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Barriers and Enablers of Women Entrepreneurs in the Digital Start-Up Ecosystem

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Abstract

This study investigates the barriers and enablers shaping the performance of women entrepreneurs in India's digital start-up ecosystem. Grounded in Social Role Theory, Entrepreneurial Ecosystem Theory, the Resource-Based View, and digital financial inclusion frameworks, the research examines the influence of digital capability, fintech access, and socio-cultural barriers on perceived venture performance. Using a descriptive and cross-sectional design, primary data were gathered from 166 women entrepreneurs operating digitally-enabled businesses across Tier 1, 2, and 3 cities in India. Data were analysed using descriptive statistics, reliability testing (Cronbach's alpha), Pearson correlation, and multiple regression. Results indicate a moderate level of digital participation across all constructs, with composite means clustering around 3.0 on a five-point Likert scale. Reliability diagnostics revealed psychometric limitations in the measurement instrument, and all three hypotheses were statistically unsupported. Despite these measurement challenges, the descriptive and regression evidence suggests that women entrepreneurs in this sample occupy a state of partial digital integration — operationally engaged with digital tools but not yet experiencing substantial performance uplift from digitalization. The study contributes to the growing discourse on gendered digital entrepreneurship in emerging economies and underscores the need for refined measurement instruments, more diverse sampling, and longitudinal research designs.

Keywords: *Women entrepreneurship; Digital start-up ecosystem; Digital capability; Fintech access; Socio-cultural barriers; Venture performance; India*

INTRODUCTION AND REVIEW OF LITERATURE

Introduction

The subject of women entrepreneurship has gained growing significance as a global research priority, residing at the intersection of economic growth, social inclusion, innovation, and gender justice. In the contemporary digital economy, women are not merely conventional small business founders they are e-commerce entrepreneurs, app-based service providers, digital platform creators, social commerce sellers, fintech users, and early-stage digital start-up founders. The digital start-up ecosystem encompassing mobile internet, cloud computing, digital payments, social media, data-driven marketing, accelerators, incubators, and venture finance has demonstrably reduced certain entry barriers that historically constrained women entrepreneurs. However, it has not eliminated structural inequality.

Women remain disproportionately exposed to restrictive social norms, unpaid care burdens, financing bias, skill gaps, and limited access to strategic networks. This duality digitalization as potential equalizer versus gendered institutions as persistent constraints forms the core analytical tension motivating this research. A two-fold analytical lens is thus indispensable: digitalization as an enabler operating alongside gendered institutional factors as ongoing impediments.

India presents a particularly pertinent context for this investigation. The country has experienced rapid

growth in mobile connectivity, digital payment infrastructure (notably the Unified Payments Interface), Jan Dhan financial inclusion initiatives, Aadhaar-linked identity systems, and a vibrant fintech ecosystem. These developments have created conditions conducive to women-led digital ventures by reducing dependence on physical banking and geography-bound markets. Simultaneously, however, the advantages of digitalization remain unevenly distributed across urban-rural divides, education levels, digital literacy, family support structures, and financial confidence. India's digital economy is therefore not inherently inclusive; its inclusiveness must be established empirically, especially for women entrepreneurs.

This paper examines these dynamics through the lens of barriers and enablers of women entrepreneurs in the digital start-up ecosystem. It frames the digital start-up ecosystem as a gendered arena where entrepreneurial success is mediated by digital capability, access to fintech, ecosystem infrastructure, and socio-cultural constraints. The essential research concern is not merely whether women are present in the digital economy, but whether they can translate digital participation into venture performance, financial autonomy, and sustainable growth on equitable terms.

Statement of the Research Problem

Despite heightened visibility of women-led enterprises in online retail, content commerce, fintech-enabled micro-enterprise, and digital professional services, academic and policy discourse continues to oscillate between two simplistic positions. The first asserts that digital technology inherently democratizes entrepreneurship by reducing transaction costs and expanding market access. The second emphasizes that women continue to suffer from foundational structural disadvantages in finance, technology, and institutional access. The tension between these positions constitutes the research problem.

The existing literature demonstrates that women entrepreneurs can employ digital tools for marketing, customer engagement, payment collection, and alternative financing. Yet the same literature shows that digitalization does not automatically eliminate gendered social norms, information asymmetry, limited property ownership, low financial confidence, or under-representation in high-growth funding networks. The adoption of digital tools does not guarantee participation in digital opportunity. This contradiction raises the central research problem: what actually enables women entrepreneurs to capitalize on the digital start-up ecosystem, and what barriers persist even within digitally advanced environments?

The problem is especially pronounced in India, where the fintech and digital payment revolution has outpaced the social transformation needed to ensure equitable entrepreneurial representation. Despite the ubiquity of digital payments, mobile banking, and online commerce, women in business vary substantially in their capacity to leverage these platforms for business gain. Rural-urban divides, linguistic barriers, education levels, safety perceptions, family norms, and venture capital bias collectively shape a highly differentiated digital entrepreneurship landscape.

Review of Literature

A substantial and growing body

of literature examines the intersection of gender, digital technology, and entrepreneurship. The following synthesis organizes key contributions around the central themes of this research.

Olsson and Bernhard (2021) explored how women in small businesses embrace digitalization through experimentation, informal learning, and collaboration with digitally proficient employees. Social media emerged as a critical growth driver; however, the study also identified digital stress, resource limitations, and continuous online presence demands as significant challenges. Digitalization, in their framing, constitutes a form of daily capability-building labor rather than a simple tool adoption.

Swartz, Scheepers, and Toefy (2022) examined opportunity identification among South African women entrepreneurs in digital platform ventures, finding that social purpose, corporate experience, exposure to structural inequality, and aspirations for scalability collectively shape how women perceive and pursue digital opportunities. This research highlighted that digital entrepreneurship is both a market strategy and a response to systemic exclusion, contingent upon gender, generation, and national context. Wang, Li, Wu, Ling, and Long (2023) tested whether digitalization neutralizes gender bias in entrepreneurial finance through the examination of female-led crowdfunding campaigns. Their results demonstrated that digitalization does not fully remove gendered expectations campaigns employing masculine-coded presentations outperformed feminine-coded ones, confirming that digital finance platforms can expand access while simultaneously reproducing legitimacy norms that disadvantage women.

Peter, Geetha, and Gupta (2024) investigated how digital financial literacy, financial competency, and financial skills affect decision-making in women-owned businesses during the fintech era, based on survey evidence from India. They established that digital financial behavior has become a strategic, rather than merely administrative, activity underscoring the pivotal role of digital confidence in women-owned enterprises navigating conditions of financial uncertainty.

Khodor, Aranega, and Ramadani (2024) studied the role of digitalization and innovation on women's entrepreneurial orientation and sustainable start-up intention in Lebanon, demonstrating that digitalization enhances entrepreneurial intention when women can develop adaptive organizational capabilities, thus linking digital access to innovation capacity and sustainable venture creation.

Huang, Zhang, Xu, Yuan, Zhang, and Huang (2025) employed fuzzy-set qualitative comparative analysis (fsQCA) using cross-country data to show that active female entrepreneurship is not the product of any single enabling factor but emerges from configurations of ecosystem conditions. This finding reinforces the importance of analyzing barriers and enablers as an interrelated ecosystem system rather than as isolated variables.

Peter, Elangovan, and Gupta (2025) examined how digital financial literacy contributes to financial inclusion and business performance of women entrepreneurs in India. Their findings confirmed that digital financial literacy significantly and positively impacts

financial inclusion and venture performance, but that financial behavior patterns can attenuate some of these benefits directly connecting digital engagement to the challenge of bridging the gender gap in entrepreneurial finance.

Wulandari and Kassim (2025) assessed the impact of digital microfinance on women's social, political, and economic empowerment, finding that access to digital credit enhances social and economic empowerment, though outcomes are distributed unevenly signaling that digital finance access alone is insufficient and that quality and distribution of empowerment outcomes must be examined.

Fox-Robertson and Wojcik (2024) introduced the concept of a 'triple glass ceiling' experienced by women in fintech, arising from the intersection of inequalities in finance, technology, and entrepreneurship. Their mixed-methods research confirmed persistent under-representation of women among fintech founders and executives, demonstrating that digital sectors cannot be treated as gender-neutral spaces.

Research Gaps

Despite the richness of the literature, several critical gaps remain. First, most empirical studies are conducted in developed economies; India-specific, large-scale survey-based studies examining enablers and barriers in digitally-enabled women's ventures are limited. Second, existing research tends to examine enablers and barriers in isolation rather than within a unified model that captures their simultaneous and interactive effects on venture performance. Third, the measurement instruments used in earlier studies show significant variability in psychometric rigor, making cross-study comparisons difficult. Fourth, there is insufficient empirical attention to the nuanced, partial digital integration experienced by women in Tier 2 and Tier 3 cities, which constitute the majority of India's entrepreneurial geography. This study seeks to address these gaps through a structured quantitative investigation grounded in a theoretically integrated framework.

Theoretical Underpinnings

This research is anchored in four complementary theoretical frameworks. Social Role Theory (Eagly, 1987) explains how socially constructed gender expectations influence occupational choices, leadership legitimacy, and the allocation of entrepreneurial resources providing the foundation for analyzing socio-cultural barriers. Entrepreneurial Ecosystem Theory (Isenberg, 2010; Stam & Spigel, 2016) positions entrepreneurship as embedded within a system of actors, institutions, infrastructure, markets, culture, policy, finance, and support organizations, enabling analysis of ecosystem-level enabling and constraining conditions. The Resource-Based View and Dynamic Capabilities extension (Teece, Pisano & Shuen, 1997) highlight that competitive advantage derives not merely from resource possession but from the capacity to orchestrate, combine, and redeploy resources applicable to digital skills, platform proficiency, and fintech competence as entrepreneurial assets. The Financial Inclusion and Digital Capability framework (Demirguc-Kunt et al., 2018) explains why access alone does not drive adoption; literacy, usability, trust, and perceived risk jointly determine whether women entrepreneurs can translate fintech availability into business advantage.

Together, these frameworks generate a cohesive conceptual space in which venture performance is shaped by the interplay of digital capability, fintech access, ecosystem support, and gendered social constraints.

RESEARCH METHODOLOGY

Scope of the Study

The study targets female business owners who own, co-own, and actively operate digitally-enabled ventures. The population encompasses e-commerce sellers, platform-based service providers, app-enabled companies, social-commerce enterprises, online professional service firms, fintech-associated micro and small businesses, and early-stage digital start-ups. The geographic scope is India, with an emphasis on urban and semi-urban areas where digital entrepreneurship is actively practiced but characterized by heterogeneity including metropolitan cities, Tier-2 cities, and digitally active smaller towns. Sector coverage includes retail-tech, digital services, beauty-commerce, food platforms, edtech micro-ventures, creative businesses, health and wellness commerce, and fintech-enabled MSMEs. The study adopts a cross-sectional design, capturing perceptions of barriers, enabling conditions, and venture outcomes at a single point in time. Eligible respondents must be female entrepreneurs aged 18 or above, with a minimum of six months of venture operation and use of at least one digital tool for business purposes.

Research Objectives

The study is guided by the following specific research objectives:

1. To investigate the role of digital capability and access to fintech as facilitating aspects of women entrepreneurs in the digital start-up ecosystem.
2. To extract the key socio-cultural and ecosystem-associated obstacles women in digitally-enabled enterprises face.
3. To examine the effect of the selected enablers and barriers on perceived performance and growth orientation of women-led digital ventures.
4. To derive practical implications for investors, policymakers, and corporate managers seeking to support women's digital entrepreneurship.

Research Hypotheses

Three directional hypotheses are tested:

H1: Digital capability positively and significantly influences the perceived performance of digital ventures run by women.

H2: Access to fintech and digital financial services has a positive and significant impact on the performance of women-led digital ventures.

H3: Socio-cultural barriers have a significant negative impact on the perceived performance of women-led digital ventures.

Research Design

The research adopts a descriptive, analytical, and cross-sectional design. It is descriptive in that it profiles demographic, educational, and venture characteristics of respondents. It is analytical in that it examines the associations between enablers, barriers, and perceived venture outcomes. A quantitative approach is appropriate given the hypothesis-testing orientation, the structured measurement of perceptions, and the need for regression-

based estimation of directional effects.

Sampling, Data Collection, and Variables

A combination of purposive and snowball sampling was employed to recruit 166 women entrepreneurs via incubators, women's entrepreneurship associations, LinkedIn communities, WhatsApp Business groups, university innovation cells, co-working spaces, and district industry networks. Data were collected using a structured, closed-ended questionnaire administered via Google Forms, with all constructs measured on five-point Likert scales (1 = Strongly Disagree, 5 = Strongly Agree).

The regression model is specified as: Perceived Venture Performance = β_0 + β_1(Digital Capability) + β_2(Fintech Access) + β_3(Socio-cultural Barriers) + β_4(Control Variables) + ε

DATA ANALYSIS AND INTERPRETATION

Respondent and Venture Profile

A total of 166 complete and valid responses were analysed. The sample is distributed across age groups, with the 26–35 years cohort constituting the largest segment (27.7%), followed by the 36–45 and 46–55 years groups (22.9% each). The youngest cohort (18–25 years) and the oldest (above 55 years) each comprised 13.3% of the sample, reflecting a mature rather than student-startup profile.

Geographically, the sample is biased towards Tier 2 (36.7%) and Tier 3/smaller towns (34.3%), with smaller proportions from metros (15.1%) and rural areas (13.9%). This distribution is analytically valuable as it locates the study precisely within the digitally expanding but unequal Indian ecosystem. Venture sizes are predominantly small: 27.7% employ 1–5 staff and 24.1% employ 6–10, with 12.0% operating as self-employed ventures. The dominant digital channels are Instagram (74.1%), online banking/fintech apps (69.9%), WhatsApp Business (53.6%), UPI/QR payments (52.4%), and mobile apps (51.8%), confirming that the sample represents genuinely digitally-engaged women entrepreneurs rather than non-digital business owners.

Descriptive Statistics for Constructs

All five composite means cluster closely around 3.0, indicating a consistent pattern of moderation across the theoretical constructs. This is a substantively important finding: respondents neither strongly endorse the empowering role of digital tools nor strongly endorse the constraining effects of socio-cultural barriers. The data depict a state of partial digital integration women entrepreneurs are operationally engaged in digital activity but have not yet experienced the transformative performance benefits theorized in the literature.

At the item level, the highest means are associated with confidence in learning new digital applications (M = 3.187), usefulness of digital transaction records (M = 3.163), and accessibility of government institutional support schemes (M = 3.139). The lowest means correspond to revenue and sales improvement through digital adoption (M = 2.777) and fintech-facilitated timely customer payments (M = 2.873). This divergence higher agreement with learning and administrative utility versus lower agreement with commercial outcomes suggests that digitalization in this sample is primarily operational and coordinative, rather than transformational

and growth-enabling.

Scale Reliability and Construct Validity

The reliability diagnostics reveal critical psychometric limitations. Cronbach's alpha values fall well below the 0.70 threshold acceptable in survey research for all five constructs, with several yielding negative values mathematically indicating that items within each construct are not consistently co-varying in the expected direction. Corrected item-total correlations across all constructs are near zero or negative, confirming that individual items do not cohere around a stable latent dimension.

The Kaiser-Meyer-Olkin (KMO) statistic of 0.411 is substantially below the 0.60 threshold of factorability. Bartlett's Test of Sphericity is non-significant ($\chi^2 = 288.094$, df = 300, p = 0.679), indicating that the item correlation matrix is statistically indistinguishable from an identity matrix. Collectively, these diagnostics preclude defensible exploratory or confirmatory factor analysis. The most appropriate interpretation is that the measurement instrument requires substantive revision and re-piloting before confirmatory inferences can be drawn.

Pearson Correlation Analysis

All bivariate correlations involving the dependent variable perceived venture performance are extremely weak and non-significant. Digital capability (r = −0.044, p = 0.570), fintech access (r = −0.121, p = 0.121), ecosystem support (r = 0.035, p = 0.655), and socio-cultural barriers (r = 0.008, p = n.s.) demonstrate no meaningful linear relationship with venture performance. Predictors also show minimal inter-correlations, excluding multicollinearity concerns. The absence of expected relationships at the bivariate stage presages the non-significant regression outcomes.

Multiple Regression and Hypothesis Testing

The main regression model incorporating the three theoretical predictors explains only 1.7% of variance in perceived venture performance ($R^2 = 0.017$, F = 0.960, p = 0.413). The addition of control variables marginally increased explanatory power to 2.7% (adjusted $R^2 = -0.016$, F = 0.621, p = 0.738). Inclusion of ecosystem support in a supplementary model produced no meaningful improvement ($R^2 = 0.028$). All variance inflation factors approximate 1.0, the Durbin-Watson statistic is 1.89, and the heteroskedasticity test is non-significant (p = 0.742), confirming that the non-significant results do not arise from estimation errors.

None of the three hypotheses is supported. The digital capability coefficient is small and negative (β = −0.053, p = 0.508), failing to support H1. Fintech access produces the largest absolute effect among main predictors but remains negative and non-significant (β = −0.122, p = 0.129), failing to support H2. Socio-cultural barriers yield a near-zero, slightly positive coefficient (β = 0.001, p = 0.990), failing to support H3. These results do not provide empirical grounds for the theorized relationships in the current instrument.

FINDINGS, IMPLICATIONS, AND RECOMMENDATIONS

Research Findings

This study set out to investigate the extent to which digital capability and fintech access enable and socio-cultural barriers constrain the perceived performance of women-led digital

ventures in India. The analysis was conducted on 166 valid responses from women entrepreneurs operating digitally-enabled businesses across diverse city tiers and business sectors.

The primary substantive finding is one of moderation: all five theoretical constructs digital capability, fintech access, ecosystem support, socio-cultural barriers, and perceived venture performance cluster around the midpoint of a five-point Likert scale. Respondents are moderately digitally active, moderately engaged with fintech platforms, moderately supported by ecosystem structures, moderately constrained by socio-cultural factors, and moderately satisfied with venture performance. This evidence of a partial digital integration state is the study's central empirical contribution: it challenges both the optimistic narrative of digital democratization and the pessimistic narrative of unchanging structural exclusion, locating Indian women's digital entrepreneurship in a more nuanced middle ground.

Item-level analysis reveals a telling disjuncture between administrative engagement with digital tools and commercial performance outcomes. Women entrepreneurs in this sample show relatively higher comfort with digital learning and operational use of technology but lower perceived payoff in terms of revenue growth, customer payment reliability, and formal financial access. This pattern suggests that digital tools have penetrated the operational layer of women's ventures without yet driving transformational improvements in market reach, financial returns, or growth orientation.

The psychometric analysis constitutes the study's most critical methodological finding. Cronbach's alpha values are below acceptable thresholds for all constructs, corrected item-total correlations are near zero, and the KMO/Bartlett's tests confirm insufficient factorability. This measurement failure means that inferential conclusions about barriers and enablers including the regression results must be interpreted with significant caution. The dataset represents a pre-final instrument that requires iterative refinement before robust hypothesis testing is warranted.

Theoretical Implications

The findings make several contributions to theory. First, the moderation finding is consistent with the Social Role Theory prediction that social expectations do not disappear in digital spaces they persist in attenuated form, shaping the degree to which women can leverage digital tools for performance gain without fully eliminating gendered constraints. Second, the Entrepreneurial Ecosystem Theory perspective is reinforced by the ecosystem support construct's non-significant relationship with performance, suggesting that access to ecosystem resources alone does not translate into measurable performance outcomes unless those resources are of sufficient quality and strategic relevance.

Third, the Resource-Based View predicts that it is the orchestration of resources not mere possession that drives performance. The finding that digital engagement does not automatically generate performance gains aligns with this prediction: access to digital tools is necessary but insufficient without the adaptive, strategic capability to deploy those tools for competitive advantage. Fourth, the Digital Financial Inclusion framework's expectation that literacy and usability mediate the access-performance

relationship is supported by the item-level finding that women in this sample use digital tools operationally but do not yet experience strong financial performance benefits, suggesting that usability and financial literacy barriers remain operative.

Practical Implications

For investors, the findings underscore that the presence of digital tools in a women-led venture does not automatically signal strong growth potential. Investors should conduct deeper capability assessments examining how entrepreneurs deploy digital assets strategically including platform analytics use, customer data interpretation, and fintech leverage for working capital management. Impact investors seeking to support women's digital entrepreneurship should prioritize ventures demonstrating not just digital access, but evidence of capability-building, mentorship engagement, and adaptive digital use.

For corporate managers and platform operators, the data signal an opportunity to design more targeted support structures. Digital marketplaces and fintech platforms serving women entrepreneurs should invest in embedded learning modules, simplified onboarding for financial products, and community-based peer support to bridge the operational-to-commercial digital gap. Platform-level interventions that reduce algorithmic visibility disadvantages for women-led ventures which prior research has identified as a concern would also directly address the performance translation challenge identified in this study.

For policymakers, the Tier 2 and Tier 3 geographic concentration of the sample points to the urgent need for targeted digital entrepreneurship support programs in non-metro India. While urban metro women entrepreneurs have access to accelerators, investors, and co-working communities, their Tier 2/3 counterparts operate with fewer ecosystem resources. Tailored government programs combining digital upskilling with fintech literacy, business mentoring, and peer networks would address the most actionable barriers identified in this research.

For educational institutions and incubators, the moderate ecosystem support scores suggest that existing programs are partially reaching their target beneficiaries but not yet delivering transformative impact. Redesigning incubation programs to specifically address the operational-to-performance gap through revenue generation workshops, digital marketing intensives, and fintech product clinics would address the precise gap the study identifies.

Limitations of the Study

This study acknowledges several limitations. First and most significantly, the measurement instrument demonstrated inadequate psychometric properties across all constructs, limiting the interpretive validity of the inferential findings. Future research must invest in iterative scale development, expert validation panels, and rigorous pilot testing before full data collection. Second, the cross-sectional design precludes causal inference; the observed associations even if statistically significant cannot establish directionality. Longitudinal designs would strengthen causal claims. Third, the sample, while geographically diverse, over-represents Tier 2 and 3 cities and may not be fully representative of metropolitan women entrepreneurs or rural micro-

entrepreneurs. Fourth, self-reported performance measures are susceptible to social desirability bias and recall errors; objective performance measures such as revenue records, customer growth data, or platform analytics would strengthen measurement validity. Fifth, the focus on India limits the generalizability of findings to other emerging economies without replication studies.

CONCLUSION

This research contributes to the understanding of women's digital entrepreneurship in India by empirically establishing that digital engagement among women entrepreneurs is real, moderate, and operationally meaningful but has not yet translated into strong and measurable performance outcomes. The study's central contribution is its descriptive portrait of partial digital integration: a state where women are using digital tools and fintech platforms in their day-to-day business operations without experiencing the transformational growth benefits that the enabling literature predicts.

The psychometric challenges encountered in this study, while a limitation, are themselves a contribution to the field surfacing the need for more rigorously validated measurement instruments in women's digital entrepreneurship research, especially in the Indian context. The conceptual framework, grounded in Social Role Theory, Entrepreneurial Ecosystem Theory, the Resource-Based View, and Digital Financial Inclusion perspectives, provides a robust theoretical architecture that future studies with refined instruments can operationalize more effectively.

Ultimately, this study reaffirms that digital access and digital empowerment are not synonymous. The digital start-up ecosystem offers genuine opportunity for women entrepreneurs in India but transforming that opportunity into equitable venture performance requires capability development, ecosystem quality improvement, socio-cultural change, and fintech literacy investment in equal measure.

SCOPE FOR FUTURE RESEARCH

Future research should pursue several directions. First, a full psychometric revision of the measurement instrument incorporating cognitive interviewing, expert panel review, and iterative pilot testing is an immediate priority. Second, longitudinal studies tracking the same cohort of women entrepreneurs over 2–5 years would enable causal inference about the performance effects of digital capability and fintech access. Third, comparative studies across India, Bangladesh, Nigeria, Kenya, and Indonesia all of which present similar digital entrepreneurship development dynamics would test the cross-national generalizability of the framework. Fourth, qualitative studies exploring the lived experience of women entrepreneurs who have successfully transitioned from operational to transformational digital use would yield insights not accessible through survey instruments. Fifth, platform-level data studies using actual transaction and performance records from digital marketplaces would complement self-reported survey data with objective performance evidence.

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Variable	Type	Measurement	Items
Digital Capability	Independent	5-point Likert	5 items
Fintech Access	Independent	5-point Likert	5 items
Socio-cultural Barriers	Independent	5-point Likert	5 items
Ecosystem Support	Supplementary	5-point Likert	5 items
Perceived Venture Performance	Dependent	5-point Likert	5 items
Control Variables	Control	Nominal/Ordinal	Age, education, sector, city tier, years in operation

Variable	Category	n	%
Age Group	26–35 years	46	27.7
	36–45 years	38	22.9
	46–55 years	38	22.9
	Above 55 years	22	13.3
	18–25 years	22	13.3
City Tier	Tier 2	61	36.7
	Tier 3 / Smaller town	57	34.3
	Metro / Tier 1	25	15.1
	Rural / Semi-rural	23	13.9
Marital Status	Widowed	47	28.3
	Divorced	43	25.9
	Married	36	21.7
	Single/Other	40	24.1

Construct	Composite Mean	Std. Dev.	Interpretation
Digital Capability	3.005	1.239	Moderate digital engagement

Construct	Composite Mean	Std. Dev.	Interpretation
Fintech Access	2.998	1.221	Moderate fintech usage
Ecosystem Support	3.034	1.235	Slightly above-midpoint support
Socio-cultural Barriers	2.961	1.228	Moderate barrier perception
Perceived Venture Performance	3.005	1.274	Moderate performance perception

Construct	Cronbach's Alpha	KMO Value	Bartlett's p-value	Assessment
Digital Capability	0.097	0.411	0.679	Inadequate reliability
Fintech Access	-0.028	0.411	0.679	Inadequate reliability
Ecosystem Support	0.196	0.411	0.679	Low reliability
Socio-cultural Barriers	-0.067	0.411	0.679	Inadequate reliability
Perceived Venture Performance	-0.005	0.411	0.679	Inadequate reliability

Variable	DC	FA	ES	SB	PVP
Digital Capability (DC)	1.000	—	—	—	—
Fintech Access (FA)	-0.031	1.000	—	—	—
Ecosystem Support (ES)	0.085	-0.001	1.000	—	—
Socio-cultural Barriers (SB)	0.086	-0.007	0.024	1.000	—
Perceived Venture Performance (PVP)	-0.044	-0.121	0.035	0.008	1.000

Hypothesis	Predicted Direction	Standardized Beta	p-value	Decision
H1: Digital Capability → Performance	Positive (+)	−0.053	0.508	Not Supported
H2: Fintech Access → Performance	Positive (+)	−0.122	0.129	Not Supported
H3: Socio-cultural Barriers → Performance	Negative (−)	+0.001	0.990	Not Supported