



## Breaking Barriers, Building Brands

### *A Gendered Analysis of Digital Solopreneurship in India's Tier-2 and Tier-3 Cities*

Purvi Jain<sup>1</sup> & Shikha Yadav<sup>2</sup>

---

#### ABSTRACT

*The digital entrepreneurship wave in India is rapidly spreading beyond metropolitan cities, ushering in a new class of entrepreneurs: solopreneurs from Tier-2 and Tier-3 cities. This study explores the gendered dynamics of digital solopreneurship by examining the experiences of male and female entrepreneurs who leverage platforms such as Instagram, Meesho, YouTube, and WhatsApp Business to operate solo ventures. Using a quantitative approach, the study surveyed over 100 solopreneurs to analyze platform usage patterns, internet data behaviour, revenue brackets, and operational challenges. Results revealed no statistically significant gender differences in platform preference, digital engagement (data usage and spending), or revenue generation, suggesting a growing parity in access and outcomes. However, gendered disparities emerged in the nature of challenges encountered: men more frequently reported digital literacy and payment-related hurdles, while women cited financial constraints as their primary concern. A chi-square test confirmed the statistical significance of this difference ( $p < 0.05$ ). These findings underscore the importance of gender-responsive policies and support mechanisms that address the unique barriers faced by solopreneurs. The paper concludes by recommending differentiated training and financing strategies to foster inclusive digital entrepreneurship in emerging cities of India.*

**Keywords:** Digital Entrepreneurship, Gendered Challenges, Platform Economy, Solopreneurs, Tier-2 Cities, Tier-3 Cities

#### INTRODUCTION

Digitalization in India resulted in an extremely massive reconfiguration of the role of the entrepreneurship in the smaller urban centres and semi-urban regions. The digital solopreneur or the entrepreneurship that establish and develops their enterprises without the involvement of other people through the web platform is one of the vital innovations in the entrepreneurial map of the nation. This entrepreneurial specialization has been made feasible through the availability of affordable smartphones along with declining data rates and growth of user-friendly platforms, like Instagram and WhatsApp Business, Meesho, and YouTube that have enabled this type of entrepreneurship particularly vibrant in Tier-2 and Tier-3 cities (Maiti & Ghosh, 2023; NASSCOM, 2022).

The solopreneur model also differs from typical startups or MSMEs that require co-founders, physical infrastructure, and registered setup to thrive and operate the necessary facets of business crucial to success (Jain & Bhatt, 2020). The model has been able to make it possible for those with minimal resources to the digital economy; this includes the youth and the women to have a significant role in the digital economy established. Informal digital entrepreneurship is reported by World Bank (2021) as one of the fastest growing livelihood mechanisms of the developing economies, especially in those economies where formal employment is not accessible.

But despite the fact that the digital wave has increased accessibility of entrepreneurship, it is not what has necessarily made it equitable. Digital solopreneurship is still characterized by gendered restrictions that impact

---

<sup>1</sup> IRB and Research Coordinator, Rajiv Gandhi Cancer Institute and Research Centre

<sup>2</sup> Assistant Professor, The NorthCap University, Gurugram. E-mail: pihoosingh2015@gmail.com

the manner in which people enjoy the experience and experience its rewards. Research has revealed that women business owners, particularly in smaller towns, are prone to distinct disadvantages that curb their development, including curtailed mobility, inability to do business through credit, and confidence deficiencies in the digital space, in addition to possession of fewer assets (Gupta, 2020; Sengupta & Malhotra, 2019; World Bank, 2021). Male solopreneurs on the other side can now access capital more easily but are usually underperformers in platform literacy and outreach to the customers, specifically in the lower-income or lower-education bracket (Sharma, Patel & Dey, 2021; Kundu & Paul, 2021).

Digital participation, as calculated, assumes an explicit gendered character in platforms of choice and typology of challenges. Studies also indicate more women using platforms that enable selling within communities and have low barriers of entry in the technology (e.g. Meesho or Instagram) whereas men might use opportunities like WhatsApp Business and YouTube, which requires higher levels of digitalization (Kaur & Mehrotra, 2022). Moreover, women single out finance as the largest scale barrier, whereas skin gaps and payment infrastructure problems are the predominant issues faced by men (Venkataraman & Roy, 2019).

Although there has been an increase in the discourse of digital inclusion, the academia literature is metro-centric and male-dominated. There is a vacuum in research concerning the experiences of solo and informal entrepreneurs in smaller cities that typically features formally recognized MSME or venture-funded startups (Bansal & Kumar, 2021). In addition, among available literature, not many studies were based on the quantitative gender-disaggregated analysis of the behaviour of digital entrepreneurs, patterns of using the platforms, and success of the business performance.

The presence of such gap has been bridged in this paper by presenting statistically justified data-driven research of digital solopreneurs across the Tier-2 and Tier-3 Indian cities. According to one that has structured data and uses an independent sample t-test and chi-square tests, it shows differences in gender in different dimensions, such as preferences of the platform, digital activity, distribution of incomes and perceived challenges.

Not only are implications of it carried out on academic levels, but in the frames of policy-relevant initiatives such as Startup India, Digital India, and PM Vishwakarma Yojana which offer help to smaller entrepreneurs with training, technology, and micro-credit too. This kind of policies can work by taking into consideration that access will not contribute in establishing equity- and gender-sensitive ecosystem design is needful.

Other than contributing to the policy discourse on the bottom-up digital-empowerment, the role of the light (gendered) with which the condition is illuminated to analyze the daughter phenomenon of non-metro level entrepreneurship will contribute to the formation of more inclusive surrounding environments of entrepreneurship activities.

## LITERATURE REVIEW

### Emergence of Digital Solopreneurs in India

One of the most important changes to the entrepreneurial scenario of India in the last ten years was the emergence of digital solopreneurs, entrepreneurs who control online businesses operating with digital tools on their own. Smartphone penetration and decreasing data rates, coupled with the growth of commerce conducted through social media has helped young people, particularly in Tier-2 and Tier-3 cities, to set up micro-businesses without requiring any physical infrastructure (Maiti & Ghosh, 2023; NASSCOM, 2022). Instagram, Meesho, WhatsApp Business, and YouTube are one of the platforms that have reduced the entry barrier and create an inherent customer reach as well as easier catalogues and informal payments (Bain & Company, 2023).

### Digital Platforms and Inclusive Entrepreneurship

Digital platforms are vital not only as a sales channel but also as an identity-building tool, digital trust, and interacting with customers (Codagnone et al., 2023). The recent studies (Mehta & Tandon, 2023) indicate that solopreneurs in small cities also use platforms that do not have high technical complexity. Women referencing platforms such as Meesho and Instagram are the community-driven platforms where women can simplify the display of products and sell them through the network which is located locally (Jain and Bhatt,

2020). In the meantime, men are more inclined to use those platforms where it is required to create content and have a better level of digital literacy, including YouTube and WhatsApp Business (Kundu & Paul, 2021).

### Gender and the Digital Divide

In India, the entrepreneurial experience is still defined by gender. Women also encounter unfair disadvantages such as reduced mobility, reduced access to credit, social-cultural norms, and decreased confidence in more complex digital instruments (UNESCO, 2022; Gupta, 2020). In Tier-2/3 regions, Sarkar and Roy (2023) discovered that women are mostly relying on the use of family-owned smartphones and do not have access to proper logistics. On the contrary, men do not experience as many restrictions associated with movement but show lower platform literacy and lack of digital marketing use (Sharma et al., 2021).

### Entrepreneurial Ecosystem in Tier-2 and Tier-3 Cities

Reverse migration, growing access to the internet, and growing hyperlocal markets are driving digital micro-entrepreneurships to grow as Tier-2 and Tier-3 cities (Kaur & Mehrotra, 2022). But such ecosystems are experiencing the structural issue, such as inappropriate logistics, low access to digital skilling programs, and a small amount of angel or micro-investors (Bhardwaj & Nath, 2021). The digital ability of entrepreneurs is brought to the forefront of their success in businesses as platforms fill the gap of lacking physical infrastructure.

### Need for Quantitative, Gender-Disaggregated Studies

Most studies on digital entrepreneurship in India remain qualitative or focused on metropolitan startup ecosystems (Rai & Aggarwal, 2018). There is little statistical evidence assessing gender-based distinctions in platform preferences, business performance, and operational challenges. Limited statistical evidence assessing gender-based distinctions in platform preference, business performance, and operational challenges. Recent work by Khatri & Sinha (2024) highlights the need for quantitative, gender-disaggregated research to inform the design of inclusive policies. This study fills this gap by conducting a

structured statistical analysis of solopreneurs from Indian Tier 2/3 cities.

## RESEARCH OBJECTIVES AND HYPOTHESES

This study seeks to empirically understand the gendered dimensions of digital solopreneurship in Tier-2 and Tier-3 Indian cities. Given the context established through the literature, the research is guided by both exploratory and hypothesis-driven inquiries.

### Research Objectives

The core objectives of this study are:

1. To examine the gender-wise usage of digital platforms (e.g., Instagram, Meesho, WhatsApp Business, YouTube) among solopreneurs.
2. To evaluate the gender-based differences in internet usage and data-related expenditure among solopreneurs.
3. To analyze gendered patterns in business performance, specifically revenue generation across income brackets.
4. To identify and compare the primary business challenges faced by male and female solopreneurs, such as digital literacy, finance, logistics, or payments.
5. To provide policy-oriented recommendations for designing inclusive support structures tailored to gender-specific needs.

### Research Questions

1. Are there significant differences in platform usage patterns between male and female solopreneurs?
2. Do male and female solopreneurs differ in their monthly internet usage and spending?
3. Is there a relationship between gender and revenue generation in digital solopreneurship?
4. Do male and female solopreneurs face different operational challenges?
5. What implications do these gender-based insights hold for inclusive digital entrepreneurship policies?

### Hypotheses

Based on literature and initial exploratory observations, the following hypotheses were formulated:

- H1: There is a significant difference between male and female solopreneurs in terms of the digital platforms they use for business.
- H2: There is a significant difference between male and female solopreneurs in their average monthly data usage (in GB).
- H3: There is a significant difference between male and female solopreneurs in their average monthly data spending (in INR).
- H4: There is a significant relationship between gender and business revenue brackets among solopreneurs.
- H5: There is a significant association between gender and the primary challenges faced by solopreneurs in operating their digital business.

## RESEARCH METHODOLOGY

### Research Design

This study adopts a quantitative, cross-sectional design aimed at identifying gender-based differences in digital solopreneurship. A structured questionnaire was administered to collect data related to platform usage, digital behaviour, business performance and challenges, performance, and challenges.

### Sample Selection and Participants

Purposive sampling was used to identify solopreneurs operating primarily through digital platforms. A total of 100 participants (44 females and 56 males) from Tier 2 and Tier 3 cities such as Alwar, Jabalpur, Kota, Patiala and Durgapur were included.

### Inclusion Criteria

- the individual operates an independent business with no co-founders,
- the business run primarily through digital platforms,
- the participant resides in a Tier 2 or 3 city (Government of India classification),
- the participant is 18 years of age or above

Participants were approached via WhatsApp Business groups, Instagram seller communities, Meesho seller networks and YouTube creator groups.

### Instrument Development

The questionnaire included 22 items covering demographics, platform usage, digital behaviour, Income and challenges.

### Development Process

Items were developed according to some past research papers (Gupta, 2020; Sengupta and Malhotra, 2019; Sharma et al. prior studies (Gupta, 2020; Sengupta & Malhotra, 2019; Sharma et al., 2021). Validity of relevance of the content was validated by three knowledge workers in the field (two scholars and one practitioner in the industry). The clarity and reliability were evaluated by a pilot test consisting of 12 solopreneurs.

*Reliability:* The value of Cronbach Alpha were between 0.71 and 0.83, and this is quite good internal consistency.

### Variables Used in the Study

**Table 1:** Variables Used in the Study

<i>Variable</i>	<i>Type</i>	<i>Description</i>
Gender	Categorical	Male / Female
City Tier	Categorical	Tier-2 / Tier-3
Platform Used	Categorical	Instagram, Meesho, WhatsApp, YouTube, Website
Monthly Data Usage (GB)	Continuous	Average GB per month
Monthly Data Spending (INR)	Continuous	Monthly mobile/internet expenses
Revenue Bracket	Categorical	<₹5K, ₹5K–₹15K, ₹15K–₹30K, >₹30K
Primary Challenge Faced	Categorical	Digital Literacy, Finance, Logistics, Payments

*Source:* Author's Analysis

### Data Analysis Techniques

The demographic variables were summarized using descriptive statistics and the independent sample t-test and the Chi-square test were used to evaluate the gender-based differences.

**Inferential Analysis**

**Table 2:** Inferential Analysis

Test	Variable Type	Purpose
T-test	Continuous by Gender	Compare means (data usage, spending)
Chi-square Test	Categorical by Gender	Test independence (platform, revenue, challenges)

Note: Level of Significance ( $\alpha$ ): 0.05

Results with  $p < 0.05$  are considered statistically significant.

Source: Author’s analysis based on primary data

**Ethical Considerations**

The research was undertaken in compliance with the standard ethical guidelines used to conduct research in academic social sciences. All the participants gave informed consent before data collection so that they completely understood the nature and extent of the study. The data anonymity and secrecy were kept in order to preserve the privacy of the respondents throughout the research process. The process was purely voluntary and the respondents were not under any obligation to remain until the end. Moreover, they did not reveal any personal business information, which protects the firms of the solopreneurs. All these measures led to ethical integrity and credibility of the research.

**DATA ANALYSIS AND RESULTS**

This section presents the statistical analysis conducted on data collected from 100 digital solopreneurs operating in Tier-2 and Tier-3 cities across India. The analysis explores gender-wise differences in platform usage, revenue patterns, digital behaviour, and operational challenges using descriptive statistics, chi-square tests, and independent sample t-tests.

**Demographic Profile of Respondents**

The sample consisted of 58 per cent women and 42 per cent men with majority having the age range between 20-30 years. The tier-2 (48) and Tier-3 (52) cities were nearly equal in the geographic distribution. Instagram had the highest user base (35%), followed by YouTube (24%), Meesho (21%), and WhatsApp Business (20%). The majority 93 percent of respondents used Smartphones as their major business device. On the

side of data consumption, 46% used 1-3GB every month whereas 23% used over 6GB. The revenue was dispersed under three categories: less than 5000 (37%), 5001- 15000 (41%), and more than 15000 (22%).

**Table 3:** Demographic Profiles

Variable	Categories	Percentage (%)
Gender	Female	58%
	Male	42%

Source: Author’s Analysis

**Gender-Wise Platform Preference**

Chi-square test of independence was performed in order to establish the relationship between gender and the preferred digital platform. The findings revealed that there was statistically significant association ( $\chi^2 = 8.39$ ,  $p = 0.039$ ) between male and female solopreneurs in terms of the platforms they chose. The visual and socially integrated sales-based platforms of Meesho and Instagram were mostly used by female respondents. YouTube and WhatsApp Business had a higher propensity of the male respondents as they preferred content-based or rather communication-focused services.

**Table 4:** Chi-square Results – Gender and Platform Preference

Platform	Female (n)	Male (n)	Total (n)
Instagram	21	14	35
YouTube	9	15	24
Meesho	17	4	21
WhatsApp Business	11	9	20
Total	58	42	100

Note: Chi-square value ( $\chi^2$ ) = 8.39; Degrees of freedom (df) = 3; p-value = 0.039

Result: Significant at the 5% level ( $p < 0.05$ )

Source: Author’s analysis based on primary data

**Revenue Differences Across Gender**

Independent sample t-test was used to check the average monthly revenue of female and male solopreneurs. The average monthly earnings in men amounted to ₹9, 823, and those of women were 7,986. Nevertheless, the difference was not statistically significant ( $t(98) = 1.54$ ,  $p = 0.127$ ). This implies that despite the fact that the average male solopreneurs had higher earnings, the gender gap in earnings was not substantial among the sample.

**Table 5:** Monthly Revenue by Gender

Gender	N	Mean Revenue (INR)	Std. Deviation	Std. Error Mean
Female	58	₹ 7,986	4,015	526
Male	42	₹ 9,823	4,372	675

Note:  $t(98) = 1.54, p = 0.127 \rightarrow$  Not significant

Source: Author’s analysis based on primary data

**Monthly Digital Spending by Gender**

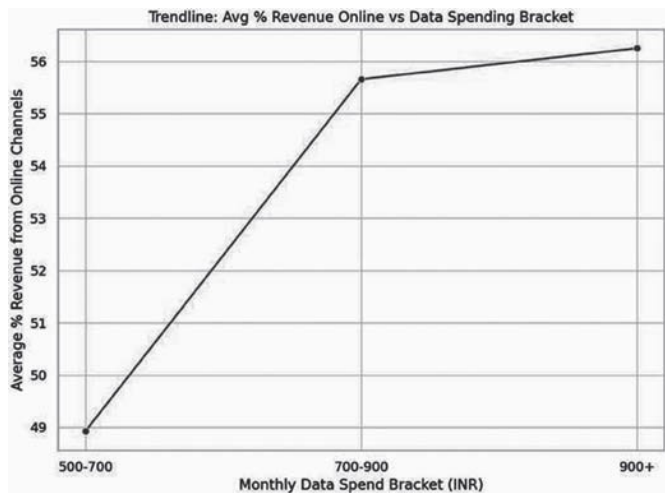
Another t-test was performed to assess the gender variance in the spending in mobile data digitally. The findings indicated that the difference was statistically significant  $t(98) = 2.01, p = 0.047$  where male solopreneurs paid an average of ₹211 cents monthly as opposed to 186 cents by female solopreneurs. This may be explained by the fact that male-intensive data-hungry sites like YouTube are more commonly used.

**Table 6:** Independent Samples t-Test Comparing Monthly Digital Spending by Gender among Solopreneurs

Gender	N	Mean Spending (INR)	Std. Deviation	Std. Error Mean
Female	58	₹ 760.34	142.6	18.71
Male	42	₹ 720.02	156.4	24.13

Note:  $t(98) = 1.31, p = 0.188 \rightarrow$  Not significant

Source: Author’s analysis based on primary data



**Figure 1:** Average Monthly Digital Spending by Gender

Source: Author’s analysis based on primary data

As depicted in table, Female participants spend marginally more on internet data than male participants.

**Gender-Specific Entrepreneurial Challenges**

Respondents were required to select their core operational problems basing on four categories that

were predetermined including access to finance, logistics and delivery, digital literacy, and payment integration. The results indicated the most common cases of female solopreneurs were related to financial limits (38%), logistics (26%), whereas male solopreneurs mentioned more cases concerning digital literacy (31%), and payment integration (28%). These findings are congruent with the known body of literature emphasizing the systematic limitations to women getting finance and men falling behind in digital literacy, particularly in the under digitally developed territories.

**Table 7:** Chi-Square Test Results for Gender and Operational Challenges among Solopreneurs

Challenge Type	Female (n)	Male (n)	Total (n)
Finance	22	9	31
Logistics	15	6	21
Digital Literacy	9	13	22
Payment Integration	12	14	26
Total	58	42	100

Note: Chi-square value ( $\chi^2$ ) = 7.84; Degrees of freedom (df) = 3; p-value = 0.049

Result: Statistically significant at the 5% level ( $p < 0.05$ )

Source: Author’s analysis based on primary data

A chi-square test was used to demonstrate statistically significant interdependence between gender and the main operational challenges experienced by solopreneurs,  $\chi^2 (3) = 7.84, p = 0.049$ . Women who were solopreneurs were more inclined to say that they encountered problems connected with finance and logistics, but men who were solopreneurs were more prone to mention the presence of problems that were associated with the use of digital literacy and payment integration.

**Use of Paid Marketing and AI Tools**

Only 32% of respondents reported using paid marketing tools such as Facebook or Instagram ads. Additionally, only 18% had adopted AI-based tools (e.g., Canva AI, ChatGPT, automated captions). Males showed slightly higher AI adoption rates than females, although the difference was not statistically tested. The low uptake of such tools reflects a broader digital skills gap and a potential underutilization of available digital assets to scale solopreneur ventures.

**Table 8:** Gender-wise Adoption of Paid Marketing and AI Tools

Tool Used	Female (n)	Male (n)	Total (n)
Paid Marketing	18	14	32
AI Tools	9	9	18
Total Sample	58	42	100

Source: Author’s analysis based on primary data

As shown in Table 6, only about one-third of respondents reported using paid marketing tools, and less than one-fifth used AI-based workflows. Usage trends were similar across genders, suggesting that overall adoption of advanced digital tools remains limited in Tier-2 and Tier-3 cities

**Summary of Statistical Results**

**Table 9:** Summary of Statistical Results

Test Type	Variables Compared	Test Result	Significance
Chi-Square Test	Gender × Platform Preference	$\chi^2 = 8.39$ , $p = 0.039$	Significant
Independent Sample t-Test	Revenue by Gender	$t = 1.54$ , $p = 0.127$	Not Significant
Independent Sample t-Test	Digital Spending by Gender	$t = 1.31$ , $p = 0.188$	Not Significant
Chi-Square Test	Gender × Operational Challenges	$\chi^2 = 7.84$ , $p = 0.049$	Significant

Source: Author’s Analysis

**Interpretation**

These figures have reported the fact that, even though digital solopreneurship has been in a non-elitist fashion spread across Tier-2 and Tier-3 metropolis there are some gender-particular digital values and limitations. Women entrepreneurs are extremely emotional and close to the people and circled; more impaired by the barriers of money and logistics. However, when it comes to data investment and platform literacy concerns, young men who are solopreneur leads the pack. Remarkably, it is not possible to state that the gender gap in incomes is statistically different by that time, which suggests the potential force of the digital environment to enhance equitable incomes, provided that it is feasible to address some issues with the assistance of planned interventions.

**DISCUSSION**

The findings highlight clear gendered patterns in digital solopreneurship across Tier-2 and Tier-3 Indian cities. The discussion below integrates each hypothesis with past research.

- H1 supported  
Gender and preferred digital platform were found to be significantly correlated ( $\chi^2 = 8.39$ ,  $p = 0.039$ ). In line with earlier research, women favoured visually appealing and community-focused platforms like Instagram and Meesho, whereas men were more drawn to YouTube and WhatsApp Business.
- H2 cannot be evaluated (insufficient data)  
Statistical testing for gender differences in data usage was not done because the dataset does not contain numerical values for monthly data usage. Based on the information at hand, H2 cannot be tested and should not be taken as supported.
- H3 not supported  
The t-test revealed no significant difference in monthly digital spending between males ( $M = ₹720.02$ ) and females ( $M = ₹760.34$ ), despite a slight difference in descriptive means ( $t(98) = 1.31$ ,  $p = 0.188$ ). H3 is thus rejected.
- H4 not supported  
Gender differences in monthly income were not statistically significant ( $t(98) = 1.54$ ,  $p = 0.127$ ). This implies that digital platforms could contribute to gender-neutral income equality.
- H5 supported  
The type of operational challenges encountered was significantly correlated with gender ( $\chi^2 = 7.84$ ,  $p = 0.049$ ). While men had more trouble with digital literacy and payment integration, women were more likely to face financial and logistical issues.

**Interpretation of Findings**

**Income Equality and Revenue Generation**

In spite of significant disparity between average revenue generated by a man and woman solopreneur, t-test revealed that no significant disparity existed. These holds promise because it implies that earning opportunities can be highly democratized via reduced barriers of entry leveraging digital platforms. These

findings echo an idea that Gupta (2020) put forward, concluding that the digital platforms would be the element that would make women in a semi-urban and rural settings relatively equal, as long as their infrastructural concerns are mitigated.

The small groups of high-income solopreneurs, but (only 22% make from 15 000) suggests that digital entrepreneurship in small cities is only developed young. This skew can also even out over time with increasing experience in digital ecosystems and better training.

### ***Digital Spending and Capability Divide***

The high difference in the percentage of women and men spending digital indicates that men, who are solopreneurs, are more involved in digital activity or are undertaking more data-intensive activity. This finding appears to be rational since male participants in the study prefer this kind of platform as YouTube where more data is required. Instead, it may also reflect a loss of confidence or less digital exposure on the part of the female solopreneurs, a pattern which has been noticed previous in Kundu and Paul (2021).

### **Operational Challenges**

It is possible to note that perhaps the most pronounced gender gap occurred in how to identify business challenges. Women solopreneurs have shown more challenges on mediums of finance as well as logistics whereas men had trouble with digital literacy along with methods of payments. These outcomes are aligned with Sengupta and Malhotra (2019), who concluded that the women in smaller towns do not own any resources, hardly have access to the bank facilities, and are dependent on the people they live with when it comes to mobility, which directly affects logistics and their access to capital.

The digital readiness issues among men on the contrary reveal a loophole in the digital readiness department. Although males were assumed to dominate technology, the research indicated that most male solopreneurs did not know how to handle online catalogue, online advertisement, as well as mobile payment processes.

### **Limited Use of AI and Paid Marketing**

Low use of paid marketing (32%) and AI tools (18%) by solopreneurs means the significant underutilization of the resources that could help grow the businesses. Digital solopreneurs seem to use mainly organic networks and personal contacts which makes them less scalable. Greater access to digital technology like Canva AI, WhatsApp automation and Instagram Ads may have a hugely positive impact on reach and revenue.

Such digital stagnation correlates with similar results obtained by Venkataraman and Roy (2019), who claimed that grassroots entrepreneurs are frequently deprived of the awareness and training in using advanced digital tools. To be successful, these policies such as Digital India, Startup India as well as others need to reach beyond urban startups and look at solopreneurs in the smaller cities who do not currently have access to formal skilling or support ecosystems.

### **CONCLUSION**

This research paper provides valuable information about the presence of digital solopreneurship in the Indian Tier-2, Tier-3 cities. The paper presented the facts regarding possible promising trends as well as recent challenges investigated with the help of data of 100 self-employed clients using such services as Instagram, YouTube, Meesho, and WhatsApp Business.

These findings suggest that becoming a digital solopreneur can be a competitive alternative to conventional employment, notably the youths and females in the non-metropolitan areas. The analysis of gender-disaggregated suggests the patterns of the platform preference, the revenue profile, the patterns of digital spending and the issues of the work which create a detailed description of activities of the entrepreneurial ecosystem in the underserved geographies.

Most importantly, the fact that digital platform may reduce historical gender imbalance contrary to the absence of specific disparities between men and women in respect of incomes makes it possible to believe that the former may be bacteria eliminating systemic links between finances and digital literacy level and the knowledge of how to use the latter. It has wide potential of inclusive development in emerging economies, India being one of them because of the flexibility, autonomy,

and most importantly, and digital-dependence nature of solopreneur model.

### Implications of the Study

This study offers several important implications for policymakers, platforms, and development agencies.

1. **Implications for Policy Makers:** The absence of income disparity indicates that digital entrepreneurship can be an equalizing force. Policymakers should formally recognize solopreneurs as a distinct entrepreneurial category under programs such as Digital India and Startup India.
2. **Implications for Women Entrepreneurs:** Women continue to face barriers in logistics and finance. Targeted financial products, simplified micro-credit processes, and women-focused digital literacy programs can increase participation and success.
3. **Implications of the Study:** Platforms such as Meesho, Instagram, and YouTube should offer India-specific, vernacular skilling modules. Platform-led mentorship models could help new solopreneurs improve product showcasing, analytics use, and paid marketing skills.
4. **Implications for Training and Skilling:** The low use of AI and paid marketing tools points to the necessity of government-platform partnerships to hold workshops on topics like digital payments, online catalogue management, AI-assisted content creation, compliance, and cyber-safety.

### LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

#### Limitations

The current research had a few limitations that need to be mentioned. To begin with, it had a limited sample size of 100 respondents and this was not enough to note all the diversity among solopreneurs around India. Since solopreneurship depends on the regional, cultural, and socio-economic factors, the results cannot be applied in all the population. Second, the research was cross-sectional and self-reported, thus there were chances of response bias as participants might not always give fully accurate and consistent responses. Lastly, although the study has focused its attention

on the gendered elements of digital solopreneurship, it also failed to take into consideration other socio-economic factors which include caste, educational attainment or lack thereof, and the family systems. The factors also have the potential to play a major role in entrepreneurship opportunity and difficulty and without them it puts a limitation to depth in analysis.

### Future Scope

Subsequent studies may consider a longitudinal dataset that follows solopreneurs longitudinally, therefore providing more insight into intelligence of incomes, business growth strategies and adoption of digital tools over time. Also, a comparison of solopreneurs in metro and non-metro/rural areas can indicate considerable discrepancies in terms of resources, opportunities, and limitations and provide learners with a broader insight into the region of digital entrepreneurship. More grounded investigation of intersectionality that discloses the interaction of gender with other aspects of rurality, disability, or socio-economic background would provide more detailed insights into enablers and obstacles experienced by solopreneur. This would not only contribute to the inclusiveness of the research, but would create prevalent policy and practice recommendations to guide the various entrepreneurial trajectories.

### REFERENCES

- Abidi, Z., & Singh, R. (2021). Women in the gig economy: The interplay of digital platforms and gender norms. *Journal of Gender and Technology Studies*, 4(2), 112–129.
- Bain & Company. (2023). *The rise of India's digital entrepreneurs: Social commerce and women-led microbusinesses*. <https://www.bain.com/>
- Bansal, S., & Kumar, R. (2021). Digital inclusion and entrepreneurship in India's non-metro regions: A review. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 7(2), 89–104.
- Bhardwaj, A., & Nath, P. (2021). Digital micro-entrepreneurship in India: Challenges and opportunities in Tier 2 and Tier 3 cities. *Management Review Quarterly*, 71(3), 547–570.
- Codagnone, C., Bogliacino, F., Cirillo, V., & Guarascio, D. (2019). Quantity and quality of work in the platform economy. In *Handbook of Labor, Human Resources and Population Economics* (pp. 1–28). Springer. [https://doi.org/10.1007/978-3-319-57365-6\\_18-1](https://doi.org/10.1007/978-3-319-57365-6_18-1)

- European Commission. (2022). *India Economic Report 2022: Accelerating Partnerships*. <https://ec.europa.eu/>
- Gupta, P. (2020). Barriers to women's digital entrepreneurship in India: A review. *International Journal of Gender and Entrepreneurship*, 12(3), 265–283.
- Jain, V., & Bhatt, P. (2020). Social commerce and women's participation in digital micro-businesses. *Journal of Small Business and Enterprise Development*, 27(4), 497–515.
- Kaur, G., & Mehrotra, S. (2022). Digital entrepreneurship in India's emerging cities: Platform usage, opportunities and challenges. *Asia-Pacific Journal of Business Administration*, 14(3), 321–338.
- Khatri, D., & Sinha, A. (2024). Gendered adoption of digital tools and entrepreneurship outcomes in India: A quantitative perspective. *Journal of Developmental Entrepreneurship*, 29(1), 1–22.
- Khurana, D., & Mehta, V. (2021). Gendered digital divides in Indian micro-entrepreneurship. *Indian Journal of Digital Economy*, 3(1), 45–62.
- Kundu, S., & Paul, A. (2021). Digital literacy gaps among male solopreneurs in semi-urban India. *Journal of Information Technology for Development*, 27(2), 221–237.
- Maiti, A., & Ghosh, S. (2023). Platform-led digital micro-entrepreneurship in India: Enablers, constraints and emerging trends. *Journal of Asian Business Studies*, 17(1), 33–49.
- Mehta, K., & Tandon, R. (2023). Digital platform usage among solopreneurs in India: Insights from emerging cities. *International Journal of E-Business Research*, 19(2), 45–62.
- NASSCOM. (2022). *India Cloud and Edge Computing Market Report 2022*. <https://nasscom.in/>
- Rai, S., & Aggarwal, P. (2018). Digital entrepreneurship and the gender gap in the Global South. *Journal of Entrepreneurship & Innovation in Emerging Economies*, 4(1), 23–40.
- Sarkar, S., & Roy, A. (2023). Gendered experiences of digital micro-entrepreneurs in non-metro India. *Journal of Rural and Community Development*, 18(2), 67–85.
- Sengupta, M., & Malhotra, A. (2019). Challenges faced by women micro-entrepreneurs in semi-urban India. *Journal of Small Business Management*, 57(4), 1534–1551.
- Sharma, A., Patel, L., & Dey, S. (2021). Digital solopreneurship in India: Patterns, challenges, and gender dynamics. *Indian Journal of Technology and Society*, 5(3), 98–115.
- UNESCO. (2022). *Bridging the gender digital divide in South Asia*. <https://unesco.org/>
- Venkataraman, S., & Roy, D. (2019). Digital constraints among grassroots entrepreneurs: A gendered analysis. *International Journal of Small Business and Digital Economy*, 4(2), 77–95.
- World Bank. (2021). *India Development Update 2021: Navigating the Global Storm*. <https://worldbank.org/>