BUILDING BUSINESS SYSTEMS AND STRUCTURES FOR SUSTAINABLE GROWTH OF SMEs IN NIGERIA: A STRATEGIC MANAGEMENT PERSPECTIVE

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Abstract

Small and medium-sized enterprises (SMEs) are critical drivers of innovation, employment, and inclusive growth in Nigeria, yet their sustainability remains fragile due to weak internal systems and structures. This study examines how management systems, operational systems, innovation and knowledge systems, and corporate governance and leadership contribute to the sustainable growth of Nigerian SMEs from a strategic management perspective. Adopting a quantitative survey design, data were collected from 400 SMEs across diverse sectors using structured questionnaires. Reliability analysis confirmed strong internal consistency (Cronbach's α > 0.83), while correlation and multiple regression analyses were conducted using Jamovi software. Diagnostic tests validated the robustness of the models. Results reveal that all four business systems significantly and positively influence SME sustainable growth, with management systems exerting the strongest effect (r = 0.804). The regression model explained 67.3% of the variance in sustainable growth outcomes, underscoring the importance of structured planning, operational efficiency, innovation capacity, and governance mechanisms. Findings highlight that Nigerian SMEs must move beyond informal practices and survivalist strategies to adopt integrated systems that align with long-term sustainability goals. The study concludes that strengthening internal business systems and structures is essential for resilience, competitiveness, and stakeholder trust in Nigeria's volatile business environment. Recommendations include capacity building for SME managers, adoption of lean operational processes, investment in innovation and knowledge transfer, and formalization of governance practices to ensure sustainable growth trajectories.

Keywords: SMEs, sustainable growth, business systems, business structures, strategic management, Nigeria, governance, innovation

1.0 INTRODUCTION

1.1 Background Context

Globally, building business systems and structures for sustainable business growth has become a priority as firms grapple with volatile markets, technological disruption, and shifting stakeholder expectations (Sagar, 2023; OECD, 2017). A **business system** is the organised processes and routines that enable firms to deliver goods or services effectively (Eeles & Sims, 1998; Rana & Morgan, 2019). In contrast, a **business structure** is the legally recognised framework for conducting commercial activities, such as sole proprietorships, partnerships, or corporations (Gilkey, 2012; Prause, 2015). While systems emphasise internal efficiency and value creation, structures establish the institutional and legal foundation for governance and growth (Chandler, 1962; Akinyemi, 2019). While large corporations often have established structures to adapt, small and medium-sized enterprises (SMEs) remain more vulnerable Brozović, Jansson & Boers, 2025). SMEs are widely recognised as drivers of innovation, job creation, and inclusive economic development, yet sustaining long-term growth continues to be a major challenge (Algan, 2019).

Sustainable growth is the ability of a firm to maintain profitability, competitiveness, and resilience while balancing social, environmental, and stakeholder obligations (Djabir, Baottong & Salam, 2025). For SMEs, this means not only expanding revenues and market share but also building adaptive capacity to survive shocks and remain relevant (Iman, et al., 2025). In Nigeria, most SMEs prioritise short-term survival over long-term sustainability, hindered by weak systems, innovation gaps, and governance challenges (Ikuemonisan, 2024; Adedeji, et al., 2020). Critics such as Roy (2016) and Cardillo & Basso (2024), argued that sustainability is often narrowly equated with financial growth, overlooking social and environmental dimensions. For Nigerian SMEs, sustainable growth requires integrating financial performance with innovation, governance, and stakeholder trust (Arsyad, et al, 2024; Almagtome, et al., 2020).

One of the key determinants of sustainable growth is the management system, which provides the framework for planning and coordination, organisational structure, management development, and performance monitoring. Chandler (1962) stressed that structure follows strategy, while Teece (2018) argued that strong systems enhance resilience and competitiveness. For Nigerian SMEs, however, management practices are often informal, leading to inefficiency and weak accountability (Abdullahi, Jakada & Kabir, 2016). Critics noted that overly rigid systems can reduce flexibility (Mintzberg, 1994), yet without some structure, SMEs remain vulnerable. Strengthening

management systems is therefore essential for aligning strategy with sustainable growth in Nigeria's uncertain business environment.

Another determinant is **operational systems**, which focus on how efficiently firms produce and deliver value (Afy-Shararah & Rich, 2018; Handoyo, et al., 2023). Efficient operations reduce costs, improve quality, and enhance competitiveness (Kumar & Harms, 2004). Nigerian SMEs often face operational inefficiencies due to outdated processes, infrastructural gaps, and informal practices (Okpara, 2011). While lean, adaptive operations can compensate for small scale (Teece et al., 2016), operations alone cannot ensure sustainability without support from governance and innovation. Nevertheless, in Nigeria's resource-constrained context, efficient operational systems remain central to SME growth and survival (Olufemi & Kayode, 2025).

The third variable is **innovation and knowledge systems**. These involve R&D, technology adoption, and organisational learning (Nonaka, Takeuchi & Umemoto, 1996). Innovation is crucial for SMEs to survive in dynamic markets (Fischer, 2001) Innovation systems help SMEs build adaptive capabilities and sustain competitiveness, yet Nigerian SMEs show weak innovation practices and limited knowledge sharing (Babalola & Ogunsola, 2018;). For Nigerian SMEs, fostering innovation and knowledge transfer is vital to overcoming stagnation and achieving long-term growth (Fom, Pwol, & Ogaji, 2023).

Finally, **corporate governance and leadership** shape how decisions are made, monitored, and implemented within SMEs (Singh & Pillai, 2022). Tarando, et al. (2015), asserted that governance is a mechanism for aligning managerial behaviour with stakeholder interests. Yet in Nigerian SMEs, governance is often informal, with leadership concentrated in founders or family members, leading to succession challenges and limited transparency (Okpara, 2011). Conversely, transformational leadership has been linked to higher innovation and stronger employee commitment (Bass, 1990; Mishra, Dashora, & Dubey, 2023). Balancing formal governance structures with adaptive leadership is therefore critical for SME sustainability.

Narrowing to Nigeria, the NBS/SMEDAN MSME survey (2021) revealed that MSMEs contribute 46.32% to Nigeria's GDP, generate 6.21% of exports, represent 96.9% of all businesses, and provide 87.9% of total employment (PwC, 2024). These figures underscore their pivotal role in shaping Nigeria's economic trajectory. Yet, despite their economic importance, most SMEs in Nigeria struggle to survive beyond their first five years, and even fewer achieve sustainable growth (Adedeji, et al., 2020). This challenge has been linked not only to the external environment - such as inadequate

infrastructure, inconsistent government policies, and limited access to finance - but also to internal weaknesses in business systems and structures.

1.2 Statement of the Problem

In Nigeria, most SMEs operate informally with weak governance, poor planning, and limited performance management frameworks (Okpara, 2011). This results in a cycle of short-term survival rather than long-term sustainability. Globalisation, digitalisation, and growing competition further expose these weaknesses, underscoring the urgent need for SMEs to build stronger business systems and structures to remain viable (Bargoni, et al., 2024). Despite SMEs' critical role in Nigeria's economy, their growth trajectory remains unstable and largely unsustainable. Research shows that many SME failures arise more from internal weaknesses than external pressures (Okpara, 2011; Owusu & Denanyoh, 2025). While prior studies such as Abdullahi, et al. (2016), Adedeji, et al. (2020) and Ikuemonisan, (2024) have focused on financing gaps, infrastructure, and policy inconsistencies, limited attention has been given to the **strategic management perspective** of strengthening internal systems. This study addresses that gap by examining how **management systems, operational systems, innovation and knowledge systems, and corporate governance and leadership** influence the sustainable growth of Nigerian SMEs, offering actionable insights for both practice and policy.

1.3 Purpose of the study

This study aims to examine how business systems and structures contribute to the sustainable growth of SMEs in Nigeria from a strategic management perspective. Specifically, the study seeks to:

1. examine the influence of management systems on the sustainable growth of SMEs in Nigeria.
2. assess the impact of operational systems on the sustainable growth of SMEs in Nigeria.
3. investigate the contribution of innovation and knowledge systems to the sustainable growth of SMEs in Nigeria.
4. evaluate the role of corporate governance and leadership in strengthening the sustainable growth of SMEs in Nigeria.

1.4 Research Questions

1. What is the effect of management systems on the sustainable growth of SMEs in Nigeria?
2. How do operational systems influence the sustainable growth of SMEs in Nigeria?
3. In what ways do innovation and knowledge systems contribute to the sustainable growth of SMEs in Nigeria?
4. How do corporate governance and leadership practices shape the sustainable growth of SMEs in Nigeria?

1.5 Research Hypotheses

HO_1: Management systems have no significant positive impact on the sustainable growth of SMEs in Nigeria.

HO_2: Operational systems are not positively associated with the sustainable growth of SMEs in Nigeria.

HO_3: Innovation and knowledge systems do not significantly contribute to the sustainable growth of SMEs in Nigeria.

HO_4: Corporate governance and leadership have no significant positive effect on the sustainable growth of SMEs in Nigeria.

2.0 METHODOLOGY

2.1 Research Design

This study adopts a **quantitative design**, suitable for testing hypothesised relationships and producing generalisable findings (Creswell, 2014). While critics noted that quantitative approaches may oversimplify complex organisational realities (Morgan & Smircich, 1980), they remain appropriate here because the study examines measurable constructs—management systems, operational systems, innovation systems, and governance—and their influence on SME sustainable growth.

The study is grounded in **positivism**, which views reality as objective and best understood through observable data (Saunders, Lewis, & Thornhill, 2019). Though criticised for neglecting interpretive perspectives (Guba & Lincoln, 1994), positivism is justified given the focus on hypothesis testing rather than subjective meaning. A **deductive approach** is employed, progressing from established theories of strategic management and SME growth to empirical testing (Bryman & Bell, 2015).

The **survey strategy** is adopted for its efficiency in collecting standardised data from a large sample (Fowler, 2014). While surveys may limit depth (Bryman, 2016), they

enable broad representation, which is vital given the heterogeneity of Nigerian SMEs. The design is **correlational in nature,** which supports the study's aim by assessing associations between internal systems and sustainable growth (Sekaran & Bougie, 2016). Although correlation cannot prove causality, it identifies significant patterns where experimental manipulation is impractical in real business contexts

2.2 Population and Sampling Technique

The study population consists of all Micro, Small, and Medium Enterprises (MSMEs) in Nigeria. According to the National Bureau of Statistics (NBS) and SMEDAN (2020), there were **39,654,385 MSMEs** in the country, representing a significant portion of the national economy (PwC, 2024). Given the impracticality of surveying this entire population, a representative sample size of **400 respondents** is determined using the Yamane (1967) formula, which provides an efficient method for calculating sample sizes for large populations.

A **hybrid sampling strategy** is employed, combining **simple random sampling** and **snowball sampling**. Simple random sampling ensures that each SME has an equal chance of selection, thereby enhancing representativeness (Sekaran & Bougie, 2016). Snowball sampling is used to reach SMEs that are less accessible, particularly those in informal clusters, by relying on referrals from initial respondents (Ting, et al., 2025). This combination is justified as it enables the study to capture both formally registered and informally operating SMEs across Nigeria, ensuring that the sample reflects the diversity of the SME sector.

2.3 Research Instruments

Data for this study were collected using a structured questionnaire (see Appendix 1), with items carefully adapted from validated instruments in the literature to ensure both reliability and construct validity. The construct of **management systems** was measured using items adapted from the *Performance Management Questionnaire (PMQ)* (Kinicki, et al., 2013) and the *Organisational Structure Scale* (Erol & Ordu, 2018), which have been widely applied in studies of organisational planning, coordination, and performance. For **operational systems**, items were drawn from the *Process Efficiency Scale (*Zaheer & Saif, 2008), which capture the efficiency, adaptability, and process quality dimensions of operations management. The construct of **innovation and knowledge systems** was measured using the *Knowledge Management Questionnaire* (Donate & Sánchez de Pablo, 2015) and the *Innovation Capability Scale (*Calik, Calisir, & Cetinguc, 2017). These scales assess R&D intensity, knowledge transfer, technology adoption, and product or service innovation, which are crucial for sustaining competitiveness (Bustinza, et al.,2019). For **corporate governance and leadership**,

items were adapted from the *Multifactor Leadership Questionnaire* (Bass & Avolio, 1995), capturing leadership style, decision-making transparency, accountability, and governance practices. Finally, the dependent variable, **sustainable growth**, was assessed using the *Sustainable Growth Questionnaire* (Na-Nan, et al., 2024), which evaluates financial, social, and adaptive performance dimensions as recommended in contemporary sustainability literature (Porter & Kramer, 2011; Gericke, et al., 2019). All questionnaire items were rated on a **5-point Likert scale** ranging from *1 = strongly disagree* to *5 = strongly agree*. The Likert format is widely recognised in management research as a reliable method for capturing perceptions in a quantitative manner, allowing nuanced analysis of attitudes and behaviours (Joshi et al., 2015).

2.4 Method of Data Collection

The study employed a structured online questionnaire, distributed using Google Forms, as the primary method of data collection. Using Google Forms was particularly advantageous because it ensured uniformity in the questionnaire design, automated data capture, and minimised human error during entry (Vasantha Raju & Harinarayana, 2016). Moreover, the online approach promoted respondent anonymity, thereby encouraging more candid and reliable responses (Bryman, 2016). Also, considering the growing digital adoption among Nigerian SMEs (PwC, 2024; Unegbu, Yawas, & Dan-Asabe, 2024), the use of a Google Form questionnaire was both practical and contextually appropriate for this study. The instrument was distributed through email, WhatsApp, and professional SME networks. This mode of administration was chosen for its cost-effectiveness and ability to reach geographically dispersed respondents while enabling real-time data collation (Keat et al., 2023).

2.5 Method of Data Analysis

Data were analysed using both descriptive and inferential statistics. Descriptive statistics, including frequencies, means, and standard deviations, were employed to summarise demographic and organisational characteristics of the sampled SMEs. This provided an overview of the dataset and ensured clarity before conducting more advanced tests (Sekaran & Bougie, 2016). For inferential analysis, correlation analysis was used to determine the strength and direction of associations among the study variables (Field, 2018). In addition, multiple regression analysis was conducted to assess the predictive power of management systems, operational systems, innovation and knowledge systems, and corporate governance on the sustainable growth of SMEs. This combination allowed for hypothesis testing and offered insights into the extent to which each construct explained variance in sustainable growth outcomes (Hair et al., 2019). All statistical analyses were performed using **Jamovi software**, selected for its

open-source accessibility, user-friendly interface, and robust statistical capabilities (Ahmed & Muhammad, 2021). Jamovi supports advanced regression models and generates intuitive visualisations that enhance interpretation, making it particularly suitable for management research (Navarro & Foxcroft, 2025).

3.0 RESULTS

Data were collected from 400 participants drawn from different SME sub-sectors in Nigeria (see Appendix 2). The responses were organised according to the study variables, coded, and exported into Jamovi statistical software for analysis. Demographic profile analysis, reliability tests, descriptive statistics, correlation analysis, and multiple regression were carried out. The results are presented in line with the study's research questions and hypotheses to provide clear evidence on how business systems and structures contribute to the sustainable growth of SMEs in Nigeria.

3.1 Demographic Characteristics of Respondents

The demographic profile of respondents shows a diverse and representative sample (See Appendix 3a). Most respondents were ***aged*** 25–44 (53%), indicating that most participants are in the active working age group, where strategic and growth-related business decisions are typically made. ***Gender*** was balanced (52.3% male; 47.8% female), reflecting women's rising role in Nigeria's SME sector, consistent with national estimates showing that women own about 40% of MSMEs (Business Insider Africa, 2023) and account for 41% of micro-businesses (Women's World Banking, 2024). ***Education levels*** were high, with 46.8% holding postgraduate degrees and 26.8% HND/BSc, suggesting that respondents are well equipped to understand structured business systems and sustainable growth nexus. ***Experience*** was widely distributed, with 34.8% having 6–10 years and 27% 2–5 years, ensuring perspectives from both established and emerging entrepreneurs. ***Sub-sectors*** were varied: trade/retail (22.8%), services (20%), manufacturing (16.8%), agriculture (16%), and ICT (14.5%), providing broad coverage of Nigeria's SME landscape and enhancing generalisability. By size, micro firms dominated (37%), followed by small (34%) and medium (29%), aligning with national trends where micro enterprises account for 97% of all MSMEs (PwC, 2024).

3.2 Reliability Analysis of Study Constructs

The reliability analysis shows strong internal consistency across all constructs (see Appendix 3b). The *Management System* **(α = 0.918)** demonstrates excellent reliability, indicating that the items measuring this construct are highly consistent. The *Operational System* **(α = 0.836)**, *Innovational and Knowledge System* **(α = 0.863)**, and *Corporate*

Governance and Leadership **(α = 0.865)** also show high reliability. Similarly, the *Sustainable Growth of SMEs* **(α = 0.850)** scale is reliable. When all variables were combined, the overall Cronbach's alpha reached **0.966**, confirming very strong internal consistency for the entire instrument. All scales surpassed the recommended threshold of Cronbach's alpha (α = 0.70) (Nunnally, 1978; Hair et al., 2019). These results suggest that the questionnaire is a dependable instrument for assessing business systems, structures, and sustainable growth of SMEs.

3.3 Descriptive Statistics

Table 1 presents the descriptive statistics, including the mean, median, standard deviation, minimum and maximum for the predictor variables – Management Systems (MS), Operational Systems (OS), Innovation and Knowledge Systems (IKS), and Corporate Governance and Leadership (CGL) – as well as the dependent variable, Sustainable Growth of SMEs (SGS). These measures provide insight into the central tendency and variability of the responses.

Table 1: Descriptives Statistics

	MS	**OS**	**IKS**	**CGL**	**SGS**
N	400	400	400	400	400
Missing	0	0	0	0	0
Mean	4.02	4.07	3.99	4.23	4.03
Median	4.4	4.4	4.2	4.6	4.33
Standard deviation	0.837	0.667	0.682	0.764	0.657
Minimum	1.4	1.8	1.8	1.4	2
Maximum	5	5	4.8	5	5

Source: Jamovi Output

Interpretation of Descriptive Statistics:

The descriptive results in Table 1 show that the ***mean*** scores for all constructs – Management Systems (MS = 4.02), Operational Systems (OS = 4.07), Innovation and Knowledge Systems (IKS = 3.99), Corporate Governance and Leadership (CGL = 4.23), and Sustainable Growth of SMEs (SGS = 4.03) – are all above 3.9 on a 5-point scale. This suggests that respondents generally agreed these systems are well embedded

within their enterprises and contribute positively to business growth. The ***standard deviations***, which range from 0.657 to 0.837, indicate relatively low variability in responses. This consistency implies that participants held broadly similar perceptions of the extent to which business structure and systems and sustainable growth practices are implemented. The ***minimum and maximum*** values (ranging from 1.4 to 5 across constructs) show that while a few respondents reported lower adoption of the business structure and systems, the majority consistently reported high levels. Likewise, the negative skewness values suggest a clustering of responses toward the higher end of the scale, further supporting the view that SMEs perceive these systems as actively practiced.

3.4 Diagnostics Tests

Before conducting correlation and regression analyses, diagnostic tests were performed to ensure the validity of the statistical models. These tests examined key assumptions, including normality, heteroskedasticity, autocorrelation, and multicollinearity, which are critical for producing reliable and unbiased results (Field, 2018; Hair et al., 2019)

Table 2: Normality Tests

	Statistic	**p**
Shapiro-Wilk	0.901	<.001
Kolmogorov-Smirnov	0.122	<.001
Anderson-Darling	11.3	<.001
Note. Additional results provided by *moretests*		

Source: Jamovi output

The normality tests (Shapiro–Wilk, Kolmogorov–Smirnov, and Anderson–Darling) were all significant ($p < .001$), indicating that the data deviate from perfect normality. Although the Shapiro-Wilk test indicated deviations from normality, the large sample size ($N = 400$) justifies parametric analyses such as Pearson correlation and regression. The Central Limit Theorem posits that for samples of at least 30, the sampling distribution of the mean approximates normality regardless of the population's shape, and larger samples provide even stronger justification (Tabachnick & Fidell, 2019). Furthermore, parametric techniques are considered robust to moderate violations of normality, especially with large datasets and continuous Likert-scale data treated as interval-level (Norman, 2010).

Table 3: Heteroskedasticity Tests		
	Statistic	**p**
Breusch-Pagan	31.5	<.001
Goldfeld-Quandt	1.1	0.247
Harrison-McCabe	0.475	0.244
Note. Additional results provided by *moretests*		

Source: Jamovi output

Heteroskedasticity refers to a condition in regression analysis where the variance of the error terms is not constant across observations, potentially biasing standard errors and test results (Field, 2018). As shown in table 3, the Breusch–Pagan test was significant ($p < .001$), suggesting the presence of heteroskedasticity. However, both the Goldfeld–Quandt ($p = 0.247$) and Harrison–McCabe ($p = 0.244$) tests were not significant, indicating no strong evidence of unequal error variances across the models. Taken together, the results suggest only mild heteroskedasticity, which is unlikely to bias the findings given the robustness of regression with large samples (Gujarati & Porter, 2009).

Table 4: Durbin–Watson Test for Autocorrelation		
Autocorrelation	**DW Statistic**	**p**
-0.00617	1.99	0.838

The Durbin–Watson statistic was 1.99 ($p = 0.838$), which is very close to the benchmark value of 2. This indicates that there was no significant autocorrelation in the residuals of the regression model. The absence of autocorrelation suggests that the error terms were independent, thereby meeting a key assumption of regression analysis (Field, 2018).

Table 5: Collinearity Statistics		
	VIF	**Tolerance**
MS	4.81	0.208
OS	3.93	0.254
IKS	5.61	0.178

CGL	6.63	0.151

Source: Jamovi output

The collinearity diagnostics in Table X show that the Variance Inflation Factor (VIF) values ranged from 3.93 (OS) to 6.63 (CGL), while tolerance values ranged from 0.151 to 0.254. However, the relatively higher VIF values for Innovation and Knowledge Systems (5.61) and Corporate Governance and Leadership (6.63) suggest some moderate correlation among predictors. However, since all values remain below the critical VIF ≥ 10 threshold, multicollinearity is not severe enough to undermine the model (Hair et al., 2019; Kutner et al., 2005).

Overall, the diagnostic tests confirm the suitability of the data for parametric analysis. Despite minor deviations from normality and moderate predictor correlations, key regression assumptions are met: no serious heteroskedasticity, no autocorrelation, and no severe multicollinearity. Thus, Pearson correlation and multiple regression remain appropriate.

3.5 Correlation Results

The correlation matrix in Table 6 presents the relationships between the independent variables (business structures and systems) and the dependent variable (sustainable growth of SMEs)

Table 6: Correlation Matrix

		MS	**OS**	**IKS**	**CGL**	**SGS**
MS	Pearson's r	—				
	df	—				
	p-value	—				
OS	Pearson's r	0.814	—			
	df	398	—			
	p-value	<.001	—			
IKS	Pearson's r	0.837	0.828	—		
	df	398	398	—		
	p-value	<.001	<.001	—		

CGL	Pearson's r	0.87	0.829	0.888	—	
	df	398	398	398	—	
	p-value	<.001	<.001	<.001	—	
SGS	Pearson's r	0.804	0.747	0.723	0.749	—
	df	398	398	398	398	—
	p-value	<.001	<.001	<.001	<.001	—

Source: Jamovi output

Interpretation of Correlation Results

Table 6 shows significant, strong, and positive correlations ($p < .001$) between all independent variables and Sustainable Growth of SMEs (SGS). *Management Systems* ($r = 0.804$) had the strongest significant correlation, indicating that structured management practices are highly influential in driving SME growth. *Corporate Governance and Leadership* also showed a significant relationship ($r = 0.749$), suggesting that effective leadership and governance mechanisms contribute meaningfully to sustaining growth. *Operational Systems* ($r = 0.747$) and *Innovation and Knowledge Systems* ($r = 0.723$) demonstrated significant positive correlations as well, underscoring the importance of operational efficiency and innovation in enhancing SME competitiveness. Overall, the results confirm that all four business systems are significantly associated with the sustainable growth of SMEs in Nigeria, with management systems showing the most substantial effect.

3.7 Linear Regression Results

Tables 7 and 8 present the results of the linear regression analysis conducted to examine the effect of business structure and system on the sustainable growth of SMEs in Nigeria.

Table 7: Model Fit Measures

				Overall Model Test			
Model	**R**	**R^2**	**Adjusted R^2**	**F**	**df1**	**df2**	**p**
1	0.82	0.673	0.67	203	4	395	<.001

Note. Models estimated using sample size of N=400

The linear regression model shows a strong and significant relationship between the predictor variables—Management Systems (MS), Operational Systems (OS), Innovation and Knowledge Systems (IKS), and Corporate Governance and Leadership (CGL)—and the Sustainable Growth of SMEs (SGS). The model's **R-value of 0.82** indicates a strong positive association, while an **R^2 of 0.673** suggests that 67.3% of the variance in SME growth is explained by these predictors. The **adjusted R^2 of 0.67** confirms the model's robustness after accounting for the number of predictors. The **F-statistic of 203 (df = 4, 395, p < .001)** demonstrates that the overall model is statistically significant, indicating that collectively, building these management systems and structures significantly influence the sustainable growth of SMEs in Nigeria

Table 8: Model Coefficients – Sustainable Growth of SMEs (SGS)

			95% Confidence Interval				
Predictor	**Estimate**	**SE**	**Lower**	**Upper**	**t**	**p**	**Stand. Estimate**
Intercept	1.06534	0.1222	0.8251	1.306	8.7181	<.001	
MS	0.41928	0.0495	0.3219	0.517	8.4626	<.001	0.534
OS	0.23834	0.0562	0.1279	0.349	4.2417	<.001	0.24197
IKS	0.00577	0.0657	-0.1234	0.135	0.0878	0.93	0.00598
CGL	0.06745	0.0637	-0.0578	0.193	1.0586	0.29	0.0784

Source: Jamovi output

Interpretation of the regression results

Management Systems (MS) had a significant positive effect on the sustainable growth of SMEs (β = 0.419, t = 8.4626, p < .001), indicating that effective management practices strongly enhance SME growth. **Operational Systems (OS)** also significantly contributes to SME growth (β = 0.238, t = 4.2417, p < .001), highlighting the importance of efficient operational structures and systems in promoting sustainable growth of SMEs. **Innovation and Knowledge Systems (IKS)** with β = 0.006, t = 0.0878, p = 0.93, showed a positive but non-significant effect on SME growth, while **Corporate Governance and Leadership (CGL)** reported a positive yet

non-significant effect (β = 0.067, t = 1.0586, p = 0.29), suggesting that their impact may be more pronounced under different conditions or over time.

3.8 Test of Hypotheses

HO1: Management systems have no significant positive impact on the sustainable growth of SMEs in Nigeria.

The regression coefficient for Management Systems (MS) is 0.419 (t = 8.4626, p < .001), indicating a strong and statistically significant positive effect on the sustainable growth of SMEs. Since the effect is significant, HO1 is rejected, confirming that management systems positively influence SME growth.

HO_2: Operational systems are not positively associated with the sustainable growth of SMEs in Nigeria.

Operational Systems (OS) has a coefficient of 0.238 (t = 4.2417, p < .001), showing a statistically significant positive relationship with SME growth. Hence, **HO2 is rejected**, indicating that operational systems contribute significantly to sustainable growth of SMEs.

***HO_3: Innovation and knowledge systems do not significantly contribute to the sustainable growth of SMEs in Nigeria*.**

The coefficient for Innovation and knowledge systems (IKS) with β = 0.006, t = 0.0878, p = 0.93, is not statistically significant. Hence, HO3 is accepted, indicating that innovation and knowledge systems has no significant influence the sustainable growth of the sampled SMEs at present. However, it should be noted that these systems are generally known to promote SME growth, and their impact may emerge over time if effectively implemented.

HO_4: Corporate governance and leadership have no significant positive effect on the sustainable growth of SMEs in Nigeria

Corporate Governance and Leadership (CGL) had a coefficient of 0.067 (t = 1.0586, p = 0.29), which is positive but not statistically significant. Therefore, **HO4 is accepted**, suggesting that corporate governance and leadership have no significant effect SME growth in the sampled firms at present, though these factors are typically important for promoting sustainable SMEs growth positively and may have a stronger effect under optimal conditions.

3.9 Summary of the Findings

Based on the analysis of data, the following findings emerged:

1. **Management Systems (MS)** has a significant positive effect on the sustainable growth of SMEs in Nigeria, indicating that effective management practices are crucial in enhancing SME growth.
2. **Operational Systems (OS)** significantly contributes to SME growth, underscoring the role of efficient operational processes in promoting organisational sustainability.
3. **Innovation and Knowledge Systems (IKS)** did not have a statistically significant impact on SME growth in the sampled firms currently; however, the effect was positive, suggesting that well-structured and effectively implemented innovation and knowledge systems facilitates sustainable growth over time.
4. **Corporate Governance and Leadership (CGL)** was not a significant predictor of SME growth in the current sample, yet the effect was positive. This implies that robust governance and leadership practices, when properly structured, operated, and supported, have the potential to enhance sustainable growth.

4.0 DISCUSSION

This chapter discusses the findings of the study in relation to previous research on sustainable growth and SMEs in Nigeria, focusing on Management Systems (MS), Operational Systems (OS), Innovation and Knowledge Systems (IKS), and Corporate Governance and Leadership (CGL).

4.1 Management Systems and Sustainable Growth

Management Systems had a significant positive effect on SME growth ($\beta = 0.419$, $t = 8.4626$, $p < .001$), supporting prior studies that emphasise robust management frameworks as critical for planning, coordination, performance monitoring, and strategy alignment (Chandler, 1962; Teece, 2018; Abdullahi, Jakada & Kabir, 2016). This finding confirms that effective management practices strengthen resilience and competitiveness in Nigeria's uncertain business environment.

4.2 Operational Systems and Sustainable Growth

Operational Systems also significantly contributed to SME growth, aligning with research highlighting efficiency, cost reduction, and competitiveness as key drivers of sustainability (Afy-Shararah & Rich, 2018; Olufemi & Kayode, 2025). Efficient operations remain central to SME survival in resource-constrained contexts.

4.3 Innovation and Knowledge Systems and Sustainable Growth

Innovation and Knowledge Systems had a positive but non-significant effect. This partially aligns with studies emphasizing innovation and knowledge transfer for long-

term SME growth (Fom, Pwol & Ogaji, 2023). The non-significance may reflect weak innovation practices, limited technology adoption, and informal knowledge-sharing among Nigerian SMEs (Babalola & Ogunsola, 2018), though the positive direction suggests potential for future impact if properly implemented.

4.4 Corporate Governance and Leadership and Sustainable Growth

Corporate Governance and Leadership also had a positive but non-significant effect, consistent with findings linking governance and leadership to stakeholder alignment, innovation, and employee commitment (Singh & Pillai, 2022). The non-significance likely reflects informal governance structures and concentrated leadership in Nigerian SMEs (Okpara, 2011), yet the positive effect indicates potential benefits if governance and leadership practices are strengthened.

4.5 Implications of the Study

The findings of this study have important implications for both practice and theory. For SMEs, the significant effects of management and operational systems highlight the need to strengthen planning, coordination, performance monitoring, and process efficiency structures and system to enhance competitiveness and sustainable growth. Although Innovation and Knowledge Systems and Corporate Governance and Leadership were not statistically significant, their positive effects suggest that well-structured innovation initiatives, knowledge-sharing practices, and robust governance frameworks can support long-term sustainability if properly implemented. Theoretically, the study reinforces the relevance of systems theory and strategic management principles in explaining SME growth, showing that management and operational systems produce immediate measurable impacts, while innovation, knowledge, and governance may yield significant effects over time. Overall, the study underscores the importance of a holistic approach building business systems and structures that foster innovation and effective leadership to achieve sustainable growth in Nigerian SMEs.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study examined the influence of business systems and structures on the sustainable growth of SMEs in Nigeria. The findings indicate that management and operational systems significantly enhance SME growth, highlighting the critical role of structured management practices and efficient operations in promoting sustainability.

Although Innovation and Knowledge Systems and Corporate Governance and Leadership were not statistically significant in the sampled firms, their positive effects suggest potential benefits over time if properly implemented and supported. Overall, the study demonstrates that a combination of strong management systems, effective operations, innovation, and governance is essential for achieving long-term sustainable growth in Nigerian SMEs.

5.2 Recommendations

Based on the findings, the study recommends:

1. SME owners should strengthen management structures and systems through formalised planning, coordination, and performance monitoring to enhance strategic alignment and resilience.
2. Operational systems should be optimised to improve efficiency, reduce costs, and enhance competitiveness.
3. SMEs should invest in structured innovation initiatives and knowledge-sharing practices to build adaptive capabilities and support long-term growth.
4. Corporate governance and leadership frameworks should be enhanced, focusing on transparency, accountability, and transformational leadership to facilitate sustainable development.
5. Policymakers and support agencies such SMEDAN should provide regular training, resources, and frameworks to help SMEs implement these systems effectively.

5.3 Contribution to Knowledge

This study contributes to knowledge by empirically demonstrating the relative importance of management and operational systems over innovation and governance in driving SME sustainable growth in Nigeria. It provides evidence that while structured management and efficient operations yield immediate benefits, innovation and governance may exert long-term effects, thereby enriching the literature on SME growth and strategic management in resource-constrained contexts.

5.4 Suggestions for Further Studies

Future research could explore the long-term effects of innovation and governance on the sustainable growth of SMEs using longitudinal data to capture changes over time. Studies could also examine sector-specific variations to determine how the impact of

building these business systems and structures differs across industries. In addition, further research could investigate the role of external factors, such as government policy, access to finance, and infrastructure, in moderating the effects of these business systems and structures on SME growth, providing a more comprehensive understanding of the conditions that support sustainable development.

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APPENDICES

Appendix 1 - Survey Questionnaire

Appendix 2 – Survey Responses

Appendix 3: Data Analysis Outputs

Appendix 4: Link to Google Form used for data collection

https://docs.google.com/forms/d/e/1FAIpQLSeU0GlXwqtZfrNKglXDLJfoEtXAZZzKp_42mQoFtUrTAgW6yQ/viewform?usp=sharing&ouid=114308383842564282553.