

**DIGITAL LITERACY OF WOMEN ENTREPRENEURS IN DAHANU TALUKA****Dr. Suchita Vikas Karvir**

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**ABSTRACT:**

Information and communication technologies plays a pivotal role in empowering entrepreneurs to start, manage, and grow their businesses effectively in today's digital age. It facilitates access to information, communication, innovation, efficiency and data-driven decision-making, ultimately contributing to entrepreneurial success and competitiveness in the global market place. India is passing through the phase of Industry 4.0 which represents a transformative era characterized by rapid technological advancements and digital innovation which offers unprecedented opportunities for businesses to enhance productivity, efficiency, and competitiveness. It's being observed that women entrepreneurs have played a vital role in industrial revolutions, contributing to economic growth. But in Industry 4.0 are the rural women entrepreneurs ready to contribute in economic growth of India. This research paper is an attempt to report the findings on rural women entrepreneurship and digital literacy skills. It focuses on digital knowledge and its usage by respondents. The sample of 30 women entrepreneurs from Dahanu are being selected. The data is collected through questionnaire and analysed through descriptive analysis. The findings showed that most of the respondents have knowledge of the Internet, are moderate in digital literacy skills, and have been using the Internet via smart phones. Facebook and WhatsApp are frequently used social media. This study also suggests the methods to enhance digital literacy among rural women entrepreneurs.

*Keywords: Rural Area, Women Entrepreneurs, Digital Literacy, Industry 4.0, Economic Growth.*

**1. INTRODUCTION****1.1 Digitalization :**

The present age is the digital age. In every field, we are observing digitalisation which facilitates work to be more easy, speedy, accurate, and efficient. The cornerstone of digitization in India is the establishment of pervasive digital infrastructure to facilitate a better quality of life. Digitalization through Information and communication technologies plays a crucial role in entrepreneurship also, impacting various aspects of business operations, management, and growth. Here are several reasons highlighting the importance of ICT in entrepreneurship:

1. Easy access to Information: ICT provides entrepreneurs with easy access to a large amount of information. Through the internet, entrepreneurs can conduct market research, gather industry data, and stay updated on trends in the market. This facilitates them to make wise and informed decisions about their businesses.
2. Networking: Information Communication Technology facilitates communication and networking which enables entrepreneurs to connect with customers, suppliers, lenders, and other stakeholders at global level. Various platforms such as email, facebook, LinkedIn, Instagram, professional websites, etc. enable entrepreneurs to reach out to a broader audience, build relationships with them, and establish the eco system through which they can grow their business effectively. The present age believes in 'Not to compete but to collaborate'. Networking helps collaborate with each other for success of business. With the advantage of E-commerce platforms and digital marketing tools, entrepreneurs can establish and expand market exposure beyond geographical boundaries. An online presence through websites, e-stores, and various social media platforms enables entrepreneurs to showcase their products and services in best possible way to a larger audience promoting sales and business growth.
3. Operational Efficiency: Digitalization improves operational efficiency. ICT offers various tools and software solutions to streamline business operations and enhance efficiency. Entrepreneurs can use advanced technologies such as cloud computing, project management, customer relationship management systems, MIS, and various administrative and accounting softwares to automate tasks, improve productivity, efficiency, and optimize resource utilization.
4. Innovation and Creativity: Digitalisation fosters innovation and creativity in entrepreneurial work by providing access to advanced technologies and tools. Entrepreneurs can leverage emerging technologies, such as artificial intelligence, blockchain, machine learning, and the Internet of Things (IoT), to create novel goods and services that disrupt existing sectors, thereby securing a competitive advantage in the market. The world has

observed innovative start-ups during the coronavirus pandemic. Digitalization gained speed, especially during corona pandemic. Digitalization has opened greater opportunities for innovative startups.

5. **Cost Control:** Digitalization enables entrepreneurs to control and reduce operational costs through search for resources at competitive prices, automation, and outsourcing services. For example, Cloud computing eliminates the need for expensive investment in infrastructure while outsourcing certain tasks such as customer support, and administrative and accounting functions reduces employee cost. It is being observed that many companies have closed their offices and have switched to 'Work from Home' concept which has resulted in reduction in office and administrative cost.

6. **Data-based Decision Making:** ICT generates vast amounts of data that entrepreneurs can process and analyze to gain insight into customer behavior, market trends, and business performance. By using various data analytical tools and techniques, entrepreneurs can better interpret the results and can make decisions (data-driven) in best possible way, optimize strategies, and improve business outcomes.

7. **Flexibility and Adaptability:** In today's dynamic business environment, adaptability is very important for entrepreneurship success. ICT provides entrepreneurs with flexibility to adapt to changing market conditions, consumer preferences, and technological advancements in a very short span of time. Cloud-based solutions, mobile applications, and digital platforms allow entrepreneurs to scale their businesses and pivot strategies accordingly.

To summarise, Digitalisation empowers entrepreneurs to start, manage, and grow their businesses effectively in today's digital age. It facilitates access to information, communication, innovation, efficiency, and data-driven decision-making, ultimately contributing to entrepreneurial success and competitiveness in the global marketplace.

### **1.2 Industry 4.0:**

India is passing through the phase of Industry 4.0 which represents a transformative era characterized by rapid technological advancements and digital innovation which offers unprecedented opportunities for businesses to enhance productivity, efficiency, and competitiveness. Driven by technological advancements, the Fourth Industrial Revolution (4IR), sometimes referred to as Industry 4.0, signifies a profound change in how we manufacture, distribute, and consume goods and services. It is distinguished by the merging of technologies that make it difficult to distinguish between the digital, biological, and physical domains. It builds on the foundation established by the earlier Industrial Revolution. India is on its way to becoming the third largest economy in the world thanks to a number of important elements of Industry 4.0, including technological integration, automation, smart manufacturing, the Internet of Things (IoT), data analytics, artificial intelligence and machine learning, digitalization and connectivity, personalization and customer-centricity, and the impact on workforce and skills.

Building a pervasive digital infrastructure to guarantee ease of life is the cornerstone of India's digital transformation. This aim has been made possible in large part by the Digital India program, which has been expanded with a total budget of around INR 14,903 Cr from 2021–2022 to 2025–2026.

### **1.3 Rural Women Entrepreneurship:**

Women entrepreneurs have played a significant role in various industrial revolutions, although their contributions have often been overlooked or marginalized. Economic Participation, Innovation and creativity, social impact, advocacy and empowerment, breaking barriers, Resilience, and Persistence are some key aspects of the role of women entrepreneurs in industrial revolutions. In the phase of Industry 4.0 also women entrepreneurs will play their role as usual. But in this digital age whether women entrepreneurs from rural areas are ready to play their role or they are facing some challenges.

This research paper is an attempt to find digital literacy of rural women entrepreneurs and accordingly find solutions to support them in enhancing digital literacy.

## **2. OBJECTIVES**

The paper aims to achieve following objectives:

To find awareness of the rural women entrepreneurs about digitalization in business.

To Find the level of digital literacy of rural women entrepreneurs

To find solutions to enhance digital literacy level of rural women entrepreneurs.

**3. METHODOLOGY**

This is descriptive research based on primary data. Primary data from rural women entrepreneurs is being collected through structured questionnaire. The sample of 30 respondents is being selected on a convenience basis from Dahanu for survey. Collected data is presented through charts and tables and analyzed through descriptive statistics and the conclusions are drawn.

**4. LITERATURE REVIEW**

Developing nations are increasingly interested in women's entrepreneurship as a means of closing the digital divide, particularly in rural regions (Razak & Pisal, 2017). However, despite the community's and government's support, women entrepreneurs—particularly those in rural areas—face obstacles like limited access to capital, a lack of business and entrepreneurship skills, a lack of market bargaining power, and a lack of diversity in key decisions pertaining to the development of entrepreneurship (Ariffin, Baqutayan, & Mahdzir, 2018). Furthermore, the challenges were more severe as a result of the innovations and inventions that were introduced to the market. The majority of enterprises were mechanized with the introduction of the Internet over twenty years ago. It goes without saying that entrepreneurs need to be proficient in the use of modern technologies in order to compete in today's globalized world. Social media marketing has emerged as a crucial strategic concern for business owners, particularly female business owners. Making ads more interactive to increase their effectiveness is one of the strategic marketing challenges in entrepreneurship. Women business owners should therefore use Facebook, Twitter, and Instagram to engage with customers about their brands, goods, and services. According to Aviram and Eshet-Alkalai (2006), digital literacy is typically understood as a combination of technical-procedural, cognitive, and emotional-social skills. Although they still encounter a number of difficulties, including financial, educational, and cultural ones, women entrepreneurs today have an easier time starting and growing their enterprises (UNCTAD, 2014). Only a small amount of research has been done on women entrepreneurs in developing nations; the majority of studies have been on male entrepreneurs (Hisrich & Brush, 1984, 1986; Bird & Brush, 2002). The findings of Fauzi, Antoni, and Suwarni's (2020) investigation of the impact of digital and financial literacy on the expansion of women-owned SMEs in Indonesia show that both had favorable and noteworthy effects on return on assets. However, the one factor that significantly and favorably impacted growth was digital literacy. The results provide more proof that women knew less about digital technology than men did. Additionally, the findings demonstrate the importance of understanding and implementing digital and financial literacy in the near future.

**5. DATA ANALYSIS AND INTERPRETATION**

To fill the literature gap, researcher conducted research on digital literacy of women entrepreneurs from a rural and tribal area i.e. Dahanu. Especially the women conducting business from home like Tailoring, Beauty Parlour, trading of Beauty and skin care products, Emission Jewellery , Catering, Handicraft items, Bakery, etc are selected for sample survey. Collected data is analysed as under:

**Table 5.1- Age-wise distribution of respondents.**

| Age(Yrs.)   | No of Responses | Percentage |
|-------------|-----------------|------------|
| 15 to 25    | 4               | 13.33      |
| 25 to 35    | 12              | 40.00      |
| 35 to 45    | 4               | 13.33      |
| 45 to 55    | 10              | 33.33      |
| Grand Total | 30              | 100.00     |

*Source: Primary data*

Respondents are from various age groups from 15 to 55 years. But more respondents are from young age group i.e. 25 to 35 years whose responses matter more for survey. It is being observed from the data that age group of 15 to 35 is more inclined to use digitalization in their business.

**Table 5.2- Education-wise distribution of respondents**

| Education       | No of Responses | Percentage |
|-----------------|-----------------|------------|
| SSC             | 6               | 20.00      |
| HSC/ Diploma    | 8               | 26.67      |
| Graduation      | 12              | 40.00      |
| Post Graduation | 4               | 13.33      |
| Grand Total     | 30              | 100.00     |

*Source: Primary data*

Respondents are from various educational backgrounds. 40 % of respondents are graduates, very few are post-graduates. Varied educational background is covered to know digital literacy at all educational levels. It is being found that graduate entrepreneurs are making more use of digitalization in their businesses.

**Table 5.3- Awareness of digital platform**

| Digital platform usage | No of Responses | Percentage |
|------------------------|-----------------|------------|
| No                     | 6               | 20.00      |
| Yes                    | 24              | 80.00      |
| Grand Total            | 30              | 100.00     |

Source: Primary data

80% of respondents know about digital platforms but they are aware of very few platforms. They have moderate knowledge of the digital platforms that can be effectively used for enhancing business activities.

**Table 5.4- Use of Digital platform**

| Row Labels | No of Responses | Percentage |
|------------|-----------------|------------|
| Any other  | 2               | 6.67       |
| WhatsApp   | 30              | 100.00     |
| Facebook   | 20              | 66.67      |
| Instagram  | 12              | 40.00      |
| GMail      | 4               | 13.33      |
| YouTube    | 2               | 6.67       |

Source: Primary data

Whatsapp and Facebook are commonly used digital platforms by women entrepreneurs in Dahanu. Other digital platforms like Instagram are also used by 40% of respondents. Use of Gmail and YouTube is limited.

**Table 5.5- Activities for which digital platforms are used**

| Activities | No of Responses | Percentage |
|------------|-----------------|------------|
| Marketing  | 30              | 100.00     |
| Payments   | 17              | 56.67      |
| Purchasing | 8               | 26.67      |
| Production | 8               | 26.67      |

Source: Primary data

Almost all women entrepreneurs in dahanu are using digital platforms for marketing purposes. It is also noteworthy that more than 50% of rural women entrepreneurs from among sample are using online payment methods.

It is also being found from other data that more than 60% of respondents are using digital platforms sometimes and not very frequently due to lack of technical expertise, though all 100% of respondents have agreed on the importance of digital literacy in today’s era.

Almost all respondents have observed improvements in terms of number of customers, increase in sales, and increase in income after use of digital platforms in business for various activities. However, very few respondents have observed improvements in production process. It again has a limitation in that the respondents are not well-versed in effective use of digital platforms.

**Table 5.6- Problems faced by respondents**

| Problems                               | No of Responses | Percentage |
|--|-----------------|------------|
| Non-availability of smartphones        | 04              | 13.33      |
| Costly internet facility               | 12              | 40.00      |
| Frequent Network issues                | 30              | 100.00     |
| Lack of technical skill                | 16              | 53.33      |
| Lack of English language               | 08              | 26.67      |
| Lack of awareness of digital platforms | 20              | 66.67      |

Source: Primary data

Network issue is a major challenge faced by rural women entrepreneurs in Dahanu. Lack of awareness about digital platforms is the second most challenge faced by them. And lack of technical skill is third biggest problem faced by them.

## **6. FINDINGS**

- 6.1 80% of rural women entrepreneurs are aware of digitalization in business though they are not aware of maximum digital platforms
- 6.2 WhatsApp and Facebook are commonly used digital platforms
- 6.3 Digital platforms are mainly used for marketing activities and then for payments. For production and purchase activity its use is limited.
- 6.4 All 100% of respondents have agreed on the importance of digital literacy in today's era.
- 6.5 There is moderate use of digitalization in business by rural women entrepreneurs.
- 6.6 Frequent Network issue is the biggest challenge for rural women entrepreneurs. Lack of awareness on various digital platforms is second biggest problem for them. And lack of technical skill is third biggest problem faced by them.

## **7. CONCLUSION**

It has been determined that the majority of respondents are aware of digitalization and the Internet, but they are unaware of the different digital platforms and their applications. They are moderate so far as digital literacy skills are concerned.

## **8. SUGGESTIONS**

To address these challenges, a multi-faceted approach is required which involves investment in infrastructure development, digital awareness programs, provision of digital skills training and education especially to women, targeted financial support, etc.

### **Hence It is recommended that**

1. The government should focus more on digital infrastructure development in rural areas like Dahanu and digital training of especially rural women entrepreneurs so that they can grab the opportunities created by Industry 4.0
2. Higher Education Institutes can take lead in conducting digital literacy awareness and training programs for women entrepreneurs in nearby localities as a part of Community Engagement Program.
3. Women entrepreneurs can enhance their digital literacy level by taking professional training.

By overcoming these barriers, rural women entrepreneurs can unlock the transformative potential of digitalization and contribute to inclusive economic growth and empowerment in rural communities.

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