International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 7.2 Website: https://ijarmt.com ISSN No.: 3048-9458

Women Empowerment 5.0: Integrating Digital Literacy, Economic Independence and Social Inclusion

Dr. Anita Madhusudan Shelke
Professor, Maratha Viday Prasarak Samaj, Adv. Vitthalrao Ganpatrao Hande College of Education, Nashik (MS)

Abstract
Women empowerment has emerged as a multidimensional developmental priority in the contemporary digital era, extending beyond traditional approaches to gender equality towards technological participation, economic autonomy and inclusive social transformation. The concept of Women Empowerment 5.0 represents a proposed human-centred framework that integrates digital literacy, economic independence and social inclusion to strengthen women's agency, capabilities and participation in a rapidly evolving society. The present paper examines the interconnected role of these three dimensions in advancing sustainable women empowerment, particularly in the context of emerging technologies, digital economies and changing socio-economic structures. The study adopts a descriptive and analytical research approach based on secondary sources, including scholarly literature, policy documents and reports published by national and international organisations. It explores how digital competencies enable women to access information, education, financial services, entrepreneurship opportunities and professional networks. Furthermore, economic independence is examined as a critical factor influencing women's decision-making power, financial security and participation in household and community development. Social inclusion is analysed in relation to equitable access to education, employment, institutional resources and digital opportunities, especially among women from rural, marginalised and economically disadvantaged communities. The paper identifies persistent challenges, including the digital gender divide, technological inequalities, socio-cultural restrictions, limited financial accessibility and gender-based discrimination. It proposes an integrated empowerment framework emphasising digital capability development, financial inclusion, entrepreneurship, institutional support and inclusive policy implementation. The study concludes that sustainable women empowerment requires the coordinated advancement of technological competence, economic agency and social participation rather than isolated developmental interventions. The proposed Women Empowerment 5.0 framework provides a conceptual foundation for future empirical investigations and gender-responsive policy development.

Keywords: Women Empowerment 5.0, Digital Literacy, Economic Independence, Social Inclusion, Gender Equality, Digital Transformation, Financial Inclusion, Sustainable Development.

1. Introduction

Women empowerment is a fundamental aspect of social justice, economic development and sustainable societal transformation. In the modern digital era, technological advancements, globalisation and changing employment structures have created opportunities for women in education, entrepreneurship, governance and economic participation. However, gender inequalities continue to restrict women's access to technological resources, financial opportunities and decision-

making processes. Therefore, contemporary women empowerment requires an integrated approach combining digital literacy, economic independence and social inclusion.

The concept of Women Empowerment 5.0 represents a human-centred framework inspired by Society 5.0, emphasising technological innovation, gender equality and sustainable development. Digital literacy enables women to access educational resources, digital financial services, employment opportunities and entrepreneurial platforms. Economic independence strengthens financial security, personal autonomy and participation in household and societal decisions. Similarly, social inclusion ensures equitable opportunities for women from diverse socio-economic and geographical backgrounds.

In India, digital transformation, financial inclusion initiatives and entrepreneurship development programmes have created opportunities for women's advancement. Nevertheless, technological disparities, socio-cultural restrictions and economic inequalities remain significant challenges. Consequently, the present study examines the interconnected roles of digital literacy, economic independence and social inclusion in promoting sustainable women empowerment and proposes an integrated conceptual framework for gender-responsive development in contemporary society.

2. Review of Related Literature

Kabeer (1999) conceptualised empowerment through the interconnected dimensions of resources, agency and achievements. Her framework emphasised that empowerment involves expanding the ability of individuals to make meaningful choices, particularly where such choices were previously restricted. This perspective remains relevant to digital-age empowerment because technological access and economic resources are valuable only when women possess the agency to utilise them independently.

Sen (1999) approached development through the expansion of substantive freedoms and human capabilities. His capability perspective suggests that economic growth alone cannot adequately represent human development unless individuals experience improvements in educational opportunities, social participation and personal freedom. Applied to women empowerment, this approach highlights the importance of creating conditions in which women can translate available resources into meaningful developmental outcomes.

The UNESCO Global Education Monitoring Report (2024), Technology on Her Terms, examined the relationship between educational technology and gender equality. It highlighted the opportunities offered by digital technologies while recognising inequalities in technological access, digital skills and participation in technological development. The report supports the argument that digital transformation must be accompanied by gender-responsive educational policies and inclusive learning opportunities.

The International Telecommunication Union (2025) reported that 71% of women and 77% of men worldwide used the internet. This continuing disparity demonstrates that technological expansion has not automatically eliminated gender-based inequalities in digital participation.

The World Bank's Global Findex Database 2025 provides evidence concerning financial account ownership, digital payments, savings and access to financial services. Based on surveys conducted in 141 economies, it demonstrates the importance of digital connectivity and financial infrastructure for inclusive economic development.

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 7.2 Website: https://ijarmt.com ISSN No.: 3048-9458

Bonfert and Norris (2025) reported that 73% of women in low- and middle-income economies held financial accounts in 2024, compared with 66% in 2021. Nevertheless, account ownership does not necessarily indicate financial autonomy because women may still encounter barriers in independently operating accounts, accessing credit and controlling economic resources.

Crenshaw (1989) introduced the concept of intersectionality to explain how different structures of inequality interact. This perspective is particularly relevant to women empowerment because women do not experience technological, economic and social disadvantages uniformly. Gender intersects with economic position, caste, disability, educational background, geographical location and other social circumstances.

The literature collectively indicates that technological access, economic participation and social inclusion should be examined as interconnected dimensions. However, their combined contribution to empowerment requires further conceptual clarification and empirical investigation. The present paper addresses this requirement by proposing an integrated Women Empowerment 5.0 framework.

3. Significance of the Study

The significance of the present study lies in its attempt to develop an integrated understanding of women empowerment in an increasingly digital and knowledge-driven society. Technological innovations have transformed education, employment, entrepreneurship, financial transactions and social communication. Nevertheless, women may remain excluded from these opportunities because of inadequate digital competencies, restricted economic resources and persistent social inequalities.

The study is academically significant because it connects the concepts of digital literacy, economic independence and social inclusion within a single conceptual framework. Rather than examining these dimensions independently, it emphasises their reciprocal relationships and their potential contribution to women's agency and decision-making capabilities.

The study also has practical relevance for educational institutions, policymakers, financial organisations, non-governmental organisations and community development agencies. Its proposed framework can inform the design of digital literacy programmes, entrepreneurship initiatives, financial inclusion strategies and community-based empowerment interventions.

Furthermore, the study contributes to discussions surrounding Sustainable Development Goal 5, which promotes gender equality and the empowerment of women and girls, and related objectives concerning education, decent work and reduced inequalities.

4. Objectives of the Study

1. To examine the conceptual foundations and emerging dimensions of Women Empowerment 5.0 in contemporary society.
2. To analyse the role of digital literacy in strengthening women's educational, technological and professional capabilities.
3. To study the contribution of economic independence and financial inclusion towards women's empowerment.
4. To examine the significance of social inclusion in promoting equitable opportunities and meaningful participation among women.
5. To propose an integrated conceptual framework connecting digital literacy, economic independence and social inclusion for sustainable women empowerment.

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 7.2 Website: https://ijarmt.com ISSN No.: 3048-9458

5. Research Methodology

The present study adopts a descriptive and analytical research methodology based on secondary data. The research is conceptual in nature and seeks to synthesise established theoretical perspectives, contemporary policy discussions and available statistical evidence concerning women empowerment.

Secondary information has been drawn from published academic literature, reports of international organisations, government policy documents and research publications related to digital literacy, gender equality, economic participation and social inclusion.

The study employs thematic analysis to organise the reviewed literature into three principal dimensions: digital literacy, economic independence and social inclusion. These dimensions are subsequently examined in relation to women's agency, participation and sustainable empowerment.

The proposed Women Empowerment 5.0 framework is developed through conceptual synthesis rather than experimental testing. Consequently, the study does not claim primary survey findings, statistical associations or causal effects. Its findings represent evidence-informed interpretations and propositions requiring validation through future empirical research.

6. Conceptual Framework of Women Empowerment 5.0

Women Empowerment 5.0 is conceptualised in the present paper as a human-centred, technology-enabled and socially inclusive approach to strengthening women's capabilities, autonomy and participation. The expression is employed as a proposed analytical framework rather than as an internationally standardised empowerment index or an officially established developmental stage.

The framework identifies three mutually reinforcing dimensions.

6.1 Digital Literacy

Digital literacy refers to the ability to access, evaluate, create, communicate and utilise information through digital technologies effectively, responsibly and safely. For women, digital literacy may support educational development, online employment, digital entrepreneurship, access to government services and participation in professional networks.

However, digital literacy should not be restricted to the ability to operate smartphones or computers. It must also incorporate information evaluation, cybersecurity awareness, digital financial skills, responsible use of artificial intelligence and the ability to protect personal information.

6.2 Economic Independence

Economic independence refers to women's ability to generate income, control financial resources, access productive opportunities and participate meaningfully in economic decision-making. It includes employment, entrepreneurship, savings, financial planning, ownership of assets and access to institutional financial services.

Digital technologies can support economic independence by enabling online marketplaces, digital payments, remote employment, financial education and access to entrepreneurial networks. Nevertheless, the economic benefits of digital participation depend on women's control over income, available time, market opportunities and institutional support.

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 7.2 Website: https://ijarmt.com ISSN No.: 3048-9458

6.3 Social Inclusion

Social inclusion refers to the removal of barriers that prevent women from participating equally in educational, economic, political and community institutions. It requires attention to discrimination, restrictive social norms, accessibility, representation and equitable distribution of opportunities.

Within the proposed framework, social inclusion acts as an enabling condition that allows digital capabilities and economic opportunities to become accessible to women across diverse social backgrounds.

6.4 Integrated Empowerment Model

Dimension	Major components	Expected empowerment outcomes
Digital Literacy	Digital skills, AI literacy, cybersecurity, information access	Technological confidence and informed participation
Economic Independence	Employment, entrepreneurship, financial literacy, resource control	Financial autonomy and economic security
Social Inclusion	Equal opportunity, institutional participation, accessibility, social recognition	Social agency and equitable participation
Integrated Empowerment	Coordination of all three dimensions	Greater decision-making capacity and sustainable empowerment

The framework proposes that digital literacy may expand women's access to economic opportunities, while economic independence may increase their capacity to acquire technological resources and participate in social institutions. Social inclusion, in turn, can reduce structural restrictions that prevent women from translating technological and economic capabilities into meaningful choices.

These relationships are theoretically plausible but should not be interpreted as empirically established causal pathways within the present study.

7. Analysis and Discussion

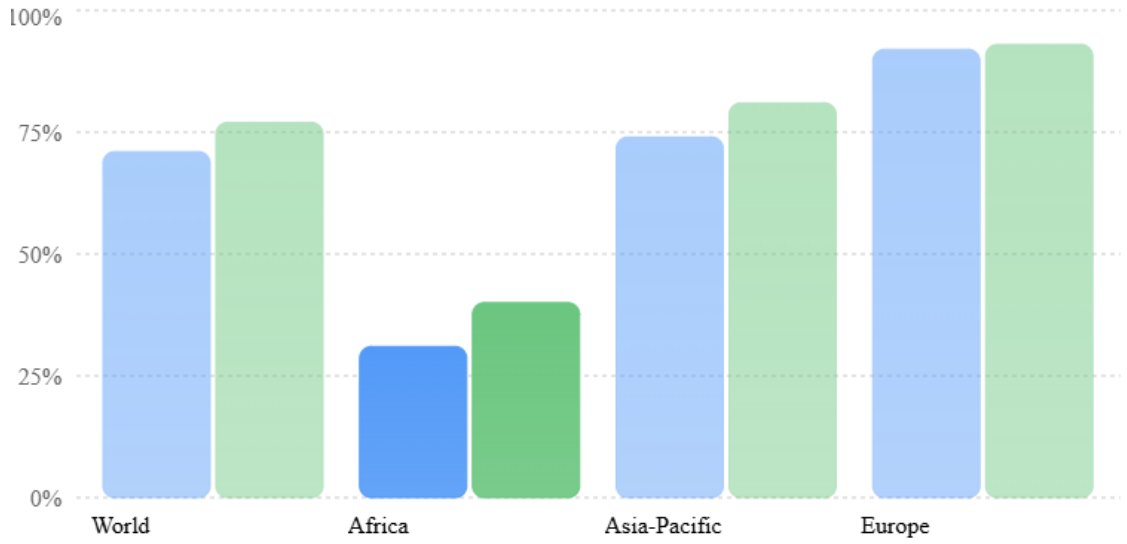
7.1 Global Gender Digital Divide

The expansion of internet connectivity has created substantial opportunities for educational and economic participation. However, the digital gender divide continues to restrict women's ability to benefit equally from technological progress.

According to ITU estimates for 2025, 71% of women and 77% of men worldwide used the internet. The difference was considerably greater in some lower-income regions, indicating the influence of economic development and infrastructure availability on digital inclusion.

Internet use by gender, 2025 (%)

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 7.2 Website: https://ijarmt.com ISSN No.: 3048-9458



Source: International Telecommunication Union, Facts and Figures 2025.

The figures indicate that gender disparities in internet use are particularly significant in regions where broader developmental inequalities persist. Therefore, women empowerment initiatives must address digital infrastructure, affordability, educational access and social restrictions simultaneously.

7.2 Digital Literacy as an Instrument of Empowerment

Digital literacy has the potential to improve women's access to educational resources, employment information, online services and communication networks. Technology-enabled learning environments can provide flexible opportunities for women who face geographical, financial or social restrictions on attending conventional educational institutions.

Digital competencies can also support professional development through online certification programmes, virtual training, digital collaboration and technology-assisted entrepreneurship.

Nevertheless, digital access does not automatically produce equal outcomes. Women may encounter difficulties involving limited device ownership, inadequate connectivity, restricted time, online harassment and insufficient technological guidance. These challenges demonstrate the importance of providing safe, accessible and context-sensitive digital education.

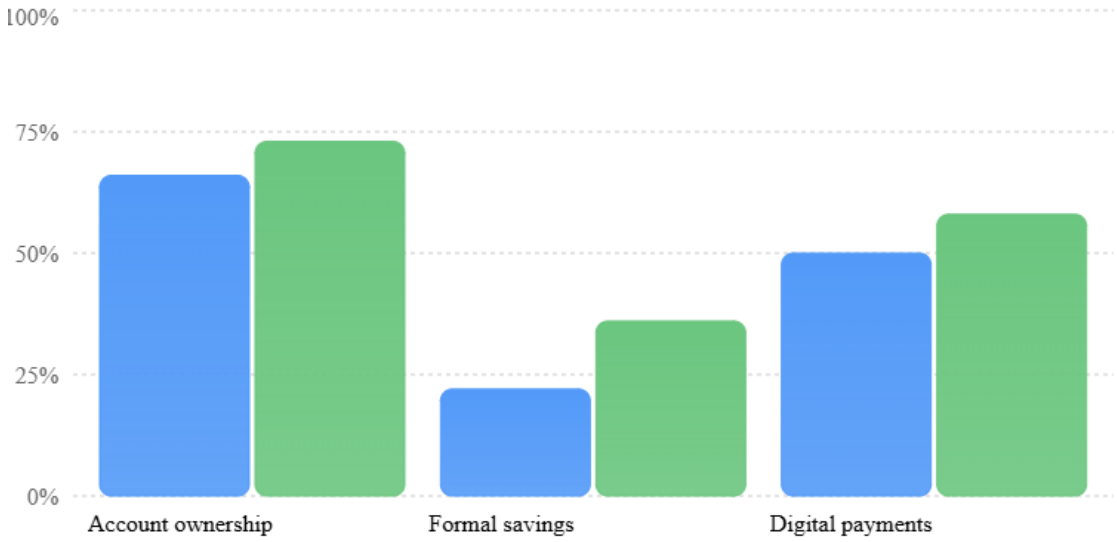
7.3 Economic Independence and Financial Participation

Economic independence is closely connected with women's ability to exercise meaningful choices and participate in household and community decision-making. Financial resources can support education, healthcare, mobility, entrepreneurship and long-term economic security.

The World Bank's Global Findex 2025 findings indicate that women's access to financial accounts has improved across low- and middle-income economies. However, differences remain between account ownership and the active utilisation of financial services.

Women's financial inclusion in low- and middle-income economies (%)

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 7.2 Website: https://ijarmt.com ISSN No.: 3048-9458



Source: World Bank, Global Findex Database 2025. Figures refer to women in low- and middle-income economies.

These improvements suggest expanding access to financial systems. However, a comprehensive understanding of economic empowerment requires examining whether women independently operate financial accounts, retain control over earnings and participate in financial decisions.

Digital financial literacy, accessible credit facilities, entrepreneurial mentoring and market linkages can potentially strengthen the relationship between financial inclusion and economic autonomy.

7.4 Social Inclusion and Structural Inequalities

Social inclusion remains essential because technological and economic opportunities are shaped by existing institutional and cultural conditions. Women from rural communities, low-income households and socially marginalised backgrounds may experience overlapping disadvantages that limit their access to educational and financial resources.

An inclusive empowerment strategy should therefore address affordability, accessibility, social acceptance, institutional representation and gender-responsive service delivery.

Community organisations, educational institutions, local self-government bodies and women's self-help groups can contribute to social inclusion by facilitating collective learning, institutional awareness and access to developmental opportunities.

7.5 Integration of Digital Literacy, Economic Independence and Social Inclusion

The three dimensions examined in this study are interconnected. Digital literacy may strengthen economic participation by enabling access to digital marketplaces, financial services and employment information. Economic independence may increase women's capacity to acquire technological resources, pursue education and participate in social institutions.

Similarly, social inclusion can create an enabling environment in which women can access digital training and economic opportunities without discrimination or restrictive institutional barriers.

The proposed Women Empowerment 5.0 framework therefore emphasises that sustainable empowerment cannot be adequately achieved through isolated interventions. Digital training programmes must be connected with financial opportunities, while economic initiatives should be supported by inclusive social and institutional arrangements.

International Journal of Advanced Research and Multidisciplinary Trends (IJARMT)
An International Open Access, Peer-Reviewed Refereed Journal
Impact Factor: 7.2 Website: https://ijarmt.com ISSN No.: 3048-9458

8. Major Findings of the Study

On the basis of the reviewed literature, secondary statistical evidence and conceptual analysis, the following major findings have been identified.

1. Digital literacy has emerged as an important enabling capability for women's educational advancement, professional development, financial participation and access to information in contemporary society.
2. The gender digital divide continues to influence women's participation in technology-driven developmental opportunities. Available international evidence indicates that inequalities in internet access remain significant, particularly in economically disadvantaged regions.
3. Economic independence represents a central dimension of women empowerment because financial autonomy can strengthen personal decision-making, economic security and participation in household and community affairs.
4. Financial inclusion has expanded considerably among women in low- and middle-income economies. Nevertheless, ownership of financial accounts does not necessarily guarantee independent financial decision-making or effective control over economic resources.
5. Social inclusion plays an essential role in ensuring that women from rural, economically disadvantaged and marginalised communities can participate meaningfully in educational, technological and economic activities.
6. Digital literacy, economic independence and social inclusion are conceptually interconnected. Their coordinated development offers a more comprehensive approach to empowerment than programmes addressing individual dimensions separately.
7. Artificial intelligence, digital entrepreneurship, online learning platforms and technology-enabled financial services present emerging opportunities for women. However, these opportunities require adequate digital competencies, accessible infrastructure and appropriate safeguards.
8. The Women Empowerment 5.0 framework offers an integrated conceptual approach that combines technological capabilities, economic agency and inclusive participation. Its effectiveness requires empirical validation through future research.

9. Recommendations and Policy Implications

1. Governments and educational institutions should develop gender-responsive digital literacy programmes incorporating artificial intelligence literacy, cybersecurity awareness, digital communication and responsible technology utilisation.
2. Women-focused entrepreneurship development initiatives should integrate digital marketing, financial management, e-commerce training and access to institutional financial support.
3. Financial institutions should promote accessible digital banking services and provide practical financial literacy programmes that strengthen women's independent financial decision-making.
4. Special digital empowerment programmes should be implemented for rural women, women from economically disadvantaged households and socially marginalised communities to reduce inequalities in technological participation.
5. Higher education institutions should introduce skill-based programmes supporting women's digital competencies, entrepreneurship, leadership and professional development.

6. Government agencies, non-governmental organisations, self-help groups and private institutions should establish collaborative mechanisms for delivering integrated digital, financial and social empowerment programmes.

10. Conclusion

The present study examined Women Empowerment 5.0 as an integrated framework connecting digital literacy, economic independence and social inclusion in contemporary society. The analysis highlighted that sustainable women empowerment requires technological competencies, financial autonomy and equitable social participation. Digital literacy enhances women's access to education, employment, entrepreneurship and financial services, while economic independence strengthens decision-making capabilities, financial security and personal autonomy. Similarly, social inclusion promotes equal opportunities and meaningful participation among women from diverse socio-economic backgrounds. The study emphasised that these three dimensions are interconnected and collectively contribute to sustainable empowerment. However, technological inequalities, financial barriers, socio-cultural restrictions and gender discrimination continue to challenge women's advancement. The proposed Women Empowerment 5.0 framework provides a human-centred approach integrating technological innovation, economic agency and inclusive development. The study concluded that coordinated educational, economic and institutional initiatives are essential for strengthening women's empowerment, advancing gender equality and promoting sustainable social transformation in the modern digital era.

12. References

1. Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. University of Chicago Legal Forum, 1989(1), 139–167.

2. International Telecommunication Union. (2025). Facts and figures 2025. https://www.itu.int/itu-d/reports/statistics/facts-figures-2025/index/

3. Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. Development and Change, 30(3), 435–464. https://doi.org/10.1111/1467-7660.00125

4. Sen, A. (1999). Development as freedom. Alfred A. Knopf.

5. UNESCO. (2024). Global education monitoring report 2024: Gender report—Technology on her terms. UNESCO. https://www.unesco.org/gem-report/en/publication/2024-gender-report

6. United Nations. (2015). Transforming our world: The 2030 agenda for sustainable development. United Nations. https://sdgs.un.org/2030agenda

7. World Bank. (2025). The Global Findex Database 2025. World Bank. https://www.worldbank.org/en/publication/globalfindex/report

8. Bonfert, A. T., & Norris, A. (2025, November 11). More women have financial accounts, yet equal access and use remain works in progress. World Bank Blogs. https://blogs.worldbank.org/en/opendata/more-women-have-financial-accounts--yet-equal-access-and-use-rem