POLICY BRIEF #27

LEVERAGING DIGITAL TECHNOLOGIES TO FOSTER GROWTH-ORIENTED WOMEN ENTREPRENEURSHIP IN INDIA

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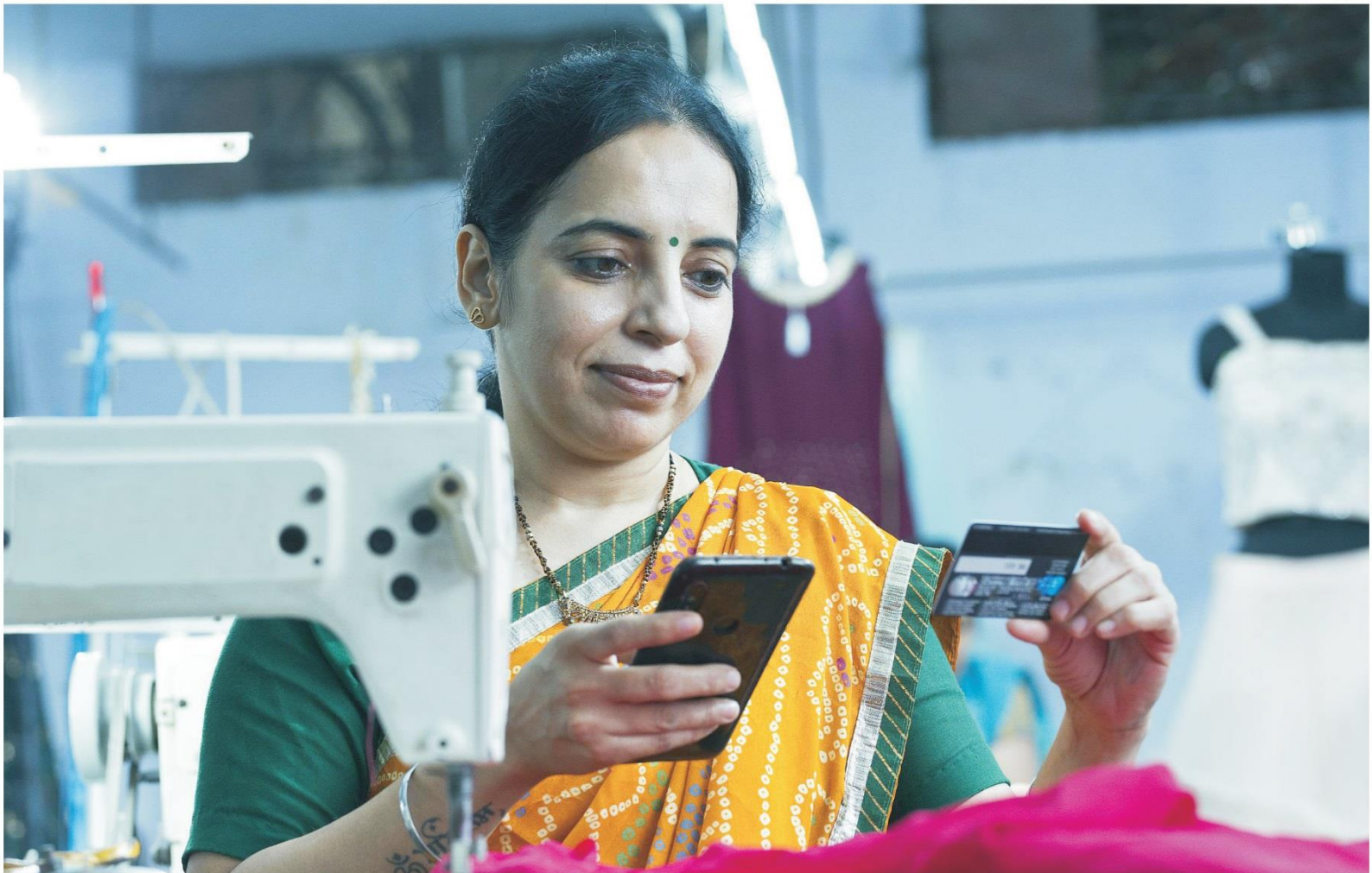

Table of Contents

List of Figures

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Abstract

Women entrepreneurship is a key driver of economic inclusion and growth. There are several government programmes available to enable entrepreneurship in India, some are dedicated programmes for women-led enterprises. However, several challenges remain with respect to access to finances, markets, technology and skills. In this policy brief, we recognize that there is significant scope to leverage the digital advancements made by India to address the challenges faced by women entrepreneurs in accessing finance, skills, networks and markets, thereby unshackling the potential of women entrepreneurship. While male entrepreneurs too, stand to gain from these advances, for women entrepreneurs they can prove to be particularly beneficial as they help alleviate several barriers which emanate from restrictive norms that are deep-rooted in society.

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Leveraging Digital Technologies to Foster Growth-Oriented Women Entrepreneurship in India

1. Introduction

Key Messages

- Women-owned enterprises are a much smaller proportion of formal SMEs in India
- There is significant scope to increase women's entrepreneurship with a focused approach.
- We recommend improvements in four key areas to achieve increased women's participation.
- They are:
  - Access to markets
  - Access to finance
  - Access to networks
  - Bridging the digital gap

The paucity of women business owners is well established in the Small and Medium Enterprise (SME) ownership data. Globally only one in three businesses are owned by women (Halim, 2020). In emerging and developing economies such as India, women-owned SMEs represent an even smaller proportion of formal SMEs. World Bank Enterprise Surveys estimate that the share of firms with female participation in ownership ratio is as low as 18% for South Asia (ibid). There are significant economic gains to be made by eliminating barriers to female entrepreneurship. Closing the gender gap in entrepreneurship is crucial for spurring economic growth and innovation and creating jobs, in particular for women. Evidence from enterprise data, which covers the formal sector, shows that enterprises headed by female entrepreneurs create more steady employment opportunities for women compared to those headed by males.[1] In a recent study for India, Chiplunkar and Goldberg (2021) find that promoting gender equality in firm ownership not only meaningfully expands female entrepreneurship but also helps female workers by increasing their real wages. It also improves the efficiency of talent and resource allocation in the economy, resulting in substantial gains in aggregate productivity and welfare.

The gender gap in entrepreneurship can be explained by a range of obstacles faced by women including lack of business and technical skills, small and less effective entrepreneurial networks and inability to access credit and potential markets. Many of these obstacles are faced by male entrepreneurs too. However, it is important to note that these obstacles are far more severe for women, as compared to men (Sinha, 2005). Over and above these challenges, there are some obstacles which are faced exclusively by women. Predominant amongst them are the cultural and social norms that disadvantage women and their entrepreneurial ventures in the labour market. These norms prescribe what is socially acceptable of women's behaviour and what choices are available to them. Importantly, these norms tend to result in legal barriers, financial discrimination, mobility restrictions and limited endowments for women vis-à-vis education, asset ownership, and networks. These in turn exacerbate the challenges faced by them in starting, operating and expanding a business.

Unshackling entrepreneurship amongst women in India is a complex task but it provides an unprecedented opportunity to change the economic and social trajectory of the country and its women for generations to come. The call to

1 In male-owned firms, the average share of female workers was found to be lower at 25%, compared to 43% in female-owned firms. (World Bank Enterprise Survey, 2021)

action is for an integrated and coordinated effort across several dimensions (Kapoor, 2022). A multidimensional strategy that facilitates access to finance through financial literacy and a range of financing instruments; builds entrepreneurial networks and ensures linkages to mainstream infrastructures; develops entrepreneurship skills through training courses and mentoring; promotes a positive attitude through role models and ambassadors; addresses regressive gender norms embedded in discriminatory laws and regulations which impede women's ability to start and grow businesses; supports women entrepreneurs to cross-over to more profitable male dominated sectors and provides care infrastructure support can create an enabling ecosystem for women entrepreneurs to start and grow their businesses. Implementing these interventions to foster women's entrepreneurship will require a coordinated effort between various ecosystem participants including Central and State governments, grass-root organisations, investment and banking communities, private enterprises, educational institutions and media.[2]

Significant advances made in digital technology, particularly since the Covid-19 pandemic, can play a pivotal role in bridging the gender gaps in entrepreneurship by reducing the barriers faced by women entrepreneurs. Technology can be effectively used to ease barriers arising from social norms by enabling women to work flexible hours and by overcoming mobility restrictions and increasing their possibilities for accessing finance, training, skilling, networks, mentors and markets remotely. Additionally, digital tools can make business formalization and growth more accessible for women entrepreneurs by making it easier for them to comply with legal and regulatory requirements rather than visiting government offices physically. Effectively deployed, technology can also contribute to less discriminatory and more standardized processes and can help provide workable approaches to overcoming some of the restrictions that women face (Burga et al, 2021).

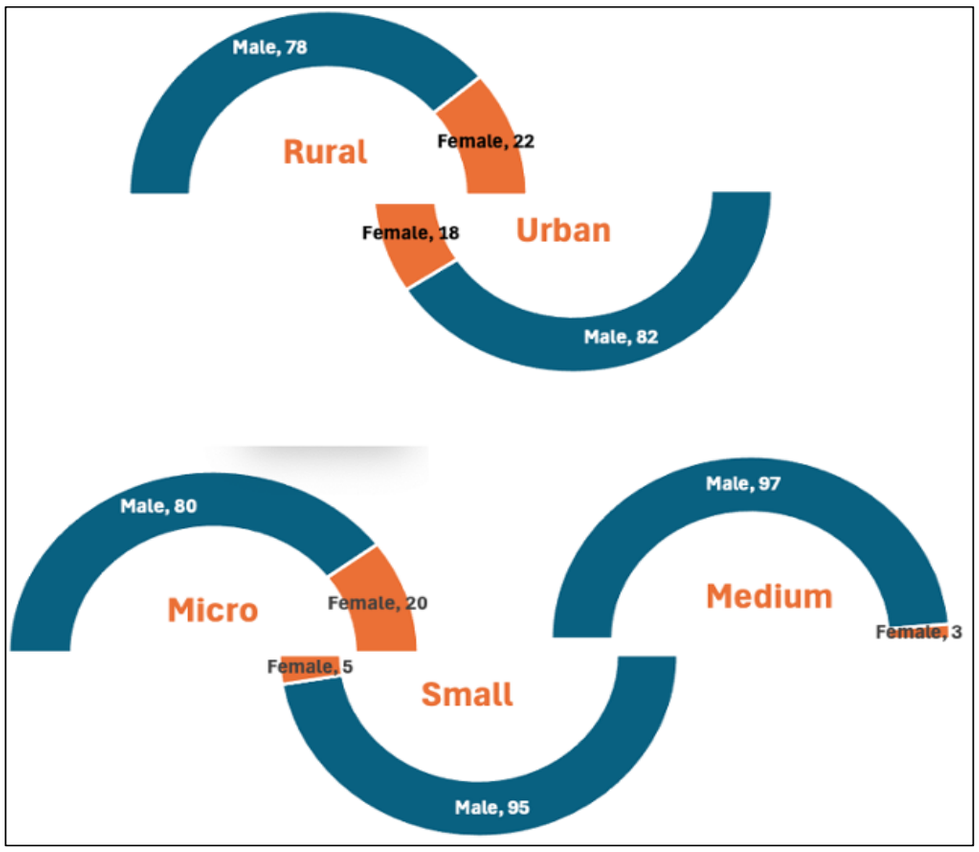
In this policy brief, we analyse how significant strides made by India in connecting its citizens to digital technology and the development of a robust Digital Public Infrastructure (DPI) can provide a unique opportunity in overcoming some of the key constraints faced by women entrepreneurs in the country. Before doing so, we provide a brief profile of women entrepreneurship in India (Section 2) and outline the key constraints faced by them. (Section 3). Section 4 outlines how technological advances have the potential to alleviate constraints faced by women entrepreneurs. Section 5 concludes.

2. Profile of Women Entrepreneurship in India

According to the National Sample Survey (NSS) 73rd round, conducted by the National Sample Survey Office, Ministry of Statistics & Programme Implementation during the period 2015-16, there were 63.3 million unincorporated non-agriculture MSMEs in the country engaged in different economic activities. Of these, 60.8 million (95.98%) MSMEs were proprietary concerns. There was a dominance of men in the ownership of proprietary MSMEs. Amongst the proprietary MSMEs, 79.63% enterprises were owned by men and only 20.37% were owned by females. There was no significant deviation in this pattern in urban and rural areas, although the dominance of male owned enterprises was slightly more pronounced in urban areas compared to rural areas (81.58% as compared to 77.76%). The above statistics pertain to data from unregistered/ informal establishments (Figure 1).

2 https://msme.gov.in/sites/default/files/MSMEANNUALREPORT2022-23ENGLISH.pdf
3 Gender wise registration has started after one month of launch of Udyam Portal (01.07.2020) and those MSMEs which have registered prior to that period has been referred as 'unidentified'
4 https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country/India-2022.pdf

Figure 1: Percentage Distribution of Enterprises by Gender Across Geography and Type of Enterprise



Source: Statement No. 2.3 & Statement No. 2.4, Section 2.2.2, pg. no 33, MSME Annual Report 2022-23

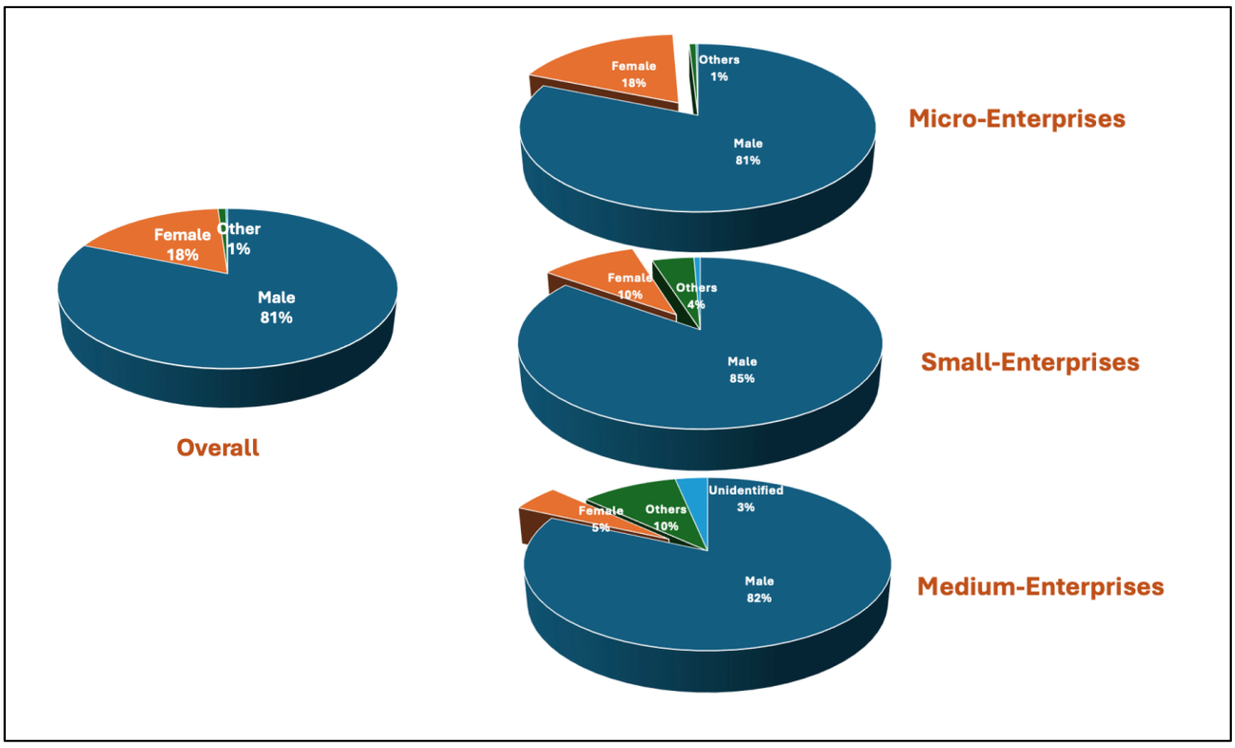
Data from the Udyam registration portal, an online portal for registration of MSMEs captures the ownership of registered enterprises based on gender (Table 2). Here too, the paucity of women entrepreneurs is apparent. Of the total registered MSMEs, 81.5% were male-owned and 17.5% were female-owned (Figure 2). Importantly, the gender wise breakdown of MSMEs across micro, small and medium categories shows that the share of women-owned enterprises is highest in the micro-category at 17.9%, followed by the small category at 10.2%. In the medium category, the share of women owned enterprises is lowest at 5%. (Figure 2). In fact, of the women-owned enterprises on the Udyam portal, an overwhelming 97.3% were in the micro-category, while less than 0.5 % were in the medium category.[3]

Another recent enterprise survey conducted by the World Bank between December 2021 and September 2022 reiterates the paucity of women entrepreneurs in India.[4] Of the 9376 firms surveyed in the non-agricultural formal private economy, only 4% reported female participation in ownership. This is considerably lower than the average share for lower middle-income countries at 32% (Figure 3).

3 Gender wise registration has started after one month of launch of Udyam Portal (01.07.2020) and those MSMEs which have registered prior to that period has been referred as 'unidentified'

4 https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/country/India-2022.pdf

Figure 2: Gender-wise Distribution of MSMEs



Source: Chart 9, Section V, pg. no. 14, Udyam Registration publication, 2020-22

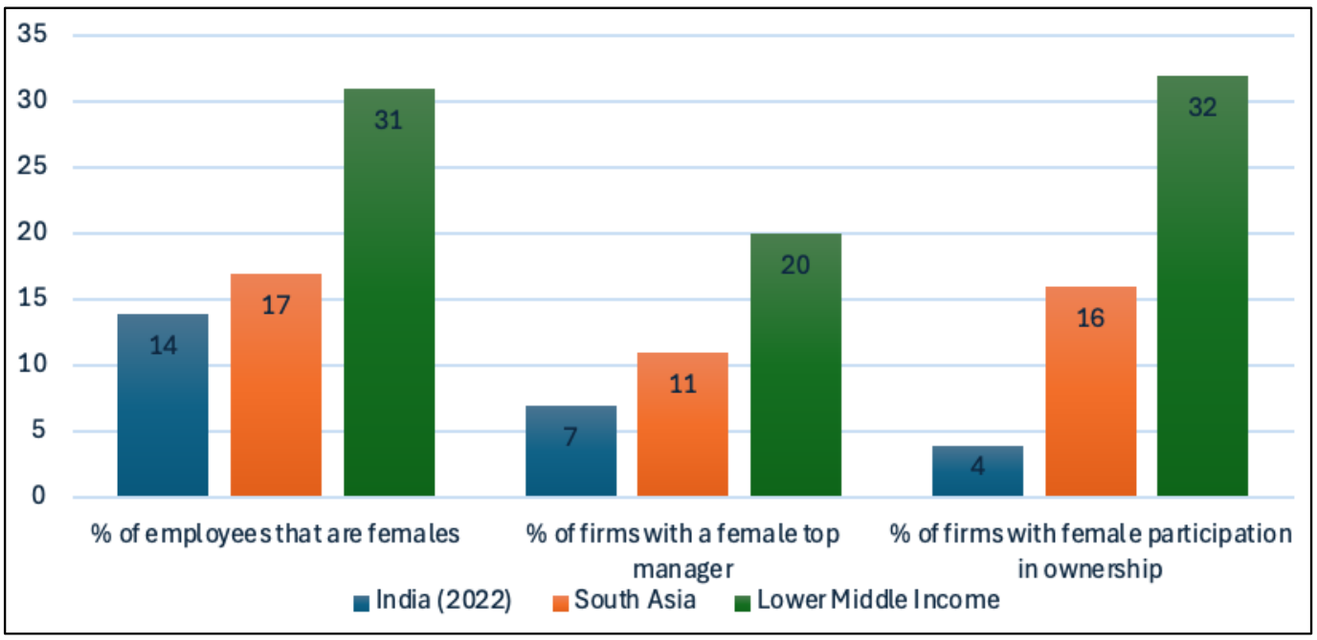
Women often operate nano and micro businesses in the informal/unregistered sector, while women entrepreneurs in the registered sector are few and far between. Kabeer (2021) has noted that women are more likely than men to be concentrated at the survival-oriented informal end of the enterprise spectrum, where there is not much evidence of active choice. Entrepreneurs who start a business in response to a perceived opportunity—as opposed to a lack of other options for income generation—are more likely to be growth-oriented, which means that they are more likely to aim to expand their businesses and hire more workers (ibid). The policy discourse on women entrepreneurship needs to look beyond support to necessity-driven entrepreneurs and examine how an enabling environment can be created for dynamic opportunity-driven women entrepreneurs to thrive. Increasing the number of growth-oriented entrepreneurs will have a catalytic effect on the economy. The discussion in this policy brief pertains to such growth-oriented entrepreneurs, who have attracted relatively limited attention in the literature, and are few and far between.

3. Key Obstacles Faced by Women Entrepreneurs

Both male and female entrepreneurs confront various challenges when starting, managing and growing a business. In addition to the regulatory bottlenecks to doing business, these challenges pertain to difficulties in accessing finance and credit, markets and information, business and technical skills, and networks. Over and above these challenges, women face an additional set of gender-based barriers. Most significantly, these include social and cultural norms, which prescribe what is socially acceptable of women's behaviour and what choices are available to them, and the burden of unpaid care work. These factors compound the challenges faced by women entrepreneurs as they generate additional pressures on their time and workload. Empirical evidence shows that the burden of unpaid domestic duties is an important reason for the lower productivity of women entrepreneurs compared to male entrepreneurs across Asia and the Pacific as women cannot spend sufficient time to grow their businesses. In Bangladesh, the average output per worker has been found to be eight times higher in firms operated by

men than in those operated by women, while in Indonesia the output per worker has been found to be six percent less in women-owned firms than those owned by males (ADB, 2015). Importantly, regressive social and cultural norms exacerbate the challenges faced by women in accessing finance, markets, skills and networks as they often result in creating an unfavourable environment that tends to result in limited endowments (education, asset ownership, networks), discrimination (legal and financial) and other restrictions (mobility, location, family responsibilities) for women.

Figure 3: Female Participation in Employment, Top Management and Ownership



Source: Figure 4, Section: Firm Characteristics, Page no. 5, Enterprise Surveys India, 2022, World Bank Group

For instance, in the case of access to finance, women often lack traditional forms of collateral (such as land, houses and other assets and/or credit history) that financial institutions require to assess a client's creditworthiness. Additionally, the high transaction costs, in particular the extensive documentation and cumbersome paperwork required to apply for a loan also disadvantage women, as they are less likely to possess the necessary expertise to navigate these procedures. Female entrepreneurs also often find the environment in formal banks to be less receptive with loan officers having open or unconscious gender biases against women and negative perceptions about female entrepreneurs. Such an attitude can also be attributed to the skewed gender-balance in the staff structure of financial institutions. For instance, recent data (as on January 2023) shows that out of total workforce in all scheduled commercial banks, around 23 per cent officers, 30 per cent clerks and around 16 per cent subordinates are female (Sinha, 2023). Such a structure impacts the outlook of staff towards women-owned enterprises. Limited and inconvenient hours of operation reduce the likelihood that women, who are burdened with multiple responsibilities, outside their business responsibilities will seek out formal financial institutions to obtain capital to establish or grow their businesses (ADB, 2018). All this undermines the confidence of women and discourages them from dealing with banking institutions.

Similarly, access to markets is critical for the progress of any entrepreneur. However, women face multiple challenges as they seek to access markets to sell their goods and services as social norms impede their ability to travel or be seen in certain places. Information about the type of goods in demand, quality standards and branding and pricing of products is not so readily accessible to women entrepreneurs as they are unable to regularly interact with buyers. Women business owners complain that they have less access to clients than male-owned firms when they seek to operate in markets beyond their traditional

household clientele. Women also often face prejudices and harassment in the marketplace.

Importantly, the sectors that women entrepreneurs choose to operate in and the scale of their businesses are also determined by their ability to access finance, markets and information as well as social and cultural norms. As the data in the preceding section shows businesses run by women tend to be smaller than those run by men. Women entrepreneurs are typically concentrated in the category of micro-enterprises. Further, they are over-represented in the informal economy. While a disaggregated sectoral breakdown of women entrepreneurs is not available for India, global evidence shows that firm profits are significantly lower in the sectors where women are overrepresented compared to sectors where they are underrepresented (World Bank,2021). Goldstein, Gonzalez and Papineni (2019) estimate that women who enter male-dominated sectors earn 67 percent higher profits on average than women who remain in traditionally female-concentrated sectors. Despite such significant differences in profitability, women tend to start businesses in fewer and less profitable sectors compared to men who dominate a wider and more profitable selection of industries (World Bank, 2021). Amongst other factors, this phenomenon is largely driven by factors such as social norms about women's interactions with men, their need for flexibility of timing and location offered by the sector, the social roles attributed to them, financial discrimination, and lack of gender-equal property and labour laws, as well as the risk of facing gender-based violence(ibid).

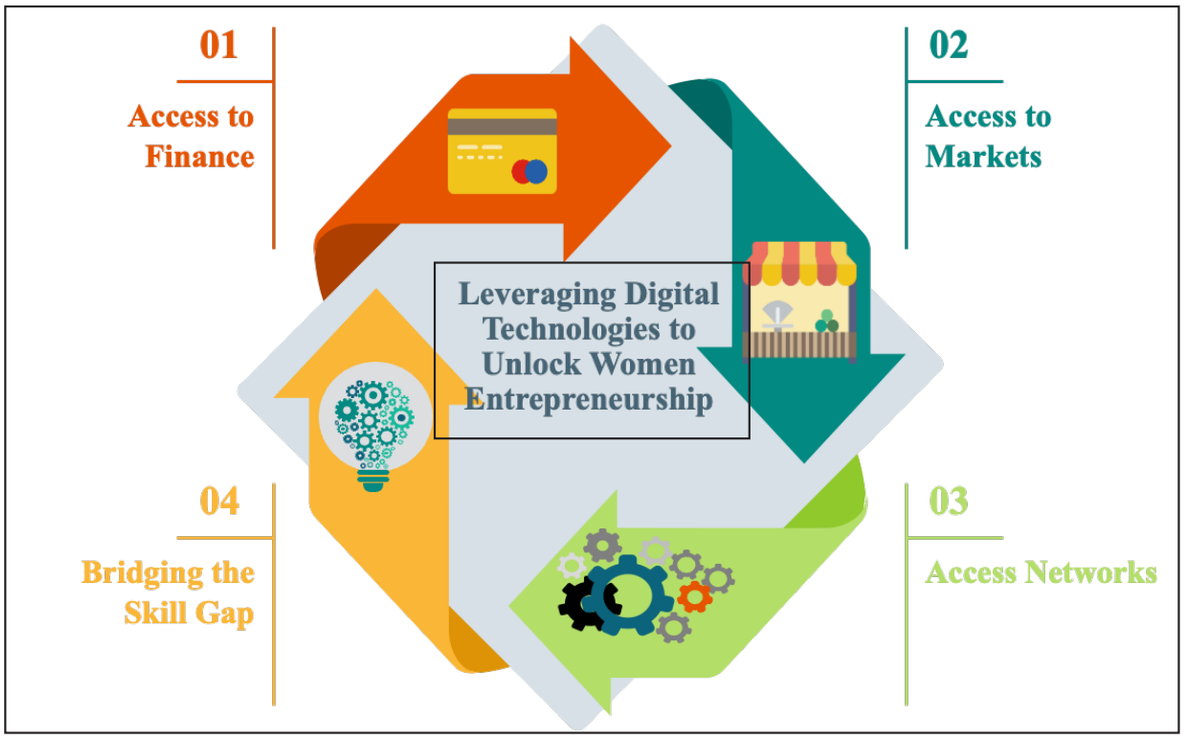
While it is important to analyse the factors that constrain female entrepreneurs from starting and growing their businesses, it is also crucial to understand what factors underlie the success of women entrepreneurs. A recent study (Kapoor, 2022) on successful first generation women entrepreneurs in South Asia identifies the following key correlates of success through a series of case studies: (i) Family's emotional and instrumental support is crucial (ii) Education helps women see greater entrepreneurial opportunity, overcome barriers and adapt to changes (iii) Successful new age women entrepreneurs are seen in more non-traditional (or sunrise) sectors (iv) Successful women entrepreneurs appear to have followed a model of structured experimentation and iterative design over traditional "big design up front" development (v) Role models or mentors play an important role for women entrepreneurs (vi) Prior Work Experience helps in understanding opportunities and building networks in industry circles (vii) Personality Characteristics such as self-efficacy, curiosity, strong internal locus of control and team-building are highly correlated with success.

Similarly, World Bank (2021) examines what factors help women cross over to more profitable male-dominated sectors and make their enterprises as profitable as those of male entrepreneurs. The study finds that characteristics such as women's education, past exposure to male-dominated sectors through work experience or training, exposure to male-dominated sectors through male relatives, mentors, or role models and spousal support appear to be positively associated with crossing over to more profitable male-dominated sectors. Broadly, both human capital and social capital act as key facilitators for success.

4. Leveraging Digital Technologies to Unlock Women Entrepreneurship

The above insights on what factors enable women entrepreneurs to succeed and cross over to profitable male-dominated sectors are important as they highlight the attributes women entrepreneurs may need to cultivate to succeed in the face of various constraints. Specific policy prescriptions and interventions that appear promising to foster growth-oriented entrepreneurship amongst women also emerge from the discussion. These include encouraging familial and spousal support; building entrepreneurial networks to connect women entrepreneurs to mentors and role models, particularly in more profitable male-dominated sectors; facilitating access to finance through financial literacy and a range of financing instruments; enhancing entrepreneurship skills (particularly business management, interpersonal and financial skills) through training courses; enhancing access to markets and promoting a positive attitude through role models and ambassadors. Fostering women's entrepreneurship will require interventions across these dimensions. Additionally, collaborations among various actors, including central and state governments, grassroots organizations, investment and banking communities, private enterprises, educational institutions, and the media, will be essential.

Figure 4: Using technology to unlock the potential of Women's Entrepreneurship



Rapid advances in digital technology are creating new opportunities for fostering women's entrepreneurship by alleviating several of the key constraints faced by women entrepreneurs in accessing markets, information, skills and training, credit, mentors, networks and formalising their businesses. They also ease barriers emanating from restrictive and regressive social norms by enabling communication and interaction without open violation of societal expectations (Burga et al, 2021). In this section, we will highlight how rapid strides made by India in connecting its citizens to digital technologies can enable women entrepreneurs to address constraints faced by them on four key dimensions of access to finance; markets and information, skills and networks.

5. Using Technology to Increase Access to Finance

Access to finance is a key constraint faced by all entrepreneurs. Difficulties in accessing finance are often intensified by gender-related factors which include women's lack of collateral, weak property rights and discriminatory regulations, laws and customs. The International Finance Corporation estimates that as many as 70% of women-owned SMEs in the formal sector in developing countries are unserved or underserved by financial institutions.[5] Digital financial services play an important role in bridging the gender gap in account ownership and access to credit by decreasing the cost of access to financial services and bypassing constraints imposed by social norms and limited mobility. They have contributed to women's empowerment and autonomy by increasing their control over their financial resources. In an environment where women are less likely than men to own assets that could serve as collateral for credit, digital financial technologies can play an important role in improving access to credit for women through the use of alternatives to physical collateral. For instance, innovations such as alternative credit scoring options that replace the requirement for collateral and financial technology tools such as artificial intelligence, blockchains, and machine learning have enabled enhanced and cheaper access to credit for women-led SMEs.[6] Such innovations not only have the potential to provide financial products to suit the needs of women-led SMEs but also support their entry into sectors with high start-up capital requirements.

5 https://www.goldmansachs.com/intelligence/public-policy/giving-credit-where-it-is-due.html

6 The analysis of big data, including data accessed through mobile phones and utility bills improve understanding of entrepreneurs' cash flow, character traits, and networks to assess credit default risk and predict the likelihood of loan repayment (World Bank, 2021).

In order to bridge the credit gap faced by MSMEs, India is actively seeking to leverage its Digital Public Infrastructure through the Account Aggregator (AA) network. Unveiled in 2021, AA is a financial data-sharing system that aims to revolutionize investing and credit by giving millions of consumers greater access and control over their financial records and expanding the potential pool of customers for lenders and fintech companies. It is the first step towards bringing open banking in India and empowering millions of customers to digitally access and share their financial data across institutions in a secure and efficient manner.[7] By facilitating secure and consent-based sharing of financial information between financial information providers and users it reduces the physical and mobility barriers faced by women in accessing credit. Importantly, the AA network is enabling a shift from physical collateral to information collateral-based loans, which is particularly beneficial in extending credit to women entrepreneurs lacking physical collateral. The central bank has recently included the Goods and Services Tax Network (GSTN), a rich source of data on cash flows of businesses, as a financial information provider in the AA network. As more data sources, including e-commerce platform data, are added, the shift to information-based collateral will accelerate, fully realizing the potential of the AA ecosystem.

To leverage Digital Public Infrastructure (DPI) for enhancing access to finance for women entrepreneurs, policy-level initiatives and outreach programs are needed. Both central and state governments should educate women about the full range of financial services available through technological advancements. Additionally, it is important to highlight the transparency and reduced gender biases these innovations offer. Efforts to improve financial and digital literacy among women are also essential.

6. Using Technology to Access Markets

Technology permits more entrepreneurs to participate in markets and provides innovations in logistics chains that can lead to closer links between buyers and sellers. E-commerce platforms are increasingly accessible to MSMEs in India through the expanded use of improved digital technologies. For women entrepreneurs, in particular, they present many advantages: access to a larger "virtual" customer base; freedom from geographic limitations, ability to connect with buyers and sellers if physical meetings are culturally or socially discouraged and opportunities to engage in commercial activity around the clock. Further, when operating in a virtual market platform as opposed to a physical marketplace, women are less likely to face gender based price discrimination. In addition, e-commerce platforms also have the potential to lower trade barriers for women business owners by bringing female producers and traders closer to international markets and increasing their participation in international trade and the global economy.

India's Account Aggregator Framework to Improve Financial Inclusion

Digital Public Infrastructure such as the Account Aggregator framework is a financial data-sharing system that aims to revolutionize investing and credit by giving millions of consumers greater access and control over their financial records and expanding the potential pool of customers for lenders and fintech companies.

7 https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1753713

Promisingly, women-owned MSMEs do not appear to be far behind male-owned MSMEs in integrating with e-commerce platforms. A recent study on the adoption of e-commerce platforms by MSMEs found that among the enterprises owned by women, 45.1 percent were integrated with e-commerce platforms (Kapoor and Goyal, 2023). For male-owned enterprises, 50.3 per cent reported to be integrated with e-commerce platforms. This suggests that notwithstanding the underrepresentation of women in the MSME landscape, MSMEs owned by women are not far behind those owned by men in the use of e-commerce as a sales channel. It is a well-known fact that women business owners face greater difficulty in accessing traditional markets compared to male business owners due to social and cultural norms that constrain their ability to travel or negotiate with buyers. Other studies, too, have noted that women-led businesses have reported higher proportions of sales made digitally compared to those led by men. Women-led small and medium businesses, with 50 percent to 75 per cent of their sales made digitally, reported 5 percentage points higher digital sales compared to those led by men (in the 30 days preceding the date of the survey).[8]

Given the significant benefits of integrating with e-commerce platforms, the government should make a concerted effort to connect women entrepreneurs to these platforms. Addressing barriers such as the lack of technical knowledge about the platforms and the difficulties faced by women entrepreneurs in onboarding is crucial. GST certification, incorporation and registration details, and PAN numbers are some of the initial requirements to sell products online, and these legal and regulatory compliances can pose significant burdens, particularly on women entrepreneurs.[9]

Recent government initiatives aimed at enabling women entrepreneurs' access to e-commerce channels include the eSARAS mobile application, which supports women of Self-Help Groups (SHGs), and the Mahila E-haat. Additionally, State Rural Livelihoods Missions (SRLMs) have launched their own digital platforms, such as Kudumbashree Bazaar in Kerala, Jeevika in Bihar, and Umed in Maharashtra, to provide women SHGs and rural enterprises with access to wider markets through digital sales channels (Taneja et al, 2023)). Funding for such initiatives at both Central and State Government levels needs to be scaled up, and a larger number of women need to be onboarded via dedicated outreach programs. To address informational gaps, training manuals for leveraging e-commerce platforms should be developed for women entrepreneurs. These manuals should include information on product branding, pricing strategies, and business planning to expand the market for their products. Additionally, it is vital to strengthen regulatory frameworks to address legal issues in e-commerce, including competition and consumer protection, cybersecurity and data privacy, and to establish effective national and state-level frameworks.[10]

7. Using Technology to Bridge Training and Skill Gaps for Women Entrepreneurs

Women entrepreneurs frequently start businesses with less schooling and work experience and with lower levels of management skills than their male counterparts constraining their businesses' growth and chances of success (Qasim and Xavier, 2014). Addressing these gaps is important not just to enable women entrepreneurs to grow and expand their businesses but also to be able to enter more profitable sectors.

As the number of smartphone subscriptions rise, online training programmes can help improve business acumen and technical skills of women who face logistical challenges in accessing training and support programs. Online training programmes can decrease the cost of delivering workshops and attract a larger pool of women participants by allowing flexible participation in training modules. In 2023-24, the Central Government's Budget had proposed an expanded digital ecosystem for skilling with the launch of a unified Skill India Digital Platform. It would be beneficial develop customized online programmes for women entrepreneurs in India that are output-oriented, hands-on or in local languages for inclusion on this platform. The delivery of business

8 https://www.mastercard.com/news/media/phwevxcc/the-mastercard-index-of-women-entrepreneurs.pdf
9 https://ifmrlead.org/wp-content/uploads/2020/11/Report_Women-Entrepreneurs-as-Powerhouse-of-Recovery-upd.pdf
10 https://unctad.org/news/making-e-commerce-and-digital-economy-work-all

training and technical assistance through digital technologies can narrow knowledge gaps and yield significant improvements in business practices and overall firm performance if the programs are well designed. Important considerations for designing these programmes include: topics covered (strategic communications, program marketing), delivery mechanisms (videos, e-learning platforms, face-to face training), and technical support) availability of IT staff for technical setup and troubleshooting (World Bank, 2021). Additionally, it is crucial for training programs designed for women entrepreneurs to incorporate an "empowerment" component. This might include individual coaching or soft-skills training, which helps women develop higher self-esteem, optimism and improved personal skills over the long term.

8. Using Technology to Access Networks

An important social-capital dimension of women's entrepreneurship ecosystem is their lower integration with formal and informal networks compared to men. This limits their ability to access business opportunities, learn from others' experiences, develop useful business contacts, and gain market information. When starting a business, women often lack access to information regarding profitable sectors, market size, and local supply and demand dynamics. Their access to networks for sharing industry-specific best practices and gaining market and price information may also be limited. The lack of mixed-gender networking confines women to low-profit, low-productivity sectors, preventing them from entering more profitable sectors traditionally dominated by men.

Several studies have noted that mentorship by established businesswomen is an important strategy for expanding business opportunities for aspiring women entrepreneurs. However, women often are not members of professional organizations or large networks. Even when they join a network, they find it difficult to actively participate due to time constraints while managing their businesses and families. Restrictive social and cultural norms further challenge their participation in networking activities.

The importance of effective networks that encourage female entrepreneurship cannot be overstated. Many challenges faced by women entrepreneurs, such as access to markets or finance, can be navigated with the help of social capital—a critical element acquired through a network of relationships. This web of social ties can provide women entrepreneurs with access to resources and information not readily available through formal channels.

Another challenge is the lack of visibility of successful role models, making it difficult for women to visualize entrepreneurial success. They also struggle to find women mentors and coaches who can groom them and provide meaningful feedback.

Establishing a digital networking mentorship platform that connects mentees with mentors and facilitates structured knowledge exchange can significantly improve access to networks for women. Under India's G-20 presidency, a proposal was put forth to establish a Mentorship Platform to promote women's leadership at all levels by enhancing and enabling access to mentorship and capacity-building through an e-platform. This platform was envisioned as a global mentoring and capacity-building portal facilitating structured knowledge exchange among women mentees and mentors of G20 nations. It would serve as an aggregator of existing subject/sector-specific mentorship portals targeting areas such as STEM, business leadership, and entrepreneurship. A pilot portal at the all-India level, connecting women entrepreneurs across states, would be a useful starting point. The mentorship, networking, knowledge sharing, capacity building, and best practices provided through this platform would benefit millions of women entrepreneurs in both rural and urban areas. Importantly, by eliminating geographical barriers to networking and connecting with mentors, such a portal would help connect budding women entrepreneurs to mentors who have successfully entered or transitioned to male-dominated sectors, thereby enabling the former to transition to these sectors.

An important social-capital dimension of women's entrepreneurship ecosystem is that they are less well integrated with formal and informal networks compared to men. This constrains the ability of women to access business opportunities, learn from the experience of others, develop useful business contacts and gain market information. Furthermore, when starting a business, women often do not have access to information regarding profitable sectors, market size and local supply and demand dynamics. Their access to networks

for sharing best practices relative to a specific industry and gaining information on markets and prices may also be limited. The lack of mixed-gender networking also tends to confine women to low-profit, low-productivity sectors, rather than enabling them to branch out into more profitable sectors which are traditionally dominated by men. Several studies have noted that mentorship by established businesswomen is an important strategy for expanding business opportunities for aspiring women entrepreneurs. However, often women are not members of professional organizations or large networks. Even when they join a network, they find it difficult to actively participate in networking activities due to their inability to devote sufficient time to networking activities while managing their businesses and families. Further, restrictive social and cultural norms make it more challenging for them to participate in networking activities.

The importance of effective networks that encourage female entrepreneurship cannot be overstated. Often many of the challenges faced by women entrepreneurs such as access to markets or finance can be navigated with the help of another key resource, namely social capital -a fundamentally critical element that can be acquired through a network of relationships. This web of social ties can often provide women entrepreneurs with access to resources and information that are not readily available through formal channels.

Another challenge often faced by women entrepreneurs is the lack of visibility of successful role models which makes it is difficult for them to visualize entrepreneurial success. They also have difficulty finding women mentors and coaches who can groom and provide them with meaningful feedback.

Establishing a digital networking mentorship platform that connects mentees with mentors and facilitates structured knowledge exchange can play an important role in improving access to networks for women. In fact, under India's G-20 presidency, a proposal to establish a Mentorship Platform to promote women's leadership at all levels by enhancing and enabling access to mentorship and capacity- building through an e-platform was put forth.[11] This platform was envisaged as a global mentoring and capacity-building portal that facilitates structured knowledge-exchange among women mentees and mentors of G20 nations. It would serve as an aggregator of existing subject/sector-specific mentorship portals targeting areas such as STEM, business leadership, and entrepreneurship. A pilot portal at the all-India level which connects women entrepreneurs across states of India would serve as a useful starting point. The mentorship, networking, knowledge sharing, capacity building and best practices provided through this platform would stand to benefit millions of women entrepreneurs across rural and urban areas. Importantly, by eliminating geographical barriers to networking and connecting with mentors, such a portal would help connect budding women entrepreneurs to mentors who have successfully entered or transitioned to male dominated sectors thereby enabling the former to transition to these sectors.

9. Conclusion

Women business owners represent a promising engine of economic inclusion and growth. Investment in women entrepreneurs makes economies more resilient and for India, in particular, it is an investment in the country's multi-dimensional growth. One of the key questions in delivering entrepreneurship support to women is whether it needs to be delivered through dedicated women-only programmes by specialist agencies or it can be integrated into mainstream programmes. Both approaches are used globally and it is argued that the approach is usually determined by social attitudes towards women in the society and the labour market. For instance, in many developed countries, where women face fewer challenges in accessing education and opportunities in the labour market, women's entrepreneurship support is delivered largely through mainstream programmes. In India, there has been a plethora of women-focused initiatives to create a conducive environment for women entrepreneurs and boost their entrepreneurial spirit. One recent key initiative has been the Women Entrepreneurship Platform, by NITI Aayog, which has helped women entrepreneurs avail the necessary information on

11 https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1916141

starting a new business and has made mentorship and incubation, among other solutions, easily accessible. As the discussion in this policy brief suggests, there is significant scope to leverage the digital advancements made by India to address the challenges faced by women entrepreneurs in accessing finance, skills, networks and markets, thereby unshackling the potential of women entrepreneurship. While male entrepreneurs too, stand to gain from these advances, for women entrepreneurs they can prove to be particularly beneficial as they help alleviate several barriers which emanate from restrictive norms that are deep-rooted in society.

Before concluding, it is important to highlight that technology also has its limitations, including gender disparities in access, ownership, and the capacity to use and engage with digital technologies. In India, a large segment of women does not have access to digital technology. According to a GSMA report (2020), there is a significant gender gap in mobile ownership and internet usage in India.[12] The report estimates that 63% of women owned a mobile phone in India compared to 79% of males. In terms of mobile internet users, the surveys estimates that the share of men stood at 42% while that of women stood at 21%. This disparity is exacerbated by the lack of digital literacy amongst women. According to the 78th round of National Sample Survey Office (NSSO) report from 2020-21, significant gender gaps exist with respect to digital literacy parameters and ICT skills. For instance, 34.6% of females reported being able to copy or move a file/folder. The corresponding ratio for men stood at 48.3%.[13] The high cost of equipment; security concerns over user location, communication logs, and breaches of personal data; and women's lower technical literacy and confidence create difficulties in accessing technology. Although technology has the potential to alleviate bottlenecks for women entrepreneurs, particularly in accessing finance and markets, fintech adoption among women remains slow. One significant challenge of increased reliance on digital technology is that women often have less control over their enterprise operations due to the digital gender divide. This divide limits their engagement with the digital aspects of their businesses. Consequently, the major barriers to technology adoption among women also translate into obstacles for women entrepreneurs seeking to leverage technology. When deploying technology, it is important to understand the full range and magnitude of the potential risks and to plan for carefully managing those risks. Policy interventions at the Central and State level that address the underlying causes of the digital gender divide is vital to enable women entrepreneurs to unlock their potential by leveraging digital technologies.

Policy Recommendations

- Enable women entrepreneurs to leverage the Account Aggregator (AA) Framework to access credit for their businesses by enhancing digital and financial literacy. Educate women about the full range of financial services available through the AA.
- Encourage women entrepreneurs to integrate with e-commerce platforms by improving their technical knowledge about these platforms, simplifying the onboarding process, and providing training on effectively marketing their products through these platforms.
- Develop customized online training programs for women entrepreneurs that are output-oriented, hands-on, and available in local languages. These programs should be well-designed in terms of topics covered, delivery mechanisms, and technical support. They should also incorporate an "empowerment component," including soft-skills training to help women develop higher self-esteem.
- Establish a digital networking mentorship platform that connects mentees with mentors and facilitates structured knowledge exchange among women entrepreneurs. A pilot portal at the all-India level, connecting women entrepreneurs across different states, could be initiated.

12 https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2020/05/GSMA-The-Mobile-Gender-Gap-Report-2020.pdf

13 https://sansad.in/getFile/loksabhaquestions/annex/1712/AU3258.pdf?source=pqals

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