Riding the Waves of Change: Strategic Agility and Performance Dynamics among NGOs in Mezam Division, Cameroon

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Research Article

Abstract

Non-Government Organizations (NGOs) in Mezam Division aim to address socio-economic and humanitarian challenges, especially in areas affected by conflict, poverty, and underdevelopment. However, many of these organizations struggle with sustainability, responsiveness to environmental changes, and consistent performance. This is largely due to limited resources, political instability, donor dependency, and rapidly changing community needs. In such a volatile and uncertain environment, the ability to adapt and respond swiftly, commonly referred to as strategic agility, becomes essential. To this end, the study examined the effects of strategic agility on NGO performance in Mezam. The study obtained data using a structured questionnaire. After constructing indices of flexibility, speed of decision-making, innovation capabilities, and NGO performance using Multiple Correspondence Analysis (MCA), the study used Ordinary Least Squares (OLS) estimation to test its hypotheses. Flexibility has a significant positive effect on NGO performance in the Mezam Division of the North West Region of Cameroon. Further results indicate a positive but insignificant effect of speed of decision-making on performance. In line with the third objective of the study, OLS results show that innovation capabilities significantly promote NGO performance in the Mezam Division of the North West Region of Cameroon at the 1% level of significance. From a policy perspective, it was recommended that NGOs should adopt flexible organizational structures that allow for quick realignment of resources and personnel to address emerging community needs. Empower field teams with decision-making autonomy to respond swiftly to local challenges without delays from hierarchical bottlenecks.

Keywords: Non-Government Organizations, NGOs Performance, Strategic agility, Bamenda-Cameroon

1. Introduction

In the mid-20th century, organizations primarily relied on long-term strategic planning to gain a competitive advantage. This approach emphasized stability, control, and efficiency in resource allocation. However, as economic and technological changes accelerated, the limitations of static strategies became evident. Firms that adhered to rigid strategic planning often struggled to respond to market fluctuations, regulatory shifts, and changes in consumer demand. Consequently, scholars and business leaders began exploring alternative approaches that emphasized flexibility, adaptability, and responsiveness. The 1990s marked a turning point with the emergence of agility-related concepts, particularly the theory of dynamic capabilities. Teece, Pisano, and Shuen (1997) introduced dynamic capabilities, describing them as a firm's ability to integrate,

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build, and reconfigure internal and external competencies to address rapidly changing environments. This perspective underscored the importance of continuous learning, resource flexibility, and the ability to seize emerging opportunities. Around the same period, the concept of organizational ambidexterity also gained prominence. March (1991) argued that organizations must strike a balance between exploitation, maximizing efficiency in existing operations, and exploration, pursuing innovation and new market opportunities. Failure to achieve this balance could lead to stagnation or excessive risk-taking, both of which could negatively impact organizational performance.

Building upon these foundational ideas, strategic agility emerged as a holistic theory encompassing three critical dimensions: strategic sensitivity, leadership unity, and resource fluidity. Strategic sensitivity refers to an organization's ability to detect and interpret emerging trends, technological shifts, and changes in consumer behavior. Leadership unity emphasizes cohesive decision-making within top management, ensuring strategies align with organizational objectives and market realities. Resource fluidity highlights firms' ability to quickly reallocate financial, human, and technological resources to capitalize on new opportunities. Together, these dimensions create an agile organization that can respond effectively to external challenges and sustain long-term competitiveness.

Empirical studies have consistently demonstrated the positive impact of strategic agility on organizational performance, particularly in developed economies. Tallon, Queiroz, Coltman, and Sharma (2019) conducted a systematic literature review of 249 empirical studies and found a strong correlation between agility and performance metrics such as financial profitability, innovation capacity, and market responsiveness. Their research suggested that firms with high strategic agility were more likely to achieve sustainable competitive advantages and outperform less agile counterparts. Doz and Kosonen (2010) reinforced this perspective, showing that organizations with a well-developed agility capability were better able to navigate market disruptions, economic recessions, and technological transformations, leading to sustained profitability and growth.

More recent research has emphasized the growing relevance of strategic agility in the digital economy. Alkandi and Helmi (2024) highlighted that agility is not a one-time capability but a continuous development process. Their study explored the mediating role of market orientation and innovation capabilities, showing that organizations that actively integrate agility into their strategic theory achieve higher adaptability and long-term success. As industries become increasingly volatile due to digitalization, artificial intelligence, and automation, firms must continually refine their agility mechanisms to stay ahead of the competition.

NGOs in Mezam would integrate strategic agility into their operations by fostering flexible leadership, real-time data-driven decision-making, and adaptive resource management. They proactively anticipate changes, swiftly adjust strategies, and enhance collaboration with stakeholders. This agility would help them optimize resource use, improve service delivery, and strengthen resilience in uncertain environments. Ultimately, they would achieve greater financial sustainability, stronger donor trust, and greater social impact.

Furthermore, donor expectations are evolving, with increased emphasis on accountability, measurable impact, and sustainability. Many NGOs struggle to meet these demands because of bureaucratic inefficiencies, poor coordination, and an inability to quickly realign their strategies with emerging trends. Additionally, the absence of a well-defined strategic agility theory within these organizations limits their ability to anticipate risks, seize opportunities, and innovate in program implementation. This rigidity leads to inefficiencies, project delays, and missed opportunities for growth and impact. Non-Government Organizations (NGOs) in Mezam operate in an increasingly volatile environment marked by economic instability, policy changes, donor dependency, and shifting community needs. Many of these NGOs struggle with adaptability, often adhering to rigid strategic plans that fail to respond effectively to emerging challenges. As a result, they experience inefficiencies, reduced donor confidence, and difficulty in achieving

sustainable impact. Despite the potential benefits of strategic agility, such as rapid decision-making, resource reallocation, and innovation, many NGOs in the region lack the structures and capabilities to implement it effectively.

If NGOs in Mezam successfully adopt strategic agility, they would experience improved organizational performance characterized by increased efficiency, effectiveness, and sustainability. Their ability to respond swiftly to crises and opportunities would enhance their credibility and attract long-term funding. This, in turn, would enhance long-term sustainability, allowing NGOs to maintain and expand their services. Moreover, beneficiaries would receive more timely and relevant interventions, leading to greater community development. Improved organizational performance would enable more efficient program delivery, ensuring interventions are timely and relevant to community needs. Increased donor confidence, driven by the ability to demonstrate adaptability and measurable impact, would open doors to more funding opportunities. Additionally, communities would benefit from more effective, targeted development programs, leading to significant improvements in social and economic conditions. On the other hand, failing to embrace strategic agility could lead to stagnation, financial instability, and declining relevance. NGOs that remain rigid in their structures risk inefficiencies, reduced funding, and diminished capacity to meet their beneficiaries' evolving needs, ultimately threatening their survival in an increasingly complex operating environment.

Against this background, the study examines the effects of strategic agility on NGO performance in Mezam. Specifically, the study seeks:

i. To analyze how flexibility affects NGO performance in Mezam.
ii. To investigate the effect of decision-making speed on the performance of NGOs in Mezam.
iii. To evaluate the effect of innovation capabilities on the performance of NGOs in Mezam.

2. Literature Review

This section reviews the literature relevant to the study and is organized into three parts. Section 2.1 presents the theoretical literature, namely the dynamic capabilities theory of Teece *et al.* (1997) and Sull's (2009) theory of strategic agility, and shows how each relates to the three components of strategic agility examined in this study: flexibility, speed of decision-making, and innovation capabilities. Section 2.2 reviews empirical studies on the relationship between strategic agility and organizational performance and ends by identifying the gap that this study addresses.

2.1. Theoretical Literature

2.1.1 Dynamic Capabilities Theory by Teece *et al.* (1997)

Teece, Pisano, and Shuen (1997) developed dynamic capabilities theory to explain how firms sustain competitive advantage in rapidly changing environments. The authors define dynamic capabilities as a firm's ability to integrate, build, and reconfigure internal and external competencies to respond to rapidly changing environments. Competitive advantage therefore comes not only from owning valuable resources but from continuously adapting and reconfiguring them. The theory assumes that firms operate in turbulent environments, hold unique resources, learn from experience, and have managers who can recognize opportunities and threats and act on them. Teece (2007) later grouped dynamic capabilities into three activities: sensing opportunities and threats, seizing opportunities by mobilizing resources, and reconfiguring assets and competencies to stay aligned with changing conditions.

The theory is relevant to this study because NGOs in Mezam operate in an unstable environment marked by conflict, policy changes, and shifting donor and community expectations. Flexibility, as the capacity to reconfigure resources and structures, and innovation capabilities, as the capacity to generate new programs and processes, are direct expressions of dynamic capabilities. The theory therefore underpins the hypotheses on flexibility and innovation capabilities.

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The theory has been criticized for being vague and difficult to operationalize (Eisenhardt & Martin, 2000) and for limited empirical validation across industries and contexts (Helfat *et al.*, 2007). Testing it on NGOs in Mezam therefore also contributes to its validation in a resource-constrained setting.

2.1.2 The Theory of Strategic Agility by Sull (2009)

Sull (2009) argues that strategic agility is the ability to sense and respond to opportunities and threats faster than competitors, and that it is an ongoing process of anticipation and swift execution rather than a one-off adjustment. He identifies three dimensions: strategic agility (sensing changes in the competitive landscape and pivoting), portfolio agility (reallocating resources across business units), and operational agility (quickly changing processes and structures). The theory assumes markets are dynamic and competitive; traditional long-term planning is insufficient; organizations can reallocate resources flexibly; leadership fosters a culture of rapid decision-making; and the three dimensions are interconnected.

The theory provides the basis for the three components of strategic agility examined in this study. Flexibility corresponds to the ability to reallocate resources and change processes (portfolio and operational agility), speed of decision-making corresponds to the capacity to sense and respond quickly, and innovation capabilities capture how organizations renew their programs in response to change.

The theory's main limitations are its focus on large multinational corporations, which leaves open how agility works in small, resource-constrained organizations such as NGOs, and the lack of standardized measures of agility. This study addresses both by examining NGOs in Mezam and constructing indexes for the three components.

2.2 Empirical Literature

Sullivan and Phelan (2017) examine the relationship between strategic agility and organizational performance in the high-tech industry, known for rapid technological advancements and intense competition. The objective of this research was to investigate how strategic agility, characterized by flexibility, innovation, and responsiveness, contributes to a firm's ability to remain competitive in dynamic and uncertain market environments. The researchers used a quantitative approach and surveyed 210 senior respondents from high-tech firms. They assessed the impact of strategic agility on organizational performance by considering key variables such as profitability, market share, and innovation. The findings revealed that strategic agility directly correlates with increased organizational performance. Companies that demonstrated higher levels of strategic agility were better able to adapt to technological disruptions, quickly pivoting their strategies in response to market changes. This ability to quickly adjust not only fostered innovation but also improved profitability and market share. The authors concluded that strategic agility is indispensable for firms in the high-tech industry, enabling them to sustain performance and competitive advantage amid rapid technological and market change. They emphasized the need for firms to continually invest in developing agile capabilities, particularly in innovation and responsiveness.

In Ngila and Mutua (2024), the authors examined how strategic agility influences the performance of cement manufacturing companies in Kenya. Their objective was to determine which aspects of strategic agility, such as organizational structure, product innovation, technological adoption, and human resource strategies, play the most significant role in improving performance in the cement industry. The authors employed a desktop research methodology, relying on secondary data from industry reports, academic journals, and publicly available information. The study found that strategic agility positively affects organizational performance, with firms that adopted agile practices in organizational structure, technology, and product innovation showing significant improvements in profitability, revenue, and market share. The findings suggested that cement manufacturers that embraced flexibility in organizational structure and prioritized technological innovation and human resource development were better positioned to respond to market

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demands and competitive pressures. The authors concluded that for cement manufacturers in Kenya to remain competitive and drive long-term profitability, they must develop and implement strategic agility, particularly in technological adoption and innovation. They also suggested that companies with more flexible structures can better respond to the industry's fluctuating demands, ultimately improving market performance.

Yildiz and Aykanat (2021) examined the role of organizational innovation in mediating the relationship between strategic agility and firm performance. The authors hypothesized that strategic agility positively affects firm performance, but that organizational innovation amplifies this effect. They surveyed 216 firms in Turkey's Sakarya Organized Industrial Zone and collected data on strategic agility, organizational innovation, and firm performance. They used structural equation modeling to analyze the data and test the hypotheses. The results showed that strategic agility had a direct, significant positive impact on both organizational innovation and firm performance. Furthermore, organizational innovation mediated the relationship between strategic agility and firm performance, meaning a firm's ability to innovate played a key role in translating strategic agility into performance gains. The study showed that firms that fostered innovation, whether through product development, process improvements, or organizational change, were able to leverage their agility to improve overall performance. The authors concluded that strategic agility, when combined with a focus on innovation, leads to superior organizational performance. They recommended that firms not only develop agile practices but also invest in a culture of innovation to fully capitalize on agility's benefits.

Chan and Muthuveloo (2020) investigated the capabilities required for strategic agility in private higher education institutions (HEIs) in Malaysia. The study aimed to identify key organizational capabilities, such as environmental scanning, marketing, and organizational learning, that enable HEIs to respond effectively to a rapidly changing educational landscape. The authors conducted a web-based survey, targeting 375 private HEIs in Malaysia, with a response rate of 41.33%. Using partial least squares structural equation modeling, the researchers analyzed the relationships between environmental scanning, marketing, organizational learning, strategic agility, and organizational performance. The results showed that all three organizational capabilities, environmental scanning, marketing, and organizational learning, contributed significantly to strategic agility. The study found that strategic agility, in turn, had a significant positive impact on HEIs' organizational performance, particularly in adapting to new teaching methods, student needs, and technological advancements. The importance-performance matrix analysis (IPMA) revealed that organizational learning was the most critical capability for enhancing strategic agility in HEIs. The authors concluded that private HEIs must prioritize developing organizational learning capabilities to remain agile and improve performance. By fostering an environment that encourages continuous learning and adaptation, HEIs can better respond to changes in the higher education sector and improve overall performance.

Ngila and Mutua (2024) also revisited strategic agility in the context of Kenyan cement manufacturers. This research aimed to assess how strategic agility influences cement companies' performance in an increasingly competitive and volatile market. Using secondary data, the study found that firms that adopted agile organizational structures and integrated technology-driven innovations into their operations were better positioned to capitalize on market opportunities and reduce risks. Key variables, including organizational structure, product innovation, technology adoption, and human resources, contributed to improved performance in the cement industry. The study emphasized that manufacturers who embraced technological advancements and flexible organizational structures experienced higher growth in revenue and market share. The authors concluded that to thrive in Kenya’s competitive market, cement manufacturers must integrate strategic agility into their organizational practices, particularly by focusing on technological innovation and human resource development. Firms that fail to embrace agility risk falling behind competitors who can adapt more quickly to changes in the market and customer demands.

Although strategic agility has been widely researched in various global contexts, its application in Bamenda and the broader Cameroonian context remains limited, especially amid rapid socio-economic

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changes, technological advancements, and organizational shifts. Much of the existing research on strategic agility focuses on developed countries or larger emerging markets, leaving a gap in understanding how strategic agility functions amid the specific challenges businesses in developing economies like Cameroon face. Because Bamenda is a commercial hub in Cameroon's Northwest Region, more detailed sectoral studies are needed to understand how strategic agility could influence local business performance. The influence of local culture, traditional management practices, and institutional frameworks on strategic agility remains underexplored. While global research emphasizes technology's role in fostering strategic agility, studies in Bamenda, or Cameroon more broadly, do not adequately address how technological advancements, digital transformation, and access to innovation support local firms' agility. Given the low penetration of high-tech infrastructure and internet access in many areas of Cameroon, a gap exists in understanding how local firms can leverage limited technological resources to enhance their agility.

3. Methodology

The study encompasses an in-depth exploration of strategic agility and its influence on organizational performance within Non-Government Organizations (NGOs) in Mezam. The study examines the specific strategic agility dynamics faced by NGOs, considering the unique context of strategic agility. The study also considers the organizational structure and project organization within NGOs in Mezam, analyzing how these elements interact with strategic agility to affect overall performance. Mezam, the regional headquarters of the Northwest Region of Cameroon, has a population of 1,968,578 as of 2015 and is characterized by diverse geographical relief, including the Mezam Highlands, which contribute to its moderate climate and picturesque landscapes.

The study adopted a combination of survey and causal research designs to examine the effect of strategic agility on organizational performance among Non-Government Organizations (NGOs) operating in Mezam Division, North West Region of Cameroon. The survey design allowed for the collection of both quantitative and qualitative data on strategic agility dynamics, organizational structure, and project organization, while the causal design enabled the researcher to test the direction and significance of relationships between the study variables.

The population comprised all NGOs operating in Mezam Division. Respondents were individuals directly involved in project implementation in these NGOs (directors, project coordinators, and key administrative staff), selected to capture a comprehensive range of roles, responsibilities, and experience levels.

The population comprised all NGOs operating within Mezam Division, including organizations such as SHUMAS, CARITAS, PLAN International, the International Red Cross, RADA, H4B, COMINSUD, Hope for Vulnerable and Orphans (HOVO), World Vision International, Doctors Without Borders (Médecins Sans Frontières – MSF), Helping Hands Foundation, Hope for the Needy Foundation, The Greens International, Reach Out, and Luther King Jr. Memorial Foundation (LUKMEF), among others. Respondents were drawn from individuals directly involved in project implementation within these organizations: directors, project coordinators, and key administrative staff, selected to capture a comprehensive range of roles, responsibilities, and experience levels.

The study used a structured questionnaire with open- and closed-ended questions and statements. The survey items used a five-point Likert scale ranging from "strongly disagree" to "strongly agree" and were distributed to NGO leaders or relevant stakeholders. The questionnaire was developed through a thorough review of existing literature to ensure it captured key dimensions of strategic agility (flexibility, speed of decision-making, and innovation capabilities) and organizational performance in the NGO context. To enhance validity, the researchers sought input from experts in organizational behavior and NGO management during development and conducted semi-structured interviews with a subset of participants to gather deeper insights. We conducted a pilot test with a small group representative of the study population

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and used the feedback to refine the instrument. During data analysis, we further assessed the survey's reliability and validity using established statistical measures to ensure the robustness of the data collection instrument. The full questionnaire is provided in Appendix A. Specifically, Cronbach's alpha was 0.7353 for flexibility, 0.7999 for speed of decision-making, 0.7895 for innovation capabilities, and 0.6980 for NGO performance, all above the 0.6 threshold, which indicates acceptable internal consistency.

Data collection followed a systematic approach. The researchers first sought permission from identified NGOs in Mezam and obtained informed consent from participants. The researchers distributed questionnaires electronically and in person to NGO leaders and stakeholders to ensure diverse representation, with data collection spanning December to March to allow for comprehensive data gathering. We scheduled semi-structured interviews with a purposive sample of participants and conducted them at their convenience in private, neutral locations to encourage candid responses. Ethical considerations were paramount throughout: participants were assured of confidentiality and voluntary participation, informed consent was re-emphasized during interviews, and all data were anonymized to protect participants' identities. The study followed established ethical guidelines, obtained institutional review board approval, and allowed participants to withdraw at any stage without consequence.

The relationship between strategic agility and NGO performance was estimated using a linear regression model adapted from Sullivan and Phelan (2017):

$$PERF_i = \beta_0 + \beta_1 FLEX_i + \beta_2 SDM_i + \beta_3 ICAP_i + \beta_4 AGE_i + \beta_5 SIZE_i + \beta_6 EXP_i + \beta_7 SEX_i + \beta_8 EDU_i + \varepsilon_i$$

Where PERF is the NGO performance index (dependent variable, constructed via MCA); FLEX, SDM, and ICAP represent the three strategic agility components: flexibility, speed of decision-making, and innovation capabilities (each constructed as an MCA index); and AGE, SIZE, EXP, SEX, and EDU are control variables capturing NGO age (years of operation), NGO size (number of staff), respondent experience, respondent gender (binary), and respondent education level (binary: 1 if postgraduate, 0 if graduate or below), respectively. β_0 is the constant term, β_1 through β_8 are the coefficients of the independent variables to be estimated, and ε is the error term capturing all omitted variables.

We coded and analyzed the data using SPSS, combining descriptive statistics (frequencies, percentages, and tables) with inferential analysis. Because the primary indicators for flexibility, speed of decision-making, innovation capabilities, and NGO performance were categorical, we used Multiple Correspondence Analysis (MCA), an extension of Correspondence Analysis and a generalization of Principal Component Analysis for categorical data, to construct a single continuous index for each variable. The resulting indices were standardized to a 0–1 range using the formula: Standardized index = (Unstandardized index − Minimum) / (Maximum − Minimum). This made Ordinary Least Squares (OLS) appropriate for model estimation, as it is the Best Linear Unbiased Estimator (BLUE), which is both unbiased and efficient.

Three validation criteria were applied to the analysis: economic a priori criteria assessing whether the signs and magnitudes of estimated parameters conformed to theoretical expectations. Statistical criteria (first-order tests) included t-statistics to assess the significance of individual parameters, R-squared and adjusted R-squared to measure goodness of fit, F-statistics to test overall model significance, and Variance Inflation Factor (VIF) tests to diagnose multicollinearity. The Breusch-Pagan test tested the null hypothesis of homoscedasticity (constant variance of residuals) against the alternative of heteroscedasticity. The study established instrument validity in two phases. For face validity, the research supervisor and departmental colleagues reviewed the questionnaire for structure and item formatting, resulting in restructuring and the elimination of irrelevant items. For content validity, the supervisor ensured the instrument measured what it intended to measure, corrected the item organization to align with the Likert scale, and suggested more detailed item wording. Reliability, which measures an instrument's consistency, was assessed using Cronbach's Alpha following a pilot test. We coded and analyzed pre-test data to assess question accuracy, with coefficients above 0.6 across all constructs indicating acceptable to good internal consistency.

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4. Result and Discussion

According to Table 1, the average NGO age in the sample is 13 years, indicating that, on average, the sampled NGOs have operated long enough to report strategic agility practices. With a standard deviation close to 10 years, this shows substantial variation in the sample. In fact, the youngest NGO had operated for 2 years, while the oldest had operated for 58 years. On average, NGOs had about 11 employees, though some had up to 40 while others had just 2. 56.7% of the sampled respondents were male, compared with 43.3% female, corresponding to 34 and 26 respondents, respectively. On average, the sampled respondents had more than 10 years of experience in NGO management, with some having just a year of experience while others accumulated 29 years. Only 1.7% (1) respondents had a secondary level of education, whereas 26.7% (17) were graduates and 71.7% (43) were postgraduates.

Table 1: Characteristics of NGOs

Variable	Frequency	Mean	Std. Dev.	Min	Max
NGO age	60	12.61667	9.686775	2	58
NGO size	60	11.46667	7.057792	2	40
Gender of respondent					
Male	34	0.5666667	0.4997174	0	1
Female	26	0.4333333	0.4997174	0	1
Experience	60	10.35	6.566027	1	29
Education					
Secondary	1	0.0166667	0.1290994	0	1
Graduate	16	0.2666667	0.4459485	0	1
Postgraduate	43	0.7166667	0.4544196	0	1

Source: Authors' computation from field data, 2025

Table 2 summarizes descriptive statistics for the variables used in the study. The table includes the number of observations, mean, standard deviation, and minimum and maximum values for each variable. However, we constructed the indices using Multiple Correspondence Analysis (MCA) and later normalized them.

Table 2: Summary of descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
NGO performance	60	0.0569335	0.1338168	0	1
Flexibility index	60	0.0749921	0.1445956	0	1
Speed of decision-making index	60	0.0756918	0.1743408	0	1
Innovation capabilities index	60	0.0363165	0.1410455	0	1
NGO age	60	12.61667	9.686775	2	58
NGO size	60	11.46667	7.057792	2	40
Experience	60	10.35	6.566027	1	29
Gender	60	0.4333333	0.4997174	0	1
Education	60	0.7166667	0.4544196	0	1

Source: Authors' computation from field data, 2025

According to Table 2, the NGO sample's average performance index is 0.0569335, far below average, with a standard deviation of 0.1338168 greater than the mean, indicating large disparities in the sample. As expected, NGO performance index values range between 0 and 1, since the index was normalized. On average, the flexibility index of NGOs in the sample was 0.0749921, while the mean speed of decision-making index was 0.0756918, and the innovation capabilities index was 0.0363165. This reveals that innovation capabilities is the least strategic agility component among NGOs in Mezam Division. All three variables have a standard deviation greater than the mean, implying that the sample is highly heterogeneous across the strategic agility components. On average, sampled NGO have been operating for 13 years, with a standard deviation of 10, indicating great variability in the sample in terms of experience. The youngest

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NGO sampled had been operating for 2 years, while the oldest had been in operation for 58 years. Of the sampled administrators, 43.3% were women, and 71.67% had postgraduate education.

Before examining the effect of strategic agility on NGOs' performance in Mezam Division, the research conducts a pairwise correlation analysis to detect strong correlations among independent variables that may lead to multicollinearity. Results of the pairwise correlation analysis are presented in Table 3 below:

Table 3: Pairwise correlation matrix

	perf	flex	sdm	icap	fage	size	exp	female
perf	1.0000							
flex	0.7976	1.0000						
	(0.0000)							
sdm	0.6299	0.7976	1.0000					
	(0.0000)	(0.0000)						
icap	0.8146	0.8397	0.6118	1.0000				
	(0.0000)	(0.0000)	(0.0000)					
fage	-0.0931	0.2225	0.0863	0.1380	1.0000			
	(0.4791)	(0.0875)	(0.5122)	(0.2929)				
size	-0.0808	-0.0817	-0.0292	0.0073	0.1502	1.0000		
	(0.5393)	(0.5347)	(0.8250)	(0.9559)	(0.2521)			
exp	-0.2371	-0.2221	-0.2226	-0.1552	0.0368	0.1475	1.0000	
	(0.0682)	(0.0882)	(0.0873)	(0.2363)	(0.7802)	(0.2608)		
female	-0.0737	-0.1354	-0.0476	-0.0440	-0.1437	-0.0727	-0.2536	1.0000
	(0.5758)	(0.3022)	(0.7181)	(0.7384)	(0.2734)	(0.5808)	(0.0505)	
postg	0.0723	-0.1097	-0.1629	0.0125	-0.0713	0.2956	0.3065	-0.1965
	(0.5830)	(0.4042)	(0.2136)	(0.9243)	(0.5883)	(0.0218)	(0.0172)	(0.1323)

Source: Author computation from field data, 2025

Pairwise correlations indicate both positive and negative relationships among variables. Most importantly, the model's independent variables showed no strong correlations, except between flexibility and speed of decision-making and between flexibility and innovation capabilities. However, we also conducted a formal multicollinearity test, the Variance Inflation Factor (VIF) test, to confirm that multicollinearity was not a major concern. Table 3 presents the VIF test results.

Table 4: Variance Inflation Factors (VIF) test results for multicollinearity

Variable	**VIF**	**1/VIF**
Flexibility index	7.29	0.137267
Speed of decision making index	3.06	0.326552
Innovation capabilities index	3.87	0.258437
NGO age	1.18	0.850814
NGO size	1.19	0.841179
Experience	1.24	0.808499
Female respondent	1.20	0.834868
Postgraduate	1.29	0.776105
Mean VIF	**2.54**	

Source: Authors' computation from field data, 2025

According to the Variance Inflation Factor test results, the Mean VIF is 2.54, slightly greater than the critical value of 2.5 prescribed by Gujarati (2004). However, according to the same author, if none of the individual VIFs exceeds 10 (as in this study), multicollinearity is not a cause for concern. Thus, we conclude that multicollinearity is not a major issue in the study.

To examine the effect of strategic agility (captured using three proxies, namely flexibility, speed of decision making, and innovation capabilities) on NGOs' performance in Bamenda, the study employs the Ordinary Least Squares (OLS) technique. First, the overall model is statistically significant at the 1% level, as the F-test p-value (0.0000) is far below 0.01 (1%). Thus, strategic agility significantly affects NGO performance in Mezam Division after controlling for NGO age, size, gender, and the respondent's level of education. Furthermore, an adjusted R-squared of 0.7591 indicates that the joint variation in all variables included in

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the model explains 75.91% of the variation in NGOs' performance in Mezam Division. In addition, the results from the Breusch Pagan test of heteroscedasticity reveal that the p-value of the test (0.3058) is greater than 0.1 (10%), implying that the test is statistically insignificant. As such, we conclude that the model is homoscedastic (has constant residual variance). Combining these results with the VIF test of multicollinearity, we conclude that the OLS estimates are reliable and valid. Therefore, they are reliable.

Table 5: OLS results of the effect of strategic agility on NGO performance

Variables	Coef.	Std. Err.	t	P>t
Flexibility index	0.4293425**	0.1596016	2.69	0.010
Speed of decision-making index	0.0117952	0.0858224	0.14	0.891
Innovation capabilities index	0.4089507***	0.1192448	3.43	0.001
NGO age	-0.0033391***	0.0009569	-3.49	0.001
NGO size	-0.0007176	0.0013209	-0.54	0.589
Respondent experience	-0.0020096	0.0014482	-1.39	0.171
Female respondent	-0.0070344	0.0187259	-0.38	0.709
Postgraduate	0.0410187*	0.0213579	1.92	0.060
_cons	0.0538004*	0.0300973	1.79	0.080
F(8, 51)	**24.24**	**Prob > F**		**0.0000**
R-squared	**0.7918**	**Adj R-squared**		**0.7591**
Breusch Pagan Chi2 (1)	**1.05**	**Prob > chi2**		**0.3058**

Note: *, ** and *** mean significant at 10%, 5% and 1% respectively

Source: Authors' computation from field data, 2025

The results show that flexibility has a positive and statistically significant effect on NGO performance in the Mezam Division of the North West Region of Cameroon. This result aligns with a priori expectations and allows us to reject the first hypothesis of the study, which claims that flexibility has no significant effect on the performance of Non-Government Organizations in the Mezam Division of the North West Region of Cameroon. Upton (1994) defines flexibility as the capacity of an organization to respond efficiently to

This finding also aligns with strategic agility theory, which explains how organizations maintain competitive advantage in rapidly changing business environments. Sull (2009) emphasizes that strategic agility is the key to surviving and thriving in today's unpredictable market conditions. He argues that companies must sense and respond to opportunities and threats faster than their competitors. Strategic agility, according to Sull (2009), requires organizations to continuously adapt their strategies, resources, and operations. Staying flexible, realigning resources, and making swift decisions are crucial for businesses in sectors where market dynamics evolve quickly.

Faster decision-making improves NGO performance in Mezam Division. However, this result was statistically insignificant. Thus, we fail to reject the second hypothesis, which states that decision-making speed has no significant effect on NGOs' performance in the Mezam Division of the North West Region of Cameroon. Although the coefficient sign aligns with theoretical expectations, this result shows that rapid decisions can benefit the organization, but making the right decision is equally important. Decision-making speed alone may not tell the full story. Decision-making speed refers to an organization's ability to make timely and effective decisions in response to opportunities, threats, or changes in its environment. Bower (1970) describes decision-making speed as an essential characteristic of high-performing organizations, particularly in rapidly changing industries. He suggests that organizations that can make decisions quickly are better positioned to capitalize on emerging opportunities, mitigate risks, and maintain competitive advantage. The importance of speed in decision-making is especially evident in dynamic environments where rapid responses are critical to organizational success. This result aligns with Yildiz and Aykanat (2021), who found a positive effect of strategic agility on firm performance.

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Results from the OLS estimation reveal a significant positive effect of innovation capabilities on NGOs' performance in the Mezam Division of the North West Region of Cameroon. This result aligns with a priori expectations and allows us to reject the third hypothesis, which postulates that innovation capabilities do not significantly affect NGO performance in the Mezam Division of the North West Region of Cameroon. Innovation capabilities refer to an organization's ability to develop and implement new ideas, processes, products, or services that strengthen its competitive position and support growth. Teece (2007) defines innovation capabilities as the firm's ability to deploy its resources and capabilities effectively to generate new and valuable outputs. These outputs might include technological innovations, product innovations, or novel business models that allow the organization to maintain or achieve a competitive advantage in the market. According to Zahra and George (2002), innovation capabilities are closely linked to a firm's dynamic capabilities, which are the organization's ability to integrate, build, and reconfigure its resources to address rapidly changing environments. These scholars argue that innovation capabilities enable firms to adjust to changes in the market and technology and to create new value for customers. This result aligns with Ngila and Mutua (2024), who found that firms that adopted agile organizational structures and integrated technology-driven innovations into their operations were better positioned to capitalize on market opportunities and reduce risks.

This outcome concurs with the dynamic capabilities theory, which explains how firms achieve and sustain competitive advantage in rapidly changing environments. According to the authors, dynamic capabilities are the firm's ability to integrate, build, and reconfigure internal and external competencies to address quickly changing environments (Teece, Pisano & Shuen, 1997). This theory suggests that firms do not rely solely on existing resources to compete; rather, they must continuously adapt and reorganize these resources to maintain a competitive edge.

5. Conclusion and Policy Implications

This study examined the effect of strategic agility on the performance of NGOs in the Mezam Division of the North West Region of Cameroon. To meet this objective, the study formulated three specific objectives and tested the resulting hypotheses using primary data collected through a structured questionnaire from a sample of 60 non-governmental organizations. After constructing indices of flexibility, speed of decision-making, innovation capabilities, and NGO performance using Multiple Correspondence Analysis (MCA), the study used Ordinary Least Squares (OLS) estimation to test the hypotheses.

NGOs play an undeniable role in alleviating suffering worldwide. This is even truer in conflict-affected areas such as the North West Region. The sustainability and effectiveness of these organizations in fulfilling their mission depend on how well they perform and adapt to a constantly changing environment. In this regard, these NGOs need to assess their strategic agility to ensure mechanisms are in place to address environmental challenges in a timely and effective manner and to seize the opportunities this environment provides.

From a policy perspective, flexibility significantly improves NGO performance in Mezam, yet many organizations still operate with rigid structures and limited adaptability. While some NGOs reported ease in adjusting to new routines and handling unexpected challenges, others showed gaps in embracing flexible work arrangements and continuous learning. To address this, NGOs should institutionalize flexibility through adaptive work policies, regular staff training on change management, and active encouragement of cross-functional collaboration to improve responsiveness.

Despite a positive influence, decision-making speed did not significantly affect performance. This suggests that delays and inefficiencies may still exist within internal decision processes. Many NGOs may lack clear structures for urgent decision-making or overly centralize authority. To improve this, NGOs should streamline decision channels, empower mid-level respondents, and integrate digital communication tools that enable faster responses in both routine and emergency situations.

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Innovation capabilities had a strong, positive, and significant impact on performance, yet this was the weakest area among the NGOs studied. The low average innovation index indicates underinvestment in idea development and creative problem-solving. NGOs should prioritize innovation by creating internal structures that support experimentation, learning from failure, and investing in new technologies or program models. Encouraging staff at all levels to contribute ideas and rewarding innovative solutions would foster a more dynamic and forward-thinking organizational culture.

6. Limitations and Direction for Future Study

This study has several limitations to consider when interpreting the findings. First, the sample comprises 60 NGOs from a single division (Mezam) with one respondent per NGO, which limits the generalizability of the results to other regions and to NGOs of different sizes. Second, the data are cross-sectional and self-reported, so the estimated relationships should be read as model-conditional associations rather than definitive causal effects, and responses may be affected by common-method and social-desirability bias. Third, the flexibility, speed of decision-making, innovation capabilities, and NGO performance indexes were constructed from categorical indicators using Multiple Correspondence Analysis, and their values depend on the indicators selected. Fourth, flexibility is strongly correlated with speed of decision-making and innovation capabilities, and its VIF (7.29) is the highest in the model, so interpret the individual effects of the three components with caution, especially since the model estimates eight explanatory variables from 60 observations.

Future studies could use (i) larger, multi-region samples with several respondents per NGO to allow multilevel analysis; (ii) longitudinal data to test causality; (iii) examine mediating and moderating factors such as leadership, donor dependency, and digital capacity; (iv) complement surveys with qualitative case studies to explain why speed of decision-making was not significant; and (v) use structural equation modeling to treat strategic agility as a latent construct.

Authors' Contribution: Derrick Suh Bila developed the idea and the data-collection tools. He also wrote the introduction and did the literature review. Paul Akumbom worked on the methodology, data collection, and analysis.

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Appendix

Appendix 1: QUESTIONNAIRE

A. Demographic Information

1. How long have you been in existence? _____
2. Indicate the number of workers. _____
3. Gender a) Male ( ) Female ( )
4. Number of years of experience: ……Years
5. Level of education: a) Secondary ( ) b) Undergraduate (HND / Bachelor) ( ) c) Postgraduate (Master and above) ( )

B. Strategic agility

Please kindly reply to the following statements by ticking where appropriate. Strongly disagree (1) Disagree (2) Agree (3) Strongly agree (4)

	Flexibility	**SD**	**D**	**A**	**SA**
6	Adjusting to new routines is done with ease.				
7	Unexpected challenges are managed calmly and effectively.				
8	New approaches to problem-solving are welcomed.				
9	Flexible work arrangements (e.g., remote work, flextime) are available and supported.				
10	The organization responds quickly to changes in the external environment.				
11	The organization embraces learning new skills outside its usual comfort zone.				
	Speed of decision-making	**SD**	**D**	**A**	**SA**
12	Decisions are made promptly when urgent action is required.				
13	Delays in decision-making are uncommon during routine tasks.				
14	Available information is used efficiently to make timely decisions.				
15	Minimal time is spent on unnecessary deliberation before action is taken.				
16	Decision-making processes are streamlined and efficient.				
17	The organization adapts decision timelines to match the pace of change.				
	Innovation capabilities	**SD**	**D**	**A**	**SA**
18	New ideas are regularly generated to improve work processes.				
19	Creative solutions are encouraged during problem-solving.				

20	Learning from failure is supported as part of innovation efforts.				
21	The organization actively invests in developing new products, services, or processes.				
22	A culture of innovation is embedded throughout the organization.				
23	Risk-taking is supported when aligned with strategic goals.				

C. Performance of NGOs

Please kindly reply to the following statements by ticking where appropriate. Strongly disagree (1) Disagree (2) Agree (3) Strongly agree (4)

	Performance	SD	D	A	SA
24	The NGO consistently achieves its objectives.				
25	Programs and services align well with the needs of target communities.				
26	Project outcomes contribute meaningfully to the NGO's mission.				
27	Resources are used effectively to maximize program impact.				
28	The NGO outreach has been on the rise over the years.				
29	The NGO adapts effectively to changes in funding policy or environment.				

Appendix 2: Cronbach's alpha reliability test for flexibility

```
Test scale = mean(unstandardized items)

Average interitem covariance:     .2853861
Number of items in the scale:            6
Scale reliability coefficient:      0.7353
```

Appendix 3: Cronbach's alpha reliability test for speed of decision making

```
Test scale = mean(unstandardized items)

Average interitem covariance:     .3905273
Number of items in the scale:            6
Scale reliability coefficient:      0.7999
```

Appendix 4: Cronbach's alpha reliability test for innovation capabilities

```
Test scale = mean(unstandardized items)

Average interitem covariance:     .2802448
Number of items in the scale:            6
Scale reliability coefficient:      0.7895
```

Appendix 5: Cronbach's alpha reliability test for NGO performance

```
Test scale = mean(unstandardized items)

Average interitem covariance:     .2310169
Number of items in the scale:            6
Scale reliability coefficient:      0.6980
```