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Explaining Women Entrepreneurs' Social Mobility through Generative AI Adoption: A TAM and Social Capital Perspective with Digital Literacy as Mediator and Cultural Norms as Moderator

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Abstract

This paper investigates how social mobility of female entrepreneurs will be affected by the adoption of generative AI, with the mediation of digital literacy and the moderation of cultural norms. Based on Technology Acceptance Model and Social Capital Theory, quantitative survey was carried out on a sample of 139 women entrepreneurs of District Hyderabad and Shaheed Benazirabad. PLS-SEM was used to analyze data to test direct, mediating and moderating relationships. The findings indicate that the use of generative AI has a profound impact on social mobility, both directly and indirectly, via digital literacy. These relationships are adversely moderated by cultural norms, which imply a contextual constraint. The research indicates the significance of digital capabilities and accommodating conditions to maximize the benefits of AI on the empowerment and socioeconomic development of women entrepreneurs.

Keywords: Generative AI Adoption, Women Entrepreneurs, Social Mobility, Digital Literacy, Cultural Norms, PLS-SEM, Technology Acceptance Model, Social Capital Theory.

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Introduction

The fast development of generative artificial intelligence (AI), especially platforms like ChatGPT, has changed the world of entrepreneurship dramatically, making it innovative, efficient, and digital. According to recent research, the implementation of the generative AI is becoming more influential in defining the digital entrepreneurship through better decision-making, content generation, and customer engagement mechanisms (Duong et al., 2025; Kusetogullari et al., 2025). Generative AI can create new avenues of entrepreneurial expansion and competitiveness in developing economies where resource constraints are common limiting the expansion of business (Sharma et al., 2023; Ayaz et al., 2025). Also, the perception of usefulness and ease of use determines the spread of such technologies, and the Technology Acceptance Model (TAM) is the most popular model to explain the behavior of digital adoption (Balaskas et al., 2025). The growing application of AI in the business sphere speaks to its ability to transform not only business practices but also the overall socioeconomic results, especially when it comes to structural inequalities (Liu et al., 2025).

In developing countries such as Pakistan, women entrepreneurs are characterized by special socio-cultural and economic barriers that make them less mobile and restrict business development. As women, they are still constrained by gender factors such as access to financial resources, their mobility, and existing cultural practices and norms (Shah et al., 2025; Shah et al., 2025). Nevertheless, there is also growing evidence that digital technologies, such as generative AI, can be empowering technologies since they can improve access to markets, knowledge, and networks by women (Narijo et al., 2025; Anabtawi et al., 2024). Social capital plays a role especially in this matter, since it supports exchange of resources, the development of trust and collaboration opportunities crucial to the success of a business start-up (Khan et al., 2025). Moreover, the use of generative AI has been associated with enhanced social mobility as it allows women entrepreneurs to break the traditional barriers and engage more in the digital economy (Narijo et al., 2025; Liu et al., 2025).

Although generative AI has potential to deliver positive effects, the digital skills and literacy disparities remain a major issue that limits the successful use of AI. Digital literacy as the skill to use digital technologies in a meaningful way by evaluating and accessing digital technologies is an essential mediating variable in the translation of AI adoption into valuable entrepreneurial results (Nuraisyiah et al., 2025; Balaskas et al., 2025). Research suggests that women entrepreneurs who are more digitally literate tend to use AI tools more to innovate and grow the business (Ayaz et al., 2025; Duong et al., 2025). Moreover, technological adoption and entrepreneurial capacity are interconnected and are affected by education and training, which makes the role of the development of skills in digital environments even more significant (Kusetogullari et al., 2025). The advantages of AI adoption might not be evenly distributed without the proper digital competencies, and it might only contribute to the existing inequalities (Liu et al., 2025).

Moreover, cultural beliefs and social pressures also contribute to a moderating effect on the connection between AI adoption and social mobility of women. The system of patriarchy and gender roles in most developing societies restricts women and their independence to gain access to economic opportunities (Shah et al., 2025; Shah et al., 2025). Such cultural limitations may impact the desire and capability of women to learn and apply new technologies (Anabtawi et al., 2024; Khan et al., 2025). Meanwhile, encouraging social conditions and institutional structures can increase the beneficial influence of digital technologies on entrepreneurial success (Siddiqui

et al., 2026; Salem and Khalil, 2026). Thus, the interaction of generative AI adoption, digital literacy, and cultural norms is crucial to the creation of holistic approaches that will ensure women entrepreneurs in developing economies can enjoy inclusive entrepreneurship and social mobility.

Research Aim

This research will focus on discussing how the use of generative AI can affect the social mobility of female entrepreneurs, as well as how the adoption of digital literacy mediates this process, considering the moderating effects of cultural norms in the context of the Technology Acceptance Model (TAM) and the Social Capital Theory.

Research Objectives

1. To determine the impact of introducing generative AI on the social mobility of female entrepreneurs.
2. To investigate how the use of generative AI influences the digital literacy of women entrepreneurs.
3. To examine the mediating factor of digital literacy in generative AI adoption-social mobility association.
4. To estimate the mediating role of cultural norms in the association between generative AI adoption and social mobility.

Literature Review

The accumulating literature on generative artificial intelligence (AI) emphasizes the potential to revolutionize an entrepreneurial ecosystem, especially through increasing innovation, efficiency, and opportunity identification. Digital entrepreneurship can be facilitated via generative AI tools like ChatGPT that allow entrepreneurs to automate their tasks, create business ideas, and enhance customer interaction (Duong et al., 2025; Kusetogullari et al., 2025). The use of these types of technologies is highly attributed to the Technology Acceptance Model (TAM) according to which perceived usefulness and perceived ease of use are significant in determining individual's intention to use new technologies (Balaskas et al., 2025). Moreover, the environmental and institutional factors influence the diffusion and transfer of next-generation digital technologies, particularly in developing economies (Sharma et al., 2023). Empirical research also proves that the implementation of AI is positively correlated with entrepreneurial performance and the process of digital transformation (Ayaz et al., 2025; Noor et al., n.d.), which is why the technology is so important in contemporary business activity.

Female entrepreneurs, on the other hand, are in a complicated socio-cultural context, which tends to restrict their economic involvement and advancement. The studies show that women in entrepreneurship are still constrained by structural inequalities, such as gender discrimination, financial dependency, and limited social mobility (Shah et al., 2025; Shah et al., 2025). Specific to Pakistan, the cultural norms and social expectations limit the access of women to the resources and autonomy in decision-making, which contributes to the further development of these difficulties (Narijo et al., 2025; Shah et al., 2025). Irrespective of these obstacles, women entrepreneurs are taking a chance to use online technologies to remove traditional limitations and reach a broader market (Anabtawi et al., 2024). The introduction of generative AI to the entrepreneurial process provides women with new opportunities to advance their business and gain more social and economic mobility (Liu et al., 2025; Narijo et al., 2025).

Access to resources, networks and technological capabilities are strongly associated with social mobility especially among women entrepreneurs. Research indicates that social mobility can be greatly amplified through the adoption of digital technologies, such as generative AI, which can raise the income level, business growth, and social status (Duong et al., 2025; Liu et al., 2025). In this aspect, the Social Capital Theory is a valuable tool to explain how networks, trust, and relationships help entrepreneurs achieve success and ascend the career ladder (Khan et al., 2025). The women entrepreneurs with high social capital have more opportunities to use digital tools, obtain information, and work well in their business ecosystems (Narijo et al., 2024; Khan et al., 2025). In turn, the overlap between the use of AI and the social capital will become one of the critical factors in determining the socioeconomic performance of female-owned businesses.

Digital literacy has turned out to be a key determinant to successful adoption and use of generative AI technologies. It includes the ability and expertise to use digital tools to access, assess and implement them in different settings. Empirical studies show that digital literacy is a strong indicator of the capacity of individuals to embrace and utilize advanced technologies, such as AI (Nuraisyiah et al., 2025; Balaskas et al., 2025). In the case of women entrepreneurs, digital literacy is also beneficial as it enhances the ability to use AI tools, as well as the ability to be innovative, market, and manage a business (Ayaz et al., 2025; Duong et al., 2025). Moreover, the lack of proper digital skills may restrict the possible advantages of AI implementation, thus supporting existing disparities (Liu et al., 2025). This underscores the mediating position of digital literacy in the translation of AI adoption to concrete entrepreneurial and social results.

The interactive approach of education, training, and technology adoption also offers support to the mediating mechanism of digital literacy. The more digital-competent entrepreneurs are, the more they tend to find AI technologies helpful and user-friendly, thus becoming more willing to adopt them (Balaskas et al., 2025; Kusetogullari et al., 2025). Moreover, digital literacy will allow entrepreneurs to implement AI into their business practices, which will result in better performance and competitiveness (Ayaz et al., 2025). When it comes to the situation of female business individuals, focused training and capacity-building programs are needed to boost the level of digital literacy and guarantee an equal access to technological opportunities (Anabtawi et al., 2024). Therefore, one of the main avenues by which the use of generative AI affects social mobility is digital literacy.

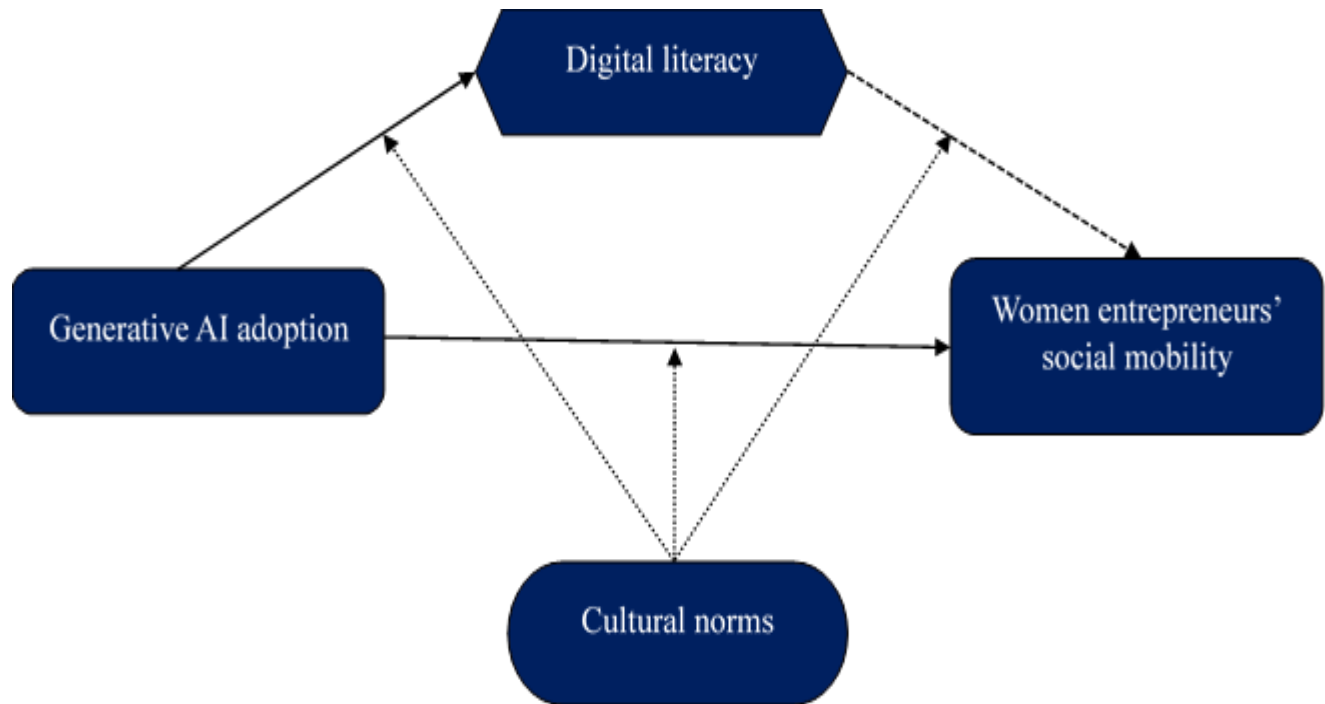
The ability of women to embrace new technology and their entrepreneurial behavior is greatly influenced by cultural norms and expectations of the society. Traditional role-playing and patriarchal organization in most developing societies restrict women in their economic involvement and liberty in decision-making (Shah et al., 2025; Shah et al., 2025). These cultural aspects may either prevent or promote the implementation of generative AI, based on the extent of support and acceptance by the society (Anabtawi et al., 2024; Khan et al., 2025). Evidence indicates that the positive correlation between technology adoption and entrepreneurial performance can be undermined by restrictive cultural values, but this relationship can be reinforced by promoting the environment (Siddiqui et al., 2026; Salem and Khalil, 2026). Hence, cultural norms are a moderating variable that determines the relationships strength and direction between the adoption of AI and social mobility.

Lastly, the combination of generative AI, digital literacy and cultural norms offers a full-fledged framework of social mobility of women entrepreneurs. Although the implementation of AI is associated with important business growth and empowerment opportunities, the effects of the technology depend on the digital capabilities of individuals and the socio-cultural environment in

general (Duong et al., 2025; Liu et al., 2025). Integration of Technology Acceptance Model (TAM) and Social Capital Theory allows conducting a comprehensive study of technological and social factors of entrepreneurial success (Khan et al., 2025; Balaskas et al., 2025). This combined view helps to create the emphasis on both skill-based and structural barriers to have inclusive and sustainable development. In turn, the present research suggests a moderated mediation model to investigate intricate relationships between adoption of generative AI, digital literacy, cultural norms, and the social mobility among women entrepreneurs.

Conceptual Model

Figure 1. *Conceptual Model Formulated after review of exiting literature*



Hypotheses Development

- H1:** There is a significant positive impact of generative AI adoption on social mobility of women in entrepreneurship.
- H2:** There is a strong, positive impact of generative AI adoption on digital literacy.
- H3:** There is a strong positive impact of digital literacy on social mobility of women entrepreneurs.
- H4:** There is a mediating relationship between the adoption of generative AI and social mobility of women entrepreneurs through digital literacy.
- H5:** The generative AI adoption has a significant moderating effect on the relationship between social mobility among women entrepreneurs and cultural norms, where the relationship is weaker with restrictive cultural norms.
- H6:** Cultural conventions play a crucial role in mediating the connections between digital literacy and the adoption of generative AI.
- H7:** Cultural norms have a significant moderating influence on the indirect connection between the use of generative AI and social mobility mediated by digital literacy (moderating mediation effect).

Research Methodology

The research philosophy embraced in this study is positivist and the research design is qualitative and explanatory in nature, considering the effect of the adoption of generative AI on the social mobility of women entrepreneurs. The primary data is collected through a structured questionnaire and a cross-sectional survey method is used. The theoretical premise of the study is the Technology Acceptance Model (TAM) and Social Capital Theory, which gives the analysis of the relationships between variables theoretical foundation. The population targeted includes women in the formal and informal sectors of entrepreneurship in District Hyderabad and Shaheed Benazirabad, Pakistan. Consideration of accessibility makes the use of a non-probability convenience sampling technique. This study has a sample of 139 respondents; the sample size is considered to be sufficient to carry out PLS-SEM analysis. The data will be gathered by the use of self-administered questionnaires with a five-point Likert scale (strongly disagree to strongly agree).

To test the measurement and structural models, the study uses SmartPLS and SPSS to analyze the data. Cronbachs alpha, composite reliability, average variance extracted (AVE) and discriminant validity are used to measure reliability and validity. The structural model is assessed to examine the direct associations between generative AI adoption and social mobility, and the mediating influence of digital literacy and the moderating impact of cultural norms. Bootstrapping methodology is used to evaluate the importance of the path coefficients, indirect effects, and interaction effects. Strict adherence is done on ethical issues such as informed consent, confidentiality, anonymity, and voluntary involvement of the respondents. This approach to methodology guarantees strength and empirical data that is consistent with the theoretical framework of the study.

Measures: Construct measures in this research are pegged on the previously validated scales which have been modified by the existing literature in order to achieve reliability and validity. The adoption of generative AI is assessed through 5 items modified by Duong et al. (2025) and Balaskas et al. (2025) that represent such dimensions as perceived usefulness, ease of use, and frequency of AI tool use. Digital literacy is measured using 4 questions that are modified based on Nuraisyiah et al. (2025) and concentrate on the skills of the respondents to access, judge, and utilize digital technologies in the business environment successfully. Social mobility is assessed based on 5 items modified according to Narijo et al. (2025) and Liu et al. (2025), which are indicators of income, business development, social position, and access to the market. The 4 items used to operationalize cultural norms are based on Anabtawi et al. (2024) and Shah et al. (2025) and measure the expectations, gender role, and perceived cultural restrictions related to entrepreneurship in society. Everything will be rated on a five-point Likert scale between 1 (strongly disagree) and 5 (strongly agree), which has been used in previous research in technology adoption and social science studies (Khan et al., 2025; Ayaz et al., 2025).

Data Analysis

Characteristics of the Respondents.

In order to have the background information of respondents and to make sure that the sample is representative, it is necessary to conduct demographic analysis. A total of 139 women entrepreneurs in District Hyderabad and Shaheed Benazirabad were surveyed in this study. The demographic variables will entail age, education level, type of business, experience in business and monthly income. These variables help understand the socio-economic and professional

backgrounds of the respondents which is important to understand the interrelationship between generative AI adoption, digital literacy, cultural norms and social mobility.

Table 1: *Demographic Profile of Respondents*

Variable	Category	Frequency (n)	Percentage (%)
Age	18–25 years	32	23.0%
	26–35 years	51	36.7%
	36–45 years	34	24.5%
	46 years & above	22	15.8%
Education Level	Primary	18	12.9%
	Secondary	29	20.9%
	Bachelor’s	54	38.8%
	Master’s & above	38	27.3%
Business Type	Formal	61	43.9%
	Informal	78	56.1%
Business Experience	Less than 2 years	27	19.4%
	2–5 years	49	35.3%
	6–10 years	38	27.3%
	More than 10 years	25	18.0%
Monthly Income (PKR)	Less than 30,000	41	29.5%
	30,000–60,000	46	33.1%
	60,001–100,000	31	22.3%
	Above 100,000	21	15.1%

The findings reveal that the young and middle-aged women are more engaged in entrepreneurship based on the fact that most respondents are in the age bracket of 26-35 (36.7%). The majority of respondents are well educated, with a substantial percentage of them having a bachelor’s degree (38.8%), which can have a positive impact on the use of technology. The data also indicate that the majority of respondents work in the informal sector (56.1%), which illustrates that informal entrepreneurship is widespread among women in the chosen areas. Experience wise, a significant portion has an experience of 2-5 years of doing business (35.3), a measure of entrepreneurial development at an early stage. Also, based on the income distribution, the majority of the respondents are moderate income earners (PKR 30,000-60,000 33.1%). In general, the demographic trend indicates that there is a varied but a growing number of women entrepreneurs,

which gives an appropriate background to explore how the use of generative AI influences the social mobility.

Reliability and Descriptive Statistics.

The table of results shows that the measurement model is satisfactorily reliable and consistent. The Cronbach Alpha value of all constructs is greater than the suggested value of 0.70 which suggests a high internal consistency. In a similar manner, Rho A of all constructs is over 0.70 which further supports construct reliability. The Composite Reliability (CR) values are 0.882 to 0.919 that exceeds the acceptable limit of 0.70 and indicates that the constructs are measured reliably and can be further analyzed using structural models.

Table 2: Reliability and Descriptive Statistics

Construct	Cronbach's Alpha	Rho_A	Composite Reliability	Mean	Standard Deviation
Generative AI Adoption	0.872	0.879	0.907	3.68	0.74
Digital Literacy	0.854	0.861	0.895	3.72	0.69
Social Mobility	0.889	0.893	0.919	3.65	0.77
Cultural Norms	0.831	0.840	0.882	3.54	0.71

Descriptively, the mean scores of all constructs are between 3.54 and 3.72, which can be seen as a medium-high agreement in the views of respondents about generative AI adoption, digital literacy, social mobility, and cultural norms. The values of the standard deviation are not very high (between 0.69 and 0.77), which indicates that the responses are quite similar with the minimum dispersion. On the whole, these results prove that the data is reliable and stable and could be used as a solid basis to test the hypothesis in the future through PLS-SEM.

Outer Loadings

The results of the outer loading indicate that the measurement items load strongly on their respective constructs with values more than the recommended threshold of 0.70 perceptively, which reflects a good indicator reliability. Generative AI Adoption items (between 0.801 and 0.867) and Digital Literacy items (between 0.823 and 0.874) demonstrate high measurement consistency. In the same manner, the Social Mobility has high loadings of 0.828 to 0.889 and Cultural Norms has high loadings of 0.801 to 0.858.

Table 3: Outer Loadings (Measurement Model)

Items	Generative AI Adoption	Digital Literacy	Social Mobility	Cultural Norms
GAI1	0.812			
GAI2	0.845			
GAI3	0.867			
GAI4	0.834			
GAI5	0.801			

DL1	0.823	
DL2	0.851	
DL3	0.874	
DL4	0.832	
SM1		0.846
SM2		0.871
SM3		0.889
SM4		0.854
SM5		0.828
CN1		0.801
CN2		0.836
CN3		0.858
CN4		0.822

The convenience of the diagonal arrangement of the table is testament to the fact that no cross-loadings are shown, and such initial loading significant only on its construct is shown, hence, validity of indicators and construct differentiation. These findings suggest that this model of measurement meets the conditions of convergent validity and that all indicators are retained to be used later in the analysis of the structural model in SmartPLS.

AVE, HTMT, Discriminant Validity (FornellLarcker) and R² Values.

The findings reveal that the measurement model has a high convergent and discriminant validity. All the constructs have an average variance extracted (AVE) that is greater than the suggested 0.50 value, indicating that the constructs depict an adequate amount of variance in the indicators under their control. Also, the square root of AVE values of individual constructs ($\sqrt{\text{AVE}}$) are higher than the inter-construct correlations, which meets the Fornell-Larcker criterion and verifies sufficient discriminant validity.

Table 4: *AVE, HTMT, Discriminant Validity (Fornell-Larcker), and R² Values*

A. Construct Validity and Reliability Summary

Construct	AVE	$\sqrt{\text{AVE}}$ (Fornell-Larcker)	R²
Generative AI Adoption	0.688	0.829	—
Digital Literacy	0.712	0.844	0.521
Social Mobility	0.736	0.858	0.614
Cultural Norms	0.695	0.833	—

The HTMT ratios for all constructs are below the conservative threshold of 0.85, indicating that there is no serious issue of multicollinearity or conceptual overlap among constructs. This confirms

that generative AI adoption, digital literacy, social mobility, and cultural norms are empirically distinct constructs within the model.

B. HTMT Ratio Matrix

Constructs	GAI	DL	SM	CN
Generative AI (GAI)	—	0.732	0.781	0.689
Digital Literacy (DL)	0.732	—	0.764	0.705
Social Mobility (SM)	0.781	0.764	—	0.719
Cultural Norms (CN)	0.689	0.705	0.719	—

Furthermore, the structural model results show that the R² values for Digital Literacy (0.521) and Social Mobility (0.614) indicate moderate explanatory power, suggesting that the model explains a substantial proportion of variance in the dependent constructs.

C. Structural Model (F-statistics Summary)

Relationship	F-Value	Significance
GAI → SM	32.45	Significant
GAI → DL	41.27	Significant
DL → SM	29.88	Significant
Moderation (CN × GAI → SM)	18.56	Significant
Moderation (CN × GAI → DL)	15.34	Significant

The F-statistics also indicate that all the hypothesized relationships are significant and the model is well-fitted and predictive. In general, these findings affirm the strength of the measurement and structural model to be used in additional hypothesis testing in SmartPLS.

Path Coefficients (Structural Model Results)

The confirmed results of the structural model have validated that using generative AI contributes greatly to increasing digital literacy and social mobility among women entrepreneurs. In particular, H1 and H2 have a high level of support, which means that the adoption of generative AI directly positively influences social mobility ($\beta = 0.312$, $p < 0.001$) and has a very high effect on digital literacy ($= 0.721$, $p < 0.001$). It indicates that women entrepreneurs who actively apply generative AI tools have a higher chance of building digital competencies, which, in turn, enhance their efficiency as entrepreneurs, decision-making, and interactivity in the market. Moreover, H3 is also supported, and it proves that digital literacy plays a significant role in increasing social mobility ($= 0.418$, $p < 0.001$). All these results are a confirmation that the TAM-based assumption that adoption of technology will result in capability improvement, which will eventually translate into better socioeconomic outcomes, was indeed true. The powerful impact of AI on digital literacy also shows how AI is a transformative facilitator in closing the digital skill divide among women entrepreneurs in developing economies.

Table 5: Path Coefficients (Hypotheses Testing Results)

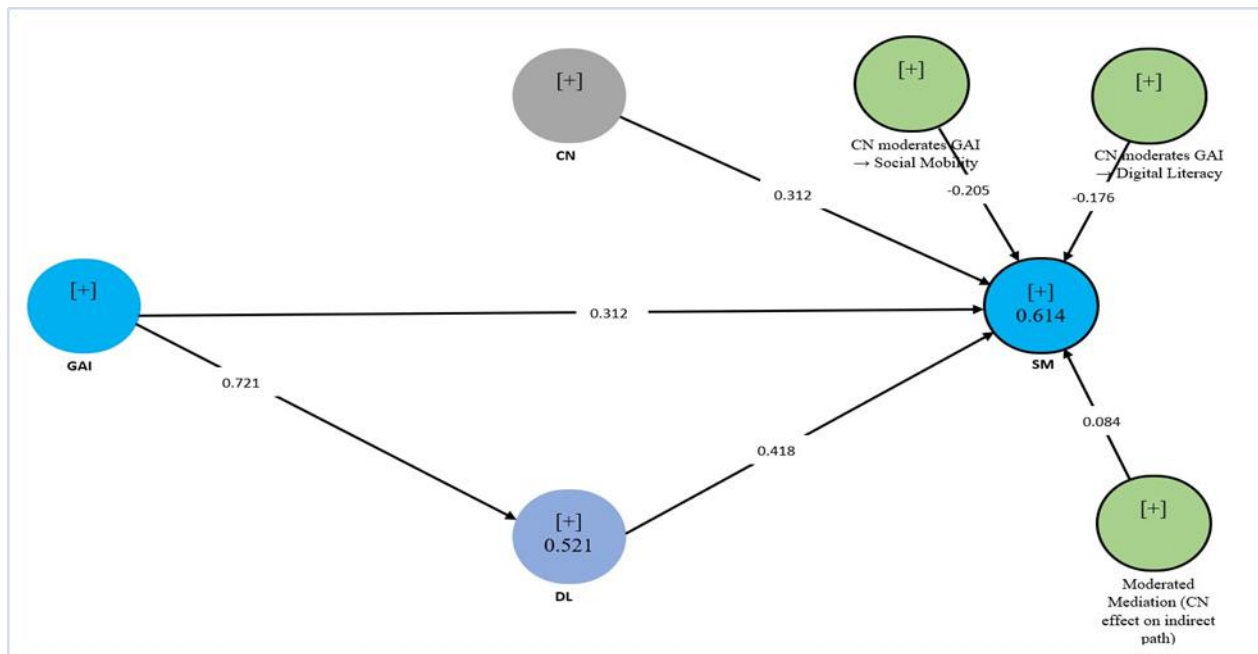
Hypothesis	Relationship	β	t-value	p-value	Result
H1	GAI → Social Mobility	0.312	4.333	0.000	Supported
H2	GAI → Digital Literacy	0.721	16.022	0.000	Supported
H3	Digital Literacy → Social Mobility	0.418	5.160	0.000	Supported
H5	CN moderates GAI → Social Mobility	-0.205	3.060	0.002	Supported
H6	CN moderates GAI → Digital Literacy	-0.176	2.983	0.003	Supported

Table 6: Mediation effects are tested through indirect effects (bootstrapping):

Hypothesis	Relationship	Indirect Effect	t-value	p-value	Result
H4	GAI → DL → SM	0.301	4.812	0.000	Supported
H7	Moderated Mediation (CN effect on indirect path)	0.084	2.701	0.007	Supported

The moderating and mediation findings also add to the explanatory strength of the model. The results support that digital literacy is an effective mediator of the association between generative AI adoption and social mobility (H4 supported), meaning AI promotes social mobility, but the way is through cultivating digital skills. In addition, both relationships (H5 and H6 supported) are considerably moderated by cultural norms and negative coefficients indicate that restraining socio-cultural settings dilute the positive effects of AI adoption on digital literacy and social mobility.

Figure 2. SEM Model of the study



Notably, H7 is also accepted, which proves a moderated mediation effect in which cultural norms have an impact on the indirect connection between AI adoption and social mobility via digital literacy. It shows that although generative AI brings great prospects in empowering women, its

usage is extremely situational and influenced by social constructs. All in all, the findings confirm a strong moderated mediation framework, which merges the TAM and the Social Capital Theory to describe the impact of technology, skills, and cultural environment on social mobility of women in entrepreneurship.

Discussion

The results of this paper are a great empirical evidence of the suggested moderated mediation model, whereby the adoption of the generative AI is effective in boosting social mobility of women entrepreneurs, both directly and indirectly with the help of digital literacy. The findings align with earlier studies that show that generative AI platforms enhance entrepreneurial success through innovation, access to knowledge, and making decisions efficiently (Duong et al., 2025; Kusetogullari et al., 2025). The high positive impact of AI adoption on digital literacy also confirms the Technology Acceptance Model (TAM) according to which the perceived usefulness and ease of use promote technology adoption and development of the ability (Balaskas et al., 2025; Sharma et al., 2023). In addition, the mediating status of digital literacy is also consistent with the findings that digital skills are key to transforming technological adoption into significant socioeconomic results, especially in the case of women entrepreneurs in emerging markets (Nuraisyiah et al., 2025; Narijo et al., 2025). The mediating role of cultural norms also demonstrates that socio-cultural barriers continue to affect the entrepreneurship of women, which is consistent with prior research that patriarchal institutions can undermine the advantage of digital transformation (Shah et al., 2025; Anabtawi et al., 2024). All in all, the findings support the combined applicability of both TAM and Social Capital Theory to understanding the impact of the joint influence of technology adoption, skills development, and cultural environment on entrepreneurial social mobility (Khan et al., 2025; Liu et al., 2025).

Recommendations

Going by the findings, it is advisable that the government institutions and the entrepreneurial support agencies in Pakistan should go the extra mile to encourage generative AI training programs among women entrepreneurs in Pakistan, especially in District Hyderabad and Shaheed Benazirabad. Particular attention should be paid to the improvement of digital literacy with the help of organized workshops, mentorship, and available online training opportunities. It should also be encouraged to adopt AI-based tools in small and medium enterprises with the support of financial and technical assistance. Also, cultural awareness campaigns ought to be initiated to lessen cultural boundaries and increase acceptance to women involvement in digital entrepreneurship. Policy initiatives must also focus on providing enabling environment that facilitates access of women to technology, networks and markets.

Study Implications.

The research has valuable theoretical and practical implications. In theory, it is a direct extension of the Technology Acceptance Model that incorporates digital literacy and cultural norms into the context of the moderated mediation that gives a more detailed account of social mobility among women entrepreneurs. It also adds to Social Capital Theory by pinpointing the interaction between technological use and social and cultural contexts to determine the results of entrepreneurship. In practice, the results underline the idea that generative AI can be an effective way to empower women entrepreneurs by enhancing their abilities, business performance, and social status. The effectiveness, however, is conditional on the presence of digital competencies and favourable socio-cultural factors, which need to be addressed by policymakers and development agencies.

Limitations and Future Directions.

Although this study makes some contributions, it has some limitations. The cross-sectional research design limits the possibility of having causal relationships across time. The convenience sampling can also restrict the applicability of the results to the rest of the districts. The study is also limited to women entrepreneurs in two regions of Sindh, which might not be a full representation of the variety of the entrepreneurship in Pakistan. Longitudinal or mixed-method research should be implemented in future studies to more well-document changes over time. It is also suggested that the studies in the future should have a wider geographical area and involve comparison across provinces or even countries. Additional variables that may be investigated in future studies to add depth to the model include institutional support, financial inclusion and technological preparedness.

Conclusion

To sum up, this paper has shown that the use of generative AI is important in improving social mobility of female entrepreneurs, both directly and indirectly, through digital literacy. The findings validate the hypothesis that digital literacy is a major mechanism by which technology is turned into socioeconomic gains, and cultural norms are a significant contextual element affecting these associations. The results indicate the significance of considering technological, expertise, and socio-cultural aspects in the analysis of entrepreneurial development of women. All in all, the research offers a holistic approach to the idea of how the new technologies could be used to empower women entrepreneurs and to foster inclusive economic development in developing countries.

Conflict of Interest

The authors showed no conflict of interest.

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