Randwick International of Social Sciences (RISS) Journal
Vol. 6, No.4, October 2025 | Page: 386-399
ISSN Online: 2722-5674 - **ISSN Print**: 2722-5666
https://www.randwickresearch.com/index.php/rissj

Factors Influencing the Growth of Small and Medium Enterprises (SMEs) in Afghanistan: A Case Study of Parwan Province

DOI: *https://doi.org/10.47175/rissj.v6i4.1231*

| Mohammad Mahfoz faqiri[1] | Mohammad Omar Lutfy[2,*] |
| Mohammad Faisal Neizi[3] |

[1,3]

[2] B.B.A department of economic faculty, Parwan University Finance and Banking department of economic faculty, Parwan University

*[*lutfy114@gmail.com*

ABSTRACT
Small and Medium Enterprises (SMEs) serve as pivotal engines of sustainable economic development, employment generation, and innovation diffusion. Their lean organizational structures, operational flexibility, and relatively low capital requirements render them highly effective in poverty alleviation and social empowerment. In Afghanistan, promoting SME growth constitutes a strategic pathway for economic reconstruction and societal resilience. This study employs a descriptive-survey design to investigate the key determinants of SME expansion in Parwan province. Data were collected from 322 active enterprises and analyzed through Exploratory Factor Analysis (EFA). The results highlight eight principal growth drivers: innovation and production productivity, workforce competencies, institutional support and legal framework, managerial and leadership capabilities, technological and logistical infrastructure, financial performance and management, human capital and technological capacity, and preparedness for external competition. Targeted enhancement of these factors can equip policymakers with actionable insights to formulate evidence-based strategies, fostering sustainable and resilient SME driven economic growth in the region.

KEYWORDS
Economic growth; factor analysis; Parwan Province; Small and Medium Enterprises (SMEs)

INTRODUCTION

The private sector is a cornerstone of economic growth, productivity enhancement, and job creation, especially in developing countries (Shadab & Rathod, 2022). Afghanistan exemplifies this, with its private sector recognized as a primary engine of the national economy, significantly contributing to employment and economic activity (Mashal, 2014). Among its most critical components, Small and Medium Enterprises (SMEs) play a pivotal role in driving economic development. Operating across sectors such as industry, services, agriculture, and trade, SMEs are typically smaller in capital, size, and workforce than large firms but exhibit remarkable flexibility, allowing rapid adaptation to dynamic market conditions (Shadab & Rathod, 2022). In Afghanistan, SMEs constitute approximately 80–90% of all businesses, contribute nearly 50% to GDP, and employ roughly one-third of the labor force, making them key drivers of employment, economic diversification, export growth, and entrepreneurial skill development (Islam, Mian, & Ali, 2021).

Sustainable SME development hinges on understanding the internal and external determinants of performance. National research demonstrates that SMEs' outcomes depend

heavily on interactions with environmental, legal, institutional, and internal factors (Shadab & Rathod, 2022). Studies in Sarpol and Jowzjan provinces categorize these factors into internal dimensions such as research and development, competitive advantage, managerial efficiency, and optimal human resource allocation and external dimensions, including competition, product quality, supportive policies, and regulatory stability (Imaaq, 2024). Effective performance improvement thus requires coordinated institutional interventions and macro-level policies.

Globally, skilled human capital, scientific management, employee participation, and technological adoption are recognized as critical growth drivers (Guangming & Hussain, 2024; Zhong, Qureshi, & Najjar, 2013). In Uzbekistan, innovation enhances production capacity and external management, while intra-industry competition can either facilitate or constrain growth depending on firm maturity and adaptability (Rahmatullah, 2024; Abdulrahmanovich, 2022). In neighboring countries, Pakistan emphasizes knowledge management, organizational innovation, and entrepreneurial orientation (Khan, Tufail, & Ali, 2021), whereas structural barriers such as capital access, taxation, and weak registration systems are noted (Abbas, Fareedi, & Saeed-ur-Rehman, 2020). In Iran, structural, environmental, and content-related factors influence SMEs, with managerial education, executive experience, and marketing skills playing key roles (Rahmati Alai & Vakil-ol-Rouya, 2015; Lotfizadeh & Shamsi, 2015). South Asian studies highlight digital marketing, modern market adaptation, and technological capacity development as pivotal (Sinha & Phuki, 2021; Islam, Mian, & Ali, 2021).

Afghan SMEs face structural and operational challenges, including limited domestic and international market access, skill shortages, complex legal and administrative processes, insufficient technological infrastructure, weak financial and institutional support, political and economic instability, and informal economic activities (Shadab & Rathod, 2022). Knowledge gaps and insufficient local-level data further complicate evidence-based policymaking, leaving key factors such as physical infrastructure, managerial capacity, and business environment security underexplored.

Ultimately, SME performance depends on the coordinated interplay of internal factors (innovation, effective management, human resources, production capacity) and external factors (institutional support, infrastructure, financial policies, market access). Leveraging these elements through development-oriented policies and institutional facilitation can substantially enhance SME growth in Afghanistan. This study aims to fill existing theoretical and informational gaps by examining the determinants of SME growth in Parwan province, providing a foundation for informed decision-making, strategic development planning, and effective local-level support.

LITERATURE REVIEWS

This study develops a rigorous theoretical framework to investigate the determinants of development and sustainability of Small and Medium Enterprises (SMEs) in Afghanistan, with a particular focus on Parwan province. The framework integrates eight factors derived from exploratory factor analysis (EFA) with well-established scientific theories, providing a coherent lens for interpreting both theoretical constructs and empirical evidence.

Innovation and Production Efficiency

Innovation and production efficiency are foundational drivers of SME performance. Schumpeter's innovation theory posits that creative advances in products, services, or production processes are engines of economic growth, generating sustainable competitive advantages (Schumpeter, 1942). Complementarily, the Resource-Based View (RBV) emphasizes that the effective deployment of internal resources, including knowledge,

skills, and R&D capabilities, underpins superior performance and high productivity (Barney, 1991). Together, these perspectives underscore that fostering innovation and maximizing resource utilization are essential for long-term SME growth**.**

Operational Competencies of the Workforce

This factor highlights task efficiency, skill development, team coordination, and employee commitment. Human resource management and team effectiveness theories argue that optimizing workforce performance and aligning team efforts are critical for achieving organizational goals and enhancing productivity (Becker, 1964). Katzenbach and Smith (1993) further emphasize that cohesive teamwork is a decisive contributor to organizational success.

Institutional Support and Legal Framework

Institutional theory asserts that organizational success is heavily dependent on formal structures, laws, regulations, and sustained institutional support (DiMaggio & Powell, 1983). Complementing this, entrepreneurship ecosystem theory emphasizes that effective institutions, transparent legal systems, and supportive environments are vital for SME development (Stam, 2015). Weak legal frameworks or insufficient institutional support can significantly constrain enterprise growth.

Managerial and Leadership Capabilities

Through transformational leadership theory, this factor underscores decision-making, team motivation, leadership skills, and change management as central to high performance and employee engagement (Bass, 1985). Dynamic capabilities theory further highlights that strategic management of resources and responsiveness to environmental changes are crucial for organizational resilience and competitiveness (Teece, Pisano & Shuen, 1997).

Technological and Logistics Infrastructure

Technology transfer theory emphasizes the critical role of IT infrastructure, equipment quality, energy reliability, and transportation systems in enhancing SME performance and sustainability (Bozeman, 2000). Open innovation theory also argues that inter-organizational collaboration and knowledge sharing can accelerate internal innovation and strengthen competitive positioning (Chesbrough, 2003).

Financial Performance and Management

Financial performance reflects the efficient utilization of resources and organizational stability, interpreted through Financial Sustainability Theory. Effective financial management ensures firms can respond flexibly to crises, exploit opportunities, and sustain long-term growth (Fatoki, 2012).

Human Capital and Technological Capacity

This factor highlights technical education, technological assets, skilled labor, and technology integration. Human Capital Theory links education and technical expertise to enhanced productivity and innovation potential (Becker, 1964). Evolutionary economics theory underscores that technological innovation and organizational learning enable firms to adapt to environmental changes and achieve sustained growth (Nelson & Winter, 1982).

External Competitiveness

Finally, this factor addresses market pressures and international competitiveness, analyzed through Porter’s Competitive Advantage Theory. Success depends on product quality,

workforce expertise, and the ability to meet international market demands effectively (Porter, 1985).

RESEARCH METHODS

Field of the Study

This research focuses on small and medium-sized enterprises (SMEs) in Parwan Province. The primary objective of the study is to identify and analyze the factors influencing the growth and development of these enterprises, which play a vital role in economic dynamism, job creation, income generation, and local development. In terms of methodology, the research adopts a quantitative approach and, in terms of purpose, has an applied nature. The findings are expected to be directly applicable in policymaking, support programs, and managerial decision-making aimed at enhancing the capacity of SMEs in the province. Data were collected through a survey method using a standardized questionnaire. The questionnaire was designed to cover a wide range of factors influencing SME growth and development, including economic, social, institutional, managerial, and environmental dimensions. The statistical population of the study comprises all active small and medium-sized enterprises in Parwan Province, which, based on preliminary estimates, amounts to approximately 500 units. This population represents the real context of economic activities in the province and can also be considered as a sample reflecting the general situation of SMEs in Afghanistan. Accordingly, the scope of the study encompasses, in addition to its geographical focus on Parwan Province, a thematic focus on both internal and external factors affecting enterprise growth, as well as a temporal focus covering the current period of SME activities during the year in which the study was conducted.

Data Collection Method

For the purpose of data collection, a survey strategy was adopted, utilizing a structured questionnaire as the primary research instrument. The questionnaire was designed in two main sections. The first section gathered demographic information of the respondents, including variables such as age, gender, educational attainment, and years of professional experience. The second section comprised 46 items formulated on a five-point Likert scale ranging from “strongly disagree” to “strongly agree,” intended to measure the underlying factors influencing the growth and development of small and medium-sized enterprises (SMEs). The determination of sample size was guided by the rule of thumb for factor analysis as proposed by Hair, Black, Babin, and Anderson (2010), which recommends a sample size of five to ten times the number of items. Based on the 46 items included in the questionnaire, the appropriate sample size was estimated to fall between 230 and 460 units. Considering that the statistical population consisted of 500 SMEs in Parwan Province, a final sample of 322 enterprises was randomly selected. This number, equivalent to approximately seven times the number of items, was deemed adequate to ensure the robustness of the factor analysis. Ultimately, 322 valid and complete questionnaires were successfully collected and subjected to further statistical analysis. The face and content validity of the instrument were verified through expert judgment obtained from academic scholars and specialists in the field of management. Additionally, internal consistency and reliability were assessed by calculating Cronbach’s alpha coefficient, the results of which indicated that the reliability levels were within an acceptable and desirable range.

Data Analysis Method

To analyze the collected data, a series of statistical procedures were employed. In the first step, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were calculated to assess the suitability of the data for factor analysis.

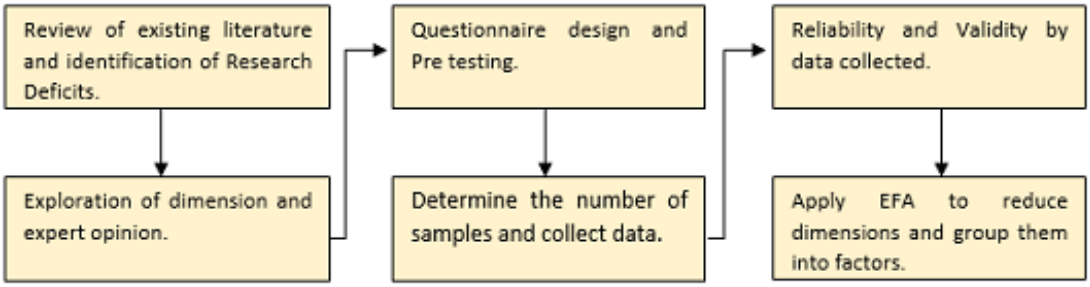

Figure 1. Research flow of the study
Source: Research findings

The results confirmed that the dataset met the necessary conditions for conducting factor analysis. Subsequently, exploratory factor analysis (EFA) was performed using the Principal Components method with Varimax rotation. During this stage, items with factor loadings below 0.6 were eliminated, resulting in 35 valid items retained for further analysis. To evaluate the internal consistency and reliability of the extracted factors, Cronbach's alpha coefficients were computed, and the results indicated that the values were at an acceptable and desirable level. Furthermore, construct validity was examined through both convergent and discriminant validity analyses. The findings demonstrated that each factor independently measured a distinct construct, while the overlap between factors was minimized. Accordingly, the collected data were confirmed to possess the required reliability and validity, thereby providing a solid foundation for subsequent analyses.

RESULTS AND DISCUSSION

In this section, Exploratory Factor Analysis (EFA) was employed to identify latent dimensions and categorize items into conceptual factors. This method enables the reduction of data while extracting meaningful constructs. Prior to analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were conducted to ensure the suitability of the dataset. Upon validation, factors were extracted using the principal component method with Varimax rotation.

Initially, the adequacy of the sample and the suitability of the data for EFA were evaluated. The KMO value was 0.782, indicating an acceptable level of sampling adequacy. Moreover, Bartlett's test yielded a chi-square value of 22,234.412 with 1,035 degrees of freedom and a significance level of 0.000, confirming that the correlation matrix was significantly different from an identity matrix and that factor analysis was justified.

Table 1. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.782
Bartlett's Test of Sphericity	Approx. Chi-Square	22234.412
	df	1035
	Sig.	0

Source: Research findings

According to Choudhry, Fang, and Lingard (2009), a KMO value below 0.5 is considered inadequate for factor analysis, while values between 0.6–0.7 are deemed weak, 0.7–0.8 acceptable, 0.8–0.9 good, and above 0.9 excellent. Furthermore, a significance level below 0.05 in Bartlett's test indicates that the correlation matrix significantly differs from the identity matrix, confirming the suitability for factor analysis.

The Total Variance Explained table shows the results of the principal component analysis, which was conducted to extract latent factors. Factors were selected based on eigenvalues greater than one. In this analysis, eight factors with eigenvalues exceeding one were extracted, cumulatively explaining 76.316% of the total variance.

Table 2. Total Variance Explained

Total Variance Explained						
Component	**Initial Eigenvalues**			**Rotation Sums of Squared Loadings**		
	Total	**% Of Variance**	**Cumulative %**	**Total**	**% Of Variance**	**Cumulative %**
1	11.186	24.316	24.316	6.276	13.644	13.644
2	5.444	11.836	36.152	4.876	10.601	24.244
3	4.691	10.198	46.35	4.586	9.969	34.213
4	3.921	8.524	54.874	4.312	9.373	43.586
5	3.228	7.017	61.891	4.25	9.238	52.825
6	2.658	5.777	67.668	4.193	9.116	61.94
7	2.083	4.529	72.197	3.584	7.792	69.732
8	1.895	4.12	76.316	3.029	6.584	76.316

Extraction Method: Principal Component Analysis.

Source: Research findings

The first factor, with an eigenvalue of 11.186, explained 24.316% of the total variance, while the second factor accounted for 11.836% of the variance. Subsequent factors contributed progressively smaller portions, with the eighth factor, having an eigenvalue of 1.895, explaining 4.120% of the total variance. Collectively, the eight factors account for 76.316% of the total variance, demonstrating the adequacy and robustness of the factor analysis model.

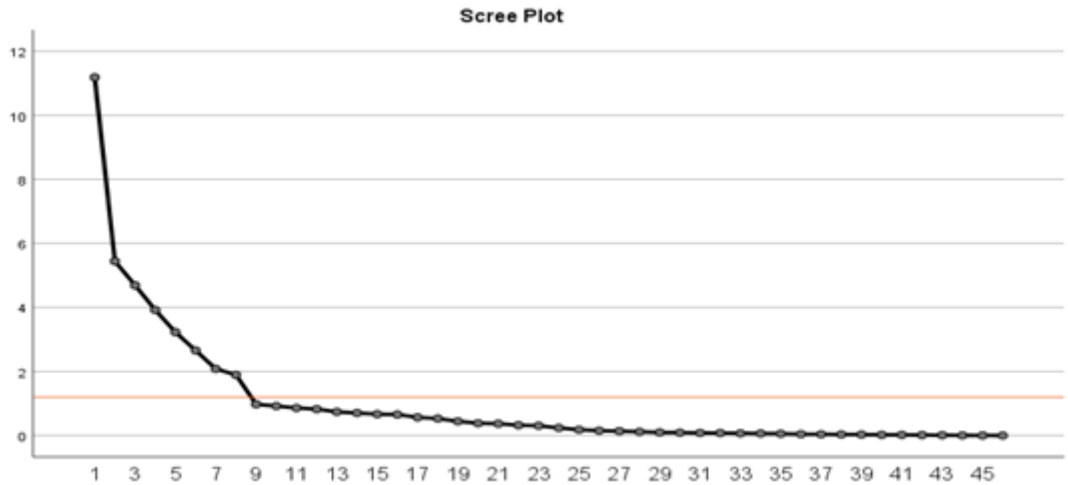

Figure 2. Illustrating the identified factors

Source: Research findings

Interpretation of Rotated Factors

For a more precise interpretation of the factor structure, the rotated factor matrix is presented, showing only the items with factor loadings greater than 0.6, while items with loadings below this threshold were removed. This procedure clarifies the assignment of each item to its corresponding factor and forms the basis for factor naming, providing a clear depiction of the conceptual structure of the latent variables. Additionally, the contribution of each factor to the total variance is presented in the total variance table, offering a comprehensive overview of the relative importance of each factor within the model.

Table 3. Rotated Component Matrix

Rotated Component Matrix			Variance Explained
Factors	**Items**	**Loading**	
Factor 1	Competitive Advantage	0.953	24.316
	Product Attractiveness	0.94	
	Size	0.925	
	R&D	0.924	
	Product Process Improvement	0.903	
	Profitability	0.884	
Factor 2	Task Efficiency	0.943	11.836
	Skill	0.941	
	Team Coordination	0.939	
	Employee Commitment	0.934	
Factor 3	Alternative Loan Sources	0.978	10.198
	Government Regulations	0.959	
	Timely Government Support	0.946	
	Supportive Policies	0.921	
	Work Permit	0.915	
Factor 4	Decision Making Process	0.95	8.524
	Team Motivation	0.94	
	Leaderships Skill	0.936	
	Change Management	0.935	
Factor 5	Information Technology	0.949	7.017
	Equipment Quality	0.94	
	Energy Sustainability	0.939	
	Transportation	0.937	
Factor 6	Financial Performance	0.952	5.777
	Cost Management	0.945	
	Profitability	0.941	
	Resource Utilization	0.915	
Factor 7	Technical & Specialized Training	0.931	4.529
	Technology as Capital	0.913	
	Skilled Workforce	0.908	
	Technology Position	0.639	
Factor 8	External Competitors	0.75	4.12
	Expertise	0.661	
	Product Quality	0.63	
	Workforce Size	0.603	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization. A
a Rotation converged in 6 iterations.

Source: Research findings

Factor Interpretation

Based on the collected data and conducted analyses, the first factor, which can be termed "Innovation and Production Efficiency," focuses on aspects such as creating competitive advantages, product attractiveness, firm size, research and development, production process improvement, and profitability, indicating that successful enterprises consider innovation in products and processes and high competitive capability as the core of their development. The second factor, centered on task efficiency, skills, team coordination, and employees' commitment to improvement, highlights the role of "Operational Competence of the Workforce" in enhancing productivity and team synergy, emphasizing the importance of skill development and workforce alignment. The third factor, focusing on alternative credit sources, government regulations, timely government support, supportive laws, and work permits, reflects "Institutional Support and Government Legal Framework" and underscores the significance of policies and institutional backing in providing a sustainable environment for economic activities.

The fourth factor, termed "Managerial and Leadership Capability," includes decision-making processes, team motivation, leadership skills, and change management, demonstrating that effective decision-making and strong leadership ensure team coordination and successful program implementation. The fifth factor, revolving around information technology, equipment quality, energy sustainability, and transportation, emphasizes the role of "Technology Infrastructure and Logistics" in improving performance and resource sustainability, highlighting the importance of access to adequate technology and efficient infrastructure. The sixth factor, concentrating on financial performance, cost management, profitability, and optimal resource utilization, illustrates the importance of "Financial Performance and Management" in establishing economic stability and growth. The seventh factor, focusing on technical and specialized training, the valuation of technology as capital, the availability of skilled labor, and the technological position, represents the critical role of "Human Capital and Technological Capacity," emphasizing that workforce skill development and effective utilization of technology drive innovation and efficiency. Finally, the eighth factor, concentrating on foreign competitors, expertise, product quality, and workforce size, represents "Acceptance of External Competition" and indicates that firms' ability to respond to international market pressures is vital for their sustainability and long-term development. Collectively, these eight factors explain 76.316% of the total variance, clearly demonstrating that they not only provide an accurate representation of the conceptual structure of the studied phenomena but also serve as a scientific foundation for subsequent analyses, managerial decisions, and policy making.

Reliability Assessment of Extracted Factors

To assess the validity and reliability of the eight extracted factors in this study, Cronbach alpha coefficient was employed. This coefficient measures the internal consistency and coherence of a set of items designed to assess a particular construct. Since the factors themselves are not directly measurable, the use of Cronbach alpha is entirely appropriate for evaluating their internal reliability.

According to the classification by Upadhyaya and Malek (2024), Cronbach alpha values above 0.90 are considered excellent, between 0.80 and 0.89 as good, 0.70 to 0.79 as acceptable, 0.60 to 0.69 as questionable, 0.50 to 0.59 as poor, and below 0.50 as unacceptable.

Table 4. Reliability Assessment of Extracted Factors

Factors	Cronbach's Alpha	Number of Item	Interpretation
Factor 1	0.975	6	Excellent
Factor 2	0.992	4	Excellent
Factor 3	0.972	5	Excellent
Factor 4	0.992	4	Excellent
Factor 5	0.985	4	Excellent
Factor 6	0.980	4	Excellent
Factor 7	0.921	4	Excellent
Factor 8	0.715	4	Good

Source: Research findings

The Cronbach's alpha coefficients for each factor are presented in Table 4. The values are as follows: Factor 1 (0.975), Factor 2 (0.992), Factor 3 (0.972), Factor 4 (0.992), Factor 5 (0.985), Factor 6 (0.980), Factor 7 (0.921), and Factor 8 (0.715). All factors exhibit alpha values above 0.70, indicating high reliability of the extracted conceptual structures. High Cronbach's alpha values for most factors demonstrate strong internal consistency and a high degree of coherence among the items within each factor. This substantially confirms the psychometric validity of the measurement instrument and the accuracy of factor extraction.

Moreover, the high factor loadings observed in the exploratory factor analysis (EFA) confirm the logical consistency and alignment of each item with its respective factor, thereby reinforcing the structural validity of the model. These results indicate that the proposed factor structure is not only statistically robust but also capable of accurately capturing the dimensions of the studied phenomenon. Consequently, the extracted factor structure provides sufficient reliability and validity for subsequent analyses, and the results can be confidently used for scientific and practical decision-making.

Convergent Validity

To ensure the construct validity of the measurement model, both convergent and discriminant validity were evaluated. Convergent validity reflects the extent to which indicators of a latent factor share high variance and effectively represent the intended construct. Typically, the Average Variance Extracted (AVE) should be equal to or greater than 0.5, indicating that the items explain more than half of their variance through the corresponding factor. Additionally, Composite Reliability (CR) should be at least 0.7 to guarantee the internal consistency of the factor. The results for the extracted factors are summarized in Table 5.

Table 5. Assessment of Convergent Validity of Extracted Factors

Factors	AVE	CR	Convergent Validity
Factor 1	0.85	0.971	Full Confirmed
Factor 2	0.882	0.967	Full Confirmed
Factor 3	0.891	0.976	Full Confirmed
Factor 4	0.884	0.968	Full Confirmed
Factor 5	0.886	0.968	Full Confirmed
Factor 6	0.88	0.967	Full Confirmed
Factor 7	0.734	0.915	Confirmed
Factor 8	0.44	0.757	**Weak AVE (<0.5)**

Source: Research findings

As shown, convergent validity is fully confirmed for the first seven factors, indicating strong internal consistency. However, Factor 8 (External Competitiveness) has an AVE less than 0.5, indicating weak convergent validity and requiring further scrutiny.

Discriminant Validity

Discriminant validity ensures that each factor is distinct from the others and that there is no conceptual overlap. It is assessed by comparing the square root of AVE (√AVE) for each factor with its correlations with other factors. For adequate discriminant validity, √AVE of each factor must be greater than its correlations with all other factors.

Table 6. Square Root of AVE

Factors	AVE	√AVE
Factor 1	0.85	0.922
Factor 2	0.882	0.94
Factor 3	0.891	0.944
Factor 4	0.884	0.94
Factor 5	0.886	0.941
Factor 6	0.88	0.939
Factor 7	0.734	0.857
Factor 8	0.44	0.663

Source: Research findings

The correlation table is presented below:

Table 7. Correlation Matrix Among Factors

Correlations									
Spearman's rho		Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
Factor 1	Correlation Coefficient	1	.186**	-0.089	.210**	0.079	.136*	.336**	0.043
	Sig. (2-tailed)	.	0.001	0.11	0	0.159	0.015	0	0.437
	N	322	322	322	322	322	322	322	322
Factor 2	Correlation Coefficient	.186**	1	-0.107	.257**	.336**	.280**	.163**	.235**
	Sig. (2-tailed)	0.001	.	0.055	0	0	0	0.003	0
	N	322	322	322	322	322	322	322	322
Factor 3	Correlation Coefficient	-0.089	-0.107	1	0.003	0.077	0.051	-0.003	0.028
	Sig. (2-tailed)	0.11	0.055	.	0.953	0.17	0.362	0.952	0.612
	N	322	322	322	322	322	322	322	322
Factor 4	Correlation Coefficient	.210**	.257**	0.003	1	.217**	0.103	.394**	0.095
	Sig. (2-tailed)	0	0	0.953	.	0	0.064	0	0.089
	N	322	322	322	322	322	322	322	322
Factor 5	Correlation Coefficient	0.079	.336**	0.077	.217**	1	.229**	0.073	.250**
	Sig. (2-tailed)	0.159	0	0.17	0	.	0	0.19	0
	N	322	322	322	322	322	322	322	322
Factor 6	Correlation Coefficient	.136*	.280**	0.051	0.103	.229**	1	.169**	.322**
	Sig. (2-tailed)	0.015	0	0.362	0.064	0	.	0.002	0

	N	322	322	322	322	322	322	322	322
Factor 7	Correlation Coefficient	.336**	.163**	-0.003	.394**	0.073	.169**	1	.140*
	Sig. (2-tailed)	0	0.003	0.952	0	0.19	0.002	.	0.012
	N	322	322	322	322	322	322	322	322
Factor 8	Correlation Coefficient	0.043	.235**	0.028	0.095	.250**	.322**	.140*	1
	Sig. (2-tailed)	0.437	0	0.612	0.089	0	0	0.012	.
	N	322	322	322	322	322	322	322	322
** Correlation is significant at the 0.01 level (2-tailed).									
* Correlation is significant at the 0.05 level (2-tailed).									

Source: Research findings

To assess discriminant validity, the square root of the Average Variance Extracted (√AVE) for each factor was calculated and compared with the highest correlation of that factor with other factors. The results are as follows:

- Factor 1 has a √AVE of 0.922, and its highest correlation with another factor (Factor 7) is 0.336. Since 0.922 > 0.336, the discriminant validity of this factor is considered good.
- Factor 2 has a √AVE of 0.940, with the highest correlation of 0.336 with Factor 5. Since 0.940 > 0.336, its discriminant validity is also satisfactory.
- Factor 3 has a √AVE of 0.944 and the lowest correlation of 0.028 with Factor 8, indicating excellent discriminant validity.
- Factor 4 has a √AVE of 0.940 and its highest correlation is 0.394 with Factor 7. As 0.940 > 0.394, its discriminant validity is good.
- Factor 5 has a √AVE of 0.941, with the highest correlation of 0.336 with Factor 2, demonstrating good discriminant validity.
- Factor 6 has a √AVE of 0.939, with the highest correlation of 0.322 with Factor 8. Since 0.939 > 0.322, its discriminant validity is acceptable.
- Factor 7 has a √AVE of 0.857 and the highest correlation of 0.394 with Factor 4, indicating good discriminant validity.
- Factor 8 has a √AVE of 0.663, with the highest correlation of 0.322 with Factor 6. As 0.663 > 0.322, its discriminant validity is considered acceptable.

Based on these results, convergent validity for the first seven factors, with AVE values above 0.7 and CR above 0.9, is fully confirmed, indicating strong internal consistency and alignment of items with their respective constructs. Furthermore, discriminant validity is confirmed as the square root of AVE for each factor is greater than its highest correlation with any other factor. These findings demonstrate that each factor can be measured independently and distinctly from the others, ensuring sufficient validity of the factor structure for subsequent analyses in the study.

Exploratory factor analysis (EFA) in the present study identified eight latent factors influencing the performance of small and medium enterprises (SMEs) in Parwan Province, collectively explaining 76.316% of the total variance. These results indicate that the success of SMEs is the product of a coordinated interaction between internal and environmental factors and are consistent with national and international studies.

The first factor, including items such as creating competitive advantage, product attractiveness, firm size, research and development, improvement of production processes, and profitability, highlights the importance of innovation and production efficiency, aligning with the findings of Shadab and Ratod (2022) and Rahmatullah (2024).

The second factor, including task efficiency, skills, team coordination, and employee commitment to improvement, reflects the operational competence of the workforce and

corresponds with the findings of Khan, Tufail, and Ali (2021) and Islam, Min, and Ali (2021).

The third factor, including alternative lending sources, government regulations, timely government support, supportive laws, and work permits, illustrates the role of institutional support and government legal frameworks and aligns with the studies of Aymaq, R. (2024) and Abdul rahmanovich (2022).

The fourth factor, including decision-making processes, team motivation, leadership skills, and change management, demonstrates the importance of managerial and leadership capabilities, consistent with the findings of Guangming and Hussain (2024) and Xiong, Qureshi, & Najjar (2013)

The fifth factor, including information technology, equipment quality, energy sustainability, and transportation, emphasizes the significance of technological infrastructure and logistics, aligning with the studies of Sinha and Fukui (2021) and Islam, Min, and Ali (2021).

The sixth factor, including financial performance, cost management, profitability, and optimal use of resources, reflects effective financial management and corresponds with the findings of Abbas, Fareedi, and Saeedalrahman (2020) and Rahmati Alai and Vakil-ol-Roya (2015).

The seventh factor, including technical and vocational training, technological capital, and the availability of skilled labor, highlights the importance of human capital and technological capacity, consistent with the study of Lotfizadeh and Shamsi (2015).

Finally, the eighth factor, including foreign competitors, expertise, product quality, and workforce size, emphasizes acceptance of external competition and international market requirements, aligning with the findings of Rahmatullah (2024) and Zhiyong, Qureshi, and Najjar (2013).

Based on these findings, it is recommended to place special emphasis on enhancing innovation and production efficiency in SMEs through the development of research and development, improvement of production processes, and enhancement of product attractiveness. Simultaneously, workforce capabilities should be improved through skills training, strengthening team coordination, and increasing employee commitment. Institutional support and government legal frameworks should be enhanced with clear regulations, appropriate financial facilities, and timely support. Managerial and leadership capabilities should be strengthened through effective decision-making, team motivation, and leadership skills, while technological and logistical infrastructure should be developed to facilitate resource utilization and innovation. Moreover, optimal financial management and human capital with technological capacity should be promoted through proper training and technology, and finally, acceptance of external competition and improvement of product and service quality should be considered. Coordinated implementation of these measures can foster sustainable development, increase productivity, and enhance the competitiveness of SMEs in Parwan Province and at the national level.

CONCLUSION

The present study indicates that the performance of small and medium enterprises (SMEs) in Parwan Province results from the complex and simultaneous interaction of eight key factors: innovation and production efficiency, workforce competence, institutional support and government legal framework, managerial and leadership capability, technological and logistical infrastructure, financial management, human capital and technological capacity, and acceptance of external competition. These factors explain over 76% of the variance in SME performance and highlight the importance of paying attention to both internal and environmental dimensions of enterprises. The findings suggest that enhancing innovation,

improving workforce skills, providing legal support, effective management, adequate infrastructure, and readiness for external competition pave the way for sustainable development and increased productivity of SMEs. Therefore, policymakers and enterprise managers can facilitate economic growth, strengthen private sector capacities, and enhance the competitiveness of SMEs at both provincial and national levels by adopting coordinated strategies in these areas. These results can serve as a foundation for designing development-oriented programs and targeted policies in support of small and medium enterprises.

REFERENCES

Abbas, J., Fareedi, M. A., & Saeed-ur-Rehman. (2020). The impact of financial management practices on SMEs performance in Pakistan. *Journal of Business and Management, 22*(3), 45–56.

Abdulrahmanovich, S. (2022). *Entrepreneurship and innovation: A key driver for economic growth in developing nations.* Tashkent: Economic Research Institute.

Aymaq, R. (2024, May). The role of education and training in improving entrepreneurship in Afghanistan. *Afghanistan Economic Review, 18*(2), 76–89.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Bass, B. M. (1985). *Leadership and performance beyond expectations.* Free Press.

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education.* University of Chicago Press.

Bozeman, B. (2000). Technology transfer and public policy: A review of research and theory. *Research Policy, 29*(4–5), 627–655.

Chesbrough, H. (2003). *Open innovation: The new imperative for creating and profiting from technology.* Harvard Business School Press.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160.

Fafchamps, M. (2006). Development and social capital. *Journal of Development Studies, 42*(7), 1180–1198.

Fatoki, O. (2012). The impact of entrepreneurial orientation on access to external finance and performance of small and medium enterprises in South Africa. *Journal of Social Sciences, 32*(2), 121–131.

Guangming, H., & Hussain, S. (2024). Challenges and opportunities for SMEs in post-conflict economies: Evidence from Afghanistan. *Asian Economic Review, 56*(1), 90–104.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Pearson.

Islam, N., Mian, S., & Ali, S. (2021). SMEs' innovation capability and performance: The moderating role of dynamic capabilities. *Journal of Small Business Management, 59*(3), 410–430.

Khan, M., Tufail, S., & Ali, N. (2021). Determinants of SME growth in emerging markets: Evidence from Pakistan. *Asian Journal of Economics and Business, 14*(2), 67–80.

Lotfizadeh, F., & Shamsi, H. (2015). The role of innovation and R&D in the performance of SMEs. *International Journal of Business Research, 12*(4), 205–218.

Mashal, M. (2014). *Entrepreneurship and the Afghan economy.* Kabul: Ministry of Commerce and Industries.

Rahmatullah, M. (2024). *Assessing business climate reforms and SME growth in Afghanistan.* Kabul: National Economic Institute.

Rahmati Alai, H., & Vakil-ol-Rouya, A. (2015). Examining the effect of marketing orientation on the performance of small and medium enterprises. *International Journal of Management Studies, 22*(5), 112–128.

Schumpeter, J. A. (1942). *Capitalism, socialism and democracy.* Harper & Brothers.

Shadab, A., & Rathod, M. (2022). Factors influencing the growth of small and medium enterprises: Evidence from developing economies. *International Journal of Business and Economic Development, 10*(1), 25–39.

Sinha, S., & Phuki, T. (2021). The influence of innovation and managerial skills on SME performance: An empirical study. *Asian Management Review, 9*(2), 88–104.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533.

Upadhyaya, P., & Malek, R. (2024). Financial inclusion and access to finance among SMEs: Evidence from South Asia. *Journal of Development Policy and Practice, 9*(3), 221–238.

Xiong, Z., Qureshi, A., & Najjar, F. (2013). Access to finance and firm growth in developing countries: Evidence from SMEs. *Journal of Economic Perspectives, 27*(3), 64–78.