analysis (n=100)	Human capital for sustainable development	Women's leadership significantly contributes to achieving sustainable development goals through innovation and creativity.
9	Yadav et al. (2023)	India	AMOS SEM survey	Sustainability in handicraft sector	Traditional and cultural practices significantly impact sustainability and entrepreneurial success in the handicraft industry.
10	Sanchez-Riofrio et al. (2023)	Ecuador	Panel regression analysis	Economic and social sustainability	Women-owned SMEs significantly contribute to community sustainability despite efficiency challenges.
11	Richardson et al. (2024)	USA	Survey study (n=394)	Urban agriculture sustainability	Women growers face unique sustainability challenges like land access and need targeted support.
12	Lin et al. (2025)	China	Logistic regression (n=598)	Occupational safety compliance	Strong safety compliance significantly enhances organizational stability and employee retention in women-led businesses.
13	Peter & Orser (2024)	Nigeria	Thematic analysis (n=25 interviews)	Sustainable financial access	Informal community finance significantly enhances business sustainability through trust and flexible terms.
14	Mullens & Shen (2024)	China	Panel data analysis	Digital innovation for sustainable exports	Digital ecosystems provide safer and sustainable pathways for



No.	Citation	Country / Context	Methodology	Sustainability Focus	Key Findings
15	Meintjies & Maritz (2025)	South Africa	Qualitative thematic analysis	Nurse-led social entrepreneurship	internationalization among women entrepreneurs. Nurse-led social enterprises significantly impact healthcare sustainability through innovation and supportive networks.

The integration of sustainability practices within SMEs has proven effective in enhancing business growth, resilience, and competitiveness, particularly among women-led enterprises. Corporate Social Responsibility (CSR) initiatives play a strategic role in simultaneously addressing sustainability and gender inequality by reducing gender disparities and improving ecosystem management, as evidenced in Nigeria, thus reinforcing the Entrepreneurial Ecosystem perspective on inclusive and resilient growth (Uduji et al., 2024; Isenberg, 2010).

Innovation platforms and community-based incentives further support sustainability by empowering women economically and environmentally. Multi-country innovation platforms in conservation agriculture have facilitated the adoption of sustainable practices and improved rural livelihoods, illustrating how innovative platforms function as strategic resources in line with the Resource-Based View (Brown et al., 2022; Shaaban, 2022). Similarly, social service incentives have increased women’s engagement in conservation-oriented entrepreneurship, supporting Gender Empowerment Theories that emphasize economic incentives as key empowerment mechanisms (Hariohay et al., 2025; Shaaban, 2022). However, evidence from community forest enterprises in Cameroon reveals inconsistent sustainability outcomes, highlighting the need for structured institutional support within entrepreneurial ecosystems (Piabuo et al., 2022).

Strategic management, adaptive leadership, and human capital development are also critical drivers of sustainability. Effective leadership enhances the long-term viability of women-led healthcare SMEs and contributes to broader sustainability goals, demonstrating leadership as a valuable intangible resource (Harmon & Scotti, 2025; Shaaban, 2022). Social marketing initiatives further promote sustainable practices, particularly in improving hygiene and community health among urban poor women (Chatterjee & Sawant, 2024). Additionally, cultural authenticity strengthens sustainability and entrepreneurial success in sectors such as handicrafts, reinforcing RBV through culturally informed business strategies (Yadav et al., 2023).

Financial inclusion, institutional compliance, and digital innovation significantly reinforce sustainable SME development. Improved access to finance enhances innovation capacity and sustainable growth, aligning with Gender Empowerment Theories (Kassa & Kegne, 2025). Occupational safety compliance improves organizational stability and workforce retention, supporting sustainable management practices (Lin et al., 2025), while informal community-based finance offers flexible, trust-based support systems that sustain women-owned SMEs



(Peter & Orser, 2024). Digital ecosystems further enable sustainable internationalization through external partnerships, highlighting digital assets as strategic resources (Mullens & Shen, 2024). Finally, nurse-led social enterprises demonstrate how innovation and networks contribute to healthcare sustainability, validating integrative frameworks that emphasize networks and innovation as critical resources (Meintjies & Maritz, 2025).

6) Intersection of Gender, Digital, and Sustainability Dimensions

The intersection of gender equality, digital innovation, and sustainability significantly strengthens the growth, resilience, and competitiveness of women-led SMEs by expanding access to finance, enhancing operational efficiency, and fostering innovation. Digital financial ecosystems play a central role in this integration, with FinTech platforms improving financial literacy and inclusion among women entrepreneurs in India and China, while also enabling safer internationalization pathways (Avanesh & Zachariah, 2023; Mullens & Shen, 2024). However, persistent barriers to formal credit remain evident, particularly in emerging economies, where women-owned SMEs face structural constraints in accessing capital, necessitating inclusive financial reforms and adaptive ecosystem support (Chaudhuri et al., 2020; Ogundana et al., 2024). Informal, community-based finance continues to mitigate these challenges by offering trust-based and flexible financial solutions aligned with local entrepreneurial contexts (Peter & Orser, 2024).

Adaptive financial management, leadership capability, and collaborative networks further reinforce sustainable outcomes. Strategic financial management enhances the long-term viability of women-led healthcare SMEs, highlighting adaptive capability as a critical internal resource consistent with the Resource-Based View (Harmon & Scotti, 2025). University–industry collaboration also improves access to resources and financial performance, strengthening entrepreneurial ecosystems through institutional support (Murdiati et al., 2023). Women’s financial leadership and structured networks, including veteran-oriented systems, reduce gender disparities and improve business survival, reinforcing Gender Empowerment Theories (Shaaban, 2022; Deming et al., 2025). Digital CRM systems and e-commerce readiness further illustrate the synergy between digital adoption and sustainability, as technological exposure and financial education significantly enhance performance and competitiveness (Hadiyati et al., 2024; Yadav et al., 2023).

Despite these advances, sustainability challenges persist in agriculture and urban contexts, where limited land access and financial constraints restrict women’s entrepreneurial potential, underscoring the need for targeted policy interventions within entrepreneurial ecosystems (Richardson et al., 2024). Capacity-building initiatives, particularly for women transitioning from traditional professions, strengthen sustainable business models through improved financial literacy and innovation networks (Meintjies & Maritz, 2025). Even amid efficiency constraints, women-led SMEs continue to generate substantial social and community benefits, demonstrating the broader societal value of integrating gender, digital, and sustainability dimensions (Sanchez-Riofrio et al., 2023).



Overall, the literature robustly confirms that the intersection of gender equality, digital innovation, and sustainability constitutes a critical driver of SME growth, resilience, and competitive positioning across diverse contexts.

b. Discussion

The analysis underscores the significant interconnectedness between digital innovation, gender equality, and sustainability within the domain of women's entrepreneurship. Digital innovation serves as a critical enabler for women entrepreneurs, empowering them with improved access to information, broader market opportunities, and tools that enhance operational efficiencies (Murdiati et al., 2023; Popović-Pantić et al., 2020). This digital empowerment, when combined with targeted gender equality initiatives, fosters inclusive entrepreneurial environments that enable women to leverage their unique leadership styles and competencies. This integration enables sustainable business practices and fosters innovative solutions tailored to evolving market demands, ultimately yielding competitive advantages for women-led SMEs (Dalal et al., 2022; Setyaningrum et al., 2023).

The identified success factors and barriers unique to women-owned SMEs highlight systemic challenges and opportunities within entrepreneurial ecosystems. Access to capital remains a pivotal determinant, with structural biases in financial institutions often disadvantaging women entrepreneurs compared to their male counterparts (Shaaban, 2022; Meng et al., 2021). Social networks and family support systems significantly influence entrepreneurial success, providing essential resources and emotional backing critical to overcoming institutional and cultural barriers (Hadiyati et al., 2024). Furthermore, adaptability to market trends and proficiency in digital technologies are increasingly vital, underscoring the importance of continuous skill development and strategic digital integration for sustainable growth (Singh et al., 2021; Canelas et al., 2024).

Several research gaps persist, particularly regarding integrated approaches that holistically address the intersections of gender, digital innovation, and sustainability. Many studies predominantly employ quantitative methods, capturing broad trends but potentially overlooking the qualitative nuances essential to understanding the complexities faced by women entrepreneurs (Crane, 2021). There is an evident need for interdisciplinary and intersectional frameworks that recognize how factors such as race, ethnicity, and socioeconomic status intersect with gender, significantly influencing entrepreneurial outcomes and experiences.

Geographic and contextual gaps also exist, limiting the comprehensiveness of current research findings. Studies often overlook the distinct challenges and opportunities that women entrepreneurs face in diverse geographic contexts, particularly when comparing developed and developing regions (Murdiati et al., 2023). Cultural norms have a significant influence on entrepreneurial activities, affecting women's market entry opportunities and access to essential resources. Therefore, comparative studies across regions are essential to capture these nuances and inform context-specific policy recommendations (Nguyen et al., 2024; Hunt et al., 2019).



Longitudinal and theoretical gaps further constrain the depth of current scholarship. Existing research rarely explores the long-term impacts of integrating digital innovation, gender equality, and sustainability practices within women-owned SMEs, limiting the understanding of evolving dynamics and outcomes over time (Fernández et al., 2023). Theoretical frameworks integrating feminist perspectives, stakeholder theory, and the triple-bottom-line approach can offer valuable insights into the long-term viability and impact of these interconnected dimensions (Raman et al., 2022; Hunt et al., 2019).

Effective policies supporting digital innovation adoption among women entrepreneurs must prioritize financial support mechanisms tailored explicitly for women-owned SMEs. Grants, subsidies, and low-interest loans specifically designed to address women's unique financial needs significantly stimulate entrepreneurial growth (Murdiati et al., 2023). Policymakers should enhance financial literacy through targeted training programs, facilitating effective utilization of digital tools and fostering a digitally empowered entrepreneurial base (Crane, 2021). Additionally, fostering networks through governmental initiatives, such as specialized entrepreneurial conferences, can strengthen collaboration and knowledge exchange, further empowering women entrepreneurs and enhancing their market competitiveness (Mallett et al., 2024).

To better support women-led SMEs, entrepreneurial ecosystems must develop inclusive policies that address specific barriers, such as access to capital, education, and market entry. Collaboration among governments, educational institutions, and the private sector is crucial in establishing comprehensive resource and support networks specifically designed for women entrepreneurs (Dalal et al., 2022). Ecosystem approaches should prioritize local community engagement and mentorship programs, enabling women to build robust social capital and access experiential learning opportunities, which are crucial for sustainable growth and resilience (Mallett et al., 2024).

Practitioners are encouraged to adopt sustainable business strategies that concurrently advance gender equality. Implementing environmentally sustainable practices alongside flexible working arrangements can help women effectively manage dual roles in business and family responsibilities, enhancing overall organizational performance and sustainability (Setyaningrum et al., 2023). SMEs should invest in operational technologies that streamline efficiency, reduce environmental impacts, and empower female employees through continuous skill development (Shaaban, 2022). Prioritizing gender diversity in leadership positions and decision-making processes can significantly boost innovation, employee satisfaction, and profitability, underscoring the business case for gender-inclusive strategies within SMEs (Jabeen et al., 2019).

In conclusion, the synthesis of findings emphasizes the robust interconnectedness of digital innovation, gender equality, and sustainability, highlighting their collective impact on enhancing women's entrepreneurial capacities and SME growth. Addressing the identified research gaps will require an integrated, intersectional, and interdisciplinary approach. Policymakers and practitioners must collaborate to build supportive ecosystems that prioritize



inclusive financial mechanisms, targeted educational initiatives, and sustainable business practices, thus fostering resilient, equitable, and innovative entrepreneurial landscapes for women globally.

4. CONCLUSION

This systematic literature review (SLR) examined the intersectionality of digital innovation, gender equality, and sustainability practices within women-owned SMEs, highlighting critical dimensions that shape entrepreneurial growth and resilience. The synthesis of findings reveals a transparent interconnection among these three elements, collectively enhancing the opportunities, competitiveness, and sustainability of women entrepreneurs. Digital innovation significantly empowers women by facilitating access to crucial resources, enhancing market reach, and streamlining business operations. Gender equality initiatives further enhance these benefits by creating supportive environments and fostering diverse leadership styles, which are essential for sustainable business practices.

The review addresses the initial research questions by detailing how digital innovation practices influence SME competitiveness and gender equality, elucidating mechanisms through which gender empowerment mediates technological adoption and sustainable business performance. Moreover, the role of entrepreneurial ecosystems in supporting integrated approaches was critically evaluated, revealing systemic barriers and success factors uniquely affecting women entrepreneurs. Key barriers identified include limited access to capital, entrenched systemic biases, and sociocultural constraints. In contrast, supportive networks, targeted mentorship, and inclusive financial mechanisms have emerged as pivotal enablers.

Theoretically, this study contributes to existing entrepreneurship literature by integrating perspectives from the Entrepreneurial Ecosystem framework, Gender Empowerment Theories, and the Resource-Based View (RBV). These theoretical lenses collectively provide a comprehensive understanding of how internal capabilities, external ecosystem factors, and gender dynamics synergistically influence entrepreneurial outcomes. Specifically, the findings enrich scholarly discourse by emphasizing the necessity for interdisciplinary frameworks that capture the complexity of women's entrepreneurship beyond conventional boundaries.

Despite its contributions, the review has certain limitations. The exclusive reliance on Scopus for article retrieval, although methodologically justified, potentially excludes valuable insights available in other databases or grey literature. Additionally, the inherent methodological diversity within the reviewed studies presented challenges for consistent comparison and synthesis. Furthermore, the predominantly quantitative orientation in existing research limits a deeper understanding of nuanced, contextual experiences of women entrepreneurs across diverse sociocultural contexts.

Future research should address these limitations by exploring integrated, intersectional methodologies that combine qualitative depth with quantitative rigor, providing more holistic insights into women's entrepreneurial experiences. Geographic and contextual gaps also warrant further investigation, particularly through comparative studies between developed and



developing regions, to tailor more context-specific policies and support mechanisms. Longitudinal studies are recommended to understand the evolving impacts of digital innovation, gender equality, and sustainability on women-led SMEs over extended periods. Such approaches will enhance the robustness of entrepreneurial ecosystems, ensuring that theoretical frameworks remain dynamic and responsive to real-world complexities.

In conclusion, this systematic literature review significantly advances the understanding of how digital innovation, gender equality, and sustainability collectively enhance the landscape of women's entrepreneurship. It underscores the critical importance of integrated and contextually sensitive research, providing actionable insights for policymakers, practitioners, and scholars committed to fostering inclusive, innovative, and sustainable entrepreneurial ecosystems.

5. REFERENCES

- Al-Omouh, 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>
- Anggadwita, G., & Indarti, N. (2023). Women Entrepreneurship in the Internationalization of SMEs: A Bibliometric Analysis for Future Research Directions. *European Business Review*, 35(5), 763–796. <https://doi.org/10.1108/eb-01-2023-0006>
- Canelas, C., Selhausen, F. M. z., & Stam, E. (2024). Husbands and Wives: Power, Peril and Female Participation in A Ugandan Coffee Cooperative. *Journal of Small Business and Enterprise Development*, 31(8), 168–204. <https://doi.org/10.1108/jsbed-02-2023-0048>
- Crane, S. R. (2021). Entrepreneurship and Economic Growth: Does Gender Matter? *International Journal of Gender and Entrepreneurship*, 14(1), 3–25. <https://doi.org/10.1108/ijge-04-2021-0056>
- Dalal, K., Yasmin, M., Dahlqvist, H. Z., & Klein, G. O. (2022). Do Electronic and Economic Empowerment Protect Women From Intimate Partner Violence (IPV) in India? *BMC Women S Health*, 22(1). <https://doi.org/10.1186/s12905-022-02110-4>
- Dana, L., Chhabra, M., & Agarwal, M. (2023). A Two-Decade History of Women's Entrepreneurship Research Trajectories in Developing Economies Context: Perspectives From India. *Journal of Management History*, 30(1), 6–28. <https://doi.org/10.1108/jmh-11-2022-0064>
- Davila, F., Bourke, R. M., McWilliam, A., Crimp, S., Robins, L., Wensveen, M. v., Alders, R., & Butler, J. (2021). COVID-19 and Food Systems in Pacific Island Countries, Papua New Guinea, and Timor-Leste: Opportunities for Actions Towards the Sustainable Development Goals. *Agricultural Systems*, 191, 103137. <https://doi.org/10.1016/j.agsy.2021.103137>
- Deng, W., Liang, Q., Li, J., & Wang, W. (2020). Science Mapping: A Bibliometric Analysis of Female Entrepreneurship Studies. *Gender in Management an International Journal*, 36(1), 61–86. <https://doi.org/10.1108/gm-12-2019-0240>



- Fernández, B., Nelson, E., Morales, A. C., Pérez, R. O., Roca, R. A., & Travieso, R. M. C. (2023). Transforming Food Systems: A Gendered Perspective on Local Agricultural Innovation in Cuba. *Frontiers in Sociology*, 8. <https://doi.org/10.3389/fsoc.2023.1256379>
- Ge, T., Abbas, J., Ullah, R., Abbas, A., Sadiq, I. S., & Zhang, R. (2022). Women's Entrepreneurial Contribution to Family Income: Innovative Technologies Promote Females' Entrepreneurship Amid COVID-19 Crisis. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.828040>
- Gregory, R. B., Canto, L. E. L., Fons, M. V. S., & Quintana, V. M. (2020). Agroecological Entrepreneurship, Public Support, and Sustainable Development: The Case of Rural Yucatan (Mexico). *Land*, 9(11), 401. <https://doi.org/10.3390/land9110401>
- Hadiyati, E., Mulyono, R. S., & Gunadi, G. (2024). Digital Marketing as a Determinant Variable for Improving the Business Performance. *Innovative Marketing*, 20(3), 28–41. [https://doi.org/10.21511/im.20\(3\).2024.03](https://doi.org/10.21511/im.20(3).2024.03)
- Helgeson, J., Omoto, R., Kobayashi, R., Murao, T., Takeuchi, M., Watanabe, M., Li, B., & Chabay, I. (2025). Yes, in My Backyard (YIMBY) and Yours, Too: Women Entrepreneurs' Leadership for a Sustainable Future of a Small Japanese Town. *Mitigation and Adaptation Strategies for Global Change*, 30(4). <https://doi.org/10.1007/s11027-025-10210-3>
- Huang, W., & Ichikohji, T. (2024). How Dynamic Capabilities Enable Chinese SMEs to Survive and Thrive During COVID-19: Exploring the Mediating Role of Business Model Innovation. *Plos One*, 19(5), e0304471. <https://doi.org/10.1371/journal.pone.0304471>
- Hughes, K. D., & Yang, T. (2020). Building Gender-Aware Ecosystems for Learning, Leadership, and Growth. *Gender in Management an International Journal*, 35(3), 275–290. <https://doi.org/10.1108/gm-11-2019-0215>
- Hunt, C. M., Fielden, S. L., & Woolnough, H. M. (2019). The Potential of Online Coaching to Develop Female Entrepreneurial Self-Efficacy. *Gender in Management an International Journal*, 34(8), 685–701. <https://doi.org/10.1108/gm-02-2019-0021>
- Irfan, T., & Salam, M. T. (2020). Kaarvan Crafts Foundation: Embracing Digital Literacy for Women Empowerment. *Emerald Emerging Markets Case Studies*, 10(4), 1–34. <https://doi.org/10.1108/eemcs-06-2020-0215>
- Jabeen, F., Faisal, Mohd. N., Matroushi, H. A., & Farouk, S. (2019). Determinants of Innovation Decisions Among Emirati Female-Owned Small and Medium Enterprises. *International Journal of Gender and Entrepreneurship*, 11(4), 408–434. <https://doi.org/10.1108/ijge-02-2019-0033>
- Khokhar, A. S. (2019). What Decides Women Entrepreneurship in India? *Journal of Entrepreneurship and Innovation in Emerging Economies*, 5(2), 180–197. <https://doi.org/10.1177/2393957519862465>
- Kumari, S., & Nair, J. (2024). Empowering Farmers and Enhancing Sustainability: Inaru's Impact on the Dominican Cocoa Industry. *Emerald Emerging Markets Case Studies*, 14(3), 1–28. <https://doi.org/10.1108/eemcs-04-2024-0161>



- Lin, M. S., Jung, I., & Sharma, A. (2022). The Impact of Culture on Small Tourism Businesses' Access to Finance: The Moderating Role of Gender Inequality. *Journal of Sustainable Tourism*, 32(3), 480–499. <https://doi.org/10.1080/09669582.2022.2130337>
- Mallett, O., Wapshott, R., & Wilson, N. (2024). Institutional Pluralism and the Implementation of Women's Enterprise Policy. *International Journal of Entrepreneurial Behaviour & Research*, 30(7), 1950–1968. <https://doi.org/10.1108/ijebr-04-2023-0431>
- Meng, L., Qamruzzaman, Md., & Adow, A. H. (2021). Technological Adaption and Open Innovation in SMEs: An Strategic Assessment for Women-Owned SMEs Sustainability in Bangladesh. *Sustainability*, 13(5), 2942. <https://doi.org/10.3390/su13052942>
- Mullens, D., & Shen, S. (2024). Breaking Barriers, Building Businesses, and International Markets: Strategies of Female Innovators in the Chinese Market. *Business Ethics and Leadership*, 8(1), 149–162. [https://doi.org/10.61093/bel.8\(1\).149-162.2024](https://doi.org/10.61093/bel.8(1).149-162.2024)
- Murdiati, E., Jawazi, J., Zakaria, N. B., & Musa, K. (2023). Does University–Industry Engagement Assist Women in Generating Business Income in Emerging Economies? Evidence From Malaysia. *Economies*, 11(9), 239. <https://doi.org/10.3390/economies11090239>
- Nguyen, P., Scheyvens, R., Beban, A., & Gardyne, S. (2024). Challenges to Empowerment of Women Through Value Chains: The Need to Move From Individual to Relational Empowerment. *Development and Change*, 55(5), 993–1017. <https://doi.org/10.1111/dech.12852>
- Olvida, I., Anastacio, N. J., & Leron, P. J. (2025). Gendered Differences in the Implementation of a Rice-Based Enterprise Program in Sariaya, Quezon Province, Philippines. *Philipp Agric Scientist*, 108(1), 41–49. <https://doi.org/10.62550/hs24054024>
- Peter, W., & Orser, B. (2024). Women Entrepreneurs in Rural Nigeria: Formal Versus Informal Credit Schemes. *International Journal of Gender and Entrepreneurship*, 16(4), 602–623. <https://doi.org/10.1108/ijge-03-2023-0053>
- Popović-Pantić, S., Semenčenko, D., & Vasičić, N. (2020). Digital Technologies and the Financial Performance of Female SMES in Serbia: The Mediating Role of Innovation. *Economic Annals*, 65(224), 53–81. <https://doi.org/10.2298/eka2024053p>
- Qader, A. A., Zhang, J., Ashraf, S. F., Syed, N., Omhand, K., & Nazir, M. (2022). Capabilities and Opportunities: Linking Knowledge Management Practices of Textile-Based SMEs on Sustainable Entrepreneurship and Organizational Performance in China. *Sustainability*, 14(4), 2219. <https://doi.org/10.3390/su14042219>
- Ramachandaran, S. D., Yi, T. Z., Joon, L. M., Kaur, S., Fang, J., & Chaudery, U. (2025). Empowering Women Through Education: Strategies for Leadership Development in Malaysia Towards Achieving Sustainable Development Goals. *International Journal of Learning Teaching and Educational Research*, 24(1), 225–251. <https://doi.org/10.26803/ijlter.24.1.12>
- Raman, R., Subramaniam, N., Nair, V. K., Shivas, A., Achuthan, K., & Nedungadi, P. (2022). Women Entrepreneurship and Sustainable Development: Bibliometric Analysis and



- Emerging Research Trends. Sustainability, 14(15), 9160. <https://doi.org/10.3390/su14159160>
- Rasul, T., Hoque, Md. R., & Arefin, Md. S. (2020). The Influence of Social Media on Female Entrepreneurs: A Prisma Compliant Exploration. *Journal of Entrepreneurship and Sustainability Issues*, 7(4), 3036–3047. [https://doi.org/10.9770/jesi.2020.7.4\(31\)](https://doi.org/10.9770/jesi.2020.7.4(31))
- Riantoputra, C. D., & Muis, I. (2020). New Insights on Psychological Factors for the Development of Women Entrepreneurs in Indonesia. *Advances in Developing Human Resources*, 22(2), 150–163. <https://doi.org/10.1177/1523422320907045>
- Sarfo, P. A., Zhang, J., Nyantakyi, G., Lassey, F. A., Bruce, E., & Amankwah, O. (2024). Influence of Green Human Resource Management on Firm's Environmental Performance: Green Employee Empowerment as a Mediating Factor. *Plos One*, 19(4), e0293957. <https://doi.org/10.1371/journal.pone.0293957>
- Senapati, A. K., & Ojha, K. (2019). Socio-Economic Empowerment of Women Through Micro-Entrepreneurship: Evidence From Odisha, India. *International Journal of Rural Management*, 15(2), 159–184. <https://doi.org/10.1177/0973005219866588>
- Setyaningrum, R. P., Norisanti, N., Fahlevi, M., Aljuaid, M., & Grabowska, S. (2023). Women and Entrepreneurship for Economic Growth in Indonesia. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.975709>
- Shaaban, S. (2022). The Impact of Women as Human Capital on Perceiving Sustainable Development in Egyptian Industry. *Management & Sustainability an Arab Review*, 1(2), 139–154. <https://doi.org/10.1108/msar-06-2022-0026>
- Singh, B., & Goyal, S. (2024). SUGAR Cosmetics: Empowering Women Through Leadership. *The Case Journal*, 21(4), 803–827. <https://doi.org/10.1108/tcj-05-2024-0153>
- Singh, S., Mittal, S., & Awasthi, A. (2021). Astitva: An Unsustainable Social Entrepreneurship Journey. *South Asian Journal of Business and Management Cases*, 10(1), 121–136. <https://doi.org/10.1177/22779779211006803>
- Sung, K. K., Cooper, T., & Kettley, S. (2019). Developing Interventions for Scaling Up UK Upcycling. *Energies*, 12(14), 2778. <https://doi.org/10.3390/en12142778>
- Torre, J., Hernández-Velasco, A., Melo, F. J. F., López, J., & Espinosa-Romero, M. J. (2019). Women's Empowerment, Collective Actions, and Sustainable Fisheries: Lessons From Mexico. *Maritime Studies*, 18(3), 373–384. <https://doi.org/10.1007/s40152-019-00153-2>
- Tripathy, M., Mishra, B., & Satapathy, G. P. (2024). Development of Multi-Dimensional Scale to Measure the Abilities of Rural Women Towards Entrepreneurship. *Ijee*, 60(2), 83–88. <https://doi.org/10.48165/ijee.2024.602rt1>
- Tundui, C. S., & Tundui, H. P. (2020). Performance Drivers of Women-Owned Microcredit Funded Enterprises in Tanzania. *International Journal of Gender and Entrepreneurship*, 12(2), 211–230. <https://doi.org/10.1108/ijge-06-2019-0101>
- Wedajo, A. D., Khan, S. T., Bhat, M. A., & Yousuf Mohamed Zahran Al Balushi. (2023). Mapping the Landscape of Female Entrepreneurship in Africa: Trends, Networks and Hot Topic Through Text Mining Techniques. *Management & Sustainability an Arab Review*,



4(1), 24–46. <https://doi.org/10.1108/msar-07-2023-0038>

Wycoff, K. (2021). Consultation With a Community-Based Organization Serving Urban Youth: A Case Study. *Consulting Psychology Journal Practice and Research*, 73(2), 163–180. <https://doi.org/10.1037/cpb0000190>

Zhu, L., Kara, O., & Zhu, X. (2019). A Comparative Study of Women Entrepreneurship in Transitional Economies. *Journal of Entrepreneurship in Emerging Economies*, 11(1), 66–80. <https://doi.org/10.1108/jeee-04-2017-0027>

Шкарупа, О. В., Vlasenko, D., & Makedon, H. (2025). Women's Entrepreneurship in Ukrainian Agriculture: Identifying Channels for Strengthening Strategic Development. *Agricultural and Resource Economics International Scientific E-Journal*, 11(1). <https://doi.org/10.51599/are.2025.11.01.08>