

Impact of Digital Transformation on Women Entrepreneurs in Delhi

Anila Singh

Research Scholar, Lingaya's Vidyapeeth, Faridabad

Email ID- aanilasingh@gmail.com

Dr. Mohender Pal Gupta

Professor, Lingaya's Vidyapeeth, Faridabad

Email ID- dr.mpgupta@lingayasvidyapeeth.edu.in

Abstract

The growing digitalization of the Indian economy has unquestionably transformed corporate environments. However, the impact of this transition on female entrepreneurs, a critical but understudied category, is still being determined. This study investigates the specific implications of digital transformation on female entrepreneurs in Delhi, a thriving metropolis at the vanguard of India's digital revolution. This study delves into the ways in which female entrepreneurs in Delhi perceive and approach technological innovation. The survey's sample was chosen using a straightforward random sampling method. Primary data will be collected from small and medium-sized industries. Data was collected using Google forms and a questionnaire, and 125 samples were returned that could be used in this investigation. Using a reliability test, descriptive analysis, and chi-square analysis, the study found out how female entrepreneurs felt about technical advancement. The data suggests that the term "digitalization" serves as a motivating factor for female entrepreneurs. Because of this survey, female entrepreneurs exhibit a demand for tangible outcomes in their technological advancements for their enterprises.

Keywords: Digital transformation, Women Entrepreneurs, Delhi, Economic Empowerment, India

INTRODUCTION

With new technologies altering whole industries and opening unexpected opportunities, the Indian economy is experiencing a fast digital revolution. There is a need for more research on the complex effects of this boom on many demographics, especially understudied groups like women entrepreneurs, because it has the potential to greatly benefit the economy and increase participation. Delhi is a vibrant metropolis at the vanguard of India's digital transformation, and this study investigates the ways in which digitalization has affected female entrepreneurs there. Entrepreneurship is "the process of creating new goods and services for an unmet need by developing, inventing, and implementing ideas that disrupt existing markets" (Schumpeter, 1934). Success as an entrepreneur hinge on your capacity to spot possibilities when others fail to do so. Since the business climate in the twenty-first century is becoming more competitive, the corporation is faced with a difficulty. While digital technologies impact businesses, they also empower entrepreneurs to challenge industry leaders.

The internet has revolutionized business practices around the world. Since more and more people in developing nations have access to smartphones, tablets, and the internet through broadband, 3G, and other similar technologies, e-commerce has been a boon to these nations' economies. The Indian economy benefits greatly from the entrepreneurial spirit of women. Women in traditionally male-dominated nations, like India, are stepping out of their roles and starting their own businesses.

Adoption of technology, or digitalization, has given women access to a wealth of amazing options. Illustrative instances of such systems include internet marketing, automated data collection, supply chain management, mobile commerce, and electronic fund transfers (Chaithralaxmi & Shruthi, 2016). This implies that digital entrepreneurs strive to meet the needs of their clients while simultaneously providing premium goods at competitive costs. There is no shortage of successful female entrepreneurs in India; like their male counterparts, they overcame insurmountable odds to achieve their current positions. Many strong women have overcome obstacles to become successful in business, entrepreneurs, and other fields (Parnami & Bisawa, 2015).

This focused investigation is driven by multiple persuasive reasons. To start, women business owners are an increasingly important part of India's economy, which is great news for the country's job market and overall growth (World Bank, 2022). For inclusive economic growth to flourish, it is essential to comprehend the ways in which digital technologies impact their

businesses. Delhi is a great place to explore the potential and problems that women entrepreneurs encounter in a digitally driven environment because of its strong tech infrastructure and entrepreneurial ecosystem. It also acts as a microcosm of India's digital landscape (Deloitte, 2023).

Women business owners are now commonly referred to as "WOMENPRENEUR" following the Global Entrepreneurship Summit. Among the different roles and identities played by female entrepreneurs, this study seeks to illuminate the role of digital change in the corporate sphere. The impact of entrepreneurial mindset traits like innovativeness, risk-taking, and adaptability, as well as perceptions like perceived usefulness and simplicity of use, on the digital transformation by women entrepreneurs is the subject of this research (Ndubisi, 2005). This study used stratified convenient random selection to get data from these women business owners. We used Google Forms and a questionnaire to gather information; however, our research shows that very few women business owners are open to using digital tools. Consequently, the researchers are zeroing in on the impact of womenpreneur's attitude and viewpoint on the digital transformation.

LITERATURE REVIEW

Bhatnagar and Yadav (2023) investigated the efforts of female entrepreneurs in India to maintain the viability of their businesses during the COVID-19 pandemic of 2021–2022. His research is focused on female-owned enterprises in Rajasthan, specifically examining the ways in which artificial intelligence (AI) aids them in surviving. One hundred female business owners who are active on social media for company management purposes were polled. Using an anti-tactical methodology and survey data from 100 participants, the researchers concluded that women entrepreneurs, especially those running MSEs, are greatly affected by the epidemic. The remuneration of women has decreased due to reduced bargaining power, disrupted supply chains, and the inconvenient nature of credit payment instalments.

Khurana et al. (2022) investigated the ways SMEs use digital technologies to better prepare small and medium-sized businesses (SMEs) for disasters. A three-tiered model of resilience capabilities was proposed, based on a qualitative approach, and backed by case studies of eight Indian entrepreneurs that saw significant changes in their operational and economic models because of the COVID-19 pandemic. The model is broken into three categories: micro (the entrepreneur), meso (the organization), and macro (the entrepreneurial environment). To become more resilient, small, and medium-sized firms (SMEs) seek help from sources outside of their own operations. This discovery demonstrates that the three first-order dynamic skills of sensing, seizing, and transforming have separate linkages.

Shukla et al. (2021) stated that women will be more entrepreneurial if they possess a sufficient range of internet capabilities, encompassing operational, informational, and creative aptitudes. There is a descriptive bent to this research. Two hundred forty-six undergraduates had their data evaluated using PLS-SEM. Positive attitudes about entrepreneurship were more common among students who had personal experience with entrepreneurship, according to the findings. Internet competence yielded contradictory findings regarding the connection between an entrepreneurial attitude and an entrepreneurial drive.

Chaithralaxmi & Shruthi (2016) indicated that the e-commerce industry in India has a substantial amount of room for expansion. Electronic commerce is built on the Internet as its foundation. Although the percentage of people in India who have access to the internet is relatively low in comparison to other countries, internet-based enterprises are expanding across a wide range of sectors.

According to Parnami and Bisawa (2015), every female entrepreneur is bolstering her financial situation by selling things online, thanks to the backing of e-commerce. In developing nations like India, women juggle two very different roles. Thanks to the rise of e-commerce, female company owners can run their operations without ever leaving the house.

According to Balachandran and Sakthivelan (2013), entrepreneurs open up new avenues for cheaper and more valuable invention, innovation, manufacturing, and processing.

Entrepreneurial spirit is key to sustained success, according to Alam et al. (2011). This study's findings on the impact of innovation—that is, entrepreneurship—on the firm's day-to-day operations and locus of control do not indicate that they are accountable for their job.

Ndubisi (2005) argues that users get knowledge from their own experiences with any technology over time. According to the findings of this study, modern research theory has centered on women's perspectives and methods when it comes to technological growth among female entrepreneurs. According to the Technology Acceptance Model, which this study used to evaluate data, there is a direct or indirect relationship between the perceived usefulness & simplicity of use of technology and its adoption. Before this, Ndubisi (2003) recognized a plethora of research on the effects and merits of ideas and empirical evidence concerning the adoption of technology by Malaysian female entrepreneurs. By building the entrepreneurial attributes that directly influence Malaysian women entrepreneurs and confirming the TAM, we may expect to test the impact of perceived ease of use. Thus, this study finds that TAM and other fundamental models effectively portray the importance of digital transformation & its major effects on the use of technology by female entrepreneurs.

OBJECTIVES

- To determine how far forward Delhi's female entrepreneurs have gone with digital transformation.
- To examine women entrepreneurs' perceptions and attitude toward digital transformation in Delhi.

RESEARCH METHODOLOGY

Descriptive & analytical research methods were employed in this study. Convenient random selection was used to choose 125 samples from various industries, ensuring equal representation. Most Delhi's cities, as well as the small-medium industries, were chosen for primary data collecting. A self-administered online survey will be done with a representative sample of female entrepreneurs from diverse sectors in Delhi. The survey will collect information about their usage of digital transformation, perceived benefits and challenges, access to resources, and company success. Government records, industry statistics, and pertinent research findings on digital entrepreneurship and gender will be gathered and analysed to give a more comprehensive background for the study.

RESULTS AND DISCUSSION

Table: 1 Demographic Table

Variable	Category	Frequency (%)
Age	Under 30	40 (32%)
	30-40	50 (40%)
	41-50	25 (20%)
	Over 50	10 (8%)
Education	Undergraduate	75 (60%)
	Postgraduate	40 (32%)
	Diploma or associate degree	10 (8%)
Industry	Manufacturing	75 (60%)
	Services	50 (40%)
Years in Business	Less than 3 years	50 (40%)
	3-5 years	35 (28%)
	Over 5 years	40 (32%)
Digital Transformation	Advanced	60 (48%)
	Intermediate	40 (32%)
	Basic	25 (20%)

This table 1 provides a snapshot of the demographic characteristics of the 125 women entrepreneurs in your study. Age-wise, a significant portion are young (32%), suggesting a rising trend of young women entering the entrepreneurial fray. The 30-40 age group forms the largest (40%), indicating experienced entrepreneurs in their prime. A smaller presence of older entrepreneurs (8%) warrants further investigation into potential barriers they might face in the digital space. Educationally, most hold a bachelor's degree (60%), highlighting the high level of attainment. A sizeable group also possess postgraduate degrees (32%), showcasing increasing specialization. The manufacturing sector (60%) and service sector

(40%) demonstrating their diverse skills and adaptability. In terms of experience, a notable 40% are relatively new businesses, reflecting the dynamism of the startup scene. Additionally, 32% are established businesses over 5 years old, offering valuable insights into sustained success. Finally, digital literacy varies – while 48% boast advanced skills, 32% have moderate levels, and 20% have basic skills. This digital divide highlights the need for targeted training and support to ensure all women can seize the opportunities presented by digital transformation. The varying levels of digital literacy indicate a potential digital divide that could hinder some women from fully capitalizing on the opportunities presented by digital transformation. Most female entrepreneurs prioritize digital transformation, and they believe that technology is simple to use. Their attitude toward digital transformation has shifted from the old way of doing business.

According to Alam, Jani, and Ismail (2011), a minimum of 0.6 alpha is recommended for any early-stage research when checking data for internal reliability (Cronbach's alpha). This should be done before doing any major tests.

Table 2: Reliability test

Cronbach's Alpha	No. of items
0.81	12

Table 2 shows that the reliability test, which used Cronbach's Alpha, got a value of 0.0810. This means that 81% of the data used to analyze views of digital transformation was trustworthy.

HYPOTHESIS TESTING

H₀₁: There is no significant difference between the mean rank of digital transformation of the manufacturing and service sector

H_{a1}: There is a significant difference between the mean rank of digital transformation of the manufacturing and service sector

Table: 3 Mann-Whitney U test

Factors	Mean Rank of the Sectors		Z value	P-value
	Manufacturing	Services		
Tools & Technology	14.6	14.4	0.001	1.00
Perception	9.8	16.21	-1.782	0.054
Attitude	23.14	12.11	-3.311	0.001
Overall	15.4	14.13	-0.37	0.625

Table 3 shows that the general (0.625), tools and technology (1.000), and perception (0.054) drivers of technology adoption do not have significant p-values, hence it is required to accept the null hypothesis at the 5% level of significance. Consequently, there is a notable disparity between the manufacturing and service industries in terms of digital transformation, and the mindset of female entrepreneurs is one of high adoption, as shown by Mann Whitney's P-value (0.01). This suggests that women entrepreneurs' perceptions and attitudes toward digital transformation are quite important. Furthermore, entrepreneurial initiatives in the service sector are more likely to incorporate technology than the industrial sector.

H₀₂: There is no significant relationship between experience & level of digital transformation

H_{a2}: There is a significant relationship between experience & level of digital transformation

Table: 4 Chi-square test

Years in Business	Overall level of Digital Transformation				Chi-Square	P-Value
	Advanced	Intermediate	Basic	Total		

Less than 3 years	20 (40%) (33.33%)	10 (20%) (25%)	20 (40%) (80%)	50 (100.0%) (40%)	10.186	.022
3-5 years	20 (57.14%) (33.33%)	10 (28.57%) (25%)	5 (14.28%) (20%)	35 (100.0%) (28%)		
Over 5 years	25 (62.5%) (41.66%)	15 (37.5%) (37.5%)	0 (0.0%) (0.0%)	40 (100.0%) (32%)		
Total	65 (100.0%) (48%)	35 (100.0%) (32%)	25 (100.0%) (20%)	125 (100.0%)		

A p-value of 0.022 indicates rejection of the null hypothesis at the 5% level of significance, as shown in Table 4. As a result, it is established that there is a relationship between experience and the extent of digital transformation among female entrepreneurs. According to the statistic, 33.3% of female entrepreneurs with less than three years of experience have basic digital literacy, while 40.0% have advanced. In the group with 3-5 years of expertise, 14.28% have adopted basic technology, whereas 57.14% have advanced literacy. As a result, new women entrepreneurs are quickly embracing technology, but existing entrepreneurs must invest and take risks to adopt digital transformation. The study discovered that perception and attitude toward digital transformation were quite beneficial, particularly for young entrepreneurial ventures.

CONCLUSION

Entrepreneurs are embracing digital transformation to bolster their traditional enterprises, boost job efficiency, raise risk-taking capacity, and expand capabilities, all because of the rapid digital revolution. Perceptions and attitudes towards digital transformation among women entrepreneurs in Delhi constitute the basis of the research plan. Overall, the decision to execute digital transformation in their daily operations will not be influenced. When it comes to digital transformation, the new entrepreneurial business model usually shows off its ability to be imaginative and take risks. This study concludes that women business owners prioritize achieving tangible outcomes when it comes to implementing technological advancements into their companies. Studying the perspectives and attitudes of women entrepreneurs toward digital transformation allowed the researchers to accomplish their primary goal of identifying the extent to which it was permeating a small and medium-sized sector in Delhi.

Women business owners are the exclusive subject of this research. To balance out male entrepreneurs, the small and medium business sector has purposefully decided to highlight the achievements and contributions of female entrepreneurs in terms of both growth and technology. Important caveats that can restrict the results' applicability and depth should be noted. To begin, the study's sample size is relatively small, with only 125 female entrepreneurs participating. This small sample size may not fully represent the diversity of Delhi's female entrepreneur population, thus proceed with caution when applying the findings to a larger context.

Furthermore, there is a need for research that assesses the efficacy of various interventions and support mechanisms targeted at increasing digital literacy and creating a more welcoming entrepreneurial climate for women. This could include creating and implementing specialized training programs, mentorship initiatives, or legislative suggestions to address the identified digital divide and foster a fairer environment for female entrepreneurs in the digital age.

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