



HOW FINTECH CAPABILITY SHAPES ENTREPRENEURIAL SUCCESS: THE MEDIATING ROLE OF ENTREPRENEURIAL FINANCIAL AGILITY AND THE MODERATING ROLE OF DIGITAL MARKET INTELLIGENCE

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Abstract

FinTech has increasingly transformed entrepreneurship in emerging economies by enabling technology-driven financial access, decision making, and resource management. However, possessing FinTech capabilities does not necessarily guarantee entrepreneurial success, particularly when entrepreneurs must rapidly respond to changing financial and market conditions. This study examines how FinTech Capability influences Entrepreneurial Success by investigating Entrepreneurial Financial Agility as a mediating mechanism and Digital Market Intelligence as a moderating capability. Using a quantitative, cross-sectional design, data were collected from 380 entrepreneurs and business respondents in Pakistan. The proposed relationships were examined using PROCESS-based moderated mediation analysis. The findings support all six hypotheses. FinTech Capability positively influences Entrepreneurial Success and Entrepreneurial Financial Agility, while Entrepreneurial Financial Agility positively contributes to Entrepreneurial Success and significantly mediates the FinTech Capability–Entrepreneurial Success relationship. Digital Market Intelligence significantly strengthens the relationship between FinTech Capability and Entrepreneurial Financial Agility and also strengthens the indirect effect of FinTech Capability on Entrepreneurial Success through Entrepreneurial Financial Agility. The study extends the dynamic capability perspective by integrating technological, financial, and market-oriented capabilities and provides practical guidance for Pakistani entrepreneurs seeking to convert FinTech resources into sustainable entrepreneurial outcomes.

Keywords: FinTech Capability; Entrepreneurial Financial Agility; Entrepreneurial Success; Digital Market Intelligence; Dynamic Capability

1. Introduction

1.1 Background of Research

The rapid digital transformation of entrepreneurship is reshaping how businesses identify opportunities, managing resources, interacting with markets, and making strategic decisions. FinTech, artificial intelligence, digital platforms, and data-driven technologies increasingly provide entrepreneurs with mechanisms for accessing information, processing transactions, improving financial decisions, and



responding to changing market conditions. This transformation has expanded the capabilities required for entrepreneurial activity beyond conventional managerial and financial competencies. Hassan (2026) emphasizes the growing importance of entrepreneurial capabilities in navigating technological transformation, while Anggraheni and Mawaddah (2025) highlight the contribution of AI and FinTech to digital transformation and decision making in entrepreneurial environments. Similarly, Ali et al. (2026) demonstrate the broader strategic importance of technology adoption and AI for competitiveness, highlighting the increasing relevance of digital capabilities to contemporary economic and entrepreneurial activity.

Within this changing environment, FinTech Capability represents an important entrepreneurial resource because it concerns the ability to effectively utilize financial technologies for financial management, innovation, and business decision making. Rather than viewing FinTech merely as a collection of digital financial tools, a capability perspective emphasizes an entrepreneur's ability to deploy these technologies in ways that support organizational objectives. Prapanca et al. (2025) demonstrate the relevance of FinTech capability to SME sustainability, while Hussain et al. (2025) connect FinTech with financial agility and competitive advantage. Sardiana and Sawmong (2025) further indicate that entrepreneurial capabilities and financial technology can contribute to the performance of technology-oriented ventures. Collectively, these studies suggest that FinTech Capability may function as a strategic resource for improving entrepreneurial outcomes.

The Pakistani context makes this issue particularly important because entrepreneurs operate amid financing challenges, evolving digital financial systems, differences in financial literacy, and technological skepticism. Ashraf et al. (2025) identify continuing barriers and opportunities related to SME access to finance in Pakistan. Khan et al. (2026) highlight financial literacy and technological skepticism as important challenges surrounding FinTech adoption, while Rehmat et al. (2025) emphasize trust and confidence in the adoption of emerging technologies among nontechnical users in Pakistan. These conditions indicate that possessing access to FinTech may not itself guarantee improved entrepreneurial outcomes.

FinTech Capability therefore needs to be converted into effective financial responses. Entrepreneurial Financial Agility provides a potential mechanism through which entrepreneurs can translate technology-enabled financial resources into timely financial decisions, resource adjustments, and responses to uncertainty. Hussain et al. (2025) associate FinTech with financial agility and competitive advantage, while Waqar et al. (2025) link entrepreneurial agility with sustainable SME performance. Shatila and Hernández-Lara (2026) similarly identify agility as an important capability for entrepreneurial success in digitally transforming environments.

However, the strength of this mechanism may depend on Digital Market Intelligence. Entrepreneurs who can identify, interpret, and utilize digital market information may be better positioned to convert FinTech Capability into financial agility. Alshibani et al. (2026) highlight the relationship between digital intelligence and financial agility, while Nurfaizal (2025) emphasizes the importance of digital capabilities in entrepreneurial contexts. Abrar and Amjad (2026) further demonstrate the importance of digital technologies for market engagement and responsiveness. Thus, Digital Market Intelligence may strengthen the ability of entrepreneurs to transform FinTech Capability into Entrepreneurial Financial Agility.

1.2 Problem Statement

Existing research provides evidence that FinTech can contribute to business performance, financial agility, sustainability, and competitiveness (Hussain et al., 2025; Prapanca et al., 2025; Skandalis, 2025). Research has also examined financial literacy, FinTech adoption, and sustainable performance, including through more complex mediation and moderation relationships (Hidayat-ur-Rehman, 2025). Similarly, Waqar et al. (2025) demonstrate the relevance of entrepreneurial agility to SME performance. However, these research streams remain insufficiently integrated to explain how FinTech Capability translates into Entrepreneurial Success. In particular, limited attention has been given to Entrepreneurial Financial Agility as the mechanism through which FinTech Capability may influence success, while Digital Market Intelligence has not been sufficiently examined as a boundary condition of this mechanism. The contextual evidence is also limited in Pakistan, despite continuing challenges related to SME financing and access to financial



resources (Ashraf et al., 2025). Consequently, the central problem addressed by this study is how FinTech Capability contributes to Entrepreneurial Success, through what mechanism this relationship operates, and whether Digital Market Intelligence determines the strength of this mechanism.

1.3 Research Questions

RQ1: What is the effect of FinTech Capability on Entrepreneurial Success?

RQ2: What is the effect of FinTech Capability on Entrepreneurial Financial Agility?

RQ3: What is the effect of Entrepreneurial Financial Agility on Entrepreneurial Success?

RQ4: Does Entrepreneurial Financial Agility mediate the relationship between FinTech Capability and Entrepreneurial Success?

RQ5: Does Digital Market Intelligence moderate the relationship between FinTech Capability and Entrepreneurial Financial Agility?

RQ6: Does Digital Market Intelligence moderate the indirect relationship between FinTech Capability and Entrepreneurial Success through Entrepreneurial Financial Agility?

1.4 Research Objectives

RO1: To examine the effect of FinTech Capability on Entrepreneurial Success.

RO2: To investigate the effect of FinTech Capability on Entrepreneurial Financial Agility.

RO3: To examine the effect of Entrepreneurial Financial Agility on Entrepreneurial Success.

RO4: To investigate the mediating role of Entrepreneurial Financial Agility in the relationship between FinTech Capability and Entrepreneurial Success.

RO5: To examine the moderating role of Digital Market Intelligence in the relationship between FinTech Capability and Entrepreneurial Financial Agility.

RO6: To examine the moderated mediation effect of Digital Market Intelligence on the relationship between FinTech Capability and Entrepreneurial Success through Entrepreneurial Financial Agility.

1.5 Significance of the Study

Theoretically, this study integrates FinTech Capability, Entrepreneurial Financial Agility, Digital Market Intelligence, and Entrepreneurial Success within a single analytical framework. This integration extends the discussion of entrepreneurial capabilities in digitally transforming environments by examining not only whether technological capabilities contribute to entrepreneurial outcomes but also the mechanism and conditions through which such effects may occur (Hassan, 2026; Shatila & Hernández-Lara, 2026).

Empirically, the study contributes by simultaneously examining an explanatory mechanism and a boundary condition. Entrepreneurial Financial Agility is positioned as the mechanism through which FinTech Capability can contribute to Entrepreneurial Success, while Digital Market Intelligence is examined as a factor that can strengthen this process. This approach provides a more comprehensive explanation than examining only the direct relationship between FinTech and entrepreneurial outcomes.

Contextually, Pakistan represents an important emerging-market setting in which entrepreneurs face financing constraints, evolving digital financial systems, varying levels of financial literacy, and technological skepticism (Ashraf et al., 2025; Khan et al., 2026). These conditions make the effective development and utilization of digital financial capabilities particularly important. From a practical perspective, the study can help entrepreneurs and SME managers recognize that FinTech adoption alone may not be sufficient to generate successful outcomes. Instead, entrepreneurs may need to combine FinTech Capability with Entrepreneurial Financial Agility and Digital Market Intelligence to convert technological resources into effective entrepreneurial responses. This perspective is consistent with the growing emphasis on dynamic capabilities in FinTech-enabled digital transformation (Tanveer, 2026).

2. Literature Review

2.1 Theoretical Framework: Dynamic Capability Perspective

The Dynamic Capability Perspective provides the theoretical foundation for explaining how entrepreneurs transform technological resources into superior business outcomes in rapidly changing environments. Dynamic capabilities refer to an organization's ability to adapt, reconfigure, and deploy resources in response to environmental changes. This perspective is particularly relevant to digital



entrepreneurship because technological transformation continually changes the resources, processes, and capabilities required for competitiveness. Tanveer (2026) argues that FinTech-enabled digital transformation can generate sustainable performance when supported by appropriate dynamic capabilities. Similarly, Asemanjerdi et al. (2026) demonstrate that dynamic capabilities can shape the relationship between FinTech, artificial intelligence, and financial performance. Research on FinTech startups also emphasizes the importance of dynamic capabilities in achieving organizational excellence and responding to changing competitive conditions (Salah et al., 2026a).

Within this perspective, FinTech Capability can be understood as a technology-enabled organizational capability through which entrepreneurs deploy financial technologies and related resources to improve financial activities and decision making. Prapanca et al. (2025) position FinTech capability as an important organizational resource associated with SME sustainability, while Hussain et al. (2025) demonstrate its relevance to financial agility and competitive advantage. Thus, FinTech Capability represents not simply technological adoption but the capacity to utilize financial technology strategically.

Entrepreneurial Financial Agility represents the resource reconfiguration mechanism through which this capability can generate outcomes. Financial agility enables entrepreneurs to adjust financial resources, decisions, and responses as circumstances change. Evidence linking FinTech with financial agility and sustainable entrepreneurial performance supports this theoretical interpretation (Waqar et al., 2025; Hussain et al., 2025). Shatila and Hernández-Lara (2026) further emphasize agility as an important capability for entrepreneurial success.

Digital Market Intelligence can consequently be conceptualized as a sensing and information-processing capability. It enables entrepreneurs to identify market changes, interpret digital information, and recognize emerging opportunities. Alshibani et al. (2026) connect digital intelligence with financial agility, while Nurfaizal (2025) highlights the importance of digital capabilities for entrepreneurial outcomes. Accordingly, the theoretical model proposes that FinTech Capability contributes to Entrepreneurial Success through Entrepreneurial Financial Agility, while Digital Market Intelligence strengthens the FinTech Capability–Financial Agility relationship.

2.2 FinTech Capability and Entrepreneurial Success

FinTech Capability refers to the ability of entrepreneurs and firms to effectively utilize financial technologies to support financial activities, innovation, decision making, and business development. Its strategic importance extends beyond the adoption of individual digital financial tools because capability reflects the effective deployment of technological resources toward organizational objectives. FinTech can facilitate financial access, improve transaction efficiency, support data-informed decisions, and provide entrepreneurs with new mechanisms for managing resources and pursuing opportunities.

Existing research provides several reasons to expect a positive relationship between FinTech Capability and Entrepreneurial Success. Prapanca et al. (2025) associate FinTech capability with SME economic sustainability, while Hussain et al. (2025) demonstrates its relevance to competitive advantage. FinTech can also strengthen entrepreneurial capabilities and support the performance of technology-oriented ventures (Sardiana & Sawmong, 2025). Skandalis (2025) similarly highlights the contribution of FinTech to SME performance, particularly in contexts where entrepreneurship and financial technology interact. Evidence from digital entrepreneurship further indicates that innovation capability can serve as an important pathway between digital entrepreneurial activity and financial performance (Wibowo & Rajput, 2025). Rohmah (2025) also emphasizes financial innovation as a pathway toward entrepreneurial success. Collectively, these findings suggest that entrepreneurs capable of effectively utilizing FinTech resources are better positioned to improve business outcomes.

H1: FinTech Capability has a significant positive effect on Entrepreneurial Success.

2.3 FinTech Capability and Entrepreneurial Financial Agility

FinTech Capability can enhance the speed, flexibility, and quality of entrepreneurial financial decision making by providing access to digital financial information, technologies, and services. When entrepreneurs can effectively deploy financial technologies, they may be better able to monitor financial conditions, process



information, access financial resources, and adjust resource allocation in response to changing circumstances. Consequently, FinTech Capability can provide an important foundation for Entrepreneurial Financial Agility.

Hussain et al. (2025) provide direct support for this relationship by linking FinTech with financial agility in emerging-market SMEs. Waqar et al. (2025) similarly connect digital financial capabilities and entrepreneurial agility with sustainable SME performance. Evidence on digital transformation suggests that technological resources can facilitate organizational agility by improving the availability and use of information (Alfawaer, 2025). Hidayat-ur-Rehman (2025) further demonstrates the importance of FinTech adoption and financial capabilities in improving firm performance. Research examining FinTech adoption and digital transformation also indicates that technology-enabled organizational processes can strengthen performance-related capabilities (Rebekah & Afjal, 2025). At the MSME level, FinTech use combined with appropriate financial behavior and literacy can contribute to improved performance, suggesting that effective utilization of financial technology is important rather than technology access alone (Latifah et al., 2025). Therefore, FinTech Capability should enable entrepreneurs to respond more rapidly and flexibly to financial requirements.

H2: FinTech Capability has a significant positive effect on Entrepreneurial Financial Agility.

2.4 Entrepreneurial Financial Agility and Entrepreneurial Success

Entrepreneurial Financial Agility represents the ability of entrepreneurs to respond rapidly and flexibly to changing financial conditions by adjusting decisions, resources, and financial strategies. In uncertain entrepreneurial environments, financial agility can help businesses respond to changing demand, financing requirements, investment opportunities, and resource constraints. It therefore represents an important performance-related capability because successful entrepreneurs must not only possess financial resources but also deploy and reconfigure them effectively.

Hussain et al. (2025) demonstrate the relevance of financial agility to competitive advantage in SMEs, suggesting that the ability to manage financial resources flexibly can strengthen business outcomes. Waqar et al. (2025) similarly associate entrepreneurial agility with sustainable SME performance, highlighting the importance of adaptive capabilities in entrepreneurial environments. Shatila and Hernández-Lara (2026) identify agility as strategically relevant to entrepreneurial success during technological transformation. Digital intelligence may further strengthen financial agility and organizational outcomes by enabling more effective interpretation and utilization of information (Alshibani et al., 2026). Financial innovation has also been positioned as a pathway toward entrepreneurial success (Rohmah, 2025), while research on FinTech competitiveness emphasizes the importance of innovativeness and competitive intensity for business outcomes (Sardiana et al., 2025). Thus, entrepreneurs with greater financial agility should be better equipped to adapt to uncertainty, reallocate resources, and pursue opportunities, ultimately improving entrepreneurial success.

H3: Entrepreneurial Financial Agility has a significant positive effect on Entrepreneurial Success.

2.5 Entrepreneurial Financial Agility as a Mediator

The relationship between FinTech Capability and Entrepreneurial Success can be understood more comprehensively by considering the process through which technological capabilities are converted into entrepreneurial outcomes. FinTech Capability provides entrepreneurs with technology-enabled financial resources, information, and tools, but these resources do not necessarily generate success automatically. Entrepreneurs must possess the ability to translate such resources into timely financial decisions, resource adjustments, and adaptive responses. Entrepreneurial Financial Agility therefore represents a theoretically meaningful mechanism linking FinTech Capability with Entrepreneurial Success.

Evidence from emerging-market SMEs indicates that FinTech is associated with financial agility and competitive advantage, suggesting that financial agility may be an important pathway through which technology generates organizational benefits (Hussain et al., 2025). Waqar et al. (2025) similarly connect digital financial capabilities with entrepreneurial agility and sustainable performance. Hidayat-ur-Rehman (2025) demonstrates the importance of FinTech-related capabilities within a more complex performance mechanism, while Rebekah and Afjal (2025) show that FinTech adoption and digital transformation can



operate through organizational mechanisms to enhance bank performance. Alfawaer (2025) further emphasizes the role of digital transformation in strengthening organizational agility. Prapanca et al. (2025) also demonstrate that FinTech capability can influence sustainability through intermediary organizational capabilities. Taken together, these findings support the proposition that FinTech Capability may contribute to Entrepreneurial Success by enabling greater Entrepreneurial Financial Agility.

H4: Entrepreneurial Financial Agility significantly mediates the relationship between FinTech Capability and Entrepreneurial Success.

2.6 Digital Market Intelligence as a Moderator

FinTech Capability provides entrepreneurs with technological potential, but entrepreneurs differ in their ability to understand and respond to digital market conditions. Digital Market Intelligence represents the ability to gather, interpret, and utilize information concerning customers, competitors, market changes, and digital opportunities. From a dynamic capability perspective, such intelligence can function as a sensing capability that helps entrepreneurs recognize changes and align available resources with emerging market requirements.

Alshibani et al. (2026) demonstrate the relevance of digital intelligence to SME outcomes involving financial agility, suggesting that digital intelligence can enhance the effective utilization of financial resources. Nurfaizal (2025) similarly highlights the importance of digital mindset, technological self-efficacy, and digital literacy for entrepreneurial outcomes. Digital environments can also provide entrepreneurs with new opportunities to monitor and engage customers, as demonstrated in research on virtual experiences and customer engagement (Abrar & Amjad, 2026). AI and FinTech further enhance access to information and support data-informed decision making within entrepreneurial environments (Anggraheni & Mawaddah, 2025). At the organizational level, digital transformation capability has been shown to influence FinTech adoption and related outcomes (Alnsour et al., 2025), while AI adoption can contribute to broader competitive capabilities (Ali et al., 2026).

Accordingly, entrepreneurs with high Digital Market Intelligence should be better able to interpret the financial and market information generated through FinTech technologies. They can identify changing customer needs, monitor competitors, recognize digital opportunities, and align financial decisions with market conditions. Therefore, the positive relationship between FinTech Capability and Entrepreneurial Financial Agility is expected to become stronger when Digital Market Intelligence is high.

H5: Digital Market Intelligence positively moderates the relationship between FinTech Capability and Entrepreneurial Financial Agility, such that the relationship is stronger when Digital Market Intelligence is high.

2.7 Moderated Mediation and Research Gap

Mediation explains the mechanism through which one variable influence another, whereas moderation explains the conditions under which a relationship becomes stronger or weaker. Moderated mediation integrates these perspectives by examining whether the indirect effect of an independent variable on an outcome through a mediator changes according to the level of a moderator. In the present study, the central question is therefore not only whether FinTech Capability contributes to Entrepreneurial Success through Entrepreneurial Financial Agility, but also whether this indirect mechanism becomes stronger when entrepreneurs possess higher Digital Market Intelligence.

Existing research provides support for examining complex relationships involving FinTech, digital transformation, organizational capabilities, and performance. Hidayat-ur-Rehman (2025) applies a moderated mediation perspective to FinTech adoption and sustainable performance, while Asemanjerdi et al. (2026) demonstrate the relevance of dynamic capabilities as a conditioning mechanism in FinTech and AI-related performance relationships. Alfawaer (2025) links FinTech adoption, digital transformation, and organizational agility, while Alnsour et al. (2025) examine digital transformation capability as a moderator of FinTech adoption. Research on FinTech startups further demonstrates the importance of dynamic capabilities and business-level contextual factors (Salah et al., 2026a; Salah et al., 2026b).



Despite these developments, five gaps remain. First, FinTech Capability and Entrepreneurial Success have not been sufficiently integrated into a single explanatory framework. Second, Entrepreneurial Financial Agility requires greater attention as the mechanism connecting FinTech Capability with success. Third, Digital Market Intelligence has not been sufficiently incorporated as a boundary condition of the FinTech Capability–Financial Agility relationship. Fourth, evidence addressing this integrated mechanism in Pakistan remains limited. Finally, the combined first-stage moderated mediation structure remains insufficiently explored. These gaps provide the basis for the present research model.

2.8 Hypotheses Development

Based on the preceding theoretical arguments and empirical evidence, the study proposes the following hypotheses:

H1: FinTech Capability has a significant positive effect on Entrepreneurial Success.

H2: FinTech Capability has a significant positive effect on Entrepreneurial Financial Agility.

H3: Entrepreneurial Financial Agility has a significant positive effect on Entrepreneurial Success.

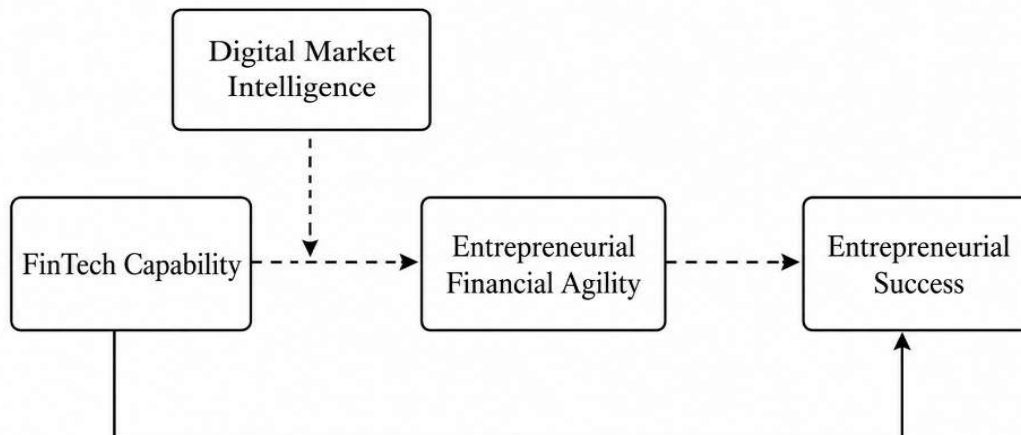
H4: Entrepreneurial Financial Agility significantly mediates the relationship between FinTech Capability and Entrepreneurial Success.

H5: Digital Market Intelligence positively moderates the relationship between FinTech Capability and Entrepreneurial Financial Agility, such that the relationship is stronger when Digital Market Intelligence is high.

H6: Digital Market Intelligence significantly moderates the indirect relationship between FinTech Capability and Entrepreneurial Success through Entrepreneurial Financial Agility, such that the indirect effect is stronger when Digital Market Intelligence is high.

Figure 2.1

Proposed Conceptual Framework of the Study



3. Methodology

3.1 Research Philosophy

This study adopts a positivist research philosophy, emphasizing objective observation, empirical measurement, and statistical examination of relationships among the study variables. A positivist orientation is appropriate for quantitative research because it facilitates systematic testing of theoretically derived relationships using observable and measurable data (Bloomfield & Fisher, 2019; Takona, 2024).

3.2 Research Approach

A deductive research approach was adopted. The study begins with the Dynamic Capability Perspective and develops theoretically grounded hypotheses concerning FinTech Capability, Entrepreneurial Financial Agility, Digital Market Intelligence, and Entrepreneurial Success. These hypotheses are subsequently tested empirically using questionnaire data and statistical analysis (Creswell & Creswell, 2005; Takona, 2024).



3.3 Research Design

The study employed a quantitative, cross-sectional, and explanatory research design. Quantitative methods were used to measure the constructs numerically and examine their relationships, while the cross-sectional design involved collecting responses at a single point in time. The explanatory design was appropriate for testing the proposed direct, mediation, and moderation relationships (Bloomfield & Fisher, 2019; Takona, 2024).

3.4 Population and Sampling

The target population comprised entrepreneurs and business owners operating in Pakistan. The study utilized a final sample of 380 valid respondents. The supplied dataset does not document sufficient information to establish the precise sampling technique used during respondent selection. Therefore, no specific probability or non-probability sampling procedure is claimed beyond the available evidence.

3.5 Measurement Instrument

Data were collected using a structured questionnaire comprising 22 measurement items across four constructs. The questionnaire employed a five-point Likert-type response scale. FinTech Capability was measured through eight items, Entrepreneurial Success through six items, Digital Market Intelligence through four items, and Entrepreneurial Financial Agility through four items. The measurement sources were selected based on their conceptual relevance to the respective constructs.

Table 3.1

Measurement of Study Variables

Variable	Items	Measurement Focus	Source(s)
FinTech Capability	8	FinTech-related organizational capability	Hussain et al. (2025); Prapanca et al. (2025)
Entrepreneurial Success	6	Entrepreneurial and business outcomes	Rohmah (2025); Wibowo and Rajput (2025)
Digital Market Intelligence	4	Digital market information and intelligence	Alshibani et al. (2026); Nurfaizal (2025)
Entrepreneurial Financial Agility	4	Financial responsiveness and flexibility	Hussain et al. (2025); Waqar et al. (2025)

The questionnaire information supplied for the study identifies multiple sources for each construct. Accordingly, the table reports the sources provided for the measurement instrument rather than asserting that every individual item originated from a particular article. Exact item-level source attribution should be verified against the original questionnaire and source instruments before final submission.

3.6 Data Collection Procedure

The study collected primary data through a structured questionnaire administered to eligible entrepreneurs and business respondents in Pakistan. Participation was voluntary, and respondents were informed that their responses would be used for academic purposes. After screening and data preparation, 380 valid responses were retained for subsequent statistical analysis.

3.7 Data Analysis Strategy

The collected data were analyzed through a sequence of statistical procedures. These included demographic analysis, reliability assessment, exploratory factor analysis, Pearson correlation analysis, and hypothesis testing. Direct, mediation, moderation, conditional indirect effects, and moderated mediation were examined using PROCESS-based procedures consistent with Hayes (2015, 2018). Reliability assessment was guided by established psychometric principles (Nunnally, 1975; Peterson, 1994).

The mediation and moderation analysis specifically examined whether Entrepreneurial Financial Agility explains the relationship between FinTech Capability and Entrepreneurial Success and whether Digital Market Intelligence strengthens the FinTech Capability to Entrepreneurial Financial Agility relationship. Conditional indirect effects and the index of moderated mediation were used to determine whether the indirect relationship varied significantly across levels of Digital Market Intelligence.

3.8 Ethical Considerations



The study followed basic ethical principles for primary quantitative research. Participation was voluntary, respondents were provided an opportunity to participate without coercion, and confidentiality and anonymity were maintained. Information collected through the questionnaire was intended for academic research purposes, and identifying information was not disclosed in reporting the findings. The analysis and presentation of results were conducted at an aggregate level to protect respondent privacy.

4. Data Analysis and Results

4.1 Introduction

This section presents the empirical findings obtained from the 380 valid responses collected from entrepreneurs and business respondents in Pakistan. The analysis was conducted sequentially to establish the characteristics of the respondents, assess the reliability and factorial structure of the measurement instruments, examine relationships among the study constructs, and test the proposed hypotheses. The analysis includes demographic analysis, reliability analysis, exploratory factor analysis, Pearson correlation analysis, direct effects, mediation, moderation, and moderated mediation. The final hypothesis testing evaluates whether FinTech Capability influences Entrepreneurial Success directly and indirectly through Entrepreneurial Financial Agility, and whether Digital Market Intelligence strengthens the first-stage relationship between FinTech Capability and Entrepreneurial Financial Agility.

4.2 Demographic Profile of Respondents

The demographic profile provides an overview of the characteristics of the 380 respondents included in the analysis. Gender, age, educational attainment, and business operating period were examined. The results indicate that 242 respondents were male, representing 63.7% of the sample, while 138 respondents were female, representing 36.3%. Regarding age, the largest group consisted of respondents aged 27–35 years, accounting for 57.6% of the sample. Respondents aged 18–26 represented 23.7%, while 17.4% were aged 36–44 years and 1.3% were aged 45–53 years. The educational profile indicates that 96.1% of respondents were graduates, 3.2% held master's degrees, and 0.8% held MS/M.Phil qualifications. Regarding business operating period, 23.7% of respondents had businesses operating for less than two years, 57.6% for 2–5 years, 17.4% for 6–10 years, and 1.3% for more than 10 years.

Table 4.1

Demographic Profile of Respondents

Demographic Variable	Category	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Gender	Male	242	63.7	63.7	63.7
	Female	138	36.3	36.3	100.0
	Total	380	100.0	100.0	—
Age	18–26	90	23.7	23.7	23.7
	27–35	219	57.6	57.6	81.3
	36–44	66	17.4	17.4	98.7
	45–53	5	1.3	1.3	100.0
	Total	380	100.0	100.0	—
Education	Graduate	365	96.1	96.1	96.1
	Masters	12	3.2	3.2	99.2
	MS/M.Phil	3	0.8	0.8	100.0
	Total	380	100.0	100.0	—
Business Operating Period	Less than 2 years	90	23.7	23.7	23.7
	2–5 years	219	57.6	57.6	81.3
	6–10 years	66	17.4	17.4	98.7
	More than 10 years	5	1.3	1.3	100.0
	Total	380	100.0	100.0	—



The demographic results show that the sample was predominantly composed of respondents aged 27–35 years and individuals with graduate-level education. More than half of the businesses had been operating for 2–5 years, indicating substantial representation of relatively established entrepreneurial ventures alongside newer businesses.

4.3 Reliability Analysis

Reliability analysis was conducted to assess the internal consistency of the measurement items for each construct. Cronbach's alpha values were calculated for FinTech Capability, Entrepreneurial Success, Digital Market Intelligence, and Entrepreneurial Financial Agility. The results demonstrate exceptionally high internal consistency across all four constructs. FinTech Capability produced an alpha value of .968, Entrepreneurial Success .959, Digital Market Intelligence .936, and Entrepreneurial Financial Agility .941. The overall reliability across the 22 items was .954.

The individual item loadings were also consistently high, ranging from .893 to .928. These findings indicate that the items within each construct demonstrate strong internal consistency. Nunnally (1975) established the importance of adequate internal consistency in psychological and behavioral measurement, while Peterson (1994) emphasizes Cronbach's alpha as a widely used indicator for assessing the reliability of multi-item scales. Based on these criteria, all constructs demonstrate satisfactory reliability for subsequent analysis.

Table 4.2

Reliability Analysis

Construct	Item	Item Loading	Cronbach's Alpha
FinTech Capability	FTC1	.900	.968
	FTC2	.893	
	FTC3	.906	
	FTC4	.901	
	FTC5	.904	
	FTC6	.901	
	FTC7	.917	
	FTC8	.899	
Entrepreneurial Success	ES1	.913	.959
	ES2	.914	
	ES3	.918	
	ES4	.908	
	ES5	.904	
	ES6	.911	
Digital Market Intelligence	DMI1	.915	.936
	DMI2	.922	
	DMI3	.914	
	DMI4	.910	
Entrepreneurial Financial Agility	EFA1	.918	.941
	EFA2	.917	
	EFA3	.926	
	EFA4	.928	
Total	22 items	—	.954

4.4 Validity Analysis

Exploratory factor analysis was conducted to examine the underlying factorial structure of the four constructs. The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were used to assess the suitability of the data for factor analysis. The KMO values ranged from .864 to .967, indicating strong sampling adequacy across all four constructs. Bartlett's test of sphericity was statistically significant for each



construct ($p < .001$), confirming that the correlation matrices were suitable for factor extraction. Principal Component Analysis (PCA) was used as the extraction method.

The analysis extracted one component for each construct. The extracted component explained 81.501% of the variance in FinTech Capability, 83.057% in Entrepreneurial Success, 83.797% in Digital Market Intelligence, and 85.044% in Entrepreneurial Financial Agility. These findings indicate that the measurement items for each construct demonstrated a clear single-component structure, with a substantial proportion of variance explained by the extracted component.

Table 4.3

Exploratory Factor Analysis Results

Construct	KMO	Bartlett's χ^2	df	Sig.	Variance Explained (%)	Components
FinTech Capability	.967	3402.247	28	.000	81.501	1
Entrepreneurial Success	.941	2408.332	15	.000	83.057	1
Digital Market Intelligence	.864	1282.644	6	.000	83.797	1
Entrepreneurial Financial Agility	.869	1366.088	6	.000	85.044	1

The results therefore provide evidence of adequate factorial structure for proceeding with correlation and hypothesis testing. In particular, the high KMO values indicate that the observed items were sufficiently interrelated for factor analysis, while the significant Bartlett's tests confirm that the correlation matrices were not identity matrices.

4.5 Correlation Analysis

Pearson correlation analysis was conducted to examine the bivariate relationships among FinTech Capability, Entrepreneurial Success, Digital Market Intelligence, and Entrepreneurial Financial Agility. All correlations were positive, although their magnitude varied across the constructs.

FinTech Capability demonstrated a strong positive correlation with Entrepreneurial Success ($r = .671$, $p < .01$) and Entrepreneurial Financial Agility ($r = .684$, $p < .01$). Its relationship with Digital Market Intelligence was positive but comparatively weak ($r = .119$, $p < .05$). Entrepreneurial Success was positively associated with Digital Market Intelligence ($r = .245$, $p < .01$) and Entrepreneurial Financial Agility ($r = .638$, $p < .01$). Digital Market Intelligence and Entrepreneurial Financial Agility also showed a positive relationship ($r = .184$, $p < .01$). These findings provide preliminary support for the proposed structural relationships.

Table 4.4

Pearson Correlation Matrix

Construct	1	2	3	4
1. FinTech Capability	1			
2. Entrepreneurial Success	.671**	1		
3. Digital Market Intelligence	.119*	.245**	1	
4. Entrepreneurial Financial Agility	.684**	.638**	.184**	1

Note: ** $p < .01$; * $p < .05$ (two-tailed).

4.6 Hypotheses Testing

4.6.1 Direct Effects of FinTech Capability on Entrepreneurial Success. H1 proposed that FinTech Capability would have a significant positive effect on Entrepreneurial Success. The regression results show a positive and statistically significant effect of FinTech Capability on Entrepreneurial Success ($\beta = .4408$, $SE = .0494$, $t = 8.9277$, $p < .001$, 95% CI [.3438, .5379]). Because the confidence interval does not include zero and the coefficient is positive, H1 is supported.

The results indicate that higher levels of FinTech Capability are associated with higher levels of Entrepreneurial Success. The regression model predicting Entrepreneurial Success also included Entrepreneurial Financial Agility, allowing the direct effect of FinTech Capability to be assessed while accounting for the proposed mediator.



4.6.2 FinTech Capability and Entrepreneurial Financial Agility. H2 proposed a positive relationship between FinTech Capability and Entrepreneurial Financial Agility. The results provide strong support for this hypothesis. FinTech Capability had a positive and statistically significant effect on Entrepreneurial Financial Agility ($\beta = .6650$, $SE = .0367$, $t = 18.1446$, $p < .001$, 95% CI [.5930, .7371]).

The model explaining Entrepreneurial Financial Agility produced $R^2 = .5029$, indicating that the predictors in the model explained 50.29% of the variance in Entrepreneurial Financial Agility. The overall regression model was statistically significant, $F(3, 376) = 126.8036$, $p < .001$.

4.6.3 Entrepreneurial Financial Agility and Entrepreneurial Success. H3 proposed that Entrepreneurial Financial Agility would positively influence Entrepreneurial Success. The findings support this proposition. Entrepreneurial Financial Agility had a positive and statistically significant effect on Entrepreneurial Success ($\beta = .3368$, $SE = .0494$, $t = 6.8205$, $p < .001$, 95% CI [.2397, .4339]).

The regression model predicting Entrepreneurial Success was statistically significant, $F(2, 377) = 196.9169$, $p < .001$, with $R^2 = .5109$. Thus, FinTech Capability and Entrepreneurial Financial Agility jointly explained 51.09% of the variance in Entrepreneurial Success.

Table 4.5

Direct Effects and Regression Results

Hypothesis	Relationship	β	SE	t	p	LLCI	ULCI	Decision
H1	FinTech Capability → Entrepreneurial Success	.4408	.0494	8.9277	<.001	.3438	.5379	Supported
H2	FinTech Capability → Entrepreneurial Financial Agility	.6650	.0367	18.1446	<.001	.5930	.7371	Supported
H3	Entrepreneurial Financial Agility → Entrepreneurial Success	.3368	.0494	6.8205	<.001	.2397	.4339	Supported

4.6.4 Mediation Analysis. H4 proposed that Entrepreneurial Financial Agility would mediate the relationship between FinTech Capability and Entrepreneurial Success. The conditional indirect effect evaluated at the mean level of Digital Market Intelligence was .2231, with a BootSE of .0350 and a 95% bootstrap confidence interval ranging from .1556 to .2926.

Because the bootstrap confidence interval does not include zero, the indirect effect is statistically different from zero. This provides evidence that Entrepreneurial Financial Agility transmits part of the effect of FinTech Capability on Entrepreneurial Success. Importantly, the direct effect of FinTech Capability on Entrepreneurial Success remained significant ($\beta = .4408$, $p < .001$), indicating that the mediation occurs alongside a significant direct relationship rather than eliminating it.

Therefore, H4 is supported.

4.6.5 Moderation Analysis. H5 proposed that Digital Market Intelligence would positively moderate the relationship between FinTech Capability and Entrepreneurial Financial Agility. The interaction between FinTech Capability and Digital Market Intelligence was positive and statistically significant ($\beta = .1575$, $SE = .0368$, $t = 4.2737$, $p < .001$, 95% CI [.0850, .2299]).

The interaction produced a significant increase in explained variance, with $\Delta R^2 = .0241$, $F(1, 376) = 18.2643$, $p < .001$. This indicates that the relationship between FinTech Capability and Entrepreneurial Financial Agility changes according to the level of Digital Market Intelligence.

The conditional effects provide further evidence of the moderating relationship. At a low level of Digital Market Intelligence, the effect of FinTech Capability on Entrepreneurial Financial Agility was .4891 ($SE = .0563$, $t = 8.6911$, $p < .001$). At the mean level of Digital Market Intelligence, the effect increased to .6625 ($SE = .0367$, $t = 18.0603$, $p < .001$). At a high level of Digital Market Intelligence, the effect increased further to .8362 ($SE = .0531$, $t = 15.7381$, $p < .001$).



Thus, the positive effect of FinTech Capability on Entrepreneurial Financial Agility becomes progressively stronger as Digital Market Intelligence increases. H5 is therefore supported.

4.6.6 Moderated Mediation Analysis. H6 proposed that Digital Market Intelligence would moderate the indirect relationship between FinTech Capability and Entrepreneurial Success through Entrepreneurial Financial Agility. The conditional indirect effects demonstrate a systematic increase across levels of Digital Market Intelligence.

At a low level of Digital Market Intelligence, the indirect effect was .1647 (BootSE = .0305), with a 95% bootstrap confidence interval of [.1071, .2271]. At the mean level of Digital Market Intelligence, the indirect effect increased to .2231 (BootSE = .0350), with a confidence interval of [.1556, .2926]. At a high level of Digital Market Intelligence, the indirect effect increased further to .2816 (BootSE = .0444), with a confidence interval of [.1955, .3694].

The index of moderated mediation was .0530 (BootSE = .0136), with a bootstrap confidence interval of [.0280, .0812]. Because this confidence interval does not contain zero, the indirect effect of FinTech Capability on Entrepreneurial Success through Entrepreneurial Financial Agility significantly varies as a function of Digital Market Intelligence.

The findings therefore indicate that Digital Market Intelligence strengthens the indirect pathway from FinTech Capability to Entrepreneurial Success. In substantive terms, FinTech Capability has a stronger contribution to Entrepreneurial Success through Entrepreneurial Financial Agility when entrepreneurs possess higher levels of Digital Market Intelligence. H6 is therefore supported.

Table 4.6

Conditional Indirect Effects and Index of Moderated Mediation

Level of Digital Market Intelligence	Indirect Effect	BootSE	BootLLCI	BootULCI
Low (-1.1175)	.1647	.0305	.1071	.2271
Mean (-.0162)	.2231	.0350	.1556	.2926
High (1.0869)	.2816	.0444	.1955	.3694
Index of Moderated Mediation	.0530	.0136	.0280	.0812

The conditional indirect effects demonstrate that the proposed mechanism is not constant across different levels of Digital Market Intelligence. The indirect effect increases from .1647 at low Digital Market Intelligence to .2816 at high Digital Market Intelligence. The positive index of moderated mediation and its bootstrap confidence interval excluding zero provide direct evidence that Digital Market Intelligence significantly conditions the indirect relationship.

4.7 Summary of Hypotheses Testing

All six hypotheses proposed in the study were supported. H1 established a significant positive direct effect of FinTech Capability on Entrepreneurial Success. H2 demonstrated that FinTech Capability positively predicts Entrepreneurial Financial Agility, while H3 established a positive relationship between Entrepreneurial Financial Agility and Entrepreneurial Success. H4 confirmed the mediating role of Entrepreneurial Financial Agility. H5 demonstrated that Digital Market Intelligence strengthens the relationship between FinTech Capability and Entrepreneurial Financial Agility. Finally, H6 confirmed that Digital Market Intelligence significantly moderates the indirect effect of FinTech Capability on Entrepreneurial Success through Entrepreneurial Financial Agility.

Table 4.7

Summary of Hypotheses Testing

Hypothesis	Relationship	β / Effect	SE	t	p	Bootstrap CI	Decision
H1	FTC $\rightarrow$ ES	.4408	.0494	8.9277	<.001	[.3438, .5379]	Supported
H2	FTC $\rightarrow$ EFA	.6650	.0367	18.1446	<.001	[.5930, .7371]	Supported
H3	EFA $\rightarrow$ ES	.3368	.0494	6.8205	<.001	[.2397, .4339]	Supported
H4	FTC $\rightarrow$ EFA $\rightarrow$ ES	.2231	.0350	—	—	[.1556, .2926]	Supported
H5	FTC $\times$ DMI $\rightarrow$ EFA	.1575	.0368	4.2737	<.001	[.0850, .2299]	Supported
H6	Moderated mediation	.0530	.0136	—	—	[.0280, .0812]	Supported



Overall, the findings support the proposed theoretical model. The results demonstrate that FinTech Capability has both a direct relationship with Entrepreneurial Success and an indirect relationship operating through Entrepreneurial Financial Agility. More importantly, the strength of the first-stage relationship is dependent on Digital Market Intelligence. The pattern of conditional indirect effects indicates that higher Digital Market Intelligence enhances the extent to which FinTech Capability is translated into financial agility and subsequently into Entrepreneurial Success.

5. Discussion and Conclusion

5.1 Discussion of Findings

The present study examined how FinTech Capability contributes to Entrepreneurial Success through Entrepreneurial Financial Agility and how Digital Market Intelligence conditions this process in the Pakistani entrepreneurial context. The findings provide support for all six hypotheses and indicate that FinTech capability should not be viewed simply as the adoption of digital financial technologies. Rather, its entrepreneurial value depends on the ability of firms to convert technology-enabled financial resources into agile financial responses and, subsequently, improved entrepreneurial outcomes.

5.1.1 FinTech Capability and Entrepreneurial Success. H1 proposed that FinTech Capability has a significant positive effect on Entrepreneurial Success. The results supported this hypothesis, with a positive and statistically significant direct effect ($\beta = .4408$, $t = 8.9277$, $p < .001$). This finding indicates that entrepreneurs with stronger capabilities to utilize FinTech resources are more likely to achieve favorable entrepreneurial outcomes. FinTech can facilitate financial transactions, improve access to financial information, support resource management, and enable entrepreneurs to respond more effectively to business requirements. This interpretation is consistent with Skandalis (2025), who emphasizes the relationship between entrepreneurship, FinTech, and SME performance. Similarly, Prapanca et al. (2025) demonstrate the importance of FinTech capability for SME economic sustainability, while Sardiana and Sawmong (2025) associate entrepreneurial capabilities and FinTech utilization with improved business performance. Thus, the present finding reinforces the view that FinTech capability represents a strategically valuable entrepreneurial resource rather than merely an operational technology.

5.1.2 FinTech Capability and Entrepreneurial Financial Agility. H2 examined whether FinTech Capability enhances Entrepreneurial Financial Agility. The hypothesis was strongly supported ($\beta = .6650$, $t = 18.1446$, $p < .001$). Among the direct relationships examined in the model, this represents a particularly strong association. The finding suggests that FinTech capability provides entrepreneurs with the technological and informational infrastructure necessary to make faster financial decisions, adjust resource allocation, and respond to changing financial circumstances. Hussain et al. (2025) similarly highlight financial agility as an important mechanism through which FinTech can enhance competitive advantage in SMEs. Waqar et al. (2025) further connect FinTech access with entrepreneurial agility and sustainable SME performance. Alfawaer (2025) also demonstrates the importance of technology-enabled transformation for organizational agility. Taken together, these findings suggest that FinTech creates value not only by improving financial transactions but also by increasing the entrepreneur's ability to adapt financial resources when circumstances change.

5.1.3 Entrepreneurial Financial Agility and Entrepreneurial Success. H3 proposed that Entrepreneurial Financial Agility positively affects Entrepreneurial Success. The results supported this relationship ($\beta = .3368$, $t = 6.8205$, $p < .001$). Entrepreneurs operating in uncertain environments require the ability to adjust financial commitments, redirect resources, respond to emerging opportunities, and manage changing business requirements. Financial agility therefore represents an important capability for converting financial resources into entrepreneurial outcomes. Shatila and Hernández-Lara (2026) similarly emphasize agility as strategically important for enhancing entrepreneurial success in digitally transforming environments. Rohmah (2025) links financial innovation and strategic management with entrepreneurial success, while Alshibani et al. (2026) demonstrate the broader importance of financial agility in SME contexts. The present findings consequently indicate that possessing financial resources or technologies alone is



insufficient; entrepreneurs must also possess the capability to use and reconfigure those resources respectively.

5.1.4 Entrepreneurial Financial Agility as a Mediator. H4 proposed that Entrepreneurial Financial Agility mediates the relationship between FinTech Capability and Entrepreneurial Success. The indirect effect was positive and significant (effect = .2231, BootSE = .0350, 95% CI [.1556, .2926]), because the bootstrap confidence interval did not include zero. This finding demonstrates that part of the influence of FinTech capability on entrepreneurial success operates through financial agility. In other words, FinTech capability provides the technological foundation, while financial agility represents an important process through which that capability becomes economically and entrepreneurially valuable. This interpretation is consistent with Hidayat-ur-Rehman (2025), who identifies a conditional pathway linking FinTech adoption with sustainable firm performance, and with Rebekah and Afjal (2025), who demonstrate the importance of intermediary mechanisms in connecting FinTech adoption and digital transformation with organizational performance. Hussain et al. (2025) provide further support for positioning financial agility as an important pathway connecting FinTech-related capabilities with competitive outcomes. The mediation finding therefore moves beyond a simple technology-performance explanation by demonstrating how capability is translated into entrepreneurial outcomes.

5.1.5 Digital Market Intelligence as a Moderator. H5 proposed that Digital Market Intelligence strengthens the relationship between FinTech Capability and Entrepreneurial Financial Agility. The interaction effect was positive and significant ($\beta = .1575$, $t = 4.2737$, $p < .001$), with a meaningful increase in explained variance ($\Delta R^2 = .0241$). The conditional effect of FinTech capability on financial agility increased from .4891 at low Digital Market Intelligence to .6625 at the mean level and .8362 at high Digital Market Intelligence. These results indicate that FinTech capability is more strongly translated into financial agility when entrepreneurs possess stronger digital market intelligence. Alshibani et al. (2026) highlight the importance of digital intelligence and agility in SME contexts, while Nurfaizal (2025) demonstrates the relevance of digital capabilities in entrepreneurial settings. Anggraheni and Mawaddah (2025) further emphasize the role of data and technology in supporting entrepreneurial decision making. Thus, technological-financial capability and market intelligence appear to operate as complementary capabilities rather than isolated resources.

5.1.6 Moderated Mediation. H6 proposed that Digital Market Intelligence moderates the indirect effect of FinTech Capability on Entrepreneurial Success through Entrepreneurial Financial Agility. The results strongly supported this hypothesis. The conditional indirect effect increased from .1647 at low Digital Market Intelligence to .2231 at the mean level and .2816 at high Digital Market Intelligence. More importantly, the index of moderated mediation was .0530, with a bootstrap confidence interval of [.0280, .0812], which excludes zero. Following the logic of conditional process analysis proposed by Hayes (2015, 2018), this finding confirms that the strength of the mediated relationship varies systematically according to the level of Digital Market Intelligence. The result is also consistent with the broader evidence that dynamic capabilities can condition the performance consequences of FinTech and technology-enabled resources (Asemanjerdi et al., 2026). Overall, the findings indicate that FinTech capability generates greater entrepreneurial value when entrepreneurs can interpret digital market signals and align financial responses with changing market conditions.

5.2 Conclusion

This study investigated how FinTech Capability contributes to Entrepreneurial Success and examined Entrepreneurial Financial Agility as a mediating mechanism and Digital Market Intelligence as a moderating condition. Based on data from 380 respondents in Pakistan, all six hypotheses were supported.

The findings establish that FinTech Capability has a significant positive effect on Entrepreneurial Success. This demonstrates that the ability to effectively utilize financial technologies can provide entrepreneurs with valuable resources for managing financial activities and supporting business outcomes. However, the findings also show that the relationship is not exclusively direct. Entrepreneurial Financial Agility significantly mediates the relationship between FinTech Capability and Entrepreneurial Success,



demonstrating that technological capability creates greater value when entrepreneurs can rapidly adapt financial decisions and reconfigure financial resources.

The moderation results provide an additional layer of explanation. Digital Market Intelligence significantly strengthens the relationship between FinTech Capability and Entrepreneurial Financial Agility. Entrepreneurs with higher levels of digital market intelligence appear better positioned to interpret market information, recognize changing opportunities and threats, and translate FinTech-enabled information into agile financial responses. The significant index of moderated mediation further demonstrates that the indirect contribution of FinTech capability to entrepreneurial success becomes stronger as Digital Market Intelligence increases.

The overall conclusion is therefore that FinTech capability should not be conceptualized as a standalone technological advantage. Its contribution to entrepreneurial success depends partly on the organizational and entrepreneurial capabilities surrounding it. In the Pakistani context, where entrepreneurs operate amid financing constraints, changing digital environments, and varying levels of technological confidence, the combination of FinTech capability, financial agility, and digital market intelligence provides a more comprehensive explanation of entrepreneurial outcomes.

5.3 Theoretical Implications

The study contributes to the dynamic capability perspective by extending its application to FinTech-enabled entrepreneurship. First, the findings position FinTech Capability as a capability through which entrepreneurs can deploy and utilize technology-enabled financial resources. This extends the discussion of dynamic capabilities within digitally transforming organizations (Tanveer, 2026). Second, Entrepreneurial Financial Agility is established as an important mechanism through which technological-financial capabilities influence entrepreneurial outcomes, thereby emphasizing resource adaptation rather than technology adoption alone. Third, Digital Market Intelligence is introduced as a boundary condition, demonstrating that the performance value of FinTech capability depends partly on the entrepreneur's capacity to sense and interpret digital market changes. These complements research emphasizing dynamic capabilities in technology-intensive environments (Asemanjerdi et al., 2026; Salah et al., 2026a). Finally, the findings support the broader argument that entrepreneurial capabilities are increasingly important for navigating technological transformation (Hassan, 2026; Shatila & Hernández-Lara, 2026).

5.4 Practical Recommendations

The findings provide several practical implications for Pakistani entrepreneurs and SMEs. First, entrepreneurs should develop FinTech capability rather than merely adopting individual FinTech applications. Technology should be integrated into financial planning, monitoring, decision making, and resource allocation. Second, entrepreneurs should develop financial agility by establishing processes that allow financial resources to be rapidly redirected when market conditions change. Third, digital market monitoring should be connected directly with financial decision making so that changes in customer demand, competitors, and digital opportunities can inform resource allocation. Fourth, entrepreneurs should invest in digital intelligence and financial literacy alongside technological adoption. This is particularly important in environments where financing barriers and financial capability can constrain SME development (Ashraf et al., 2025; Latifah et al., 2025). Finally, entrepreneurs should view FinTech as a strategic capability for improving flexibility and responsiveness rather than simply as a mechanism for increasing transaction efficiency. Building these complementary capabilities can strengthen the conversion of digital financial resources into entrepreneurial outcomes (Khan et al., 2026; Waqar et al., 2025).

5.5 Limitations and Future Research Directions

Several limitations should be considered when interpreting the findings. First, cross-sectional design captures relationships at one point in time and therefore limits strong causal inference. Second, the study relies on quantitative self-report responses, which may introduce common-method or response biases. Third, the empirical context is restricted to Pakistan, limiting the direct generalizability of the findings to other institutional and economic environments. Fourth, the sample focuses on entrepreneurs and business



respondents, which may not capture differences across industries, firm sizes, or stages of business development.

Future studies could address these limitations through longitudinal designs that examine how FinTech capability develops over time. Comparative studies across countries could determine whether institutional conditions influence the proposed relationships. Researchers could also examine firm age, entrepreneurial experience, financial literacy, digital transformation capability, AI capability, innovation capability, institutional support, and financial inclusion as additional explanatory or boundary variables. Comparative research could be particularly valuable because technological capabilities and digital transformation may operate differently across institutional settings (Ali et al., 2026; Alnsour et al., 2025). Further research could also examine how dynamic entrepreneurial strategies and business support mechanisms shape these relationships (Salah et al., 2026b; Munawar, 2025). Such extensions would provide a more comprehensive understanding of how entrepreneurs can transform emerging financial technologies into sustained entrepreneurial success.

Contribution of Authors

All the authors participated in the ideation, development, and final approval of the manuscript, making significant contributions to the work reported.

Conflict of Interest Statement

The authors declare no conflict of interest.

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Data Availability

This study relies exclusively on publicly available secondary sources, including corporate disclosures, industry reports, and peer-reviewed literature, all of which are cited in the References section.

References

- Abrar, K., & Amjad, S. I. (2026). Gamified advertising in the metaverse: How Pakistani brands can leverage virtual experiences for customer engagement. *Social Science Review Archives*, 4(1), 6022–6041. <https://doi.org/10.70670/sra.v4i1.2471>
- Alfawaer, N. H. S. (2025). Cloud transformation as a mediator between financial technology adoption and organizational agility: Evidence from Jordanian commercial banks. *International Journal of Applied Mathematics*, 38(9s), 1351–1392. <https://doi.org/10.12732/ijam.v38i9s.864>
- Ali, G. A., Syed, M. I., Saqib, S., Rizvi, S. A. A., & Naz, S. (2026). AI adoption and national economic competitiveness: A comparative study of industrial and economic leadership in Pakistan and the UK. *Journal of Business Insight and Innovation*, 5(8), 36–55. <https://doi.org/10.63544/jbii.v5i8.129>
- Alnsour, I. R., Al-Nsour, I. A., Malkawi, E. M., & Allahham, M. I. (2025). The role of internet of things in FinTech adoption within banking sector: The moderating role of digital transformation capability. *Lex Localis—Journal of Local Self-Government*, 23(S4), 2486–2510.
- Alshibani, S. M., Sharma, P., Agarwal, S., Petruzzelli, A. M., & Papa, A. (2026). Bridging digital intelligence and ESG outcomes: The role of mindfulness and eco-financial agility in SMEs. *International Entrepreneurship and Management Journal*, 22(3), Article 107.
- Anggraheni, D. R., & Mawaddah, U. (2025). From data to decision: How AI and FinTech drive digital transformation in rural entrepreneurship. *International Journal of Global Accounting, Management, Education, and Entrepreneurship*, 6(1), 130–151. <https://doi.org/10.48024/ijgame2.v6i1.228>
- Asemanjerdi, S. A., Khosraviniya, M., de Frutos Madrazo, P., Moradi, Z., & Martín-Cervantes, P. A. (2026). Examining the impact of FinTech and artificial intelligence on financial performance: The moderating role of dynamic capabilities. *FinTech*, 5(2), Article 45. <https://doi.org/10.3390/fintech5020045>



- Ashraf, N., Arzu, F., Abrar, K., & Anwar, M. (2025). Narratives of SMEs on access to finance: Barriers and opportunities in Pakistan's banking sector. *The Critical Review of Social Sciences Studies*, 3(4), 262–277.
- Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses' Association*, 22(2), 27–30. <https://doi.org/10.33235/jarna.22.2.27-30>
- Creswell, J. W., & Creswell, J. D. (2005). Mixed methods research: Developments, debates, and dilemmas. In R. A. Swanson & E. F. Holton III (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 315–326). Berrett-Koehler Publishers.
- Hassan, N. (2026). Entrepreneurship in the digital age: The mediating role of entrepreneurial capabilities in navigating the challenges and opportunities of technological transformation. *The Journal of the Knowledge Economy*, 17, 1–47.
- Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, 50(1), 1–22. <https://doi.org/10.1080/00273171.2014.962683>
- Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4–40. <https://doi.org/10.1080/03637751.2017.1352100>
- Hidayat-ur-Rehman, I. (2025). The role of financial literacy in enhancing firm's sustainable performance through FinTech adoption: A moderated mediation analysis. *International Journal of Innovation Science*, 17(4), 754–785. <https://doi.org/10.1108/IJIS-03-2024-0056>
- Hussain, S., Masood, K., Idrees, F., & Sohail, A. (2025). Enhancing competitive advantage in SMEs through FinTech: The mediating roles of technological innovation and financial agility in emerging economy. *Journal of Innovative Research in Management Sciences*, 6(2), 45–64.
- Khan, M., Arzu, F., Amjad, S. I., Mahmood, A., & Abrar, K. (2026). Exploring how FinTech entrepreneurs build consumer trust in emerging markets amid low financial literacy and high technological skepticism challenges adoption rates. *Bulletin of Management Review*, 3(2), 524–552. <https://doi.org/10.5281/zenodo.21629063>
- Latifah, L., Aeni, I. N., Isdiati, E. H., & Gunawati, I. S. (2025). Improving MSME performance through financial literacy, behavior, and FinTech use in Jepara. *JAS (Jurnal Akuntansi Syariah)*, 9(2), 323–335. <https://doi.org/10.46367/jas.v9i2.2545>
- Munawar, A. (2025). Enhancing the performance of newly established MSMEs through entrepreneurial orientation and digitalization. *Financial and Credit Activity Problems of Theory and Practice*, 3(62), 495–514. <https://doi.org/10.55643/fcaptp.3.62.2025.4709>
- Nunnally, J. C. (1975). Psychometric theory—25 years ago and now. *Educational Researcher*, 4(10), 7–21. <https://doi.org/10.3102/0013189X004010007>
- Nurfaizal, Y. (2025). Digital mindset, technological self-efficacy, and social media usage on entrepreneurial intention: Mediation of innovation capability and moderation of digital literacy. *Jurnal Manajemen Teori dan Terapan*, 18(3), 309–328. <https://doi.org/10.20473/jmtt.v18i3.78708>
- Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381–391. <https://doi.org/10.1086/209405>
- Prapanca, D., Husain, A. S., Aisdja, S., & Jazuli, A. (2025). FinTech capability and economic sustainability of SMEs: The mediating roles of business resilience and innovation capability in Indonesia's food and beverage sector. *Financial and Credit Activity Problems of Theory and Practice*, 6(65), 403–419.
- Rebekah, E., & Afjal, M. (2025). Exploring the mediating role of FinTech adoption and digital transformation in enhancing bank performance: A TOE framework study using a hybrid SEM-ANN approach. *SAGE Open*, 15(4), 21582440251367149. <https://doi.org/10.1177/21582440251367149>
- Rehmat, M. A., Hassan, H., Rumaan, M., Baig, J., & Abrar, K. (2025). Human-centred explainable AI in emerging markets: Trust and confidence among non-technical users in Pakistan. *Annual Methodological Archive Research Review*, 3(10), 145–163.



- Rohmah, J. N. (2025). Integrating financial innovation and strategic management: A pathway to entrepreneurial success. *Journal of Economics, Accounting, Management, and Entrepreneurial Innovation*, 1(1), 9–20.
- Salah, W. M. F., Shohaieb, M., & Helmy, H. (2026). Dynamic capabilities and organizational excellence: A new perspective on the moderating role of business incubators in Egypt's established FinTech startups. *MSA-Management Sciences Journal*, 5(1), 65–91.
- Salah, W. M. F., Shohaieb, M., & Helmy, H. M. A. E. (2026). Rethinking the moderating role of business incubators on the relationship between entrepreneurial strategies and dynamic capabilities in Egypt's FinTech startups. *The Academic Journal of Contemporary Commercial Research*, 6(2), 142–169.
- Sardiana, A., & Sawmong, S. (2025). Exploring entrepreneurial capabilities and firm innovativeness to leverage financial technology start-up business performance. *Entrepreneurial Business and Economics Review*, 13(4), 71–88. <https://doi.org/10.15678/EBER.2025.130404>
- Sardiana, A., Sawmong, S., & Zahra, R. (2025). Understanding competitiveness in FinTech: Examining the effects of innovativeness and competitive intensity. *Perinatal Journal*, 33(1), 720–729. <https://doi.org/10.57239/prn.25.03310077>
- Shatila, K., & Hernández-Lara, A. B. (2026). From digital literacy to Innovation 5.0: The strategic role of agility in enhancing entrepreneurial success. *Journal of Entrepreneurship in Emerging Economies*, 18(5), 1371–1396. <https://doi.org/10.1108/JEEE-06-2025-0361>
- Skandalis, K. S. (2025). From credit fear to competitive edge: The interplay of entrepreneurship, FinTech and SME performance. *Journal of Economic and Administrative Sciences*, 1–16. <https://doi.org/10.1108/JEAS-06-2025-0386>
- Takona, J. P. (2024). Research design: Qualitative, quantitative, and mixed methods approaches (6th ed.). *Quality & Quantity*, 58(1), 1011–1013. <https://doi.org/10.1007/s11135-023-01798-2>
- Tanveer, M. (2026). FinTech-enabled digital transformation for sustainable performance: The strategic role of dynamic capabilities. *Frontiers in Human Dynamics*, 8, Article 1747642. <https://doi.org/10.3389/fhumd.2026.1747642>
- Waqar, M., Masood, K., & Idrees, F. (2025). Digital financial literacy and FinTech access driving sustainable SMEs performance through green innovation and entrepreneurial agility. *Gomal University Journal of Research*, 41(2), 115–128. <https://doi.org/10.51380/gujr-41-02-01>
- Wibowo, S. N., & Rajput, S. (2025). Digital entrepreneurship and financial performance: The mediating role of innovation capability in SMEs India. *Journal of Business Innovation and Accounting Research*, 2(2), 71–79. <https://doi.org/10.56442/cfzgnh19>