

Managing Strategic Uncertainty in Emerging Economies: A 4A Framework for Entrepreneurial Strategy in BRICS SMEs

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Abstract: Small and medium-sized enterprises (SMEs) operating in emerging economies face persistent and multidimensional strategic uncertainty arising from regulatory volatility, institutional heterogeneity, market turbulence, and chronic resource constraints [6], [7], [25]. In BRICS economies - Brazil, Russia, India, China, and South Africa these uncertainties fundamentally shape entrepreneurial decision-making, strategic behavior, and firm survival. While prior research has examined entrepreneurial orientation, innovation capability, dynamic capabilities, organizational agility, and firm performance in emerging markets [1], [2], [4], [15], the literature remains fragmented and conceptually siloed. Most studies examine isolated strategic dimensions without integrating how strategic intent is formed, how actions are executed, how learning and adaptation occur, and how outcomes are evaluated over time. This paper develops a comprehensive 4A framework - Aim, Action, Adaptation, and Accountability to synthesize and systematize the literature on entrepreneurial strategy under uncertainty in BRICS SMEs. Drawing on strategic management, entrepreneurship, dynamic capabilities, organizational learning, and performance measurement research, the study conceptualizes strategy as an iterative, learning-based process rather than a linear planning exercise [1], [2], [10]. The framework emphasizes feedback loops, capability alignment, and strategic renewal as central mechanisms through which SMEs navigate uncertainty in resource-constrained environments. The paper contributes theoretically by integrating dispersed research streams into a coherent process-oriented framework tailored to emerging economies and contributes practically by offering entrepreneurs and policymakers a clear roadmap for managing uncertainty using simple, actionable mechanisms. The study also discusses limitations and outlines a detailed agenda for future empirical research across BRICS contexts.

Keywords: BRICS economies, SMEs, entrepreneurial strategy, strategic uncertainty, dynamic capabilities, organizational agility, performance measurement.

1. Introduction

Small and medium-sized enterprises (SMEs) play a foundational role in the economic structure of emerging economies. They account for a substantial share of employment creation, innovation activity, and regional development, particularly in countries undergoing rapid structural transformation [6], [25]. In BRICS economies Brazil, Russia,

India, China, and South Africa SMEs are central to industrial diversification, technological diffusion, and inclusive growth agendas promoted by national governments [7]. Despite their importance, SMEs operate under conditions of persistent strategic uncertainty that fundamentally distinguish their strategic environment from that of firms in advanced economies.

Strategic uncertainty in emerging economies is not episodic or temporary; rather, it is structural and enduring. SMEs face frequent regulatory changes, uneven institutional enforcement, political intervention, market volatility, informal competition, and constrained access to finance and skilled labor [11], [14]. These conditions significantly reduce predictability and increase the cost of strategic mistakes. For small firms with limited slack resources, a single misaligned strategic decision can threaten survival.

Traditional strategic management models were largely developed in stable Western institutional contexts and assume relatively predictable competitive dynamics, clear property rights, and consistent regulatory enforcement [3]. Such assumptions rarely hold in emerging economies characterized by institutional voids, informal market arrangements, and policy volatility [13], [24]. As a result, long-term strategic planning central to classical strategy models may be ineffective or even counterproductive for SMEs operating in BRICS economies [9].

Although the literature increasingly recognizes uncertainty as a defining feature of emerging markets, research on entrepreneurial strategy remains fragmented. Existing studies often focus on isolated dimensions such as innovation capability, entrepreneurial orientation, strategic flexibility, or firm performance [5], [8], [15]. Few studies explicitly integrate how strategic intent is formed, how actions are implemented, how learning and adaptation occur, and how outcomes are evaluated over time. This fragmentation limits both theoretical integration and practical relevance.

This paper addresses this gap by developing a 4A framework Aim, Action, Adaptation, and Accountability to synthesize the literature on entrepreneurial strategy under uncertainty in BRICS SMEs. The framework conceptualizes strategy as a

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continuous, iterative, and learning-based process suited to volatile and resource-constrained environments. By integrating insights from strategic management, entrepreneurship, dynamic capabilities, organizational agility, and performance measurement, the paper offers a holistic explanation of how SMEs manage strategic uncertainty in emerging economies.

2. Strategic Uncertainty in Emerging Economies

Emerging economies are frequently characterized by institutional voids, defined as gaps or weaknesses in market-supporting institutions such as legal systems, financial intermediaries, regulatory agencies, and enforcement mechanisms [13]. In BRICS economies, these institutional voids coexist with rapid economic growth and structural transformation, creating environments that are simultaneously opportunity-rich and risk-laden [6], [7].

For SMEs, strategic uncertainty manifests in several interrelated forms. Regulatory uncertainty arises from frequent policy changes, ambiguous regulations, and inconsistent enforcement across regions and administrative levels [7], [14]. Market uncertainty stems from volatile demand, informal competition, rapid technological change, and shifting consumer preferences [11], [21]. Resource uncertainty reflects limited access to external finance, digital infrastructure, managerial expertise, and skilled labor [6], [12].

Importantly, uncertainty does not merely constrain firm performance; it reshapes strategic behavior. SMEs operating under high uncertainty tend to rely on experimentation, incremental investment, and continuous adjustment rather than rigid planning systems [1], [2], [9]. Strategic decisions are often made with incomplete information and revised frequently as new feedback emerges. These behaviors align with adaptive and learning-based views of strategy and challenge static conceptions of competitive advantage.

3. Entrepreneurial Strategy in BRICS SMEs

Entrepreneurial strategy in SMEs differs fundamentally from strategy in large corporations. SMEs typically operate with limited slack resources, centralized decision-making, and close integration between ownership and management [4], [16]. In BRICS economies, these characteristics are often intensified by informality, family ownership, and strong dependence on local or regional markets [6].

Entrepreneurs in emerging economies frequently rely on experiential learning, intuition, and network-based information rather than formal analytical tools [9], [17]. While such approaches enhance flexibility and responsiveness, they also increase vulnerability to cognitive biases and misjudgment in highly uncertain environments.

Comparative research across BRICS countries reveals substantial heterogeneity in SME strategic behavior. Indian and Chinese SMEs increasingly leverage digital platforms to scale operations and access new markets, whereas Brazilian and South African SMEs often emphasize regional networks and incremental growth strategies [11], [21], [29]. These differences underscore the need for a framework that accommodates contextual variation while maintaining analytical coherence.

4. Dynamic Capabilities and Organizational Agility

Dynamic capabilities theory provides a powerful lens for understanding how firms navigate uncertainty. It conceptualizes strategy as an ongoing process of sensing opportunities and threats, seizing opportunities through timely action, and reconfiguring resources to sustain competitiveness [1], [2], [20].

In SMEs, dynamic capabilities are typically embedded in informal routines rather than formal organizational structures. Sensing may occur through close customer interaction or supplier feedback, while seizing involves rapid decision-making and resource bricolage. Reconfiguration often entails

Table 1
Strategic uncertainty dimensions affecting SMEs in BRICS economies

Type of Uncertainty	Description	Strategic Implications for SMEs	Key References
Regulatory uncertainty	Frequent policy changes, unclear regulations, uneven enforcement	Short planning horizons; emphasis on flexibility	[7], [14]
Institutional uncertainty	Weak legal systems, informal institutions	Reliance on networks and relational governance	[13], [24]
Market uncertainty	Volatile demand, informal competition, rapid technology diffusion	Incremental experimentation and pivots	[11], [21]
Resource uncertainty	Limited finance, skills, and infrastructure	Bricolage and selective investment	[6], [12]

Table 1 synthesizes prior research on strategic uncertainty in emerging economies and highlights how different forms of uncertainty shape SME strategy in BRICS countries

Table 2
The 4A framework: dimensions, capabilities, and strategic outcomes

4A Dimension	Core Strategic Capabilities	Typical SME Practices in BRICS	Expected Strategic Outcomes	Key References
Aim	Strategic intent clarity, opportunity focus	Directional vision, survival-oriented goals	Resource prioritization	[3], [4], [6]
Action	Execution flexibility, experimentation	Pilot launches, digital market entry	Market feedback generation	[8], [11], [21]
Adaptation	Learning, sensing, reconfiguration	Rapid pivots, business model adjustment	Strategic alignment under uncertainty	[1], [2], [9], [10]
Accountability	Performance tracking, feedback interpretation	Cash-flow monitoring, customer metrics	Strategic renewal and learning	[5], [12], [23]

Table 2 operationalizes the proposed 4A framework by linking each dimension to strategic capabilities, observable SME practices, and expected outcomes based on prior literature

reallocating human effort, adjusting business models, or forming temporary partnerships [9], [18].

Organizational agility complements dynamic capabilities by emphasizing speed, flexibility, and responsiveness in execution. Empirical evidence suggests that agility enhances SMEs' ability to respond to environmental change and strengthens the performance effects of dynamic capabilities, particularly in volatile and resource-constrained environments [10], [19], [22].

5. Development of the 4A Framework: An Integrated Strategic Process

Existing strategy research in emerging economies suffers from conceptual fragmentation. While different streams explain *parts* of entrepreneurial behavior under uncertainty, they rarely explain how these parts interact over time. The 4A framework - Aim, Action, Adaptation, and Accountability is developed to address this gap by integrating strategic intent, execution, learning, and evaluation into a unified, process-oriented model suitable for SMEs in BRICS economies.

Aim shapes entrepreneurial Action: Action generates feedback that enables Adaptation. Accountability evaluates outcomes and informs strategic renewal. Dynamic capabilities and organizational agility support all stages, enabling SMEs to manage strategic uncertainty in BRICS economies.

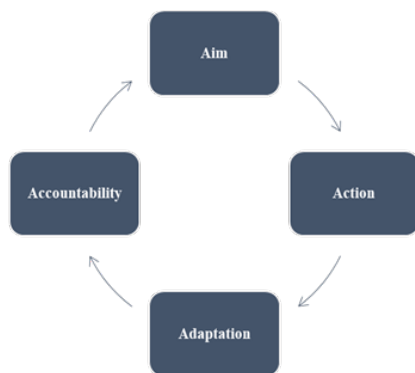


Fig. 1. Conceptual 4A framework for entrepreneurial strategy in BRICS SMEs

Figure 1 Illustrates the 4A framework as an iterative and learning-based strategic process.

A. Aim: Strategic Intent under Persistent Uncertainty

Aim represents the strategic vision and purpose that guide entrepreneurial decision-making. Classical strategy literature emphasizes long-term positioning and competitive advantage [3]. However, in emerging economies, SMEs often operate under conditions where long-term predictability is limited and survival concerns dominate strategic thinking [6], [7]. Consequently, Aim in BRICS SMEs is rarely a fixed or formalized mission statement; instead, it is a directional intent that provides focus while remaining adaptable.

Entrepreneurial orientation research suggests that clarity of intent enhances opportunity recognition and resource prioritization [4]. Under uncertainty, a clear Aim reduces cognitive overload by filtering environmental signals and

helping entrepreneurs decide which opportunities merit attention. However, overly rigid aims can be dangerous in volatile environments, as they may prevent timely strategic shifts. The 4A framework therefore conceptualizes Aim as stable in purpose but flexible in expression, allowing SMEs to balance focus with adaptability.

Importantly, the literature provides limited insight into how strategic intent evolves in response to feedback in emerging markets. The 4A framework explicitly links Aim to downstream accountability mechanisms, enabling strategic renewal rather than static goal adherence.

B. Action: Entrepreneurial Execution in Resource-Constrained Contexts

Action refers to the translation of strategic intent into concrete operational activities such as product development, market entry, partnerships, and commercialization. Implementation research in SMEs consistently shows a preference for flexible, low-cost, and incremental actions rather than comprehensive planning systems [8], [11].

In BRICS economies, Action is often shaped by severe resource constraints. Entrepreneurs frequently rely on bricolage making do with available resources to test ideas in the market before committing fully [9]. Digital platforms have increasingly expanded the action space of SMEs by lowering entry barriers and enabling rapid experimentation [21].

However, prior literature often treats action as an outcome variable rather than a strategic mechanism. The 4A framework reframes Action as an experimental interface between the firm and its environment. Actions are not merely execution steps; they are probes that generate information and feedback. This perspective is particularly relevant in uncertain environments where market intelligence is incomplete and costly.

C. Adaptation: Learning, Reconfiguration, and Strategic Agility

Adaptation captures the firm's capacity to revise its strategy based on feedback from action and changes in the external environment. Dynamic capabilities theory provides the conceptual foundation for this dimension, emphasizing sensing, seizing, and reconfiguring processes [1], [2].

In SMEs, adaptation is rarely formalized. Learning often occurs through trial-and-error, customer interaction, and network-based knowledge exchange [9], [17]. Organizational agility enhances adaptation by shortening decision cycles and enabling rapid responses to environmental shocks [10], [22].

While dynamic capabilities research explains *how* firms adapt, it often underplays *when* and *why* adaptation occurs in SMEs. The 4A framework situates adaptation explicitly between action and accountability, highlighting that learning is triggered by performance feedback rather than abstract environmental scanning alone.

D. Accountability: Performance Evaluation as a Learning Mechanism

Accountability refers to the mechanisms used by SMEs to evaluate strategic outcomes and guide future decisions. Performance measurement literature suggests that SMEs adopt

Table 3
Comparison of dominant strategy perspectives and the 4A framework

Theory / Perspective	Main Focus	Key Limitation in Emerging Economies	How the 4A Framework Extends It	Key References
Porter's positioning	Competitive advantage	Assumes stable institutions	Focuses on iterative viability	[3], [24]
Dynamic capabilities	Resource reconfiguration	Weak strategic sequencing	Adds intent–action–learning loop	[1], [2], [20]
Effectuation	Entrepreneurial cognition	Weak performance evaluation	Integrates accountability	[17], [9]
4A framework (this study)	Strategy as learning	Requires empirical testing	Integrates full strategic cycle	[1], [2], [5], [10]

Table 3 positions the 4A framework relative to dominant strategy perspectives and highlights its relevance for SMEs operating under persistent uncertainty in emerging economies

simplified systems focused on cash flow, liquidity, customer retention, and short-term viability [5], [12].

In emerging economies, formal performance metrics may be infeasible due to data limitations and informality. Nevertheless, accountability mechanisms are critical for closing the strategic learning loop. Without systematic evaluation, adaptation becomes ad hoc and disconnected from strategic intent [23].

The 4A framework elevates accountability from a control function to a learning mechanism. Performance feedback informs not only operational adjustments but also the reassessment of strategic Aim, enabling strategic renewal under uncertainty.

6. Comparative Positioning of the 4A Framework

The 4A framework extends and integrates several dominant theoretical perspectives.

Compared to Porter's positioning view [3], which assumes relatively stable competitive environments, the 4A framework is explicitly designed for volatility and institutional uncertainty. Unlike Porter's emphasis on sustained competitive advantage, the 4A framework emphasizes strategic viability and renewal.

Relative to dynamic capabilities theory [1], [2], the 4A framework provides clearer process sequencing. Dynamic capabilities explain *capability types*, whereas the 4A framework explains *strategic flow* from intent formation to evaluation.

In contrast to effectuation theory [17], which emphasizes entrepreneurial cognition and means-driven action, the 4A framework incorporates formal accountability and performance feedback, making it more suitable for explaining SME growth beyond early-stage entrepreneurship.

Finally, compared to organizational ambidexterity [19], which focuses on balancing exploration and exploitation, the 4A framework embeds this balance implicitly through iterative action, adaptation, and accountability cycles.

7. Advantages and Disadvantages of the 4A Framework

A. Advantages

The primary advantage of the 4A framework lies in its integrative nature. It synthesizes fragmented research streams into a coherent, process-oriented model [1], [15]. It is also context-sensitive, explicitly incorporating institutional voids and uncertainty common in BRICS economies [6], [7].

Additionally, the framework is SME-appropriate, reflecting informal routines, limited resources, and centralized decision-making [5], [12]. Its emphasis on learning and feedback aligns

with real-world entrepreneurial practice in emerging markets.

B. Disadvantages

Despite its strengths, the framework has limitations. Its conceptual nature may limit immediate operationalization, and measurement of constructs such as Aim clarity or Adaptation capability may be challenging in informal contexts [12], [18]. Furthermore, the framework may oversimplify socio-political and cultural influences on strategy in emerging economies [24].

C. Limitations of the Study

This study is conceptual and relies on secondary literature, limiting empirical generalizability. Informal entrepreneurial practices may be underrepresented in published research [6], [9]. Additionally, the framework abstracts from intra-country heterogeneity and sectoral variation across BRICS economies [11], [29].

D. Future Research Directions

Future research should empirically test the 4A framework using mixed-method and longitudinal designs. Comparative studies across BRICS countries can examine institutional moderators [7], [14]. Micro-level research should explore entrepreneurial cognition and learning processes underlying adaptation [1], [18]. Further research is also needed on digital tools that enable low-cost accountability systems in SMEs [21], [22], [26], [30].

8. Conclusion

This paper develops a 4A framework Aim, Action, Adaptation, and Accountability to explain how SMEs in BRICS economies manage strategic uncertainty. By integrating insights from entrepreneurial strategy, dynamic capabilities, organizational agility, and performance measurement literature, the framework conceptualizes strategy as a continuous, learning-based process rather than a static plan.

The framework advances theory by offering a structured yet flexible model tailored to emerging economies and advances practice by providing entrepreneurs and policymakers with a clear roadmap for navigating uncertainty. As volatility and institutional complexity continue to shape emerging markets, understanding how SMEs iteratively align intent, action, learning, and evaluation will remain central to strategy research.

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