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Role of Digital Literacy in Promoting Women in the Digital Economy

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Abstract

Digitalisation has transformed the way people communicate, work, conduct business, access financial services and participate in economic activities. For women, digital technologies can provide new opportunities for employment, entrepreneurship, financial independence, education and access to markets. However, access to a smartphone or internet connection alone does not ensure meaningful participation in the digital economy. Women also require the knowledge and confidence to use digital devices effectively. Digital literacy therefore represents an important component of women's economic empowerment. The present study examines the role of digital literacy in promoting women's participation in the digital economy, with particular reference to employment, entrepreneurship and financial inclusion. The study is descriptive in nature and is based on secondary data collected from government reports, institutional publications, international organisations and published research. The study finds that India has made considerable progress in expanding digital infrastructure and digital financial services, but a gender gap continues in actual usage and digital capabilities. Government has made many initiatives, however, lack of digital skills, affordability constraints, limited access to internet, social and cultural barriers, cyber security concerns and inadequate financial literacy continue to restrict women's effective participation. The paper suggests a shift from merely providing digital access towards developing practical, safe, financially relevant digital capabilities among women.

Keywords: Digital Literacy, Women Empowerment, Financial Inclusion, Digital Skills.

Introduction

The rapid expansion of digital technology has brought significant changes in economic and social life. Digital platforms have become an important part of employment, entrepreneurship, banking, education, communication and marketing.

Mobile phones, internet connectivity, digital payments, e-commerce platforms and social media have created opportunities for individuals to participate in economic activities beyond traditional geographical boundaries.

For women, these developments have particular significance. Digital technologies can help women overcome some of the barriers associated with mobility, access to markets, information and financial services. A woman entrepreneur can promote their products through various digital platforms, receive payments electronically and access information. Similarly, digital financial services can enable women to manage their own financial accounts.

However, the benefits of digitalisation cannot be realised simply by providing technological infrastructure. A woman may possess a smartphone but may not know how to use online banking, digital payment applications, e-commerce platforms or online government services. She may also depend on another family member to perform digital transactions. Therefore, **access to technology and the ability to use technology are two different dimensions of digital inclusion.**

Recent evidence highlights this distinction that the percentage of persons aged 15 years and above who were able to use the internet was 67.6% for males compared with 51.8% for females. Among the 15–29 age groups, the corresponding figures were 89.2% and 78.8%, respectively. These differences demonstrate that although digital penetration is increasing, gender differences in digital capability remain.

Digital literacy can be viewed as an important factor that converts technological access into meaningful economic integration. The importance of this issue has increased with the emergence of the digital economy. Employment is increasingly influenced by digital skills, while small businesses and self-employed workers are increasingly dependent on digital communication and payments. Women who lack these skills risk will be excluded from economic prospect.

Research Gap

Existing research on the digital gender divide has extensively examined differences in access to mobile phones, smartphones, internet connectivity and digital infrastructure. Considerable attention has also been given to affordability and the gender gap in technology ownership.

However, comparatively less attention has been given to examining **how digital literacy converts access to technology into economic empowerment.** Merely owning a mobile phone does not necessarily mean that women can independently use digital opportunities. The study also considers the major barriers that prevent women from developing and using digital capabilities effectively.

Objectives of the Study

The study has the following objectives:

- To examine the status of digital literacy among women.
- To examine the contribution of digital literacy in enhancing women's financial status.
- To identify the major barriers to women's digital literacy and participation in the digital economy.
- To suggest measures for improving women's digital literacy and economic participation.

Research Methodology

The present study is **descriptive and analytical in nature** and is based on secondary data which has been collected from reliable and recognised sources. The collected data help us to understand the relationship between women's digital literacy and their participation in economic activities. The study particularly examines digital literacy from the perspective of **access, aptitude, practice and economic result**.

Digital Literacy and Women's Participation in the Digital Economy

Digital literacy has moved beyond being a basic educational skill. In the present economic environment, it is increasingly becoming an employability and livelihood skill. The nature of employment is changing with technological development. Digital literacy can improve women's employability by enabling them to:

- search and apply for jobs online;
- participate in online training;
- prepare digital documents and resumes;
- communicate with employers;
- attend virtual interviews and meetings;
- access online skill-development programmes; and
- explore flexible and remote work opportunities.

The digital skills become significant barriers to women's participation in India's platform economy. It should be considered part of women's employability rather than an optional technological skill.

Digitalisation has considerably changed the way small businesses reach out to their customers. A woman entrepreneur can use WhatsApp, social media, digital marketplaces and online payment systems to promote and sell products. For women operating home-based businesses, handicrafts and other micro-enterprises, digital platforms has reduced dependence on physical markets.

The World Bank has documented how digital skills enabled women artisans in India to use product photographs, WhatsApp customer groups and digital payments to persist and enlarge their businesses. This shows that digital literacy can be important for women engaged in micro-enterprises, where conventional business infrastructure may be limited.

Digital Literacy and Women's Financial Inclusion

Financial inclusion is one of the most important areas in which digital literacy can influence women's economic independence. India has made significant progress in expanding access to bank accounts. According to the Economic Survey 2023–24, 55.6% of PMJDY account holders were women as of May 2024.

However, **having a bank account is not equivalent to being financially empowered**. Women must also be able to independently use the account, make payments, check balances, transfer money, save, access credit and understand financial risks. Digital literacy makes these activities more accessible.

The Reserve Bank of India has also highlighted the transformative role of digitalisation and UPI in India's payment system. Digital payments have reduced business costs and expanded the reach of payment, thereby supporting financial inclusion.

For women, digital financial literacy can therefore contribute to:

Income → Digital Account → Digital Payment → Saving → Financial Record → Access to Formal Finance → Greater Economic Independence

The process is particularly important for women entrepreneurs and self-employed women because digital transactions can create records of economic activity that may subsequently support access to formal credit.

Status of Women's Digital Literacy in India

India has made substantial progress in expanding digital communications and digital literacy programmes. However, the available evidence indicates that gender differences in digital potential still continue.

The Ministry of Statistics and Programme Implementation's Comprehensive Modular Survey: Telecom provides an important indication of this gap. At the all-India level, 51.8% of females aged 15 years and above were able to use the internet, compared with 67.6% of males. Among young people aged 15–29, 78.8% of females were able to use the internet compared with 89.2% of males.

These figures indicate that younger women are substantially more digitally connected than older women, but a gender gap continues even among younger age groups.

PMGDISHA

The Pradhan Mantri Gramin Digital Saksharta Abhiyan was one of India's major initiatives for promoting digital literacy in rural areas. The programme aimed to provide basic digital skills to individuals in rural households.

By the conclusion of the programme in March 2024, approximately **7.35 crore candidates had been enrolled, 6.39 crore trained and 4.78 crore certified**.

Women constituted a significant proportion of the beneficiaries. Government data reported that women represented more than 53% of enrolled beneficiaries, more than 54% of trained beneficiaries and more than 56% of certified beneficiaries as of December 2022.

This is an important indication that targeted digital literacy programmes can reach women at scale, particularly in rural areas. Despite considerable progress, several barriers continue to restrict women's meaningful participation in the digital economy.

- Gender Digital Divide
- Affordability
- Lack of Digital Skills
- Financial Literacy Gap
- Cybersecurity and Online Fraud
- Social and Cultural Barriers
- Language and Content Barriers
- Rural–Urban Differences

Suggestions for Improving Women's Digital Literacy

- **Move from Access to Meaningful Usage-** Policies should not measure success only through the number of smart phones, internet connections or bank accounts. They should also assess whether women can **autonomously and assertively use digital services**.
- **Introduce Practical Digital Literacy-** Training should focus on everyday financial activities rather than only basic computer operations. Women should be skilled in UPI and digital payments, online banking, cyber security etc.
- **Develop Women-Centred Training Models** - Training centres should be easily available and should preferably provide women-friendly learning situation.

- **Promote Digital Entrepreneurship-** Digital literacy programmes should be linked with entrepreneurship development. Women should not only learn how to use knowledge but also how to **earn through it**.
- **Strengthen Cyber security Awareness-** Every digital literacy programme for women should include practical lessons on passwords, OTPs, phishing, fraudulent links, privacy, digital identity and safe online transactions.
- **Integrate Digital and Financial Literacy-** Digital banking and payment systems need both technological and financial understanding. Thus digital literacy and financial literacy should not be treated as separate areas.

Conclusion

Digital literacy has emerged as an important requirement for women’s meaningful participation in the digital economy. The expansion digital service has created unique opportunities for women. Nevertheless, the benefits of digitalization cannot reach women equally unless they possess the knowledge, confidence and capability to use these technologies independently.

The evidences reviewed in this study shows that India has made significant progress in digital infrastructure, financial inclusion and digital literacy programmes. Large-scale initiatives such as PMGDISHA have reached millions of citizens, with women representing a substantial proportion of beneficiaries. Similarly, PMJDY has significantly expanded women’s access to formal bank accounts.

At the same time, the continued gender gap in internet usage demonstrates that digital inclusion remains incomplete. The study therefore concludes that **digital literacy should be treated as an economic empowerment tool rather than merely a technological skill**. The next phase of women’s digital empowerment should move from *access to ability, from ability to usage, and from usage to economic opportunity*.

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