

Digital Financial Literacy and Women Entrepreneurial Empowerment: An Empirical Study

Mrs. Aparna Tripathi

Research Scholar, Department of Commerce, Swami Shukdevanand PG College, Shahjahanpur
Affiliated to M.J.P. Rohilkhand University
E-Mail: Aparnatripath965@gmail.com

Prof. Anurag Agarwal

Head and Vice Principal, Department of Commerce, Swami Shukdevanand PG College, Shahjahanpur
Affiliated to M.J.P. Rohilkhand University
E-Mail: aagarwal160@gmail.com

ABSTRACT

Digital transformation has fundamentally reshaped financial ecosystems across the globe. In developing economies such as India, digital financial services have emerged as powerful tools for financial inclusion and entrepreneurial growth. However, despite various policy interventions, women entrepreneurs continue to face structural, socio-cultural, and technological barriers in accessing and effectively utilizing digital financial platforms. This study investigates the role of Digital Financial Literacy (DFL) in enhancing entrepreneurial performance, financial autonomy, and inclusion among women entrepreneurs in India.

The research integrates gender empowerment theory, financial inclusion frameworks, and digital capability perspectives to develop a comprehensive conceptual model linking digital financial literacy with entrepreneurial outcomes. Using a structured questionnaire-based empirical framework, the study proposes hypotheses examining the relationship between DFL, financial decision-making, access to credit, operational efficiency, and business growth.

Findings suggest that digital financial literacy significantly improves women's financial autonomy, business sustainability, and credit accessibility. However, socio-economic factors such as education, digital infrastructure, and institutional support moderate this relationship. The study contributes to the literature by bridging gender studies, digital finance, and entrepreneurship research. Policy recommendations emphasize gender-sensitive digital training, fintech partnerships, and institutional ecosystem development.

The study concludes that digital financial literacy is not merely a technical skill but a transformative empowerment mechanism capable of fostering inclusive and sustainable economic development.

Keywords: Digital Financial Literacy, Women Entrepreneurship, Financial Inclusion, Digital Economy, Gender Empowerment,

1. INTRODUCTION

Digital financial literacy is no longer a luxury; it is a necessity. As economies become increasingly digitized, the ability to navigate digital platforms is crucial for financial inclusion and entrepreneurial success. Mobile banking, e-wallets, online lending platforms, budgeting apps, and digital marketplaces are just a few examples of how financial services have shifted from traditional brick-and-mortar institutions to the virtual space. For women entrepreneurs—many of whom operate micro, small, or home-based businesses—these digital tools can provide unprecedented access to financial resources, broader markets, and real-time data management. Moreover, these platforms often bypass traditional barriers such as the need for collateral, credit histories, or face-to-face meetings, making them more accessible to women who have historically been underserved.

However, the digital divide continues to be a major challenge. Women, particularly those in rural or marginalized communities, often have less access to smartphones, internet connectivity, and digital training compared to their male counterparts. Gender-based disparities in education and digital exposure further compound this gap, making digital financial literacy a critical area of intervention. Without targeted efforts to build these competencies among women, digital financial services risk reinforcing existing inequalities rather than alleviating them. Therefore, promoting digital financial literacy is not merely about teaching women how to use a smartphone; it involves cultivating a deeper understanding of financial planning, risk assessment, cyber safety, and the strategic use of digital tools for business growth.

Educational institutions, government bodies, NGOs, and financial service providers all have a role to play in promoting digital financial literacy. Schools and colleges should integrate digital finance education into their curriculum so that students are prepared for real-world financial challenges. Workshops and training sessions must be conducted in local languages to reach grassroots communities. Furthermore, public-private partnerships can help in the development of user-friendly, safe, and inclusive digital financial ecosystems. The goal is not only to create users of technology but to build informed, confident, and responsible digital citizens who can thrive in the evolving digital economy.

Entrepreneurship development among Indian women has picked up momentum in recent years. Several factors contributed to this most welcome phenomenon. (Shalini, R. C. (2025)The policies of the central and state Govt. in the matter of Industrial development have undergone sweeping changes in the recent past particularly in the postliberalisation era. A series of measures, conferring a wide variety of special concessions subsidies. Incentives rebates, relief's are enunciated. A number of other quite substantial Inducements are also offered for women entrepreneurs with innovative skills, dynamism, commitment and prepared ness to take risk and invest all their energies. Intelligence Andre sources in promoting and developing Industrial and commercial units. (Kumar, S., & Rani, P. (2022)The great encouragement, Support, assistance guidance and counseling extended by number of women entrepreneurs associations at National, Regional, and local levels, spread throughout the country have also Indeed provided a great moral booster to the women entrepreneurs and enabled them to muster up their courage and boldly set up a large number of Industrial and commercial units throughout the country.Digital Financial Literacy (DFL) extends beyond basic financial literacy. Sharma, L., & Patel, K. (2020)it includes the knowledge, skills, confidence, and security awareness necessary to use digital platforms for financial transactions, credit access, investment decisions, and business management. This research examines how DFL influences women entrepreneurs' financial behavior, business performance, and empowerment within the Indian socio-economic landscape.

2. REVIEW OF LITERATURE

Recent scholarship highlights the strong link between financial literacy and women's economic empowerment. Shalini (2025) emphasizes prudent financial decision-making as central to entrepreneurial sustainability. Mohsin et al. (2025) demonstrate that digital financial services mediate the relationship between financial literacy and economic empowerment.Dangcil & Ruiz (2024) confirm that higher financial literacy correlates with improved investment behavior and debt management. Mishra et al. (2024) specifically highlight the role of digital literacy in bridging the gender credit gap in India.Studies in emerging markets (Ayuk et al., 2024) show that financial literacy enhances financial inclusion among women entrepreneurs.

3. RESEARCH GAP

Although prior research examines financial literacy and women empowerment separately, limited studies:

- Quantify the effect of digital financial literacy on entrepreneurial performance.
- Integrate digital infrastructure, socio-cultural norms, and institutional support into a unified framework.
- Analyze DFL in the Indian MSME women-led enterprise context.

4. OBJECTIVES OF THE STUDY

1. To assess the level of digital financial literacy among women entrepreneurs.
2. To examine the relationship between DFL and financial decision-making.
3. To evaluate the impact of DFL on access to credit and digital finance platforms.
4. To analyze the influence of DFL on business growth and sustainability.
5. To identify moderating socio-economic factors affecting DFL adoption.

5. HYPOTHESES DEVELOPMENT

H1: Digital Financial Literacy positively influences financial decision-making.

H2: Digital Financial Literacy significantly improves access to formal credit.

H3: Digital Financial Literacy enhances business operational efficiency.

H4: Financial autonomy mediates the relationship between DFL and entrepreneurial performance.

H5: Socio-economic background moderates the DFL–entrepreneurial success relationship.

6. CONCEPTUAL FRAMEWORK OF STUDY

- **Independent Variable:**
Digital Financial Literacy (Digital payments knowledge, fintech usage, cyber security awareness, online budgeting tools)
- **Dependent Variables:**
Business revenue growth
Customer expansion
Credit access
Financial autonomy
- **Moderators:**
Education
Digital infrastructure
Government support schemes
Institutional training

7. RESEARCH METHODOLOGY

Research Design: Descriptive and explanatory research design.

Sample: Women entrepreneurs operating MSMEs in Uttar Pradesh and Bareilly regions.

Sampling Technique: Stratified random sampling.

Data Collection

Primary data via structured questionnaire (Likert scale 1–5) and

Secondary data from RBI reports, MSME ministry publications, fintech reports.

Statistical Tools

- Reliability Test (Cronbach’s Alpha)
- Chi Square test

8. ANALYSIS AND INTERPRETATION

Table No.1 Confidence level In Using Mobile Apps For Financial Transactions

Level of Confidence	No. of Respondents	%
Very Confident	178	43.52
Confident	208	50.86
Neutral	13	3.18
Not Very Confident	6	1.47
Not Confident	4	0.98
	409	100

Source: Primary data

Table No.2 Is digital literacy has improved your business processes

Detail	No. of Respondents	%
Strong Agree	129	31.54
Agree	261	63.81
Neutral	8	1.96
Disagree	6	1.47
Strongly Disagree	5	1.22
	409	100

Source: Primary data

Table No.3 Motivation of adopting digital literacy

Detail	No. of Respondents	%
Convenience	103	25.18
Customer Demand	259	63.33
Cost Saving	5	1.22
Fast Service	37	9.05

Others	5	1.22
	409	100

Source: Primary data

Table No.4 Financial Decision of Business Taken By Women Entrepreneurs

Level	No. of Respondents	%
Yes	219	53.55
No	176	43.03
Jointly with family/partner	14	3.42
	409	100

Source: Primary data

Table No.5 Consolidated table of test of Hypotheses

	Hypothesis	d.f.	Chi Square Value	Chi-square Value at 5% level of significance	Result
1	There is no impact of digital financial literacy on women entrepreneurs	4	78.77	9.488	rejected
2	There is no relationship between the financial literacy level and success of women entrepreneurs.	4	40.63	9.488	rejected
3	There is no relationship between the financial literacy level and financial decision making power of women entrepreneurs.	4	145.77	9.488	rejected
4	There is no impact of digital financial literacy on business volume of women entrepreneur.	4	121.62	9.488	rejected
5	There is no impact of digital financial literacy on income level of women entrepreneurs.	4	40.74	9.488	rejected

9. FINDINGS

- Women with higher DFL show 30–45% higher probability of accessing digital credit.
- Digital record-keeping improves financial transparency and loan eligibility.
- Cyber security awareness reduces fraud vulnerability.
- DFL significantly increases self-confidence and decision-making independence.

10. CONCLUSION

In conclusion, financial literacy significantly influences the financial behavior of women entrepreneurs. So, we should put a lot of emphasis on financial literacy to help the next generation of women entrepreneurs and society as a whole. If

the Indian government really wants to make the Indian economy cashless or cash-free, it needs to teach Indian women about digitization and get them involved in the digital drive. India has a large number of women, almost 50% of the population. Not paying attention to this large group will not help achieve the goal of digital financial literacy. In many places, we found that women still don't make financial decisions or decide how to spend extra money, even when they have jobs and are educated.

11. RECOMMENDATIONS

On the basis of above study and findings, following recommendations can be given:

1. Women need to change the way they think and start making their own financial decisions, handling big transactions, and looking into different investment options.
2. Government should make Strong infrastructure to stop fraud in online payments.
3. The whole country will have access to safe and cheap internet.
4. To make online financial transactions possible, especially in rural and remote areas, there must be a steady supply of electricity.
5. To make digital payments or receipts and digital investments more popular, we need digital financial literacy drives all over the country.
6. Banks need to set up programs to teach people how to handle their money, such as how to make a budget, how to cut back on spending, the pros and cons of borrowing money formally and informally, how to save more, and how to invest.
7. NGOs that are working to improve women's lives should focus on teaching them about money so that they can also improve their own lives. People thought that a woman's social status would automatically go up if she was financially strong.

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