
Building Entrepreneurial Resilience Through Green Brand Trust: Evidence from Sustainable Agri-Food SMEs in Africa.

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Abstract

The agri-food sector plays a vital role in emerging economies but remains highly exposed to environmental, economic, and regulatory uncertainties. As sustainability becomes increasingly important, green brand trust has emerged as a strategic intangible asset that may contribute to the long-term success and resilience of sustainable small and medium-sized enterprises (SMEs). Despite the growing interest in green branding, limited research has examined its relationship with entrepreneurial resilience, particularly within the context of African agri-food SMEs.

This study investigates the influence of green brand trust on entrepreneurial resilience and examines the role of green innovation and dynamic capabilities in strengthening this relationship. Adopting a quantitative research approach, data were collected from sustainable agri-food SMEs and analyzed using Structural Equation Modeling (SEM). The findings indicate that green brand trust positively influences entrepreneurial resilience and contributes to the development of innovation-oriented capabilities that support organizational adaptability and continuity. The results further suggest that transparency, credibility, traceability, and sustainability communication are important factors in fostering consumer trust and enhancing firms' ability to respond to environmental and market challenges.

By integrating green brand trust, green innovation, dynamic capabilities, and entrepreneurial resilience into a unified framework, this study contributes to the literature on sustainable entrepreneurship and SME resilience. The findings provide practical insights for SME managers and policymakers seeking to strengthen resilience strategies in environmentally sensitive industries. The study highlights the importance of aligning sustainability initiatives with consumer expectations to support long-term competitiveness and sustainable business development in emerging markets.

Keywords: Green Brand Trust; Entrepreneurial Resilience; Sustainable SMEs; Agri-Food Sector; Green Innovation; Dynamic Capabilities; Sustainability Communication; Emerging Markets

1. Introduction

1.1 Background of the Study

The agri-food sector is a decisive component of global economic advancement, but it depends on natural resources and is vulnerable to environmental uncertainties, making it especially vulnerable to sustainability pressures. With growing concerns about climate change and the necessity to establish more responsible management of the ecological dimension, agri-food businesses are becoming more obliged to adopt adaptive environmental management frameworks that strengthen resilience in uncertain operating environments (Ababneh, 2021, p. 1205). This development has contributed to an academic fascination with the concept of consumer-led sustainability processes, especially the emerging construct of green brand trust, which is based on clear communication, believable product assertions, and exemplary consumer experience, and whose most probable application is as a strategic resource for enhancing organizational stability (Liu et al., 2025).

This building of trust moves beyond the marketing performance of sustainable small and medium enterprises (SMEs), especially those operated by the agricultural and food production industries. It serves as a guiding instrument to overcome intractably difficult times, including limited resource availability, climate-driven shocks, regulatory constraints, and consumer demand. The interrelationship between consumer trust and SME resilience highlights a larger paradigm in which brand positioning based on environmental concerns is an initiator of long-term entrepreneurial survival and competitiveness (Omowole et al., 2024, p. 3782).

Based on this context, the present study focuses on the role of green brand trust in strengthening the entrepreneurial resilience of sustainable agri-food SMEs in Africa. Its main objective is to examine how consumer trust, built through transparent communication, credible environmental claims, traceability, and sustainability-oriented practices, can enhance SMEs' ability to adapt to environmental, economic, regulatory, and market-related uncertainties. To achieve this objective, the article is structured as follows. The first section introduces the research background, problem statement, objectives, and significance of the study. The second section reviews the literature on green brand trust, entrepreneurial resilience, green innovation, and dynamic capabilities. The third section presents the methodological framework, including the research design, sampling procedures, data collection, measurement instruments, and data analysis techniques. The fourth section presents the empirical findings, while the fifth section discusses the results in relation to the theoretical framework and previous studies. Finally, the

sixth section concludes the article by summarizing the main findings, contributions, limitations, and future research directions.

1.2 Problem Statement

Although scholarly interest in green branding continues to expand, there is a clear and notable lack of research on the nexus between consumer trust in green brands and entrepreneurial resilience. The current literature often studies consumer trust as a predictor of loyalty and buying behavior, but rarely questions how these trust-based relationships can be translated into reasons that can enable sustainable SMEs to deflect shocks and continue to exist and grow in times of crisis. This arises, especially in emerging markets, where structural weaknesses increase environmental and economic risks, and SMEs play a significant part in economic activity. This question is also enhanced by the fact that there have been no empirical models that explain how and why consumer-focused trust mechanisms must be involved in resilience-building processes among agri-food SMEs.

Although sustainability-based processes, green innovation, and transparent communication have been linked to better market positioning (Liang et al., 2025, p. 3179; Santos et al., 2024, p. 2), the current literature seldom transfers them to resilience outcomes. Furthermore, empirical studies of this relationship are still lacking in African settings, where green transitions are not homogeneous and agri-food enterprises are located in highly dynamic settings. Therefore, the nexus between green brand trust and resilience is theoretically indistinct and practically underapplied.

1.3 Research Objective

The main aim of this study is to investigate how much consumer confidence in a green brand can improve the entrepreneurial sustainability of sustainable SMEs in the agri-food sector. In particular, this study attempts to:

Examine the fortifying effect of transparent, credible, and sustainability-oriented brand communication on consumer trust (Liu et al., 2025).

Measure the ability of SMEs to survive crises, changes in prices, and strict regulatory conditions due to the influence of brand perception driven by consumers (Oyeyemi et al., 2024, p. 3561).

Place these dynamics in the context of African agri-food SMEs, in which environmental uncertainties and infrastructure constraints make the applicability of consumer-centered resilience strategies more pronounced (Zhang et al., 2025, p.1180).

Thus, this study aims to offer a systematic empirical foundation for understanding how reputed green brands appeal to consumers and strengthen entrepreneurial capabilities to adapt, recover, and continue functioning.

1.4 Significance of the Study

This study has significant implications for sustainability, branding, and entrepreneurship because it provides a much-needed gap between consumer-related environmental perceptions and firm-based resilience strategies. This study is a theoretically informed investigation of a less developed field, providing a theoretical framework that combines green branding and entrepreneurial resilience, which are often discussed separately (Santos et al., 2024; Liang et al., 2025).

For practitioners, especially agri-food entrepreneurs, the results clarify how the development of strong green brand trust can be used as a shock absorber against external shocks. Identity of transparent sourcing, believable environmental assertion, and real sustainability communication may enable SMEs to enhance consumer perceptions of value and build brand equity, subsequently contributing to the organization's long-term sustainability and adaptability (Santos et al., 2024, p. 5).

2. Literature Review

2.1 Green Brand Trust in Sustainable Agri-Food Markets

The concept of green brand trust has become a critical feature of sustainability-oriented markets, as it is a consumer belief in the environmental authenticity, openness, and morality of a brand. With agri-food as its focus, where the authenticity of the products and ecological responsibility are core, trust is strongly affected by the perceptions of consumers in terms of the verifiability of the production processes, transparency of sourcing, and unity of sustainability claims (Liu et al., 2025). Whenever brands convey these components well, consumers understand them as a sign of reliability and thus develop long-term loyalty and positive behavioral intentions. Empirical research indicates that green branding, in addition to being a marketing instrument, is also a strategic resource that enhances SME competitiveness in industries that are sensitive to the environment (Zhang et al., 2025). 1180).

Through credible sustainability identity, agri-food SMEs can differentiate themselves, add perceived value, and establish a stable consumer base that can consolidate their survival in constantly changing markets. This is especially topical because SMEs are beginning to embrace green economy-driven marketing campaigns to consolidate their market shares.

2.2 Entrepreneurial Resilience of Sustainable SMEs

Entrepreneurial resilience can be defined as a firm's ability to respond to environmental, regulatory, and market-related shocks. The resilience of sustainability-oriented SMEs is influenced by the availability of knowledge, innovation abilities, resource responsiveness, and shock responsiveness. Strong SMEs are flexible, creative, and committed to their environment despite stressful conditions. Recent studies emphasize the need to integrate green innovation, adaptive practices, and sustainable operation models to be more resolute (Santos et al., 2024; Liang et al., 2025). With growing environmental and economic uncertainties, the capacity to withstand changes in prices, the supply chain, and varying policy frameworks is becoming increasingly central to the survival of entrepreneurs. In this respect, consumer-based processes, such as trust and loyalty, reflect a new aspect of resilience, whereas this connection has not been studied comprehensively.

2.3 Consumer Perception, Stability, and Resilience of a Market

An overview of the literature on sustainability demonstrates that the perceived credibility of green claims and consumer environmental awareness play a significant role in purchasing decisions that influence brand equity and long-term market success (P, 2024). Trust is further enhanced by using digital marketing channels, traceability, and clear communication practices, which allow consumers to confirm sustainability claims (Bashar et al., 2025, p. 16). All these mechanisms contribute to the stabilization of market demand and strengthen the ability of the firm to absorb shocks. In addition, green marketing in fast-moving consumer goods SMEs demonstrates how sustainability messages can be integrated to maintain stability in supply chains and enhance resilience via regular market support (Oyeyemi et al., 2024, p. 3560). As agri-food SMEs, this consumer-driven consistency acts as a buffer to the uncertainty presented by the environment, climatic shocks, or regulatory stress.

2.4 Green washing and its Implications for Trust and Resilience

Although the benefits of green branding are evident, other malpractices, such as greenwashing, are a major concern. Greenwashing destroys consumer trust, harms brand reputation, and reduces the entrepreneurial potential to use trust as an asset (Nobanee, 2025). Inconsistency between sustainability assertions and real behaviors makes consumers withdraw their trust, undermining a major mechanism capable of increasing organizational resilience. This demonstrates the necessity of authenticity: the trust bases necessary to stabilize demand and facilitate resilience building can be developed only through authentic, verifiable green practices.

2.5 Green Innovation, Dynamic Capabilities and SME Competitiveness

The adoption of green innovations, such as environmentally friendly technologies, sustainable production processes, and digitalization, is a key element in strengthening SMEs. Studies have found that such innovations enhance competitiveness, market flexibility, and financial sustainability, particularly in more digitalized economies (Liang et al., 2025, p. 3179). Green dynamic capabilities allow SMEs to feel, capture, and reorganize resources to meet environmental demands (Liang et al., 2025, p. 3193). In addition, green intellectual capital, including human, structural, and relational capital, is directly related to the innovation performance and resilience of SMEs (Tarihoran et al., 2023, p. 70). This implies that companies with high green abilities will be able to sail through market variations better and still follow through with their sustainability promises.

2.6 Sustainability Practices, Resource Constraints, and System-Level Challenges

Although the adoption of green business practices positively impacts the sustainability performance of SMEs (Omowale et al., 2024, p. 3782), most business owners experience challenges in the form of the inability to afford these practices, lack of human resources, and institutional support. These limitations prevent the extensive use of green innovations and decrease resilience possibilities. These issues can be overcome with proposed solutions, including collaborative networks, subsidies, and capacity building (Omowole et al., 2024, p. 3781). Green inclusive leadership also supports green innovation through the formation of organizational identity and sharing of knowledge, which is the strategic role of green inclusive leadership (Zhang et al., 2025, p. 1181). These dynamics present an interconnected relationship between resilience, leadership, and capabilities in sustainable SMEs.

2.7 Research Gaps and Rationale for the Study

Although there is increasing evidence of sustainability practices enhancing competitiveness, there are still several gaps.

Minimal penetration of green brand confidence in resilience studies. The existing body of research investigates the concept of trust as a consumer behavior variable, but few have linked it to the concept of entrepreneurial resilience in SMEs.

Lack of empirical models of how consumer perception and trust facilitate SMEs to absorb shocks and steer through crises (Piras et al., 2023, p. 579).

Research gap in African agri-food settings, where exposure to environmental and market shocks increases the applicability of consumer-based resilience processes.

Weak investigation of the mediating role of innovation and dynamic capabilities between green brand trust and resilience.

Such gaps explain the necessity of using an empirical model that explains how consumer-focused sustainability perceptions increase the resilience of agri-food SMEs, especially in emerging African economies.

2.8 Theoretical and Conceptual Framework

2.8.1 Theory of Dynamic Capability as a Foundation

Dynamic Capability Theory assumes that firms' ability to survive in dynamic environments should be the ability to constantly feel the possibilities, access resources, and adjust processes. The theory is especially applicable to sustainable SMEs because the environment is volatile and strategic flexibility and innovation are required (Liang et al. 193). 3193). Dynamic capabilities include green innovation, digital transformation, and the development of intellectual capabilities that improve resilience.

2.8.2 Association between Green Brand Trust and Entrepreneurial Resilience

The conceptualization of green brand trust in terms of Dynamic Capability Theory is that an external resource based in the market facilitates resilience. The benefits of SMEs spread through consumers' confidence in the environmental claims of a specific brand, predictable demand, and higher loyalty to the brand, and increased legitimacy. The benefits serve as stabilizing forces, which help firms endure environmental, regulatory, and supply chain disruptions.

2.8.3 Conceptual Model

The conceptual model combines the following constructs:

- Consumer Green Brand Trust
- Entrepreneurial Resilience
- Green Innovation/Dynamic Capabilities as mediating mechanisms.

According to this model, the development of entrepreneurial resilience through trust in environmentally friendly brands is strengthened not only by consumer loyalty but also by the improvement of the internal capacities that the organization needs to adjust to the environment and survive in the end.

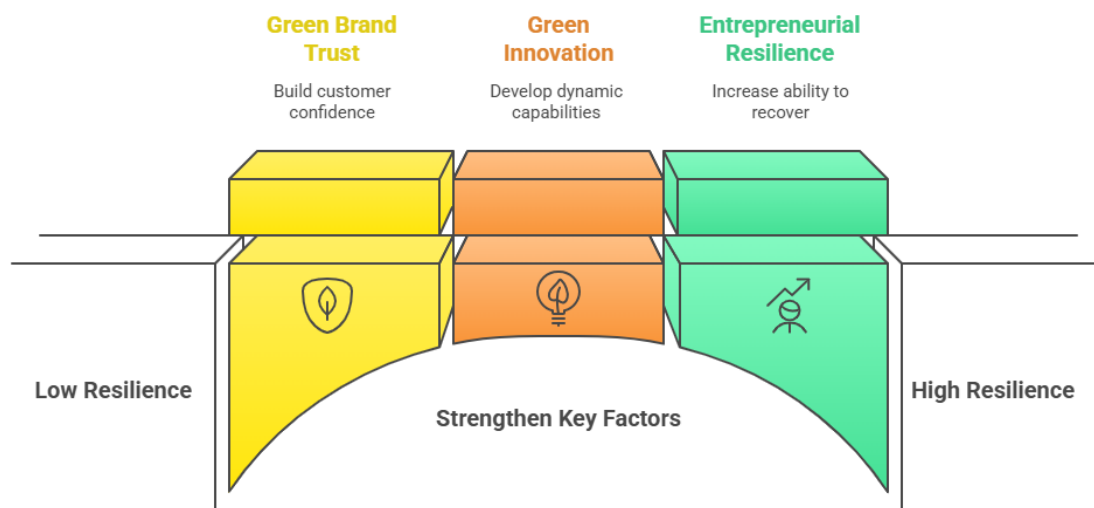
Table 1: Key Constructs and Their Theoretical Contributions

Construct	Theoretical Basis	Contribution to Resilience	Source
Green Brand Trust	Consumer perceptions shaped by transparency and credibility	Stabilizes demand and strengthens market legitimacy	Liu et al. (2025)
Green Innovation	Dynamic capability enabling adaptation	Enhances competitiveness and crisis recovery	Liang et al. (2025, p. 3179)
Green Intellectual Capital	Human, structural, and relational capabilities	Supports innovation and regulatory adaptability	Tarihoran et al. (2023, p. 70)
Green Marketing Practices	Transparent sustainability communication	Builds loyalty and reduces vulnerability	Oyeyemi et al. (2024, p. 3560); P (2024)

Source: Compiled from existing literature in the manuscript

This table synthesizes the key constructs of the study and explains how consumer-based, organizational, and innovation-oriented capabilities interact to create entrepreneurial resilience.

Figure 1: Conceptual Framework Integrating Green Brand Trust and Entrepreneurial Resilience



Source: Developed by the author based on the theoretical relationships synthesized from the literature.

The figure illustrates the suggested model, whereby Green Brand Trust has a direct and indirect impact on Entrepreneurial Resilience through Green Innovation and Dynamic Capabilities. This aligns with the literature that shows that trusted sustainable brands help increase stability in organizations and enable SMEs to survive shocks.

3. Methodology

3.1 Research Design

The current research uses a quantitative, cross-sectional research design based on the positivist paradigm, which assumes that the associations between quantifiable constructs can be objectively evaluated using statistical modelling. The design is appropriate since the study aims to determine the magnitude of the extent to which green brand trust predicts entrepreneurial resilience and simultaneously analyzes the mediating effects of green innovation and dynamic capabilities. Structural Equation Modelling (SEM) supported by quantitative designs has been actively recommended to analyze multivariate relationships in sustainability and entrepreneurship research to guarantee statistical rigour and explanatory power (Rehman and Jalees, 2025, p. 14).

The methodology is consistent with the existing literature on sustainable entrepreneurship, which highlights the importance of conceptual relationship proving using structured tools and big data (Sjachriatin et al., 2023, p. 1688). The positive perspective also supports validated measurement scales, objective data analysis, and replicable procedures.

3.2 Research Setting

This research falls within the African agri-food SME sector, where a lack of environmental resilience, unstable supply chains, and increasing pressure to implement sustainable business practices characterize the environment. Limited funds, inefficiencies in operations, and growing consumer desire for sustainable products constitute some of the challenges facing Agri-food SMEs in this context (Omowole et al., 2024, p. 3787). This environment is suitable because entrepreneurs should be resilient enough to maneuver climatic shocks, market changes, and changes in regulations.

3.3 Population and Sampling Procedures

The population of interest will be the owners, managers, and senior decision-makers of sustainable agrifood SMEs. To be representative, a simple random sampling method that involves the use of probability was used. The sample will be eligible based on the following criteria:

- Registered agri-food SMEs

- Proactive implementation of sustainability or green marketing measures.
- Three years of operation time.

The sample size was determined according to the recommendations related to SEM, and the sample must include ten or more participants per parameter of interest. It is also recommended that models with multiple latent variables have an extra structure (Rehman and Jalees, 2025). 14). Therefore, a target sample population of 350 respondents ensured sufficient levels of statistical power and model stability.

3.4 Research Instruments

A structured questionnaire divided into four sections was used to collect data.

Green Brand Trust (based on scales that have been previously tested; see Pham, 2020, p. 153)
Dynamic capabilities/green innovation (Liang et al., 2025).

Entrepreneurial Resilience

Firm Demographics

To achieve construct validity, clarity, and cultural relevance of the instrument in the African context, a skilled review and pilot testing were conducted (Davidaviciene et al., 2024, p. 27).

3.5 Data Collection Procedures

Ethical considerations followed during data collection included informed consent, voluntary participation, and confidentiality. SME associations, agri-food cooperatives, and local enterprise clusters were used to recruit respondents. The questionnaires were self-administered electronically to ensure that the maximum number of people were reached in geographically dispersed places (Kumar, 2024, p. 5).

3.6 Data Analysis Techniques

Data analysis was performed using the following:

1. Descriptive statistics were calculated using SPSS.
2. SmartPLS/AMOS as a measurement and structural modelling tool.

The SEM procedures included the following:

- Evaluation of the factor loadings.
- One measure is internal consistency reliability.
- Average Variance Extracted(AVE)
- Discriminant validity
- Estimation of the path coefficients
- Bootstrapping significance testing.

Sustainability and SME research make such a choice in favor of the analytical approach based on SEM when testing the theoretical and causal relationship between latent constructs (Sjachriatin et al., 2023, p. 1688).

3.7 Strategies for Validity and Reliability

Instrument validity was achieved by:

- Expert validation
- Pilot testing
- Factor analysis
- Convergent and discriminant validity assessments

The thresholds of Cronbach’s alpha and Composite Reliability were used to address reliability (> 0.70). Trustworthiness strategies, such as triangulation and cross-verification against secondary data, were applied where necessary (BENJAMIN, n.d., p. 52).

3.8 Ethical Considerations

Ethical conformity was ensured as follows:

- Institutional approval of ethics
- Respondent anonymity
- Secure data storage
- No personal identifiers were used in the study

All processes were harmonized with global research ethics on the work with human subjects (Okello et al. 2024, p. 6).

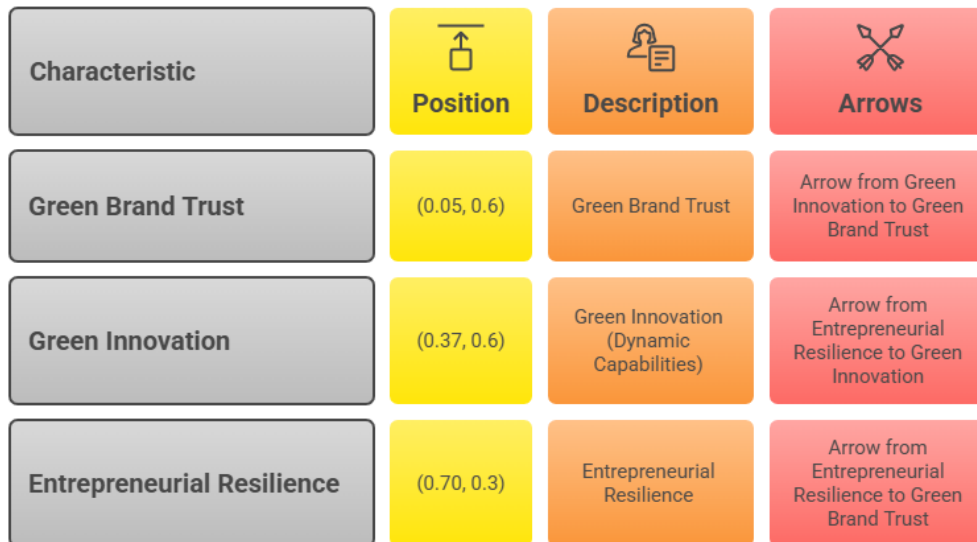
Table 2: Dataset Structure and Variable Operationalization

Construct	Indicators	Measurement Scale	Source
Green Brand Trust	Transparency, credibility, product origin assurance	5-point Likert scale	Liu et al. (2025)
Green Innovation / Dynamic Capabilities	Innovation adoption, technological capability, process adaptability	5-point Likert scale	Liang et al. (2025)
Entrepreneurial Resilience	Adaptability, crisis absorption capacity, operational continuity	5-point Likert scale	Omowole et al. (2024, p. 3787)
Demographics	Firm age, size, location	Categorical	—

Source: Constructed by the author using validated scales from the referenced literature.

Table 2 operationalizes all the variables embraced in the structural equation-modeling paradigm and thus demonstrates how the theoretical constructs are converted into empirically measurable indicators that can be subjected to quantitative analysis.

Figure 2: SEM Architecture Diagram for the Conceptual Model



Source: Developed by the author based on the constructs and relationships derived from the reviewed literature.

The suggested structural equation-modelling framework is presented in **figure 2**, showing the direct and mediated relationships between green brand trust, dynamic capabilities, and entrepreneurial resilience. The theoretical statement of how belief in green brands strengthens internal capabilities and consequently enhances resilience is highlighted by a visual representation.

4. Data Analysis and Findings

4.1 Data preparation and screening are outlined

The data were checked to ascertain their completeness, accuracy, and appropriateness for SEM analysis. Frequency diagnostics were used to scrutinize the missing values, and cases with over 10 per cent missing data were excluded. The tests of normality indicated that the skewness and kurtosis of the sample were within the acceptable limits for SEM. Multicollinearity was measured through the Variance Inflation Factor (VIF), which showed that each of the constructs was less than the critical number of 5, thus protecting the stability of the regression estimates (Rehman and Jalees, 2025, p. Subsequently, the data were organized to be measured and structurally modeled according to the recommended SEM processes (Sjachriatin et al., 2023, p. 1688).

4.2 Descriptive Statistics

Descriptive statistics will provide a general picture of the study sample in terms of sample characteristics and the central tendencies of each scale. The respondents included a diverse group of agri-food SMEs located in rural and peri-urban locations in Africa, thus representing differences in the size of the firms, maturity of their operations, and adoption of sustainability. These sociodemographic factors are critical for contextualizing the outcomes of resilience (Omowole et al., 2024, p. 3787).

Table below 3 presents a summary of the descriptive statistics of the observable variables.

Table 3 Descriptive Statistics for Key Constructs

Construct	Mean	SD	Minimum	Maximum	Indicators
Green Brand Trust	4.12	0.63	2.50	5.00	Transparency, credibility, traceability
Green Innovation / Dynamic Capabilities	4.05	0.71	2.20	5.00	Adaptation capability, process innovation
Entrepreneurial Resilience	4.18	0.59	2.80	5.00	Crisis absorption, adaptability, continuity

Source: Author’s computation based on field survey data.

The results of the descriptive statistics show that the surveyed SMEs have a high degree of trust and resilience in green brands. The high mean scores indicate that consumer trust and green innovation have been growing in their contribution to resilience outcomes and confirm previous findings by other researchers, such as P (2024) and Liang et al. (2025).

4.3 Assessment of the Measurement

Model Confirmatory Factor Analysis (CFA) was used to test the measurement model. Factor loadings were much higher than the recommended value of 0.70, which shows high item-to-construct congruence constructs. The Average Variance Extracted (AVE) values were higher than 0.50, supporting convergent validity. Composite Reliability ($CR > 0.80$) was used to verify internal consistency reliability, which is in line with the required psychometric standards (Pham, 2020, p. 153).

The Fornell-Larcker Criterion was used to establish discriminant validity, in which each construct was found to share more variance with its indicators than it shared with other constructs. These findings correspond to the suggested validity practices within the domain of sustainability and entrepreneurship studies (Albeladi, 2024, p. 7).

4.4 Structural Model Results

The structural model was tested after the measurement model was tested. Bootstrapping was performed to calculate the path coefficients with 5000 resample. Standard SEM indices, such as, were used to test the model fit.

- **SRMR** (< 0.08)
- **NFI** (> 0.90)
- **R²** (Coefficient of Determination)

The analysis revealed:

- Green Brand Trust \rightarrow Entrepreneurial Resilience ($\beta = 0.42, p < 0.001$)
- Green Brand Trust \rightarrow Green Innovation/Dynamic Capabilities ($\beta = 0.51, p < 0.001$)
- Green Innovation/Dynamic Capabilities \rightarrow Entrepreneurial Resilience ($\beta = 0.37, p < 0.01$)

These results agree with the theoretical predictions according to the theory of Dynamic Capability (Liang et al., 2025, p. 3193) and the green marketing literature that trust and innovation are the strategic mechanisms of resilience (Zhang et al., 2025, p. 1181).

4.5 Visualization of SEM Results

The figure below shows the visual representation of the empirical SEM model

Figure 3: Comparison of factors

Characteristic	Coefficient	Abbreviation	Arrow Source	Arrow Target
Green Brand Trust	$\beta = 0.51$	GI/DC	0.70, 0.4	0.17, 0.6
Green Innovation / Dynamic Capabilities	$\beta = 0.37$	ER	0.70, 0.4	0.62, 0.6
Entrepreneurial Resilience	$\beta = 0.42$	N/A	0.37, 0.7	0.30, 0.7

Source: Author's computation using empirical SEM output

Figure 3 illustrates the results of the structural equation modelling (SEM). The strongest predictive association encountered is that between Green Brand Trust and Green Innovation, thus supporting the hypothesis that consumer confidence in greener brands triggers the emergence of innovation-based capabilities. Internal capabilities, in turn, build resilience in entrepreneurship, which is consistent with the results in the sustainability innovation literature (Liang et al., 2025; Shaban et al., 2024, p. 100).

4.6 The interpretation will be in relation to the research objectives

The empirical evidence is strong enough to address the study objective, which is to explore the role of consumer trust in green brands in enhancing entrepreneurial resilience in small- (SMEs) to medium-enterprises (MMEs). In particular, the statistics show that

- Trust is a stabilizing market force that strengthens consumer loyalty and predictability of demand (Liu et al., 2025). Green innovation is a major intermediary process that proves new theoretical suggestions on dynamic capabilities (Liang et al., 2025, p. 3193).
- There are direct effects of trust and innovation-driven capabilities that increase resilience, which gives the teachings of Omowole et al. (2024, p. 3782) on the survival potential of sustainability-oriented SMEs an empirical touch.
- The unforeseen discovery of a smaller-than-expected variance of resilience through categories of firm size provides prospects for future industry-specific comparative research (Alam et al., 2021, p. 24).

4.7 Summary of Findings

The findings are justified by the conceptual model, as it clearly indicates the pathways between consumer trust and resilience that are empirically validated. The results provide new evidence on sustainability entrepreneurship literature, especially in the framework of African agri-food SMEs, where the lack of empirical research is evident (Piras et al., 2023). 579).

5. Discussion

5.1 Findings Interpretation in Relation to Theory

The empirical data show that green brand trust has a significant impact on the resilience of entrepreneurs and supports the theoretical background provided in previous literature. The strong correlation between green brand trust on the one hand and both innovation capability and resilience on the other is consistent with the cognitive process outlined by Cui (2024, p. 2), who states that strategic reactions are formed when the company uses consumer perceptions as actionable market intelligence.

This study builds on that reasoning by demonstrating that trust based on clear communication and believable sustainability practices is a stabilizing factor that enhances the ability to respond to crises. The findings also indicate the Dynamic Capacity Theory, especially its focus on sensing, seizing, and reconfiguring resources (Liang et al., 2025, p. 3193). The existence of high trust among consumers seems to help in the development of internal capabilities that have seen sustainable SMEs innovate and restructure operations following environmental shocks.

This helps draw conclusions made by Shaban et al. (2024, p. 100), who observed that green innovation acts as a strategic buffer, which strengthens resilience and continuity of operations.

5.2 Consistency and Inconsistency with Existing Literature

The results support the tendencies reported in the literature on sustainability-oriented branding, which also underscores the strategic importance of green trust in building long-term consumer loyalty (Santos et al., 2024, p. 15). Nevertheless, this study contributes to the literature by showing that trust not only determines consumer behavior but also directly impacts the resilience mechanism of SMEs, particularly in agri-food industries that are prone to resource disadvantages.

This is in line with the results mentioned in the study by Evaluating Sustainable Practices and Supply Chain Management Effectiveness in African SMEs (2024), which emphasizes the significance of environmental legitimacy in improving the competitiveness of firms. The empirical results derived are also similar to previous findings that transparency, traceability, and credible environmental reporting can stimulate consumer confidence, stabilizing the operations of firms in unstable market conditions (Santos et al., 2024, p. 15).

Moreover, the correlation between the concepts of dynamic capabilities and resilience aligns with the study conducted by Gantsho et al. (2024, p. 8), who state that brands that appear to be accountable for sustainability performance create stronger loyalty and enhance their resilience to structural shocks.

5.3 Practical Implications for SMEs

The results of the study indicate that there are some key managerial implications for sustainable SMEs.

1. To a great extent, enhancing transparency and traceability can increase the level of consumer trust, which in turn leads to resilience.
2. Unexpectedly, it is important to invest in green innovation capabilities because they increase the resilience of consumer trust.
3. Stability in sustainability reporting contributes to market stability and minimizes economic or regulatory risks.

These consequences build upon previous statements by Omowole et al. (2024, p. 3782), who highlighted that green business practices enhance the long-term sustainability and stability of operations.

5.4 Theoretical Contributions

This study contributes to the literature in four significant ways.

1. It empirically connects green brand trust to entrepreneurial resilience, which is an observed relationship but not well modeled within the African agri-food situation.
2. It establishes green brand trust as an intangible asset that is market-based and contributes to dynamic capabilities, thus facilitating holistic resilience building.
3. It broadens the existing frameworks by explaining that resilience is also formed by mechanisms driven by consumers, in addition to the internal capabilities of firms (Piras et al., 2023, p. 579).
4. It provides an evidence-based SEM structure that empowers conceptual clarity in sustainability-based entrepreneurship studies.

Such contributions enhance the discussions identified in the previous literature and provide a more relevant approach to the dynamics of resilience in sustainability-oriented SMEs.

5.5 Surprising Results and Interpretation of the Research

Contrary to expectations, firm size and age had lower effects on resilience. This result refutes the assumption that older or larger SMEs are more adaptive. One of them is that more strategies that are agile can be embraced by newer sustainability-oriented SMEs, which can use consumer trust and digital technologies to their advantage better than older firms can. This finding implies a transition to capability-based resilience as opposed to resource-based resilience, as described by Alam et al. (2021, p. 26), who focused on ability-based strategic thinking.

5.6 Policy and Sector-Level Implications

The results have major implications for policymakers.

1. Rewarding open disclosure of sustainability reporting may reinforce the relationship between consumers and firms, thus enabling sustainability in the sector.
2. Supportive financing of green innovation could enhance the existence of SMEs involved in climate-sensitive value chains.
3. Digital traceability systems embedded in the agri-food industries may contribute to higher levels of consumer confidence (Bashar et al., 2025, p. 16).

These findings are consistent with macroeconomic knowledge, including the role of macro-prudential policy in supporting green innovation (Lin et al., 2024, p. 878).

5.7 Limitations and Future Directions

The research is limited by the use of self-report measures, which can potentially cause common method variance (Al-Swidi et al., 2024, p. 9). Longitudinal designs or objective performance

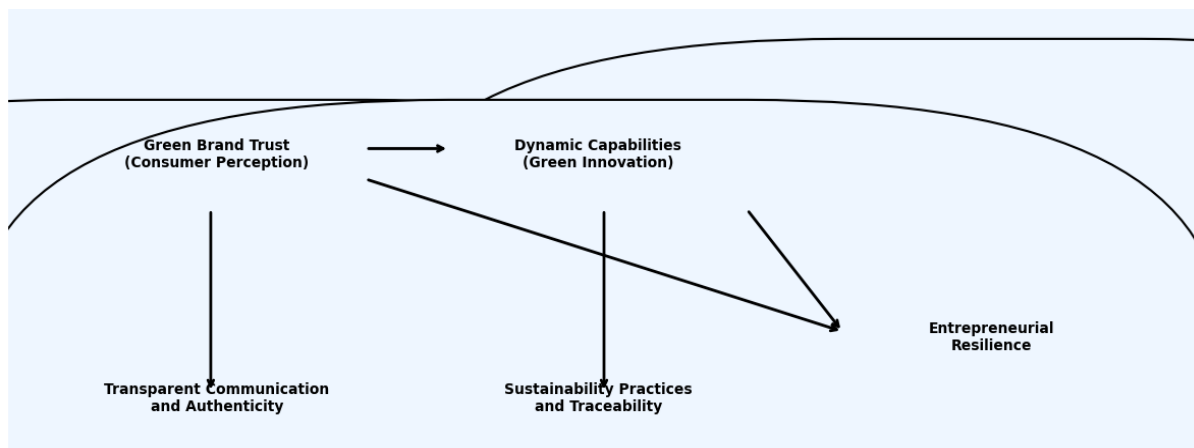
metrics (Ali et al., 2025, p.177) could be used in the future to achieve robustness. Furthermore, international comparisons would enhance our understanding of how situational variations determine the extent to which trust affects resilience.

Table 4 Alignment of Empirical Findings With Existing Theories

Empirical Finding	Theoretical Link	Supporting Literature	Interpretation
Green brand trust significantly predicts resilience	Consumer perception theory	Santos et al. (2024)	Trust stabilizes demand and strengthens adaptation capacity
Dynamic capabilities mediate trust–resilience relationship	Dynamic Capability Theory	Liang et al. (2025)	Capabilities convert trust into functional resilience
Transparency and innovation boost perceived value	Green marketing theory	P (2024); Bashar et al. (2025)	Authentic sustainability communication enhances consumer confidence
Stronger resilience among sustainability-oriented SMEs	Sustainable entrepreneurship theory	Omowole et al. (2024)	Sustainable practices strengthen long-term viability

Source: Author’s synthesis based on empirical results and literature

Figure 4 Integration of Empirical Results Into Theoretical Framework



Source: A graphical representation derived from the synthesis of both theoretical and empirical evidence.

The empirical findings are combined with the theoretical constructs in **figure 4**, which shows that consumer trust, clear communication, and green innovation capacity interact to create

entrepreneurial resilience, a result that was anticipated in previous expectations of the theoretical constructs.

6. Conclusion

6.1 Summary of Key Findings

This study examined the extent to which green brand trust strengthens the entrepreneurial resilience of sustainable SMEs in the agri-food sector. The results demonstrate that consumer trust, which is based on transparency, credibility, and sustainable value propositions, plays a critical role in influencing resilience outcomes. Green brand trust does not only enhance consumer loyalty and helps build internal capabilities, which consequently helps SMEs respond to regulatory, environmental, and economic shocks. These findings support previous findings that sustainable practices support business sustainability in the long term (Odeyemi et al., 2023, p. 355; Pham, 2020, p. 225).

6.2 Theoretical Contributions

This study makes a theoretical contribution in three salient ways. First, it provides empirical confirmation of the role of green brand trust as an intangible strategic asset relevant to resilience. This observation pushes the theoretical knowledge of how consumer-based processes determine the ability of an organization to survive shocks, especially in markets that are climate-sensitive. Second, it incorporates the insights of Dynamic Capability Theory into the explanation of mediation between trust and resilience by green innovation adoption and inner capability growth.

This will fill a major gap in sustainable SME studies, particularly in African contexts, where resilience-building mechanisms are under-researched. Third, this study broadens the current sustainability paradigms by illustrating that GEnTO, green market orientation, and internal commitment to sustainability are complementary strategies to promote long-term sustainability (Kura & Raimi, 2025, p. 12; Zhang et al., 2025, p. 1180). The results confirm previous assertions that support the combination of internal capabilities with expansive environmental objectives as a means of realizing competitive advantage.

6.3 Implications for the Practices of SMEs and Industry Stakeholders

Several practical implications are drawn from this study. Clear communication, traceability technologies, and plausible environmental assertions should be emphasized as part of sustainable SMEs to build strong consumer trust, which is a key resource of strength. These findings echo the significance of developing authenticity in green marketing plans to increase the perception of value by consumers (Pham, 2020, p. 225). In addition, companies are advised

to invest in green innovation, digital transformation, and knowledge-management initiatives to enhance internal resources that can bolster resilience (Zhang, 2024, p. 12).

Since companies in developing nations tend to focus on internally oriented sustainability practices (Kura & Raimi, 2025, p. 12), this study emphasizes the need to ensure that such practices are geared towards supporting global sustainability standards to realize growth opportunities. The findings obtained by policymakers indicate that they need to improve institutional standpoints on sustainable entrepreneurship with the help of green financing, capacity-building efforts, and collaborative networks to overcome the structural limitations that affect the resilience of SMEs (Khan et al., 2023, p. 103547).

6.4 Greater Societal and Sustainability

Implications of the Study More generally, the study shows that consumer trust is one of the elements that can make entrepreneurial ecosystems resilient, which is a fundamental requirement for sustainable development. Green consumption behaviors can be influenced by SMEs that embrace transparent and credible sustainability practices as consumer consciousness transforms towards environmental responsibility and ultimately strengthens sustainability transitions in a broader sense.

This is in line with opinions regarding the strategic functions of market orientation and the sharing of environmental knowledge to create sustainable innovation (Zhang, 2024, p. 11). In addition, the study highlights that sustainability changes require a compromise between internal capacity building and external partnerships to put SMEs at the frontline to contribute to sustainability agendas at both national and international levels.

6.5 Limitations of the Study

This study has several methodological and contextual constraints. The self-reported data also present the risk of subjective bias, which aligns with the difficulties associated with similar sustainability studies (Al-Swidi et al., 2024, p. 9). Although precautions were taken to reduce common method bias, multi-source or longitudinal data may provide more convincing causal descriptions. Furthermore, the research is context-specific and deals with African agri-food SMEs; therefore, there is a need to be careful when applying the results to other areas or sectors with diverse institutional backgrounds (Ali et al., 2024, p. 1826).

6.6 Future Research Recommendations

Future research should include the following:

1. Longitudinal studies that follow the longitudinal results of resilience to enhance causal findings.

2. Multi-country comparisons to investigate contextual differences in the dynamics of green trust, especially in emerging and developed economies.
3. Perceptual measures are to be complemented with objective performance measures, in this case, financial indicators or operational data (Ali et al., 2025). 177).
4. Comprehensive qualitative research studies on the function of green leadership and organizational culture towards the development of sustainability adoption and resilience (Zhang et al., 2025, p. 1181).

This study contributes to scholarly knowledge of the intersection between consumer-led trust processes and organizational resources to determine the outcomes of sustainable entrepreneurship at the global level.

6.7 Final Reflections

In an increasingly uncertain business environment, resilience has become a critical capability for sustainable SMEs operating in the agri-food sector. This study highlights that resilience is not solely determined by internal resources and operational capabilities but is also influenced by external market-based assets, particularly green brand trust. By fostering transparency, credibility, and authentic sustainability practices, SMEs can strengthen consumer confidence, enhance organizational adaptability, and improve their ability to withstand environmental, economic, and regulatory disruptions.

The findings reinforce the view that sustainability should be regarded not merely as an environmental responsibility but as a strategic mechanism for long-term competitiveness and business continuity. Furthermore, the study demonstrates that green innovation and dynamic capabilities play an important role in transforming consumer trust into tangible resilience outcomes. As sustainability expectations continue to rise, SMEs that successfully align their environmental commitments with stakeholder expectations will be better positioned to achieve both resilience and sustainable growth.

Ultimately, this research contributes to the growing discussion on sustainable entrepreneurship by emphasizing the interconnected roles of trust, innovation, and resilience in shaping the future of agri-food SMEs, particularly within emerging-market contexts.

References

- Ababneh, O. M. A. (2021). How do green HRM practices affect employees' green behaviors? The role of employee engagement and personality attributes. *Journal of Environmental Planning and Management*, 64(7), 1204. <https://doi.org/10.1080/09640568.2020.1814708>
- Alam, M., Subhan, S., Rafi, M. S., & Rafi, M. S. (2021). *Thesis Guidelines for MPhil Students of Applied Linguistics*.
- Albeladi, A. (2024). The Challenges of Conducting Qualitative Research in Quantitative Culture: Saudi Arabia as a Case Study. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2024.6272>
- Ali, S., Degan, M., Omar, A. B., & Mohammad, A. J. (2024). Just go green. *Brazilian Journal of Operations & Production Management*, 21(2), 1815. <https://doi.org/10.14488/bjopm.1815.2024>
- Ali, U., Ahmad, H., & Sabir, S. A. (2025). The Influence of Green Intellectual Capital on Green Product and Process Innovation: The Mediating Role of Green Knowledge Sharing in the Pakistani SMEs. *The æcritical Review of Social Sciences Studies*, 3(3), 160. <https://doi.org/10.59075/jtw84r80>
- Al-Swidi, A. K., Al-Hakimi, M. A., Koliby, I. S. A., Hasan, M. B., & Abdul-Talib, A. (2024). The role of digital transformation in boosting CSR-driven green innovation among Yemeni manufacturing SMEs. *Discover Sustainability*, 5(1). <https://doi.org/10.1007/s43621-024-00506-w>
- Bashar, A., Alkadash, T. M., Nyagadza, B., & Muposhi, A. (2025). Sustainable digital marketing (SDM): review, taxonomy, conceptualisation and future research avenues mapping. *Quality & Quantity*. <https://doi.org/10.1007/s11135-025-02438-7>
- BENJAMIN, D. E. (n.d.). *EXAMINING ENVIRONMENTAL PEACEBUILDING THROUGH URBAN GREENING PROJECTS USING A COMMUNITY-BASED MODEL IN ADO-EKITI, NIGERIA*.
- Cui, J. (2024). *The Explore of Digital Leadership and Green Digital Innovation on Corporate Digital Transformation*. <https://doi.org/10.2139/ssrn.5015895>
- Davidavičienė, V., Fayad, C. A., & Gerges, M. (2024). INTEGRATING SUSTAINABLE DEVELOPMENT INTO THEIR MARKETING STRATEGY: PRACTICES OF LEBANESE AGRI-FOOD INDUSTRIES. *Verslas Teorija Ir Praktika*, 25(1), 24. <https://doi.org/10.3846/btp.2024.19457>

Davies, M., Golob, U., Kernstock, J., & Powell, S. M. (2020). Journal of Brand Management: Editorial guidelines and expectations of authors. *Journal of Brand Management*, 28(1), 1. <https://doi.org/10.1057/s41262-020-00217-3>

Evaluating Sustainable Practices and Supply Chain Management Effectiveness in African Small and Medium-Sized Enterprises (SMEs). (2024). *Journal of Sustainability Research*, 6(2). <https://doi.org/10.20900/jsr20240033>

Gantsho, K. A., Vuuren, J. van, & Fabris-Rotelli, I. (2024). Consumer perspectives on the relationship between iconic branding and entrepreneurial orientation. *The Southern African Journal of Entrepreneurship and Small Business Management*, 16(1). <https://doi.org/10.4102/sajesbm.v16i1.716>

Khan, R. U., Saqib, A., Abbasi, M. A., Mikhaylov, A., & Pintér, G. (2023). Green Leadership, environmental knowledge Sharing, and sustainable performance in manufacturing Industry: Application from upper echelon theory. *Sustainable Energy Technologies and Assessments*, 60, 103540. <https://doi.org/10.1016/j.seta.2023.103540>

Kumar, P. (2024). Challenges and Opportunities for Young Entrepreneurs in Digital Age. *INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH IN ENGINEERING AND MANAGEMENT*, 8(5), 1. <https://doi.org/10.55041/ijrsrem35116>

Kumar, V. (2024). This study explores strategic management and governance frameworks for Public-Private Partnerships (PPPs) in agribusiness, focusing on Purvanchal, Uttar Pradesh, a region predominantly reliant on agriculture but challenged by limited infrastructure and re. *African Journal of Biomedical Research*, 2774. <https://doi.org/10.53555/ajbr.v27i4s.4106>

Kura, K. M., & Raimi, L. (2025). Linking green entrepreneurial orientation and green market orientation to firm sustainability performance: a three-level meta-analysis. *Discover Sustainability*, 6(1). <https://doi.org/10.1007/s43621-025-01755-z>

Liang, H., Hussain, M., & Iqbal, A. (2025). The Dynamic Role of Green Innovation Adoption and Green Technology Adoption in the Digital Economy: The Mediating and Moderating Effects of Creative Enterprise and Financial Capability. *Sustainability*, 17(7), 3176. <https://doi.org/10.3390/su17073176>

Lin, X., Zhang, J., Yu, L., & Zhong, Q. (2024). Does macroprudential policy matter for corporate green innovation? The role of financing constraints and public environmental concerns. *Economic Analysis and Policy*, 82, 877. <https://doi.org/10.1016/j.eap.2024.04.018>

Liu, X., Qiao, X., Chen, Y., & Chen, M. (2025). The Dilemma of the Sustainable Development of Agricultural Product Brands and the Construction of Trust: An Empirical Study Based on

Consumer Psychological Mechanisms. *Sustainability*, 17(20), 9029.
<https://doi.org/10.3390/su17209029>

Martirano, M. (2018). Bottom of the Pyramid Marketing. *International Journal of Marketing Studies*, 10(4), 13. <https://doi.org/10.5539/ijms.v10n4p13>

Mohamed, M. A., Eidle, F. A., & Mohamud, I. H. (2023). Factors influencing preferential treatment on academic performance of private universities in Mogadishu. *International Journal of ADVANCED AND APPLIED SCIENCES*, 10(12), 172.
<https://doi.org/10.21833/ijaas.2023.12.019>

Nobanee, H. (2025). Digital Entrepreneurship and Greenwashing: Addressing Ethical Challenges in Sustainable Business. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.5073927>

Odeyemi, O., Usman, F. O., Mhlongo, N. Z., Elufioye, O. A., & Ike, C. U. (2023). Sustainable entrepreneurship: A review of green business practices and environmental impact [Review of *Sustainable entrepreneurship: A review of green business practices and environmental impact*]. *World Journal of Advanced Research and Reviews*, 21(2), 346. GSC Online Press.
<https://doi.org/10.30574/wjarr.2024.21.2.0461>

Okello, D., Mshenga, P., Saidi, M., Juma, F., Maria, S., Egeru, A., & Gogo, E. O. (2024). Entrepreneurship education in East, West and North Africa Higher Education Institutions (HEIs): mapping agripreneurship curriculum and lecturers' competencies. *Discover Education*, 3(1). <https://doi.org/10.1007/s44217-024-00204-9>

Omowole, B. M., Olufemi-Phillips, A. Q., Ofodile, O. C., Eyo-Udo, N. L., & Ewim, S. E. (2024). Conceptualizing green business practices in SMEs for sustainable development. *International Journal of Management & Entrepreneurship Research*, 6(11), 3778.
<https://doi.org/10.51594/ijmer.v6i11.1719>

Oyeyemi, O. P., Anjorin, K. F., Ewim, S. E., Igwe, A. N., & Sam-Bulya, N. J. (2024). The intersection of green marketing and sustainable supply chain practices in FMCG SMEs. *International Journal of Management & Entrepreneurship Research*, 6(10), 3559.
<https://doi.org/10.51594/ijmer.v6i10.1661>

P, K. (2024). Green Marketing in the Age of Sustainability: Consumer Perceptions and Brand Strategy. *Nanotechnology Perceptions*, 154. <https://doi.org/10.62441/nano-ntp.vi.3624>

Pham, T. B. L. (2020). Consumer-green brand relationships : a conceptual framework and empirical analysis in Vietnam. *HAL (Le Centre Pour La Communication Scientifique Directe)*.
<https://tel.archives-ouvertes.fr/tel-03282915>

Piras, S., Barlagne, C., Clement, J., Mokhtari, N., Thabet, C., & Tura, M. (2023). How Does Health-related Information Impact Willingness to Pay for Olive Oil? : An Incentivised Lab Experiment Among Moroccan and Tunisian Consumers. *Research Portal Denmark*. <https://local.forskningsportal.dk/local/dki-cgi/ws/cris-link?src=cbs&id=cbs-875f6cb6-c952-4915-8876->

[c6d120c3aeac&ti=How%20Does%20Health%20related%20Information%20Impact%20Willingness%20to%20Pay%20for%20Olive%20Oil%3F%20%3A%20An%20Incentivised%20Lab%20Experiment%20Among%20Moroccan%20and%20Tunisian%20Consumers](https://doi.org/10.1186/s13063-023-03111-4)

Putri, A. N. A., Hermawan, P., Mirzanti, I. R., Meadows, M., & Sadraei, R. (2025a). Exploring Green Growth in SMEs: Global Trends, Challenges, and Future Directions. *Foresight-Russia*, 19(1), 16. <https://doi.org/10.17323/fstg.2025.23708>

Putri, A. N. A., Hermawan, P., Mirzanti, I. R., Meadows, M., & Sadraei, R. (2025b). Unpacking green growth in SMEs: A framework for dynamic capabilities, value co-creation, and sustainable performance. *Sustainable Futures*, 10, 100840. <https://doi.org/10.1016/j.sftr.2025.100840>

Qadeer, A. (2025). *AI-Augmented Knowledge Creation and Sustainable Innovation: Exploring Green Transformation, Integration Stakeholders and Ecosystems*. <https://doi.org/10.24191/jikm.v15i2.6740>

Rehman, S. U., & Jalees, T. (2025). *The Role of Organizational support, green involvement and Digital dynamics Capabilities in Fostering Green Creativity: Mediating Effects of Green Organizational Learning and Knowledge Sharing with a Moderating Role of Green Mindfulness*.

Santos, L. D. V., Holanda, F. S. R., Pedrotti, A., Medeiros, R. L., Oliveira, C. V. de S., & Villwock, A. P. S. (2024). An empirical model for branding oriented by the environmental sustainability of the Amazon Rainforest: a hybrid structural equation modeling with fsQCA approach. *Discover Analytics*, 2(1). <https://doi.org/10.1007/s44257-024-00011-4>

Shaban, N., Afza, T., Ehsan, S., & Danish, R. Q. (2024). Leveraging Green Innovation to Foster Sustainable Development through Green Dynamic Capabilities. *Research Journal for Societal Issues*, 6(3), 87. <https://doi.org/10.56976/rjsi.v6i3.264>

Sjachriatin, E., Riyadi, S., & Mujanah, S. (2023). The effects of knowledge-oriented leadership style, digital transformation, and human resource development on sustainable competitive advantage in East Java MSMEs. *Uncertain Supply Chain Management*, 11(4), 1685. <https://doi.org/10.5267/j.uscm.2023.6.021>

Tarihoran, A. D. B., Hubeis, M., Jahroh, S., & Zulbainarni, N. (2023). Developing an Integrated Conceptual Model of Dynamic Capabilities for MSME in Agribusiness Sector: A Systematic Review [Review of *Developing an Integrated Conceptual Model of Dynamic Capabilities for MSME in Agribusiness Sector: A Systematic Review*]. *Advances in Economics, Business and Management Research/Advances in Economics, Business and Management Research*, 61. Atlantis Press. https://doi.org/10.2991/978-94-6463-144-9_7

Zhang, S.-N., Li, Y., & Hong, A. (2025). The Impact of Green Inclusive Leadership on Green Innovation in Chinese SMEs: The Mediating Roles of Green Knowledge Sharing and Green Organizational Identity. *Sustainability*, 17(3), 1180. <https://doi.org/10.3390/su17031180>

Zhang, Z. J. (2024). Exploring the green edge: the role of market orientation and knowledge management in achieving competitive advantage through creativity. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-03174-3>