

Role of Entrepreneurial Orientation in Startup Growth and Sustainability: An Empirical Investigation

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Abstract

Startups are a major contributor to economic growth, innovations, and employment generation. But a lot of new companies have trouble holding on and expanding in a really competitive, ever-changing market. Entrepreneurial orientation is one of the factors that could be a determinant of success to a startup which is defined as a firm's willingness to be innovative, proactive and ready to take calculated risks. In recent years, the importance of growth and sustainability in the long term has also been emphasized. The role entrepreneurial orientation plays in the growth and success of a business has therefore gained more and more importance. This study investigates the effects of entrepreneurial orientation on startup growth and sustainability, and the importance of entrepreneurial thinking in solving problems, spotting opportunities and adapting to changing environments. The findings of the study can be useful for entrepreneurs, business leaders, and policy makers looking to create more resilient and robust startups that are sustainable. The factors studying the Role of Entrepreneurial Orientation in Startup Growth and Sustainability are Innovativeness, Proactiveness, Risk-Taking and Competitive Aggressiveness.

Keywords: *Entrepreneurial orientation, startup growth, business sustainability, innovation, entrepreneurship*

Introduction

The failure rate for startups is something that everyone should be concerned with. Read any report on the subject, and you'll find the reasons for new ventures failing in the first five years typically revolve around a handful of issues, usually lack of market fit, cash flow issues and failure to adapt when initial pitch meets actual customers. The attitudinal stance of the entire firm (the strategy) is less talked about, however, which dictates how a young company will react to opportunity and threat. Entrepreneurial orientation is where it comes in. EO was originally conceived as a construct in the 1990s and further elaborated continuously since then, and is defined as a firm's disposition towards innovativeness, proactiveness and risk taking, with some scholars adding autonomy and competitive aggressiveness (Kasim et al., 2024). It's quite a bit like the personality of the organisation.

In the past decade there has been a slight change in interest in EO. While most of the previous research was dedicated solely to the EO relates to company's financial performance, the newer one has incorporated sustainability as a result of the EO instead as an objective that should be achieved while growing the company. In this perspective, sustainable entrepreneurship is not an add-on or outgrowth of EO, but a core part of it; and the companies that integrate sustainability in their entrepreneurial actions from the beginning seem to have a better chance to be competitive over the long haul. It's a relatively strong relook. It implies that sustainability is not a secondary consideration for companies, and that perhaps it's not the best way to go.

The growth of a start-up is seldom a linear process and one of the better predictors of growth is innovation. The effect of the entrepreneurial mindset and innovation activity on growth is significantly positive, and the mediating role is played by innovation which has a significant relationship between the two variables (Abdul Rahman et al., 2025). And this is in line with the rest of the literature: EO on its own doesn't do the heavy lifting, but it works through some other ability, such as innovation, digital adoption or strategic

flexibility. Context is also an important element here. Network orientation, while important, did not play as prominently as EO in startups in emerging economies, particularly in the initial stages of a start-up's life, and was complemented by innovation and strategic flexibility (Daradkeh & Mansoor, 2023). This is noteworthy, as in resource-limited environments where startups rely on relationships, they may think that network orientation is more significant than in their other environments. In this finding, there's a bit more refutation of that assumption.

However, sustainability has shifted from the periphery to more of a "strategic attitude." Sustainable entrepreneurial orientation has been defined as a strategic mindset that sees entrepreneurship combined with environmental and social goals and firms with this type of orientation are able to manage their business with a better ability of balancing the economic, social and environmental goals (Criado-Gomis et al., 2017). And the digital transformation appears to be speeding up this change. Entrepreneurial orientation seems to buffer the negative relationship between digital technology adoption and firm performance for SMEs, as entrepreneurial firms are better equipped to value digital investments for sustainable growth than are their less entrepreneurial counterparts (Vrontis et al., 2022).

Combined, these areas of work lead to a fairly unambiguous result, although the picture for each country and sector is not necessarily clean. EO is not a solely inner characteristic and it is not an assured way to development. It is tied up with innovation, digital capabilities, network relations and sustainability orientation that are highly context-dependent.

Literature Review

The role of entrepreneurial orientation in the sustainable entrepreneurship values within the organisations have been brought into the light and firms that score high on innovativeness, proactiveness, risk taking, autonomy and competitive aggressiveness prove to be significantly more likely to embrace sustainable practices. The technology adoption-mediated relationship was stronger than simply running in parallel and added to the relationship between EO and sustainability outcomes. It is assumed that a relationship between entrepreneurial firms and technological change is a trade-off, but here it is suggested that it is not, as the implication is that firms in these categories can embrace technological change and still achieve sustainable growth.

Another one examined the individual entrepreneurial orientation instead of the firm level construct, a construct which was found to have a significant impact on sustainable entrepreneurship practices via innovativeness, proactiveness and risk taking. Interestingly, there was not always a direct link between EO and increased firm performance. However, the relationship was fully or partially mediated by sustainable entrepreneurship practices, indicating that the relationship from orientation to performance is not around but through sustainability (Salehe et al., 2024).

A more restricted angle that is specific to sustainability investment decisions. Firms with higher scores on EO expressed a higher desire to fund environmentally and socially responsible activities and in certain cases, EO was a better predictor of such activities than firm performance itself. It was also a somewhat counter-intuitive finding because it would seem that companies facing difficulties would be more likely to cut sustainability spending first rather than invest in it; however, the data indicated that orientation had more of an impact than the bottom line in determining whether sustainability investments actually took place or not (Mullens, 2018).

In relation to growth, early growth phase of startups is proven to be dependent on innovation wherein the innovative firms grow much more rapidly in comparison with the non-innovative firms. A key aspect of this analysis was the difference between R&D investments and innovation activities, and their impact on

growth compared to the impact of innovation output, in the form of patents or product launches, which is often overlooked when looking only at the latter as proxies for the former (Fiorentino et al., 2021).

Entrepreneurial success is strengthened by skill development and experiential learning approaches that align competencies with market needs (Gupta et al., 2024). Another study takes a different perspective on the subject, by examining what actually motivates firms to adopt sustainable entrepreneurial orientation in the first place, from an adoption perspective. The answer, which stemmed from individual, organisational and contextual factors, was that those entrepreneurs more likely to be proactive and innovative were most likely to engage in sustainable EO, suggesting that sustainable EO is a behavior that takes time to develop within a firm (Lazarte-Aguirre, 2024).

Reputation is not a topic that occurs frequently in this literature, but does appear at least in one study to which mention is made here. The results indicated that the EO had a significant impact on business sustainability and organisational reputation, with sustainability as a mediator between the two, and companies with higher entrepreneurial behaviours reported better organisational reputation, which was indirectly linked to the companies' sustainability, but not directly (Hanaysha & Al-Shaikh, 2024). AI-enabled knowledge management improves organizational learning, innovation, and competitiveness, which are critical for entrepreneurial growth and sustainability (Mittal et al., 2023).

There's another level of difficulty, though, because of market conditions. Market orientation is a factor that influences the performance of entrepreneurs both directly and indirectly in EO, and environmental uncertainty has the positive effect of enhancing the direct link. In other words, firms in more volatile markets seemed to gain more than from strong entrepreneurial behaviours than firms in more stable markets, thus challenging the notion that uncertainty is just a liability (Cheng et al., 2025). In more recent work, digital capability re-appears in that the contribution to firm performance from EO is primarily via digital innovation capability. Our findings indicated that the impact of EO on performance in terms of growth was more pronounced in the presence of supportive digital environments and the influence of EO extended beyond traditional entrepreneurial behaviours into technological capability, suggesting that EO is now a major driver of growth beyond just entrepreneurship (Mu et al., 2026).

The environmental dimension has also become the focus but with a specific emphasis on green entrepreneurial orientation as a factor for sustainable business. Startups with proactive, innovative and risk-taking attitudes towards environmental opportunities were more likely to attain long-term sustainability, and the mechanisms that make the orientation effective in creating sustainability effects were green innovation capability and market positioning (Widjajanti et al., 2025).

Finally, the contribution of EO to the problem of limited resources in startups is directly tested and results indicate that as EO can foster capabilities for technological innovation, it can generate competitive advantages for startups. Strategic flexibility reinforced these relationships even more, enabling startups to adapt to changing market conditions and bringing EO to the forefront of business resilience and future performance, instead of it being just a catalyst for growth (Neupane et al., 2025).

The mechanisms by which EO translates to growth or sustainability outcomes continue to be innovation, digital capability and strategic flexibility; on its own, EO doesn't do much. In the past, the issue of sustainability has been considered to be an addition to entrepreneurship, but in most of these studies, sustainability seems to be integrated from the outset rather than tacked on. It's not so obvious when applied to industries that have rather distinct capital and regulatory requirements, such as manufacturing versus software, say, and even the studies reviewed here are pretty much weighted toward the services and SME ends.

Objective

1. To know the factors studying the “Role of Entrepreneurial Orientation in Startup Growth and Sustainability”

Methodology

349 participants were surveyed from respondents with different role in the startup. The method of sampling was “Random sampling” for collection of data and examination was done by “Explanatory Factor Analysis” for results.

Findings

Table 1 demonstrates demographic details, it shows that 57.59% are Male, 42.41% are female. Looking at the age, 32.38% are between 30 to 35 years of age, 30.66% are between 35 to 40 years of age, and 36.96% are above 40 years of age. With regards to Role in the Startup, 34.10% are Founder, 34.67% are Co-founders, and 31.23% are CEO.

Table. 1 Respondent's Details

Variables	Participants	Percentage
Gender		
Male	201	57.59%
Female	148	42.41%
Total	349	100
Ages in years		
30 to 35	113	32.38%
35 to 40	107	30.66%
Above 40	129	36.96%
Total	349	100
Role in the Startup		
Founder	119	34.10%
Co-founder	121	34.67%
CEO	109	31.23%
Total	349	100

“Factor Analysis”

“KMO and Bartlett's Test”

Table. 2 “Kaiser-Meyer-Olkin Measure of Sampling Adequacy”

“Kaiser-Meyer-Olkin Measure of Sampling Adequacy”		.768
“Bartlett's Test of Sphericity”	“Approx. Chi-Square”	6542.683
	df	91
	Significance	.000

“KMO and Bartlett's Test”, value of KMO is .768 (Table 2).

Table 3 “Total Variance Explained”

“Component”	“Initial Eigenvalues”			“Rotation Sums of Squared Loadings”		
	“Total”	“% Of Variance”	“Cumulative %”	“Total”	“% Of Variance”	“Cumulative %”
1.	6.643	47.448	47.448	3.963	28.305	28.305
2.	2.451	17.510	64.958	3.634	25.956	54.261
3.	1.965	14.036	78.994	2.457	17.548	71.809
4.	1.342	9.584	88.579	2.348	16.769	88.579
5.	.513	3.662	92.241			
6.	.368	2.632	94.873			
7.	.191	1.364	96.236			
8.	.137	.982	97.218			
9.	.131	.933	98.152			
10.	.101	.720	98.871			
11.	.061	.434	99.306			
12.	.045	.322	99.628			
13.	.031	.219	99.847			
14.	.021	.153	100.000			

The four factors contribute towards explaining total 88.579% of variance. Variance explained by Innovativeness is 28.305%, Proactiveness is 25.956%, Risk-Taking is 17.548%, and Competitive Aggressiveness is 16.769%. (Table 3).

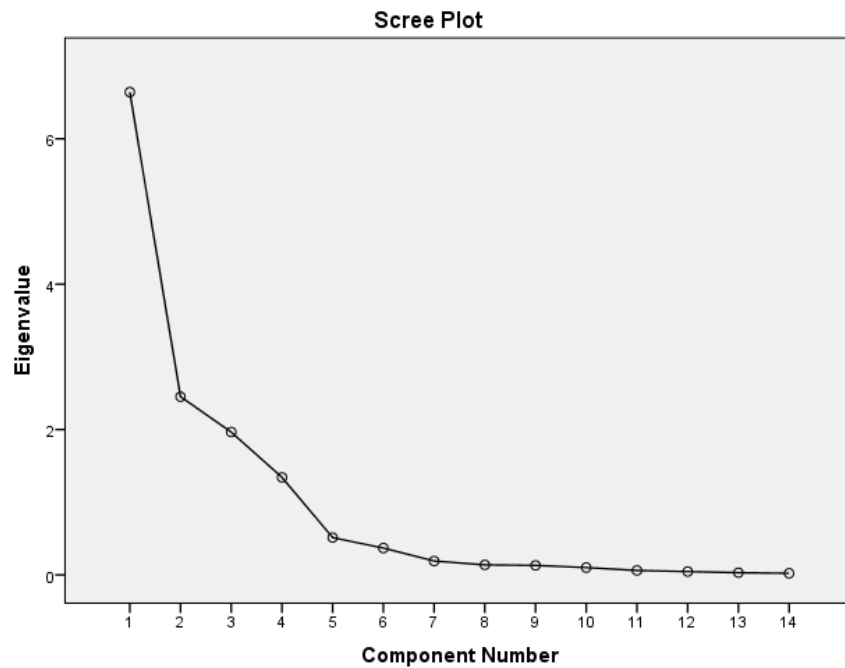


Table. 4 “Rotated Component Matrix”

S. No.	Statements	Factor Loading	Factor Reliability
	Innovativeness		.956
1.	Employees are encouraged to develop and implement new ideas	.950	
2.	Innovation is a key priority in business strategy	.918	
3.	Startups regularly introduce innovative products and services	.843	
4.	Startups invest in research and development activities	.837	
	Proactiveness		.963
1.	Startups actively seek new market opportunities	.963	
2.	They anticipate changes in customer preferences before competitors	.897	
3.	Respond quickly to emerging business opportunities	.886	

4.	Monitor market trends to stay ahead of competitors	.862	
	Risk-Taking		.870
1.	Startups are willing to invest in projects with uncertain outcomes	.916	
2.	Management encourages bold decisions-making when opportunities arise	.868	
3.	Startups accept short-term uncertainty for long-term success	.744	
	Competitive Aggressiveness		.847
1.	Startups respond aggressively to competitor's actions	.942	
2.	Continuously strive to strengthen competitive position	.930	
3.	Startups focus on outperforming competitors through superior offerings	.642	

Factors of the study and its related variables

The first factor of the study is Innovativeness, the variables it includes are Employees are encouraged to develop and implement new ideas, Innovation is a key priority in business strategy, Startups regularly introduce innovative products and services and Startups invest in research and development activities. Proactiveness is the second factor, its variables are Startups actively seek new market opportunities, they anticipate changes in customer preferences before competitors, respond quickly to emerging business opportunities and Monitor market trends to stay ahead of competitors. Risk-Taking is the third factor, its include variables like Startups are willing to invest in projects with uncertain outcomes, Management encourages bold decisions-making when opportunities arise, Startups accept short-term uncertainty for long-term success. Lat and fourth factor are Competitive Aggressiveness, the variables are Startups respond aggressively to competitor's actions, continuously strive to strengthen competitive position and Startups focus on outperforming competitors through superior offerings.

Table 5 "Reliability Statistics"

"Cronbach's Alpha"	"Number of Items"
.906	14

Total reliability of 14 items that includes variables for Factors exploring the "Role of Entrepreneurial Orientation in Startup Growth and Sustainability" 0.906 (Table 5).

Conclusion

Entrepreneurial orientation is indeed a key factor underlying the growth and survival of startups but it is not a standalone factor. It is based on innovation, digital capacity, market orientation and strategic flexibility, and its impact appears to magnify in environments that many would consider to be challenging,

like environmental uncertainty, or when resources are scarce. But, less clear is what such dynamics might look like in capital intensive or strongly regulated industries. Both firms and policy-makers would be well-served to view EO and sustainability not only as non-competing, but also as complementary. The factors studying the Role of Entrepreneurial Orientation in Startup Growth and Sustainability are Innovativeness, Proactiveness, Risk-Taking and Competitive Aggressiveness.

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