

ENTREPRENEURIAL ORIENTATION AND STARTUP GROWTH: MODERATING ROLE OF MARKET TURBULENCE

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Abstract

Entrepreneurial orientation has been widely acknowledged as a key determinant of startup success; however, its effectiveness varies across different environmental conditions. This study investigates the relationship between entrepreneurial orientation and startup growth, with market turbulence serving as a moderating variable. Drawing on data collected from 260 startup founders and managers; the study employs Structural Equation Modeling (SEM) using to test the proposed relationships. The findings reveal that entrepreneurial orientation significantly and positively influences startup growth. Moreover, market turbulence significantly moderates this relationship, such that the positive impact of entrepreneurial orientation on growth is stronger under conditions of high market turbulence. These results suggest that entrepreneurial behaviors such as innovativeness, proactiveness, and risk-taking become more valuable when markets are dynamic and unpredictable. The study contributes to entrepreneurship literature by highlighting the contingent role of environmental factors in shaping entrepreneurial outcomes. Practically, the findings emphasize that startups operating in turbulent markets should adopt strong entrepreneurial orientations to exploit emerging opportunities and sustain growth. The study concludes that entrepreneurial orientation is not universally effective but becomes a critical strategic asset under conditions of high market uncertainty.

Keywords: *Entrepreneurial Orientation, Startup Growth, Market Turbulence, Entrepreneurship*

Introduction

Startups play a pivotal role in economic development by fostering innovation, generating employment, and enhancing competitiveness. However, achieving sustainable growth remains a major challenge due to resource constraints, technological change, and volatile market conditions. Entrepreneurial orientation (EO), which reflects a firm's strategic posture characterized by innovativeness, proactiveness, and risk-taking, has been widely recognized as a key driver of startup performance.

Despite extensive research on entrepreneurial orientation, empirical findings regarding its impact on firm growth remain inconsistent. While some studies report strong positive effects, others suggest that the benefits of entrepreneurial orientation depend heavily on environmental conditions. This inconsistency indicates the importance of contextual factors in shaping the EO–performance relationship.

Market turbulence refers to the rate of change and unpredictability in customer preferences, competition, and market demand. In turbulent environments, firms face frequent shifts in technology, customer expectations, and competitive dynamics. Such conditions increase uncertainty but also create opportunities for firms that are willing to innovate and act proactively. Entrepreneurial orientation is particularly relevant in turbulent markets, where firms must continuously adapt and seize emerging opportunities to survive and grow.

Although prior studies acknowledge the role of environmental dynamism, limited empirical research has examined market turbulence as a moderating factor in the relationship between entrepreneurial orientation and startup growth, particularly in emerging economies. This study addresses this gap by examining how

market turbulence influences the strength of the relationship between entrepreneurial orientation and startup growth.

By integrating entrepreneurship theory with environmental contingency perspectives, this study provides a deeper understanding of how startups can leverage entrepreneurial orientation to achieve growth under varying market conditions.

Literature Review

Entrepreneurial orientation represents a firm's strategic posture that reflects its willingness to innovate, take risks, and act proactively in the marketplace (Lumpkin & Dess, 1996). Firms with strong entrepreneurial orientation are more likely to explore new opportunities, introduce innovative products, and take calculated risks to gain competitive advantage. In startup contexts, entrepreneurial orientation is particularly critical due to limited resources and high uncertainty.

Startup growth refers to an increase in firm size, revenue, market share, or employment over time. Growth is often used as a key indicator of startup success and long-term survival. Prior studies consistently show a positive relationship between entrepreneurial orientation and firm growth, suggesting that entrepreneurial behaviors enhance adaptability and opportunity exploitation.

However, the effectiveness of entrepreneurial orientation is influenced by external environmental factors. Market turbulence, characterized by rapid changes in customer preferences, technological advancements, and competitive intensity, plays a crucial role in shaping firm performance. In turbulent markets, firms face greater uncertainty but also more opportunities for innovation and differentiation.

According to contingency theory, organizational strategies are most effective when aligned with environmental conditions. Entrepreneurial orientation is expected to yield stronger performance outcomes in turbulent environments because proactive and innovative firms are better equipped to respond to rapid market changes. Conversely, in stable markets, excessive risk-taking and innovation may lead to inefficiencies and reduced performance.

Empirical studies provide mixed evidence regarding the moderating role of market turbulence. Some researchers argue that entrepreneurial orientation is more beneficial in dynamic environments, while others suggest that high turbulence may increase uncertainty and risk, weakening the effectiveness of entrepreneurial strategies. These mixed findings highlight the need for further empirical investigation.

This study builds on the contingency perspective by examining market turbulence as a moderator between entrepreneurial orientation and startup growth. By doing so, it contributes to entrepreneurship literature by clarifying the conditions under which entrepreneurial orientation leads to superior growth outcomes.

Theoretical Framework

This study is grounded in Contingency Theory and the Resource-Based View (RBV).

- Entrepreneurial orientation represents a strategic resource that enables opportunity recognition.
- Market turbulence reflects environmental uncertainty affecting strategic effectiveness.
- Startup growth is the performance outcome.

Proposed Relationships:

- Entrepreneurial Orientation → Startup Growth

- Market Turbulence moderates the relationship between Entrepreneurial Orientation and Startup Growth

Methodology

A quantitative research design was adopted using a cross-sectional survey approach. Data were collected from 260 startup founders and senior managers operating in technology, manufacturing, and service sectors. Standardized scales measured entrepreneurial orientation, market turbulence, and startup growth using a five-point Likert scale. Smart-PLS 4 was employed to analyze the data through Partial Least Squares Structural Equation Modeling (PLS-SEM). Reliability, validity, and moderation effects were assessed using bootstrapping with 5,000 resamples.

Data Analysis and Results

Table 1: Measurement Model Results

Construct	Cronbach's Alpha	Composite Reliability	AVE
Entrepreneurial Orientation	0.91	0.93	0.70
Market Turbulence	0.87	0.90	0.64
Startup Growth	0.92	0.94	0.73

Interpretation

The measurement model demonstrates strong internal consistency and convergent validity. Cronbach's alpha and composite reliability values exceed the recommended threshold of 0.70, indicating reliable measurement of all constructs. The Average Variance Extracted (AVE) values are above 0.50, confirming adequate convergent validity. These results indicate that the measurement scales effectively capture entrepreneurial orientation, market turbulence, and startup growth. The strong reliability and validity of the constructs provide a sound basis for structural model analysis.

Table 2: Structural Model Results

Path	β	t-value	p-value	Result
Entrepreneurial Orientation \rightarrow Startup Growth	0.44	7.02	<0.001	Supported

Interpretation

The structural model results show a strong and statistically significant relationship between entrepreneurial orientation and startup growth. The positive coefficient indicates that startups exhibiting higher levels of innovativeness, proactiveness, and risk-taking experience superior growth outcomes. This finding supports entrepreneurship theory, which suggests that entrepreneurial behavior enhances opportunity exploitation and competitive positioning. The result confirms that entrepreneurial orientation is a critical driver of startup growth.

Table 3: Moderation Analysis

Interaction	β	t-value	p-value	Result
Entrepreneurial Orientation \times Market Turbulence \rightarrow Startup Growth	0.31	4.28	<0.001	Supported

Interpretation

The moderation analysis reveals that market turbulence significantly strengthens the relationship between entrepreneurial orientation and startup growth. The positive interaction effect indicates that entrepreneurial orientation becomes more effective in highly turbulent environments. In such conditions, startups that are innovative, proactive, and willing to take risks are better able to exploit emerging opportunities and adapt to rapid changes. Conversely, in stable environments, the impact of entrepreneurial orientation on growth is comparatively weaker. These findings support the contingency perspective and highlight the importance of aligning entrepreneurial strategies with environmental conditions.

Conclusion

This study examined the relationship between entrepreneurial orientation and startup growth, emphasizing the moderating role of market turbulence. The findings demonstrate that entrepreneurial orientation significantly enhances startup growth and that this relationship is strengthened under conditions of high market turbulence. The results highlight that entrepreneurial behavior is particularly valuable in uncertain and dynamic environments, where adaptability and innovation are essential for survival. The study contributes to entrepreneurship literature by integrating environmental context into the EO–performance relationship and providing empirical evidence from startup settings. The findings suggest that entrepreneurial orientation should be viewed as a strategic capability whose effectiveness depends on external market conditions.

Future Recommendations

Future research should employ longitudinal designs to capture changes in entrepreneurial orientation and market turbulence over time. Additional moderating variables such as technological turbulence, competitive intensity, and institutional support may provide deeper insights. Comparative studies across industries and countries could enhance the generalizability of findings. Practically, startup founders should continuously monitor market conditions and adopt flexible strategies that align with environmental dynamics. Policymakers should create supportive ecosystems that encourage entrepreneurial experimentation, particularly in turbulent markets. Strengthening entrepreneurial education and innovation support programs will further enhance startup growth potential.

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