



(RESEARCH ARTICLE)



ENTREPRENEURIAL LEADERSHIP DEVELOPMENT AND BUSINESS SUSTAINABILITY: A STUDY OF SAFETY EQUIPMENT FIRMS IN RIVERS STATE, NIGERIA

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ABSTRACT

Safety equipment firms are a critical component of Nigeria's Small and Medium Enterprises (SMEs) which constitute a major backbone of the National economy, contributing significantly to employment. They are integral to Nigeria's economic growth, especially in high-risk industries such as oil and gas, construction, manufacturing, and mining. These sectors significantly contribute to Nigeria's GDP and employment rates. Unfortunately, in Nigeria, many SMEs and family-owned businesses often struggle to survive beyond the second generation. Often implicated in this *Business Sustainability* challenge is poor *Entrepreneurial Succession Planning*. Non-the-less the place of succession planning in SME venture sustainability remains a subject of debate and research. This study seeks to establish the practical significance of succession planning as a predictor of business sustainability amongst safety equipment firms in the oil-rich Rivers State of Nigeria. It operationalizes succession planning – the predictor variable – as *Entrepreneurial Leadership Development* which it matches against three operational dimensions of business sustainability, the criterion, namely: *Sustainable Risk Mitigation*, *Sustainable Innovation*, and *Sustainable Resilience*. 300 copies of validated questionnaire structured on 5-points Likert scale were administered to respondents across 60 safety equipment firms to obtain requisite data for the study. Analysis of the data so obtained was done using Partial Least Square Structural Equation Modelling (PLS-SEM) which was conducted with the aid of SMART PLS. The results revealed that *Entrepreneurial Leadership Development* has a significant positive relationship with the three proxies of business sustainability employed in the study. In the light of the findings, the study recommends that tailored leadership development programmes and training should be organized routinely for potential leaders to help identify and groom future executives from within the organization.

Keywords: Entrepreneurial Succession Planning, Business Sustainability, Sustainable Risk Mitigation, Sustainable Innovation, Sustainable Resilience

1 INTRODUCTION

Small and Medium Enterprise (SMEs) constitute a major backbone of the Nigerian economy, contributing significantly to employment, GDP, and economic growth (Ayres, 2019); notable amongst these SMEs is safety equipment merchants. Safety equipment merchants are integral to Nigeria's economic growth, especially in high-risk industries such as oil and gas, construction, manufacturing, and mining. These sectors significantly contribute to Nigeria's GDP and employment rates (World Bank, 2020). By providing safety equipment, these merchants support sector stability through improved productivity, reduced downtime due to accidents, and enhanced operational efficiency (Akinmoladun et al., 2020; NNPC, 2021). As the sectors continue to grow, particularly with on-going reforms in mining and manufacturing, the demand for safety equipment is expected to rise, further solidifying the role of safety equipment merchants in Nigeria's industrial advancement and in reducing accident rates (World Bank, 2020).

In Nigeria, many SMEs and family-owned businesses often struggle to survive beyond the second generation, making it essential to investigate how succession planning influences business sustainability, particularly in specialized industries such as safety equipment merchandising. Research suggests that many SME businesses in Nigeria fail to survive beyond the second generation, primarily due to inadequate succession planning (Ayres, 2019). Recent statistics show that 70% of SMEs collapse in Nigeria due to lack of succession planning (Nosike & Egbunike, 2024); this does not exclude safety equipment merchants in Rivers State. Several empirical evidences suggest that a vast number of safety equipment business struggle to survive the demise or retirement of the owner or proprietor (Nnabuike & Okoli, 2017; Nosike & Egbunike, 2024). This trend has gradually increased the yearning of business experts and scholars for a sustainable succession strategy.

Empirical studies across industrial sectors highlight that safety leadership directly correlates with reduced workplace incidents and enhanced operational continuity. When executive leadership prioritizes safety training over short-term output, firms report lower asset loss, fewer regulatory fines, and improved client retention among major IOCs (International Oil Companies)

Research on Nigerian small and medium-sized enterprises (SMEs) indicates that structured leadership development programs improve financial governance, capital allocation, and supply chain negotiation skills. Equipment firms in Rivers State that invest in middle-management leadership development show higher operational resilience during sector downturns than firms relying on centralized owner-manager management models.

Existing literature emphasizes that local capacity development initiatives often face implementation gaps. Constraints such as limited access to specialized international training programs, high employee turnover after training, and short-term profit pressures slow down long-term sustainability initiatives in local equipment servicing firms.

While global literature heavily covers general leadership development and ESG performance, limited empirical focus exists specifically on technical *equipment supply and safety firms* operating within the Niger Delta's unique socio-economic landscape.

Much of the regional research relies on descriptive, qualitative assessments. Quantitative analyses linking specific leadership interventions (e.g., executive safety coaching, succession planning) directly to longitudinal metrics of business sustainability remain scarce. Few studies evaluate how NCDMB mandate-driven leadership training directly translates into sustained firm performance versus surface-level regulatory compliance. Available literature demonstrates that leadership development acts as a core catalyst for business sustainability in capital-intensive and safety-critical industries. For safety and equipment firms operating in Rivers State, robust leadership capabilities are essential not only for internal operational efficiency and safety compliance, but also for long-term survival amid economic volatility and regulatory scrutiny. Future empirical research must address local contextual variables—such as community engagement strategies, currency devaluation risks, and local content framework enforcement—to build comprehensive models for sustainable business growth in the region.

1.1 Research Objective, Question, and Hypotheses

This study is aimed at investigating the extent of relationship between entrepreneurial succession planning and business sustainability safety equipment merchants in Rivers State Firms in Rivers State. More specifically, the study seeks to examine the relationship between Entrepreneur Leadership Development and Dimensions of Business Sustainability, the criterion variable. On the strength of the objective stated above, the study raised the following fundamental research question: What connection exists between entrepreneurial leadership development and business sustainability of safety equipment firms in Rivers State?

Based on conceptualized three operational dimensions of the criterion variable, the study provides to the foregoing research question, the following tentative answers cast in the form of three Null hypotheses:

- H01: No serious connection exists between leadership development and sustainable risk mitigation of safety equipment firms in Rivers State.
- H02: No significant correlation exists between leadership development and sustainable innovation of safety equipment firms in Rivers State.
- H03: There is no substantial connection between leadership development and sustainable resilience of safety equipment firms in Rivers State.

2 LITERATURE REVIEW

2.1 Conceptual Framework

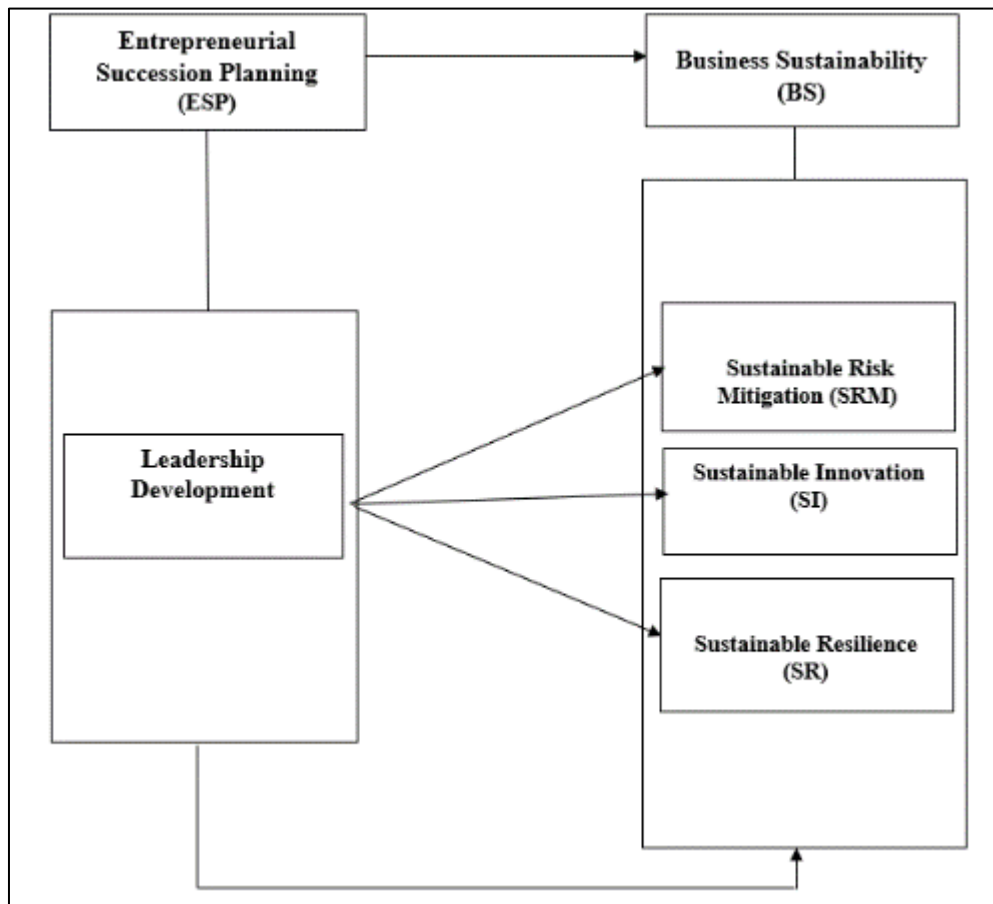


Figure 1: The Conceptual Framework of the Relationship between Entrepreneurial Succession Planning and Business Sustainability

Sources: Research Desk (2026); Adapted from Omae (2024); Groves (2020); Aguinis and Burgi-Tian (2021)

2.1.1 Leadership Development

Leadership is commonly defined as the process by which an individual exerts influence over others to attain collective objectives, a concept that has been analyzed via several theories. These theories emphasize characteristics, actions, situational variables, and transformative attributes. Leadership, as articulated across several domains, primarily pertains to the capacity to direct, influence, and inspire individuals to achieve shared or individual goals. Yukl (2013) characterizes leadership as a process wherein individuals exert influence on others to reach consensus and collaborate towards a common objective. This strategy prioritizes activities and strategies that foster collaboration, creating an environment where everyone contributes to shared goals. Leadership entails the application of personal influence to guide a group or organization towards achieving specified goals. Northouse (2019) defines leadership as "a process whereby an individual influences a group of individuals to achieve a common goal." Leaders employ a diverse array of behaviors, strategies, and interpersonal dynamics to effectively inspire, motivate, and guide their followers; leadership

encompasses several styles and methods (Bass, 1990). Vision, communication, adaptability, decision-making, and emotional intelligence are the fundamental attributes of an effective leader.

Leadership development entails the deliberate preparation of individuals for leadership roles within an organization by enhancing their ability, competence, and experience in these domains. Day et al. (2014) asserts that leadership development includes programs and activities designed to enhance individuals' capabilities as team leaders and resource managers. This approach often encompasses training programs, mentorship, experience learning, and ongoing professional development. Leadership development seeks to cultivate a succession of proficient leaders equipped to tackle present and impending organizational difficulties. Leadership is context-dependent, influenced by cultural, organizational, and situational elements. Yukl (2012) asserts that the efficacy of leadership is contingent upon the alignment of leaders' behaviors with the needs of their followers and the requirements of the external environment. Transformational leadership, emphasizing the inspiration and empowerment of followers, has recently acquired recognition as a successful approach in both academic and practical contexts (Bass & Riggio, 2006). Day et al. (2014) assert that leadership development encompasses actions and efforts designed to enhance people's abilities to lead teams and manage organizational resources efficiently. This approach frequently encompasses training programs, mentorship, experience learning, and ongoing professional development. Leadership development is to cultivate a succession of proficient leaders equipped to tackle present and forthcoming organizational difficulties. Empirical evidence from daily experiences indicates that leadership development is a crucial element in fostering organizational success. Avolio and Hannah (2008) performed research demonstrating that leadership development programs significantly enhance decision-making, emotional intelligence, and team cohesion. Moreover, leadership development is intrinsically linked to talent management strategies, enabling organizations to discover and nurture employees with significant potential for future leadership roles (Collins & Holton, 2004).

Rothwell and 2020 characterize succession planning as a systematic approach for recognizing and cultivating prospective future leaders to occupy critical roles as they arise. Leadership development is a critical component of succession planning since it equips individuals to assume greater responsibilities and aids organizations in maintaining consistency. Leadership development is a crucial component of succession planning as it enables firms to identify high-potential individuals, provide them with necessary resources, and mentor them in assuming leadership positions. Organizations that emphasize leadership development within their succession

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Leadership development is an essential component of succession planning for businesses. Furthermore, it equips prospective leaders to assume control of the company in the absence of the founder by imparting the requisite information, experience, and perspective essential for its continued operation and expansion. As the corporate landscape evolves, the demand for leaders who are intelligent, innovative, and adaptable is increasing. Integrating leadership development into succession planning is not only advisable, but a strategic must for the long-term sustainability of enterprises. Succession planning is becoming more vital for family-owned enterprises and SMEs, as it ensures the long-term survival and profitability of the company within the dynamic entrepreneurial landscape. Leadership development is a vital component necessary for effective succession planning. Leadership development entails equipping existing leaders to transition out and facilitate the entry of new leaders into an organization. Succession planning include mentoring, coaching, training, experiential learning, and role modeling, all aimed at enhancing the leadership capabilities of prospective leaders and maintaining organizational competitiveness (Le Breton-Miller & Miller, 2021).

In the realm of succession planning for entrepreneurs, leadership development entails the identification and cultivation of individuals, whether from the family or internal talent, who possess the capability to further the company's vision, mission, and strategic objectives through leadership development. This proactive technique addresses the leadership void sometimes created by the departure of founders or existing leaders due to retirement, death, or unforeseen

circumstances. According to Ghee, Ibrahim, and Abdul-Halim (2020), leadership development guarantees that successors possess not just technical proficiency but also emotional intelligence, vision, and the capacity to navigate change and complexity. This assurance extends beyond mere leadership development. The principal aim of leadership development in succession planning is to guarantee the firm's sustainability by nurturing a cadre of proficient individuals poised to assume leadership positions in the future. Consequently, several sub-goals exist. These include; **Capacity Building**: - The process of equipping future successors with abilities that foster critical thinking, problem-solving, and decision-making; **Vision Sustenance**: - Implementing measures to guarantee that successors assimilate the founder's vision and principles while promoting innovation is a successful strategy for aligning vision.

To adequately prepare emotionally, it is beneficial to cultivate the resilience required to lead under pressure and manage stakeholder relationships. Strategic acumen is cultivating the attributes of strategic thinking essential for effectively maneuvering within competitive environments.

Chrisman et al. (2021) emphasize that several entrepreneurial ventures fail due to inadequate succession planning after the departure of the founder. Consequently, leadership development fulfills a preventative function by mitigating the competence gap between the current leader and their successor. Research by Wang and Poutziouris (2020) indicates that companies implementing a systematic leadership development framework are often more equipped for succession and have smoother transition processes. Due to the intricate social and emotional dynamics of succession in family-owned enterprises, leadership development is critically essential. In several instances, the primary aims of family enterprises are the perpetuation of the firm and the preservation of familial heritage. Consequently, it is imperative for successors to possess robust social skills with professional expertise. Research conducted by Foege, Jacob, and Falk (2022) revealed that family enterprises investing in leadership development initiatives for younger personnel exhibit superior performance after a leadership transition. Leadership in family companies is influenced by cultural influences, attitudes, and familial dynamics. This necessitates a change in strategy to acknowledge the distinct social and emotional assets of family enterprises (Berrone et al., 2012). This entails assisting the incumbent leader and their successor in fostering communication, establishing trust, and advocating shared concepts.

Recent empirical research indicates that leadership development enhances succession planning outcomes. A study shows that organizational leadership development programs significantly enhanced successor satisfaction and corporate performance post-succession (Ahmad and Yaseen, 2021). Investigations into family enterprises in Pakistan corroborated this finding. A regression study was conducted to examine the association between leadership development and financial performance. This mixed-methods study surveyed 150 family-owned small and medium enterprises (SMEs). Nkosi and Oseifuah (2020) investigated a pertinent subject in their research on leadership development inside South African SMEs. They discovered that leadership development, mentorship, and practical experience had a significant positive association with succession performance. The research determined that organizations have to provide support for small business proprietors in refining their leadership competencies.

Adegbite et al. (2023) investigated the correlation between leadership development and the sustainability of indigenous enterprises in Nigeria. Subsequent to the founder's exit, firms that prioritized leadership development for their successors had an enhancement in financial performance, client retention, and strategic alignment. Their research indicated that future leaders are more adept at managing risks, fostering innovation, and anticipating strategic shifts when they get leadership development. Investments in leadership development correlate with smoother and more successful leadership transitions, as evidenced by worldwide studies conducted by Brigham et al. (2020) and Salazar and Zhang (2022). Researchers predominantly examined the relationships between leadership development elements and company performance metrics via structural equation modeling.

Leadership development sustains companies by generating a consistent influx of capable executives who can drive their organizations toward enduring success. For a corporation to achieve sustainability, it must effectively grow and compete among social, economic, and environmental challenges (Elkington, 1997). Effective succession planning programs cultivate leaders capable of sustaining firm strategy, managing stakeholder expectations, and fostering innovation. When executives are well equipped to navigate uncertainty and adapt to changing market conditions, it enhances businesses' resilience to shocks. Leadership development enhances the probability of organizational growth, sustains competitive advantage, and improves talent retention, all of which are vital for an organization's sustainability in a dynamic business landscape (Conger & Fulmer, 2003). Research by Carmeli et al. (2013) indicates that organizations that significantly spend in leadership development are also more inventive and adaptable. According to Maak and Pless (2006), responsible leadership is essential for a company's long-term viability. Responsible leadership fosters corporate social responsibility and ethical decision-making.

The sustainability of a company relies on its leadership development program, which must adopt a holistic approach. Diversity and inclusion, global leadership competencies, and technology-driven leadership practices are essential components to be incorporated. Research by Chin et al. (2016) indicates that a diverse leadership team is more likely to deliver value to stakeholders and promote innovation. Executives learn the capacity to effectively negotiate many

cultural and geographical contexts through global leadership development programs (Mendenhall et al., 2013). Contemporary leadership development is significantly shaped by technology. Online learning platforms, virtual reality (VR) simulations, and artificial intelligence (AI)-driven assessments provide innovative methods for cultivating leadership abilities. Technology-enhanced leadership development programs enhance learning results and scalability, as evidenced by a research conducted by Lacerenza et al. (2017). Leadership development is essential for succession planning, ensuring organizational continuity and long-term viability. Organizations may facilitate a smooth transfer of leadership roles and cultivate a culture of excellence by providing individuals with the requisite skills, knowledge, and experience to thrive in the position.

2.1.2 Business Sustainability

Business sustainability measures a firm's capacity to achieve long-term survival and financial viability while managing environmental impact, social responsibility, and operational risk (the Triple Bottom Line framework). For oilfield and industrial equipment supply firms, sustainability relies on supply chain resilience, continuous capital flow, quality assurance compliance (e.g., ISO certifications), and adaptability to market volatility.

2.1.2.1 Sustainable Risk Mitigation

It is essential to have an effective risk mitigation strategy in order to successfully navigate uncertainties and ensure long-term sustainability in the ever-changing world of entrepreneurship. It is crucial to strategic planning to concentrate on proactively recognizing, analyzing, and managing possible issues. Mitigation is more than simply a technique for minimizing risk; it is a fundamental component of strategic planning. Through the promotion of resiliency, environmental responsibility, and resource optimization, effective risk reduction directly contributes to the development of sustainable business. As shown by the "triple bottom line" (TBL) paradigm that was established by Elkington (1998), sustainable risk management approaches address not only economic difficulties but both social and environmental concerns as well. In order to achieve balanced growth, satisfy the expectations of stakeholders, and contribute to the well-being of society and the environment, entrepreneurs may accomplish these goals by aligning risk management with economic, environmental, and social aspects simultaneously.

2.1.2.2 Sustainable Innovation

According to Gopalakrishnan (2000) and Dosi (1990), innovation is not only a means by which a company may improve its performance, but it is also an iterative process that involves obstacles, failures, and successes, which disproves the idea that technological advancement occurs in a linear fashion. According to Calantone, Garcia, and Droge (2003), the success of an organization is not the result of singular breakthroughs but rather originates from a continuum that places an emphasis on resilience and adaptability. Product innovations and process innovations are the two fundamental aspects that are shown by innovation. According to Tidd (2001) and Prajogo (2016), product innovation refers to the process of introducing new components, features, or technologies into existing goods or services. Process innovation, on the other hand, refers to the creation of changes in production processes that result in increased productivity and efficiency.

2.1.2.3 Sustainable Resilience

In the course of investigation, it has been discovered that the concept of resilience in entrepreneurship may be comprehended via both personal and organizational measures. The ability of an entrepreneur to cope with stress, recover from failure, and maintain motivation when things are difficult is what we mean when we talk about resilience from a psychological point of view. According to Shepherd et al.'s research from 2020, this characteristic includes characteristics such as proactive problem-solving, practical optimism, and independence. Additionally, organizational capacity is included in the concept of resilience. This concept describes the manner in which firms modify their procedures, structures, and strategies in response to alterations in the surrounding environment. It is strongly aligned with the dynamic capacities hypothesis (Teece, 2007) that a resilient organization is one that depends on flexible leadership, good communication, and adaptive resource allocation in order to quickly recover from shocks. To add insult to injury, resilience on a strategic level refers to the ability of an entrepreneur to pivot or innovate, which frequently results in the creation of new business models or offerings. Strategic management theories emphasize the need of adaptation in maintaining a competitive edge (Teece et al., 2016). This adaptability is vital for maintaining success.

2.2 Theoretical Framework

As shown in the framework below, this study is founded on two cardinal theories: The Transformational Leadership Theory and The Resource-Based View.

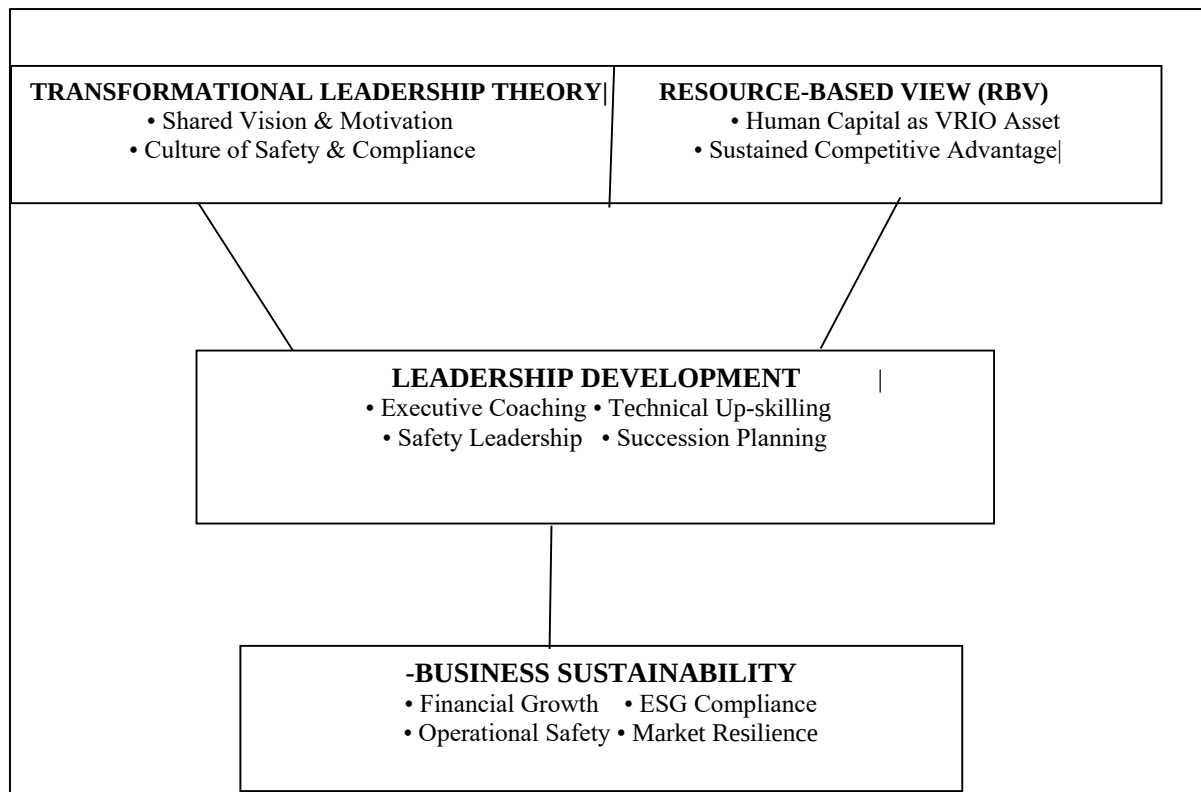


Figure 2: Provide to the caption

Source: Adapted from Bass (1985), Barney (1991)

2.2.1 Transformational Leadership Theory (Bass, 1985)

The Transformational Theory posits that leaders who inspire followers, foster innovation, and enforce shared values create higher levels of organizational commitment. In safety and equipment firms, transformational leaders build proactive safety cultures, moving beyond regulatory compliance to embed sustainable operational practices.

2.2.2 Resource-Based View (RBV) of the Firm (Barney, 1991)

The Resource-based View asserts that firms achieve sustainable competitive advantages by acquiring and nurturing Valuable, Rare, Inimitable, and Non-substitutable (VRIO) resources. Human capital developed through targeted leadership programs serves as an internal dynamic capability that enables equipment firms to navigate industry disruptions.

2.2.3 Operational Context: Safety and Equipment Firms in Rivers State

Rivers State, particularly Port Harcourt, serves as the industrial hub for Nigeria's onshore and offshore oil and gas industry. Safety and equipment firms in this region provide crucial support, supplying Personal Protective Equipment (PPE), heavy lifting gear, process control systems, and hazardous environment protection.

Operating in Rivers State introduces distinct environmental and structural challenges: The first is **Regulatory Compliance**: Firms must maintain strict compliance with the Nigerian Content Development and Monitoring Board (NCDMB) directives, the Department of Petroleum Resources (DPR)/Nigerian Upstream Petroleum Regulatory Commission (NUPRC) guidelines, and international standards (ISO 45001, ISO 9001). The second is **Macroeconomic Volatility**: Currency fluctuations, inflation, and local supply chain bottlenecks affect foreign equipment procurement and inventory management. Thirdly, comes the issue of **Socio-Environmental Dynamics**: Operating within the Niger Delta requires localized crisis management capabilities, community relations management, and stringent environmental hazard controls.

2.3 Empirical Review

Okafor and Onuoha (2023) examined the impact of leadership involvement in succession planning on the viability of SMEs in Lagos, Nigeria. The research used a cross-sectional survey methodology, collecting data from 200 SMEs using questionnaires sent to CEOs and HR managers. The study included descriptive statistics and multivariate regression

methodologies. The research used descriptive statistics and correlation analysis to determine that leadership involvement in succession planning significantly influences the long-term sustainability of SMEs. The findings indicated that leadership involvement significantly impacts company sustainability, shown by an R^2 value of 0.45 at a 99% confidence level. This indicates that leadership involvement might improve organizational sustainability by as much as 45%. The research indicated those SMEs exhibiting more leadership engagement in the succession process saw enhanced organizational continuity and development potential. The researchers advised Nigerian SMEs to implement organized succession plans including leadership at all tiers and to emphasize the cultivation of future leaders to guarantee organizational viability.

A study by Brown and Walker (2022) aimed to evaluate the impact of leadership involvement in succession planning on the sustainability of manufacturing companies in the United Kingdom. The researchers used a mixed-method approach, using surveys and interviews with top managers from 50 manufacturing companies. The data were examined using Structural Equation Modeling (SEM) and theme analysis. The study yielded a Path Coefficient $\beta = 0.60$, $p < 0.01$ for Leadership Engagement $\rightarrow$ Sustainability. There exists a significant correlation between leadership involvement and the sustainability of manufacturing enterprises in the UK. The results indicated that leadership involvement favorably impacts the cultivation of future leaders, hence improving long-term organizational sustainability. Organizations exhibiting more leadership engagement in succession planning reported improved financial and operational outcomes. Based on these results, the authors advised manufacturing businesses to include senior executives in training possible successors and to establish organized leadership development programs to guarantee continuity and progression.

Maseko and Madonsela (2021) investigated the significance of leadership involvement in fostering organizational continuity and sustainability via effective succession planning in family-owned enterprises in South Africa. This qualitative research used a case study methodology, conducting comprehensive interviews with CEOs and HR managers from ten family-owned enterprises. The data were examined using content analysis and cross-case analysis methodologies. The research indicated that leadership involvement is essential for successful succession planning in family-owned enterprises. Leaders that actively mentor and cultivate future leaders create a more sustainable organizational climate, facilitating seamless transitions and securing long-term success. The authors advised family enterprises to codify their succession planning procedures and guarantee that incumbent CEOs engage in mentoring and instructing the next generation of executives.

In their 2019 research, Bhattacharya and Mukherjee examined the importance of leadership development in succession planning within Indian manufacturing firms. The researchers used a mixed-method approach for the study, including interviews with senior executives and subsequently interviewing 150 HR experts. The data were examined using a technique referred to as thematic analysis. Their findings emphasized the need of structured leadership development initiatives to nurture successors and enhance organizational resilience during transitions. This is especially pertinent in the case of emerging markets

2.3.1 Synthesis and Literature Map

Table 1: Literature Map

Core Theme	Primary Theoretical Anchor	Key Variables / Focus Areas	Literature Consensus	Contextual Gap in Rivers State
Safety Leadership	Transformational Leadership Theory	HSE Compliance, Hazard Mitigation, Organizational Culture	Strong positive effect on incident reduction and client retention.	Limited focus on equipment supply vendors vs. major E&P operators.
Managerial Capacity	Resource-Based View (RBV)	Succession Planning, Strategic Execution, Financial Stewardship	Human capital drives firm resilience and competitive advantage.	High turnover rates post-training degrade long-term sustainability benefits.
Regulatory Dynamics	Institutional Theory	NCDMB Compliance, ISO Certification, ESG Standards	Institutional pressure drives adoption of leadership structures.	Over-reliance on compliance metrics rather than proactive leadership integration.

3 RESEARCH METHODOLOGY

This study used a cross-sectional survey methodology, predicated on the selection of sample components from the population of interest, measured at a singular moment in time (Malcolm 2003; Baridam 2001). The population of this study comprised of the sixty (60) registered safety equipment merchants in Rivers State. According to the directory of the registered safety equipment dealers in Rivers State, there are sixty (60) functional and active members as of August 2024.

Due to the sensitive nature of his study, the researcher adopted a purposive Sampling technique which involved the distribution of research instrument to only the management staff of the safety equipment companies which included operational managers, middle level managers and top managers. Thus five (5) copies of the research instrument were administered to management staff of each of these organisations which specifically included Owners, CEOs, Managing Director, Operations manager, Human Resources Manager and other management staff. These management staff formed the sample representatives for the study.

SPSS version 21.0 was utilized for data analysis which was both descriptive and inferential. For the inferential Statistics, the study employed the Structural Equation Modelling (SEM) which includes Confirmatory Factor Analysis (CFA), Path Analysis, Structural Regression Model, as well as Latent Change Model. There are actually two of this- a Structural Model and a Measurement Model (Chou and Kim (2009).

4 DATA ANALYSIS AND RESULTS

Table 2: The Results of the Measurement Model Assessment with descriptive analysis and factor loadings

Constructs	Item Scale	Mean	S.D	Factor Loadings	Cronbach Alpha	CR	AVE	Sq. Root of AVE
Entrepreneur Transformational Leadership								
	I strive to inspire others to achieve their best within the organization.	4.37	0.924	0.809	0.745	0.807	0.583	0.764
	I am committed to setting an example of leadership that motivates others.	4.61	0.955	0.778				
	I actively support my team members in their personal and professional growth.	3.99	0.983	0.698				
Sustainable Risk Mitigation								
	I support risk mitigation practices that align with sustainable goals.	3.98	0.913	0.709	0.851	0.768	0.529	0.729
	I am encouraged to take proactive measures to reduce organizational risks.	4.02	0.661	0.703				
	I believe in balancing risk-taking with sustainable, long-term planning.	4.31	0.707	0.768				

Sustainable Innovation								
	I am encouraged to develop solutions that contribute to sustainable growth.	4.31	0.893	0.648	0.785	0.776	0.539	0.734
	The organization values new ideas that support long-term sustainability.	4.32	0.887	0.833				
	I see sustainability as a core aspect of innovation in our organization.	4.51	0.93	0.709				
Sustainable Resilience								
	I am prepared to adapt to changes that may impact our organization's future.	3.92	0.799	0.719	0.764	0.775	0.537	0.733
	I feel confident in our team's ability to navigate challenges sustainably.	4.27	0.990	0.647				
	The organization prioritizes resilience in both individual and team practices.	3.99	0.971	0.821				
CFA Model Fit:								
	$\chi^2 (201) = 507.89$ P = 0.001; CFI = 0.945, TLI = 0.912; SRMR = 0.05							

Source: Researchers' Computation, 2026 (Aided by SMARTPLS Version 4.0.9.9).

Test of Hypotheses: Assessing the relationship between Leadership Development and Dimensions of Business Sustainability

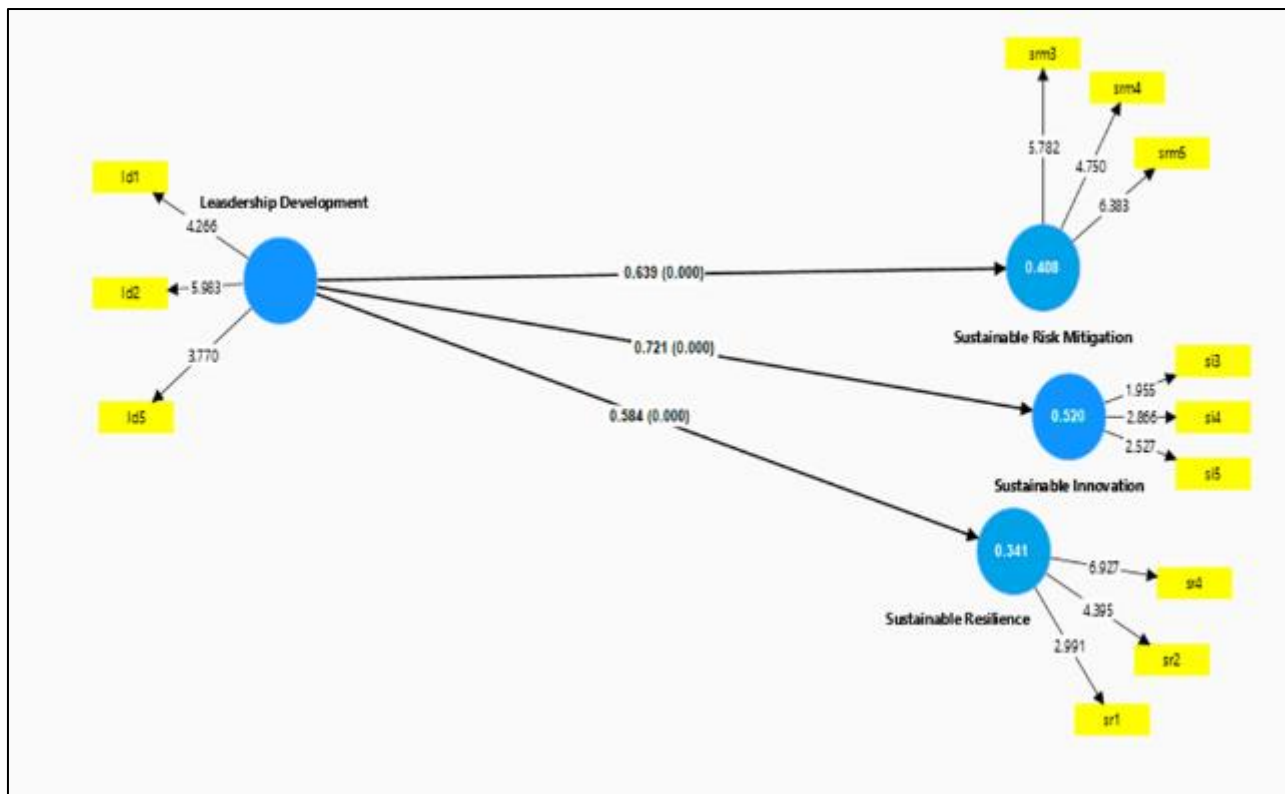


Figure 2: Structural Path Model for Leadership Development and Business Sustainability

Source: Analysis Output 2026; (Aided by Smart Pls Version 4.0.9).

Table 3: Structural Path Model and Hypotheses Results

S/n	Hypothesized Path	Path Coefficient (β)	P-Value	T Value	Decisions	R ²
1.	LD → SRM	0.639***	0.000	3.779	Not Supported	0.408
2.	LD → SI	0.721***	0.000	2.865	Not Supported	0.520
3.	LD → SR	0.584***	0.000	4.261	Not Supported	0.341

***P<0.001; **P<0.01 *P<0.05; Source: The Researcher's Computation (2026) from Path Analysis Result (Aided by SMARTPLS 4.0.9.9).

The figure and table presented the path analysis results of the correlation between Leadership Development and Business Sustainability among Safety Equipment Merchants in Rivers State. The findings of the structural model and hypotheses are displayed in the results table. The results demonstrated a substantial positive correlation among the components of the research. A significant positive correlation existed between Leadership Development and Business Sustainability as detailed below;

The initial structural path, corresponding to the first hypothesis of the study, demonstrated a significant positive correlation between Leadership Development and sustainable Risk Mitigation among Safety Equipment Merchants in Rivers State, with a beta value (β) of 0.639, a P-value of 0.00 (less than 0.05), and a T-value of 3.779 (greater than 1.96). Consequently, the null hypothesis is not supported.

The second structural path, corresponding to the second hypothesis of the study, demonstrated a significant positive correlation between Leadership Development and Sustainable Innovation among Safety Equipment Merchants in Rivers State, with a beta value (β) of 0.721, a P-value of 0.00 (less than 0.05), and a T-value of 2.865 (greater than 1.96). Consequently, the null hypothesis was not upheld.

The third structural path, corresponding to the third hypothesis of the study, demonstrated a significant positive correlation between Leadership Development and Sustainable Resilience among Safety Equipment Merchants in Rivers State, with a beta value (β) of 0.584, a P-value of 0.00 (less than 0.05), and a T-value of 4.261 (greater than 1.96). Consequently, the null hypothesis was rejected.

4.1 Leadership Development and Business Sustainability

The finding of this study emanated from the specific objective of the study which sought to examine the relationship between leadership development and business sustainability of safety equipment merchants in Rivers State. This objective resulted into three hypotheses which ascertained the relationship between leadership development and sustainable risk mitigation, sustainable innovation and sustainable resilience respectively.

Firstly, the result showed that there is a substantial positive relationship between Leadership Development and sustainable Risk Mitigation of Safety Equipment Merchants in Rivers State with a beta value (β) of 0.639 at P-value of $0.00 < 0.05$ and T-Value $3.779 > 1.96$. This connotes that leadership development could foster sustainable risk mitigations amongst safety equipment merchants in Rivers State up to 40%. It was also revealed that a substantial positive relationship is present between Leadership Development and Sustainable Innovation of Safety Equipment Merchants in Rivers State with a beta value (β) of 0.721 at P-value of $0.00 < 0.05$ and T-Value $2.865 > 1.96$; indicating that leadership development could influence sustainable innovation of safety equipment merchants up the magnitude of 52%. Lastly the result further revealed that there is substantial positive relationship between Leadership Development and Sustainable Resilience of Safety Equipment Merchants in Rivers State with a beta value (β) of 0.584 at P-value of $0.00 < 0.05$ and T-Value $4.261 > 1.96$. This also practically implies that leadership development have the potential to bolster sustainable resilience amongst safety equipment dealers in Rivers State.

This finding is not far from reality in the sense that leadership development prepares employees for higher responsibility in the future. It is likely to sharpen both the mental and physical readiness of successors to assume the front role when the need arises. This underscores why leadership development and business sustainability have gained significant attention in both academic and practical contexts. Leadership development focuses on equipping individuals with the skills, competencies, and knowledge necessary to lead organizations effectively and been widely recognized as a cornerstone of business sustainability by providing employees with the resilience and adaptability needed to navigate evolving challenges

The findings of this study was supported by Okafor and Onuoha (2023) whose investigation found that leadership engagement in succession planning has a significant impact on the long-term sustainability of SMEs. They affirmed that SMEs with higher leadership involvement in the succession process showed greater business continuity and growth potential. The study conducted by Brown and Walker (2022) which was aimed to assess how leadership engagement in succession planning affects the business sustainability of manufacturing businesses in the United Kingdom also gave similar proof. The findings revealed that leadership engagement positively influences the development of future leaders, which in turn contributes to long-term business sustainability. It was also proven that companies with a higher level of leadership involvement in succession planning reported enhanced financial and operational performance. Also Maseko and Madonsela (2021) gave supporting evidence from their study which found that leadership engagement is critical for effective succession planning in family-owned businesses. Leaders who actively mentor and develop future leaders create a more sustainable business environment, ensuring smooth transitions and long-term success. Similarly, Anderson and Bennett (2020) provided an empirical support for this study when they explored the impact of leadership development through leadership involvement in succession planning on organizational sustainability within the healthcare sector in Canada. The results of their study demonstrated that leadership involvement in succession planning significantly correlates with improved organizational sustainability. They argued that healthcare organizations that demonstrated proactive leadership succession planning were found to have better employee retention, higher operational efficiency, and stronger financial performance.

The study conducted by Eweje and Saraf (2020) also revealed that leadership development practices result in improved business performance and stakeholder trust. Uchenna et al. (2019) proved that leadership development programmes such as mentorship improved leadership capabilities and operational efficiency of mentees of the SME organisations. In India, Gupta et al. (2018) proved that Leadership development trainings improved operational efficiency and employee retention, contributing to sustainability among SMEs. In India, Gupta et al. (2018) found that leadership training in SMEs enhances financial performance and employee retention, contributing to sustainability.

Similarly, Okorie and Nwaeke (2016) found that leadership development initiatives in safety equipment merchants improve operational efficiency and customer satisfaction. Studies conducted at the global level have also highlight the universal importance of leadership development for achieving sustainability. For instance, Zhang et al. (2015) found that organizations that emphasized leadership development exercise demonstrate stronger sustainability performance in Asia. Also, Carmeli et al. (2013) found that leadership development enhances creative problem-solving and innovation, which are essential for long-term success.

5 CONCLUSION

In the light the foregoing findings, this study concludes that;

- Leadership Development is positively associated with sustainable Risk Mitigation of Safety Equipment Merchants in Rivers State.
- There is a substantial positive relationship between Leadership Development and Sustainable Innovation of Safety Equipment Merchants in Rivers State.
- There is positive correlation between Leadership Development and Sustainable Resilience of Safety Equipment Merchants in Rivers State.

Recommendation

In the same vein, it is recommended as follows:

Tailored leadership development programs and training should be organised routinely for potential leaders to help identify and groom future executives from within the organization. By equipping employees with leadership skills and business acumen, companies can ensure a smooth transition during succession planning. Employees will subsequently develop the required competencies to take on leadership roles seamlessly, fostering sustainable innovation and minimizing disruptions in business continuity.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

Disclosure of conflict of interest

The authors declare no conflicts of interest regarding this manuscript.

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