

Influence of Digital Literacy and E-Commerce on Women-Led Enterprises in Rural Bangalore

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DOI:10.5281/zenodo.15239614

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This study explores how digital literacy and e-commerce platforms are transforming women-led enterprises in rural Bangalore. As technology penetrates even remote regions, digitally literate women are leveraging online marketplaces to expand their businesses beyond local boundaries. The research highlights how digital skills empower women to access wider customer bases, streamline operations, and improve financial independence. E-commerce has opened up new channels for selling handmade, agricultural, and home-based products. The study also sheds light on challenges like connectivity issues, digital skill gaps, and market competition. Despite hurdles, a clear trend of resilience and adaptability among rural women entrepreneurs is evident. Their stories illustrate the power of knowledge and connectivity in reshaping rural economies. The findings are based on both qualitative narratives and survey-based data analysis. This research emphasizes the need for inclusive digital training programs and tailored policy support.

Keywords: digital literacy, e-commerce, women entrepreneurs, rural development, bangalore

Corresponding Author	How to Cite this Article	To Browse
S Ayyappan, Professor, School of Management, CMR University, Bengaluru, Karnataka, India. Email: ayyappan.s@cmr.edu.in	Ayyappan S, Sharfunisa.N, Influence of Digital Literacy and E-Commerce on Women-Led Enterprises in Rural Bangalore. soc. sci. j. adv. res.. 2025;5(2):139-144. Available From https://ssjar.singhpublication.com/index.php/ojs/article/view/242	

Manuscript Received
2025-02-01

Review Round 1
2025-02-26

Review Round 2

Review Round 3

Accepted
2025-03-25

Conflict of Interest
None

Funding
Nil

Ethical Approval
Yes

Plagiarism X-checker
4.29

Note



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1. Introduction

Women entrepreneur refers to the process of dreaming of ideas, initiating with efforts, dedication, hard work, resources and developing an enterprise by a woman or group of women to make their dream a reality. In the male dominated society women entrepreneurs face many challenges such as, Gender Dominance, Dual responsibilities, lack of business knowledge, financial constrains, family and society pressure etc. In spite of all the difficult situations women have broken all the barriers and are emerging as a lead role in contributing the country's economy. However, Rural women often encounter unique additional challenges, including limited access to markets, low digital literacy, inadequate infrastructure and connectivity, difficulty in marketing and reaching customers, and limited access to education, skills, resources, technology, and capital, all of which hinder their ability to start or grow their businesses. With the increasing adoption of digital literacy and e-commerce, rural women entrepreneurs now have opportunities to overcome these barriers, expand their businesses, and improve profitability.

Digital Literacy Digital literacy is the ability to effectively and critically navigate, assess, and create information using a variety of digital technologies. It encompasses not only the fundamental technical skills required to operate devices such as computers, smartphones, and tablets but also the ability to use digital tools for communication, problem-solving, learning, and accessing information. Key components of digital literacy include basic computer skills, internet usage, digital communication, e-commerce and online transactions, cyber security and online privacy, content creation and management, digital problem-solving, and critical thinking and evaluation of digital content.

E-commerce refers to the buying and selling of goods and services over the internet, and it has emerged as a powerful tool for rural entrepreneurs to expand their businesses and reach broader markets. For rural entrepreneurs, e-commerce offers an opportunity to transcend the limitations of traditional brick-and-mortar stores, providing them with a platform to promote and sell their products to a global audience. Whether it's selling handmade crafts, agricultural products, or locally-produced goods, e-commerce opens up new avenues for growth and profitability.

In Karnataka, several government agencies and initiatives support rural women entrepreneurs by providing financial assistance, skill development, and access to markets. These programs aim to empower women in rural areas. Some of the key government agencies and schemes supporting rural women entrepreneurs include Karnataka State Women's Development Corporation (KSWDC), Karnataka State Rural Livelihoods Mission (KSRLM), Karnataka State Coir Development Corporation (KSCDC), Rural Development and Panchayat Raj Department (RDPR), Karnataka State Financial Corporation (KSFC), National Bank for Agriculture and Rural Development (NABARD), Department of Women and Child Development (DWCD), Karnataka Industrial Areas Development Board (KIADB), Micro, Small and Medium Enterprises (MSME) Development Institute, Karnataka Handicrafts Development Corporation (KHDC) etc.

2. Research Objectives

- To assess the level of digital literacy among women entrepreneurs in rural Bangalore.
- To analyze the impact of digital literacy on business operations, marketing, and customer engagement.
- To evaluate the role of e-commerce in expanding market access and increasing revenue.
- To identify barriers faced by rural women in adopting digital tools and e-commerce platforms.

3. Methodology

This study will use a mixed-methods approach, combining quantitative surveys and qualitative interviews. A sample of 100 women entrepreneurs in rural Bangalore, involved in sectors such as agriculture, handicrafts, and small-scale manufacturing, will be surveyed. In-depth interviews will be conducted with 15 women who use e-commerce to understand their experiences and challenges.

4. Primary Data

The primary data were collected through surveys and personal interviews using a well-structured questionnaire and interview guide.

5. Secondary Data

The secondary data for the study were gathered from a variety of sources, including books, journals, magazines, newspapers, the internet, articles, and other relevant materials.

such as percentages, averages, and other relevant methods. To enhance clarity and facilitate a better understanding of the concepts and topics, tables, graphs, and charts have been used wherever necessary to present the data in a more accessible and comprehensible format.

6. Plan of Analysis

The primary data collected for the study have been analyzed using statistical tools and techniques,

7. Analysis and Interpretation

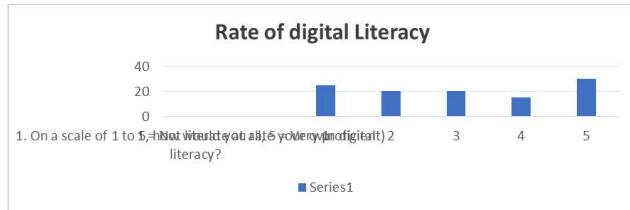
Table 1: Shows the demographic profile of rural women entrepreneurs.

Demographic Factor	Characteristics	Response	
		In Number and percentage	Analysis
Age	Below 25	15	Majority of the women entrepreneurs are in the age group 36-45
	25-35	25	
	36-45	28	
	46-60	20	
	Above 60	12	
Educational Qualification:	No Formal Edu.	22	Majority of the entrepreneurs have education up to high school, and one of the respondent has done Phd. in agriculture and is doing saffron farming.
	Up to Highschool	60	
	Degree	12	
	PG Degree	5	
	Others	1	
Sector of Business	Agriculture	58	Majority of the respondents are from agricultural sector, out of which two respondents were it professionals who quit there Job and are engaged in horticulture.
	Handicrafts	20	
	Small-Scale Manufacturing	12	
	Retail	9	
	Other	1	
How long have you been running your business	Less than 1 year	2	Majority of the respondents are running the business from more then 6 years
	1-3 Years	15	
	4-6 Years	23	
	More than 6 yrs	60	
Size of the family	1-3 members	52	Majority of the respondents family size is small
	4-5 members	33	
	6-8 years	10	
	More than 8 yrs	5	
Monthly Income	Below - Rs.20,000	18	Majority of the respondent are earning Rs. 60000 to 80000 and highest income is earned by the entrepreneur who is doing saffron farming.
	Rs.20000-40000	20	
	Rs.40000-60000	22	
	Rs.60000-80000	30	
	Above 80000	10	
Reason for becoming Entrepreneur	Family Occupation	30	Majority of the respondent are working as they are the sole bread earners of the family.
	sole bread earner	35	
	Passion	10	
	Education	25	

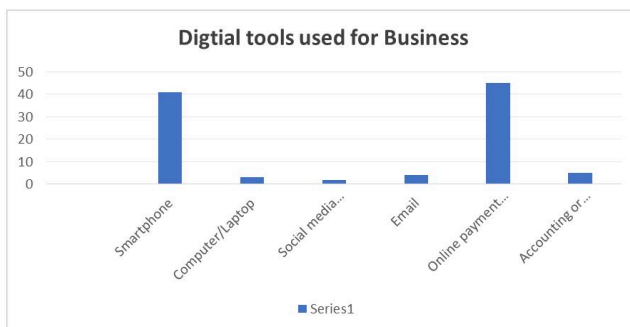
Section 2: Digital Literacy and Use of Technology

On a scale of 1 to 5, how would you rate your own digital literacy?

1 = Not literate at all, 5 = Very proficient



Which of the following digital tools do you use for your business?



How frequently do you use the internet for your business activities?

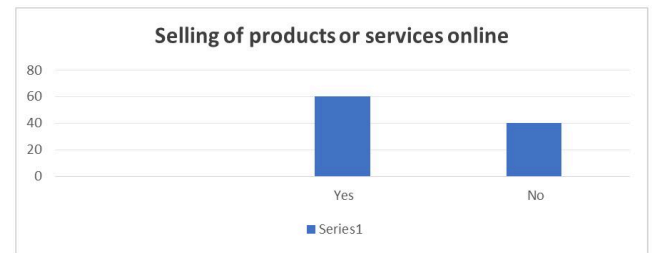


Do you have access to formal training or courses to improve your digital skills?

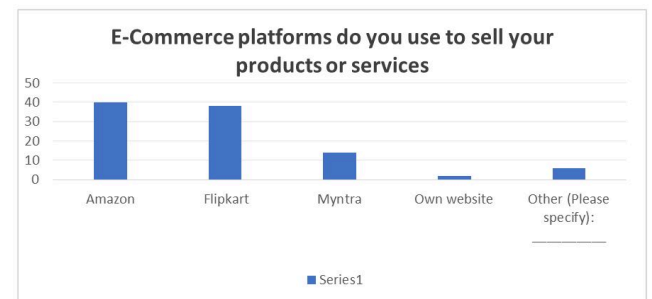


Section 3: E-commerce Adoption and Business Impact

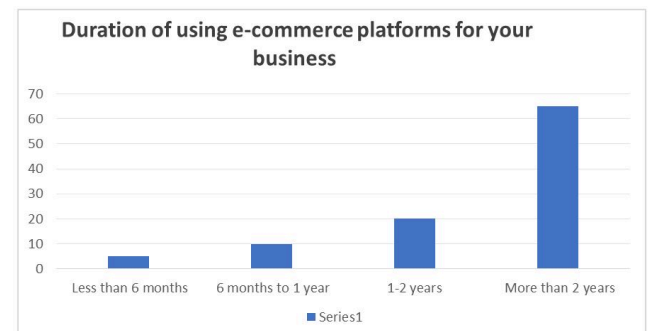
Do you sell your products or services online?



Which e-commerce platforms do you use to sell your products or services?



How long have you been using e-commerce platforms for your business?



Has using e-commerce platforms helped in increasing your sales/revenue?

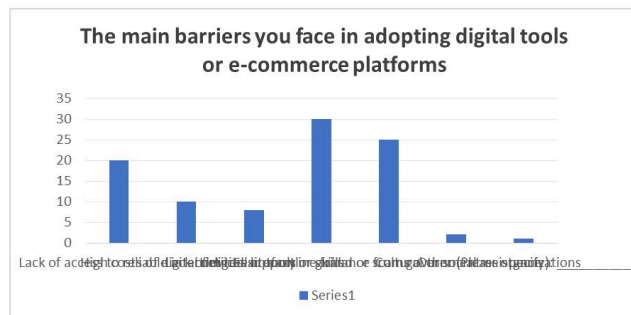


Section 4: Impact on Business Operations

On a scale of 1 to 5, how much has digital literacy helped in improving your overall business efficiency? (1 = Not helpful at all, 5 = Very helpful)



What are the main barriers you face in adopting digital tools or e-commerce platforms? (Select all that apply)



Section 5: Qualitative Insights

Question No	Qualitative Insights	Analysis
19	Can you share any specific examples of how e-commerce has contributed to the growth of your business?	Majority e-commerce has helped countless businesses increase revenue, improve customer engagement, and scale faster than traditional retail models.
20	What kind of support or resources would help you improve your digital skills and expand your business online?	Better Internet Connectivity as maximum payment are through digital platform.
21	Any other comments or suggestions regarding the role of digital literacy and e-commerce in your business?	Digital literacy and e-commerce are key drivers of business success today. A deep understanding of digital tools, coupled with a strong online presence, can lead to greater efficiency, customer satisfaction, and growth opportunities for any business.
22	Would you recommend digital literacy and e-commerce to other women entrepreneurs in rural areas?	95% of the respondent have recommended digital literacy and e-commerce to other rural women entrepreneurs to boost the business

8. Findings

The study reveals that a significant majority of women-led enterprises in rural Bangalore are managed by women aged between 36 and 45, possessing basic educational qualifications and running agricultural businesses for over six years. Most of these women belong to small families where they are the sole earners, generating a monthly income of up to ₹80,000. Their digital literacy, although not formal, is strengthened through support from friends, family, and previous schooling, allowing them to engage effectively in online business activities. E-commerce platforms, particularly Amazon, have played a transformative role in boosting their business volumes over the past two years, with digital tools primarily used for transactions and customer engagement. While digital access has enhanced operational efficiency and expanded market reach, respondents also expressed concern about increasing online fraud. Nonetheless, an overwhelming 95% of participants have recommended digital literacy and e-commerce to fellow women entrepreneurs, affirming its vital role in modern rural enterprise growth.

9. Conclusion

The research underscores the pivotal influence of digital literacy and e-commerce on the growth and sustainability of women-led businesses in rural Bangalore. These tools have not only enabled women entrepreneurs to reach broader markets and increase revenue but also enhanced their confidence and operational capabilities. However, challenges such as poor infrastructure and digital safety concerns remain significant barriers. To fully harness the benefits of digital engagement, it is essential for government bodies and NGOs to invest in robust digital training programs and fraud prevention awareness. With continued support, the digital ecosystem can serve as a powerful equalizer, enabling rural women to lead successful, scalable enterprises that contribute meaningfully to both local and regional economies.

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