"Digital Literacy And Gender Equality: A Mechanism For Facilitating Women's Empowerment In The Twenty-First Century"

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Abstract:

Women now have a multiplicity of chances to develop their skills and construct better futures thanks to the digital age, which has completely changed the way we live, work, and communicate. But there are drawbacks as well, such the gender gap, underrepresentation in IT, and socioeconomic obstacles. In order to get beyond these obstacles, the Indian government has started a number of digital initiatives. In order to promote socioeconomic inclusion, enable women to have a sustainable future, and reduce gender disparities in access to digital technology, the Indian government's digital literacy initiatives are essential. In addition to promoting gender equality, empowering women in the digital era is an essential first step toward long-term social and economic advancement.

The significance of providing women with fundamental digital skills is examined in this essay. It draws attention to how few digital platforms are effective at closing the gender gap and the necessity of laws that support inclusivity and provide safe online environments for women. Additionally, outline the obstacles and difficulties that prevent women from acquiring digital skills.

Keywords: Digital literacy, Empowering, Entrepreneurship, Sustainable

1. INTRODUCTION:

In the 21st century, digital literacy has emerged as a critical factor in shaping economic, social and political opportunities. However, gender equality in digital literacy is not just about providing access to technology but also about ensuring that women have the knowledge, confidence and opportunities to use digital tools effectively bridging the digital gender gap can unlock the new opportunities for education, employment, entrepreneurship and civic engagement ultimately leading to women's empowerment.

The Digital India initiatives, launched in 2015, aimed to establish a knowledge-based economy with accessibly technology. It transformed electronic payments and saw India surpassing China in digital transaction in 2021, with 48.6 billion transactions. This digital revolution has shifted India's economy into the fourth industrial revolution, as highlighted by the Prime Minister during Digital India Week 2022. "India can proudly claim that it's not just a part of industry revolution 4.0, but is leading it" (Sneha

Mohan,2023). This paper explores the crucial role of digital literacy and gender equality intersect create a pathway for women' empowerment.

2. LITERATURE REVIEW:

(S & Noronha, 2024) in the paper "A comprehensive literature review on women's empowerment in self-help groups and digital initiatives" concludes that the integration of self-help groups (SHGs) with digital initiatives significantly enhances women's empowerment by promoting financial independence and digital literacy, which are crucial for achieving broader community development and gender equality. - It emphasizes the importance of recognizing the intersectionality of empowerment strategies, as combining traditional and digital approaches not only addresses economic and social aspects but also fosters innovative community development and provides valuable insights for effective policymaking and program implementation.

The paper titled "Digital and Financial Literacy for Uplifting Women and Achieving Sustainable Development Goals," proposed by Mishra et al. (2024), focuses on the intersection of digital and financial literacy, particularly in relation to women's empowerment and the Sustainable Development Goals (SDGs). The author discussed the impact of digital literacy, the role of financial literacy, barriers to education, and the double literacy strategy. The author summarized the role of digital and financial literacy in empowering women and achieving sustainable development while also addressing the barriers that need to be overcome to realize these goals. The findings advocate for a comprehensive approach to literacy that can lead to significant socio-economic improvements for women globally.

(Gupta, 2024) in their paper titled "The Road to Empowerment: Gender Equality and Women's Empowerment" addresses the critical themes surrounding gender equality and the empowerment of women. The author emphasizes that gender equality is not just a moral issue but also a practical necessity for societal progress. The author discussed how gender equality and women's empowerment are intertwined with pressing global challenges such as economic crises, climate change, healthcare disparities, and conflicts. In summary, the surrounding gender equality and women's empowerment highlights the importance of viewing the issues as both moral imperatives and practical necessities, with significant implications for global progress and societal well-being.

3. OBJECTIVES:

- To know the importance of digital literacy for women
- To study some Digital literacy initiatives by the government to empower women in India
- To identifies barriers and challenges faced by the women to acquire digital literacy.

4. METHODOLOGY:

Using a descriptive, qualitative, and conceptual approach, this paper conducts a thorough literature review on the government initiatives to promote digital literacy among women. The pertinent data used in this study was obtained from secondary sources, such as credible websites, books, journal articles(Saharia, G. & Mazumdar, S. 2024)

5. WOMEN'S DIGITAL EMPOWERMENT:

Digital empowerment in women refers to the process of equipping women with the skills, knowledge and access to digital technologies to enhance their personal, professional and social lives.

6. IMPORTANCE OF DIGITAL LITERACY:

The importance of digital literacy among women is a multifaceted issue with significant implications for economic empowerment, social inclusion, and overall well-being. Digital literacy, defined as the ability to locate, organize, evaluate, analyze, and use information through digital technologies (Talukdar, 2022), is becoming increasingly crucial in today's rapidly evolving digital landscape. This response will explore the various dimensions of digital literacy for women, drawing upon recent research and highlighting both the opportunities and challenges associated with promoting digital inclusion.

Economic Empowerment-Digital literacy plays a pivotal role in women's economic empowerment by providing access to new opportunities and enhancing performance in various economic activities (Egbuka, 2024). Digitally literate women are better equipped to leverage online platforms for marketing, networking, and accessing markets beyond geographical boundaries (S, 2024). This is particularly important for women entrepreneurs who can utilize digital tools to promote their products, manage their finances, and expand their businesses (Savitri, 2024).

Entrepreneurship and Online Business-Digital technologies have emerged as powerful tools that can level the playing field for women in entrepreneurship (S, 2024). By acquiring digital skills, women can harness the benefits of online platforms for marketing, networking, and accessing essential business resources. A study by Nancy Ihechi Egbuka, Oluwatimileyin Deborah Dabo, Victoria Olayinka Akinyele, and Olachi Deborah Azino found that women with digital skills exhibit greater economic success compared to those without (Egbuka, 2024). This includes improved performance in economic activities, increased opportunities in entrepreneurship and online businesses, and better financial planning and decision-making facilitated by digital tools.

Financial Management and Inclusion-Digital literacy also enhances women's ability to manage their finances effectively (Egbuka, 2024). With the increasing accessibility of digital financial instruments, women can use these platforms to make informed economic decisions, increase their financial independence, and build resilience in the face of economic crises (Mishra, 2024). A study by Jelly Wulan Shakila and Dedik Hariyanto indicated a positive influence of digital literacy on the financial management of working women (Shakila, 2024). Similarly, Ratna Candra Sari, Zuhrohtun Zuhrohtun, Arin Pranesti, Ratna Yudhiyati, Umi Syafaatul Udhma, and Novita Nurbaiti found that digital financial literacy significantly influences financial behavior and future financial decisions of women entrepreneurs (Sari, 2024).

Social Inclusion and Empowerment -Beyond economic benefits, digital literacy is crucial for women's social inclusion and empowerment. It enables women to access information, participate in socio-economic activities, and adapt to the rapidly evolving technological landscape (Sharmila, 2024). Digital literacy also enhances women's ability to connect with others, build social networks, and engage in community participation (Meenu, 2025).

Access to Information and Education -Digital literacy provides women with access to a wealth of information and educational resources that can improve their quality of life (Mishra, 2024). Online education platforms offer flexible and accessible learning opportunities, breaking down barriers to education for women in developing countries (Khaliqi, 2024). Nargis Hakimi, Musawer Hakimi, Muska Hejran, Tamanna Quraishi, Parisa Qasemi, Lima Ahmadi, Mehriya Daudzai, and Helena Ulusi's case study of Women Online University highlighted the transformative potential of e-learning for women's education, emphasizing the importance of addressing digital literacy gaps and enhancing institutional support (Hakimi, 2024).

Social Networking and Community Participation-Digital literacy enables women to participate actively in social networks and community activities (Meenu, 2025). Social media platforms provide opportunities for women to connect with others, share information, and engage in discussions on issues that affect their lives. However, it is important to address the challenges and barriers faced by women in developing digital literacy skills, including socio-economic factors, cultural norms, and access to technology (S, 2024).

7. GOVERNMENT INITIATIVES:

The Indian government has launched several initiatives aimed at developing digital literacy for women, recognizing its importance for empowering women and bridging the gender gap in the digital world. These initiatives focus on providing training, resources, and platforms to help women, particularly in rural areas, acquire digital skills. Here are some key government initiatives in India that promote digital literacy for women:

➤ **Digital India Program**

- **Overview:** Launched in 2015, **Digital India** is a flagship program aimed at transforming India into a digitally empowered society and knowledge economy. One of its main goals is to increase digital literacy among all citizens, with specific attention to marginalized groups, including women.

- **Key Features:**
  - o **Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA):** A major component under the Digital India program, this initiative aims to digitally empower rural communities, with a special focus on women. The goal is to provide digital literacy to 60 million rural households, particularly targeting women and disadvantaged communities.
  - o **Training & Certification:** PMGDISHA offers free digital literacy training in rural areas, helping women learn essential skills like internet usage, online banking, and government services.

➢ **Mahila e-Haat**

- **Overview:** Launched by the Ministry of Women and Child Development in 2016, **Mahila e-Haat** is an online platform designed to help women entrepreneurs showcase and sell their products. It also aims to provide women with digital skills to help them grow their businesses.
- **Key Features:**
  - o Provides training and resources for women entrepreneurs to help them set up online businesses and use e-commerce platforms.
  - o Encourages digital literacy among women by offering a platform for them to interact, sell, and network online.

➢ **National Digital Literacy Mission (NDLM)**

- **Overview:** The **National Digital Literacy Mission** was launched in 2014 by the Ministry of Electronics and Information Technology to provide basic digital literacy to the underserved population, including women.
- **Key Features:**
  - o **Focus on Rural Women:** One of the primary objectives is to provide digital literacy to rural women, equipping them with essential skills to access information, government services, and financial tools.
  - o **Skill Development Centers:** These centers offer free digital literacy programs, training women in using digital devices, navigating the internet, and using services like online banking and government portals.

➢ **Skill India Mission**

- **Overview:** The **Skill India Mission**, launched in 2015, is a government initiative aimed at providing skill development opportunities to youth, including women. This initiative also includes digital literacy as a key area of focus.
- **Key Features:**
  - o **Pradhan Mantri Kaushal Vikas Yojana (PMKVY):** This program offers short-term skill training courses in various sectors, including digital literacy and technology. Women, especially in rural and semi-urban areas, are given priority for training in digital skills like software development, digital marketing, and IT services.
  - o **Digital Skills Courses:** Several courses specifically targeting digital literacy and skills development are available, focusing on making women employable in the digital economy.

➢ **e-District Scheme**

- **Overview:** The **e-District Scheme** is part of the Digital India initiative and focuses on providing e-governance services at the district level. It aims to improve the accessibility of government services through digital means, especially for women.
- **Key Features:**
  - o **Digital Service Access:** Women are trained on how to access government services such as pension schemes, welfare programs, and healthcare services through digital platforms.

- o **Local Digital Literacy Centers:** Training women to use these services, enhancing their digital skills and promoting greater inclusivity in the digital ecosystem.

> **Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)**

- **Overview:** Launched by the Ministry of Rural Development, **DDU-GKY** aims to provide skill development opportunities to rural youth, including women, with an emphasis on livelihood generation. The scheme also focuses on improving digital literacy.
- **Key Features:**
  - o Offers training programs that include digital literacy as part of their skill development modules.
  - o Focuses on empowering rural women by providing them with the necessary digital and vocational skills to improve their employment opportunities.

> **Swadhar Greh Scheme**

- **Overview:** The **Swadhar Greh Scheme**, launched by the Ministry of Women and Child Development, is aimed at supporting women in difficult circumstances. The scheme helps women who have been victims of violence or are in distress, offering shelter, counseling, and vocational training.
- **Key Features:**
  - o The scheme includes provisions for digital literacy training for women, helping them reintegrate into society by providing them with skills that enhance their employability and economic independence.

> **Women Empowerment through Digital Literacy**

- **Overview:** This initiative, launched in 2020, aims to empower women by providing them with the knowledge and tools to become digitally literate.
- **Key Features:**
  - o Offers training programs that teach women basic digital skills, including the use of smartphones, online banking, and government services.
  - o Provides women with the skills needed to access information on health, education, employment, and government schemes.

> **Nari Shakthi Portal**

- **Overview:** the **Nari Shakti Portal** launched by government of India serves as a centralized platform for women's empowerment.
- **Keyfeatures:**

    o To provide centralized platform for women to access government schemes policies and resources aimed at their empowerment.

    o It focus on women from all sectors including education, employment, entrepreneurship and social welfare.

8. Challenges and Barriers :

Despite the numerous benefits and initiatives, significant challenges and barriers hinder the widespread adoption of digital literacy among women in India. These challenges include limited access to digital infrastructure, gendered sociocultural norms, economic constraints, and a lack of digital literacy (Imam, 2024).

Socio-Cultural Barriers-Patriarchal norms and traditional gender roles often restrict women's access to education and technology, limiting their opportunities to acquire digital skills. In many rural areas, women are primarily responsible for household chores and childcare, leaving them with little time or resources to pursue education or digital training (Rai, NaN).

Economic Constraints-Economic constraints also pose a significant barrier, as many women in rural and marginalized communities cannot afford the cost of digital devices, internet access, and related training programs. The lack of financial independence further exacerbates this issue, making it difficult for women to invest in their digital literacy (Shaheen, NaN).

Digital Infrastructure and Connectivity-Inadequate infrastructure and poor internet connectivity in rural areas further limit women's access to digital technologies. The lack of reliable electricity supply and the high cost of data also pose significant challenges, making it difficult for women to stay connected and utilize digital resources effectively (Shaheen, NaN).

The Gender Digital Divide -The gender digital divide, which refers to the disparities in access to and use of ICTs between women and men, remains a persistent issue in India. Women are less likely than men to own smartphones and have exclusive access to the internet, particularly in rural areas (Islam, 2023). This divide widens the gap of marginalization, limiting women's opportunities for education, employment, and social participation (Nagpal, 2022).

Language Barriers-Many digital platforms, resources, and educational materials are primarily available in dominant languages like English. Women who do not speak these languages may find it difficult to access

Time Constraints-Many digital literacy programs have rigid schedules or require significant time commitments, which can be difficult for women to manage if they are already stretched thin by other obligations.

Low Literacy Rates-In some regions, women may have low basic literacy rates, making it more difficult for them to acquire digital literacy. If a woman struggles with reading or writing, she will face additional challenges in navigating digital platforms and resources.

Limited Support Networks-Women may lack access to mentors or role models in digital fields, which can make it harder to build confidence or find guidance in navigating the digital world. This lack of mentorship can reduce the likelihood that women will pursue digital literacy initiatives or tech-related careers. In some households or communities, there may be resistance to women engaging in digital literacy programs, especially if family members or community leaders do not understand the importance of such skills for women's empowerment and social mobility.

Conclusion

Empowering women through digital literacy in India is a multifaceted endeavor that requires a holistic approach involving government initiatives, community participation, and supportive ecosystems. By addressing the challenges and barriers that limit women's access to digital technologies and implementing targeted strategies to promote digital literacy, India can unlock the transformative potential of technology and empower women to participate more fully in the country's economic, social, and political development. The journey towards digital inclusion and gender equality requires ongoing commitment, collaboration, and innovation to ensure that all women have the opportunity to thrive in the digital age.

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