

Innovative Management Practices and Product Development Success: Evidence from Selected Paint Manufacturing SMEs in Nigeria

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ABSTRACT

The ability to develop new or improved products in a competitive and dynamic business environment is crucial for the survival and growth of small and medium-sized enterprises (SMEs), particularly in the manufacturing sector. Innovation management has become a key driver of product development success. This study examines the link between innovative management practices and product development success among paint manufacturing SMEs in Nigeria, focusing on the roles of organizational structure, strategy, and culture. Using a survey research design, data were collected from 50 management staff across seven selected paint manufacturing firms. Descriptive statistics, Pearson correlation, and multiple regression analyses were employed to analyze the data. The findings reveal a strong and statistically significant positive relationship between the three innovation management dimensions and product development success. Organizational strategy emerged as the strongest predictor ($r = 0.778$), followed by organizational culture ($r = 0.762$) and organizational structure ($r = 0.743$). The regression model further confirmed that these variables significantly contribute to product development success ($R^2 = 0.679$, $p < 0.001$). The study concludes that firms with flexible structures, innovation-driven strategies, and supportive organizational cultures are better positioned to succeed in product development. It recommends that paint manufacturing SMEs adopt adaptive organizational structures, foster innovation-friendly cultures, align innovation with strategic goals, and invest in employee development to enhance product innovation and competitiveness.

Keywords: Innovative Management Practices; Product Development Success; Organizational Structure; Organizational Strategy; Organizational Culture.

1. INTRODUCTION

Innovative management techniques are now crucial for achieving success in the fiercely competitive and rapidly changing business environment of today, particularly for SMEs in Nigeria (Binuyo et al., 2023). SMEs must use creative methods to stay competitive and guarantee sustained growth as markets and consumer preferences change in response to economic challenges, globalization, and technology advancements (Aroyehun, 2025; Agri et al., 2018). Innovative management, according to Binuyo et al. (2023), is the purposeful use of new technology, creative thinking, and strategic resource alignment to enhance organizational procedures, goods, and services.

According to Keelsona et al. (2024), these strategies are essential for SMEs to overcome market and structural obstacles since they improve their ability to produce new products, shorten time-to-market, and become more sensitive to customer requests. It's interesting to note that successful product development is directly impacted by organizations' ability to utilize technology breakthroughs, incorporate new ideas systematically, and foster a creative culture through effective innovation management (Al Suwaidi et al., 2021; Dwivedi et al., 2022). Achieving long-term profitability, business resilience, and market competitiveness all depend on successful product development (Edison et al., 2018).

The COVID-19 pandemic further exposed the vulnerabilities of SMEs, increasing the need for digital transformation and innovation-led growth (Dwivedi et al., 2022). However, many SMEs in Nigeria face significant obstacles, such as limited access to capital, inadequate infrastructure, weak research capabilities, and a poor innovation culture, all of which hinder their ability to innovate effectively (Obokoh & Goldman, 2016; Ebegbetale & Okon, 2022).

Keelson et al. (2024) state that SMEs' ability to succeed in new product development is closely linked to their ability to implement innovative management practices, adapt to market trends, and harness internal and external knowledge. Many Nigerian SMEs have challenges related to obsolete business models, inadequate investment in innovation, and a lack of strategic direction, whereas major firms possess the ability to innovate quickly (Iguodala-Cole, 2024; Nimfa et al., 2021). Therefore, it is both vital and urgent to comprehend how innovative management practices—like organizational flexibility, proactive strategy, and an innovation-friendly culture—contribute to the success of product development. By investigating the relationship

between creative management techniques and the success of product development among Nigerian SMEs, this study aims to close this gap (Chukwuka & Imide 2023).

The study specifically addresses the following research questions: How does organizational structure affect product development success among SMEs in Nigeria? What roles do organizational strategies play in enhancing product development success among SMEs in Nigeria? What effect does organizational culture have on product development success among SMEs in Nigeria? The study is intended to offer practical insights that can help SMEs in Nigeria enhance their innovation capacity, improve competitiveness, and contribute to economic development. Particularly, it focuses on how organizational structure, strategy, and culture influence these enterprises' ability to introduce successful new products that satisfy changing market demands (Chukwuka & Igweh 2024).

The specific objective of the study is to examine and ascertain the link between innovative management practices and product development success among paint manufacturing SMEs in Nigeria, focusing on the roles of organizational structure, strategy and culture.

2. LITERATURE REVIEW

2.1 The Concept of Innovation Management Practices

Innovation management practices refer to the systematic planning, implementation, and supervision of innovative processes within an organization to improve products, services, and business models (Karstegl et al., 2025). It is not just about generating ideas, but also about managing the entire process from ideation to implementation and beyond. In other words, it consists of a set of strategic, structural, and cultural practices that enable firms to generate, develop, and commercialize new ideas that create value for both the organization and its customers (Banmairuoy et al., 2022). In today's competitive business environment, particularly in emerging economies like Nigeria, innovation management has become an essential tool for small and medium-sized enterprises (SMEs) seeking to enhance product development and achieve sustainable growth (Ebegbetale & Okon, 2022).

Indeed, scholars have argued that innovation management involves more than just technological advancements; it requires a conducive organizational culture, flexible structures, and well-defined strategies that support creativity, learning, and adaptation (Bogers et al., 2019).

Consequently, organisations that actively manage innovation processes are better positioned to anticipate market changes, develop customer-centric products, and maintain competitive advantage.

SMEs in Nigeria face significant challenges such as limited access to finance, insufficient infrastructure, and poor innovation capabilities, which often impede their ability to successfully manage innovation (Nimfa et al., 2021). Nonetheless, innovation management can serve as a critical enabler for overcoming these barriers by fostering resilience, flexibility, and market responsiveness. Furthermore, innovation management practices are increasingly being shaped by the global digital transformation, which compels firms to integrate digital technologies into their innovation processes (Dwivedi et al., 2022).

Empirical studies have shown that organisations with strong innovation management practices tend to exhibit higher performance in product development, market adaptation, and customer satisfaction (Huynh et al., 2024; Zhanget al., 2023). This therefore highlights the importance of fostering an organizational environment where innovation is not only encouraged but systematically managed to ensure sustained product development success.

2.1.1 Dimensions of Innovation Management Practices

Innovation management is multidimensional, encompassing various organizational elements that collectively influence how innovation is conceived, implemented, and sustained within firms (Soomro et al., 2021). That implies that for SMEs in developing economies like Nigeria, effectively managing innovation is crucial for achieving product development success. This section explores three key dimensions of innovation management practices: organizational structure, organizational strategy, and organizational culture.

a) Organizational Structure

Organizational structure refers to the systematic arrangement of roles, duties, authority, and communication channels within an organization. It significantly shapes the way innovation is managed by determining how ideas are generated, shared, and implemented (Lazarević & Mosurović, 2023). A flexible and decentralized structure is often associated with greater innovation capacity, as it encourages collaboration, reduces bureaucracy, and allows quicker decision-making. In contrast, rigid hierarchical structures can stifle creativity, slow down

processes, and create barriers to change. In the context of Nigerian SMEs, the lack of adaptable organisational structures often hampers innovation efforts. Many SMEs operate within traditional, top-down frameworks that limit employee involvement in decision-making and hinder the flow of new ideas (Nguyen et al.,2023). For instance, a more dynamic structure, where cross-functional teams and open communication are encouraged, has been found to enhance firms' ability to respond to market changes and introduce successful products (Li et al., 2018). Thus, for innovation management to thrive, SMEs must adopt structures that promote agility, collaboration, and information sharing, enabling them to develop competitive products in an increasingly volatile market environment.

b) Organizational Strategy

Organisational strategy serves as the roadmap that guides a firm's actions, resource allocation, and competitive positioning. It is a fundamental dimension of innovation management because it shapes the direction and intensity of innovation activities within an organization (Lopez & Oliver, 2023). Indeed, a well-articulated innovation strategy enables firms to align their innovation efforts with business objectives, market trends, and customer expectations. For SMEs in Nigeria, strategic planning for innovation is often underdeveloped, leading to fragmented or reactive innovation practices (Ajonbadi et al., 2015). Interestingly, firms that prioritize innovation within their strategic frameworks by investing in research and development, setting clear innovation goals, and continuously scanning the external environment are more likely to succeed in product development (Agri et al., 2018). Moreover, proactive innovation strategies help SMEs manage risks associated with new product development while capitalizing on emerging opportunities.

Strategic alignment also requires that innovation initiatives receive adequate leadership attention and resource commitment. Without strategic backing, innovation efforts may lack focus, resulting in wasted resources and failed product launches (Al Suwaidi et al., 2021). Therefore, embedding innovation within the organisational strategy is essential for ensuring that new product development efforts are purposeful, market-relevant, and sustainable.

c) Organizational Culture

Organisational culture refers to the shared values, beliefs, and norms that shape behaviour within a firm. It is a powerful driver of innovation management because culture that encourages

experimentation, tolerates failure, and rewards creativity fosters an environment where innovation can flourish (Kareska, 2024). In contrast, conservative or risk-averse cultures tend to inhibit new ideas and discourage proactive problem-solving. For Nigerian SMEs, building an innovation-friendly culture presents unique challenges. Moreover, the absence of strong leadership support for innovation or a clear articulation of innovation values within the workplace may create resistance to change. Empirical studies highlight that SMEs with supportive cultures—where open communication, continuous learning, and employee empowerment are emphasized—tend to perform better in new product development and market adaptation (Kareska, 2024; Keelson et al., 2024;). In addition, the recent global shift towards digitalization has further highlighted the need for cultural agility. As new technologies reshape industries, SMEs must foster cultures that are open to technological adoption, innovation-driven thinking, and customer-centric solutions.

2.2 The Concept of Product Development

Product development is a critical organizational process that involves the creation, improvement, and commercialization of new or existing products to meet market demands and enhance competitiveness (Falihat et al., 2024). At its core, product development encompasses a series of interrelated activities aimed at transforming market opportunities or technological advancements into tangible products or services. Okafor (2025) posits that product development serves as a bridge between innovation and market relevance, ensuring that business offerings remain attractive and valuable to customers. This, the strategic importance of product development has grown in recent years due to rapid technological advancements, shifting consumer expectations, and increased globalization. As markets become more saturated and customer preferences evolve, organisations must continuously innovate and update their product portfolios to maintain relevance and profitability.. In this context, product development is no longer a one-time event but an ongoing strategic capability that supports long-term business sustainability.

In the Nigerian business environment, where SMEs face multiple challenges including limited access to finance, poor infrastructure, and intense market competition, effective product development is essential for survival and growth (Elikwu, 2024). Many SMEs, however, struggle with weak research and development (R&D) capabilities, lack of innovation orientation, and insufficient strategic planning, which hinder their ability to develop competitive products

(Elikwu, 2024). This underscores the need for Nigerian SMEs to adopt structured product development processes and to invest in market research, innovation management, and talent development.

Moreover, the COVID-19 pandemic and the acceleration of digital transformation have further highlighted the importance of agile product development. Firms that were able to quickly adapt their products or services to meet changing consumer needs, such as through digital platforms or new service models, were better positioned to navigate the crisis (Dwivedi et al., 2022). For SMEs, this shift emphasizes the need for flexibility, speed, and customer-centric approaches in product development processes. Product development success is influenced by several factors, including organizational structure, strategy, culture, and leadership (Şen, 2024). For example, an organizational environment that supports creativity, risk-taking, and cross-functional collaboration tends to foster more innovative and successful product outcomes. Furthermore, aligning product development efforts with market intelligence and customer feedback increases the likelihood of commercial success.

2.3 Theoretical Framework

This study is anchored on Schumpeter theory of innovation which states that innovation is the main thing that drives economic growth and keeps businesses alive (Schumpeter, 1934). The Schumpeter's Theory of Innovation is useful in analyzing the relationship between innovation management practices and product development success. This theory is very helpful because it doesn't just look at one side of innovation; it looks at everything businesses do to stay competitive (Callegari & Nybakk, 2022). As far as innovation management is concerned, Schumpeter's idea is very valid because it explains why businesses need to think outside the box and manage their ideas well. If businesses do not manage innovation, they won't be able to create new products or even improve old ones. According to Owolabi & Ireferin (2022), companies in the paint sector are always trying to improve their product quality or come up with new colours and finishes to meet customers' needs. Without good innovation management, it will be hard to achieve these goals.

Product development is like the fruit of innovation. When businesses manage innovation well, they can develop products that make customers happy and solve their problems. According to Kotler (2006), a product is not just something physical; it's what customers buy to satisfy their

needs. Schumpeter's theory supports this because it says businesses must innovate to create products that people actually want. For example, in the manufacturing sector, companies use new production methods and materials to make better and more affordable products.

Another thing about Schumpeter's theory is that it focuses a lot on the role of technology and how it changes the way businesses operate. Technology is a big part of innovation management because it helps businesses create and test new ideas faster (Śledzik, 2013). For example, in the paint industry, technology helps companies develop eco-friendly paints that are better for the environment. This aligns with Schumpeter's point that innovation drives economic growth by solving problems and creating new markets.

To situate the variables in this theory, innovation management practices are the independent variable because it is like the engine that starts everything. Without good innovation management, there cannot be effective product development, which is the dependent variable. The relationship is simple: when businesses manage innovation well, they can develop better products. If they don't, they'll struggle to keep up with their competitors. Dwivedi et al.. (2022) point out those companies with strong innovation management systems are more likely to create products that meet customer needs and stay relevant in the market.

2.4 Empirical Review

Şen (2024) explored the application of the TRIZ methodology in innovative product development through the case study of an oil cap used in propeller shafts of motor vehicles. The study addressed the dual design challenge of ensuring both sealing and airflow within the product. By integrating TRIZ—a problem-solving tool that fosters innovation—creative solutions were developed to overcome design difficulties. The oil cap prototype was tested and successfully validated, leading to the development of a commercialized innovative product. The study demonstrates that TRIZ enhances product development processes by systematically solving design challenges and provides a practical guide for designers seeking to develop market-ready innovations.

Burapajatana et al. (2025) study aimed to redesign and develop innovative lifestyle fashion products by integrating traditional Thai weaving patterns, particularly from the northern region, with modern production techniques. Using both quantitative and qualitative research methods, the study analyzed consumer preferences and generated design guidelines that merged cultural

heritage with contemporary fashion trends. The redesigned products utilized digital printing and handicraft methods to enhance aesthetic appeal, resulting in multifunctional fashion collections suitable for various occasions. The final designs followed a Deconstructivist style, emphasizing asymmetry and dimensional depth. The research successfully demonstrated how cultural capital can be revitalized through innovation, producing sustainable, culturally rich fashion that appeals to modern consumers while preserving traditional craftsmanship.

This study by Carpinetti et al. (2007) presented a conceptual model for managing continuous innovation and performance measurement within SME clusters. The model aims to enhance collective efficiency by guiding improvement actions and monitoring outcomes across firms. Applying this model in a real-world SME cluster, the study highlights the challenges of developing and using performance indicators in small businesses. However, it demonstrates that the proposed framework can foster cooperation, continuous innovation, and maturity within SME networks. The research provides practical insights into how collective performance management can be instrumental in driving sustained innovation, improving competitiveness, and strengthening collaboration among clustered SMEs.

Yousaf and Palazzo (2023) examined how homophily—the tendency of individuals to associate with similar others—affects innovative work behaviour in SMEs. Using data collected from 423 SME employees through a cross-sectional survey, the study found that homophily positively influences employees' innovative behaviours. The research further reveals that job excitement serves as a mediator, enhancing the relationship between homophily and innovation, while employee functional flexibility acts as a moderator, strengthening this relationship. The findings highlight the importance of fostering social similarity, enthusiasm, and flexibility within SMEs to boost innovation. This study contributes to innovation management literature by clarifying the psychological and social mechanisms that drive innovative behaviour in dynamic SME environments.

Zhou et al. (2021) tested a deliberate innovation management model for SMEs, integrating the “cognition-intention-action” framework by combining knowledge management (KM) and deliberate strategy perspectives. Using survey data from 633 Dutch SMEs, the study found that firms engaging in external knowledge acquisition and internal knowledge-sharing are more likely to strengthen their innovation orientation, which positively impacts innovation performance. The

research highlights the dual role of external scanning and internal knowledge creation in driving innovation. It contributes to the innovation management literature by emphasizing the importance of a deliberate, knowledge-driven approach to innovation and provides practical guidance for SMEs seeking to enhance innovation capabilities through systematic knowledge management practices.

Didonet and Diaz-Villavicencio (2020) examined how Market Orientation (MO) influences learning for innovation in SMEs by strengthening organizational structures and innovation linkages. Using survey data from 169 Ecuadorian SMEs and Partial Least Square Path Modeling (SmartPLS 2.0), the study found that MO directly and indirectly enhances learning for innovation. Organizational structure was identified as a stronger mediator than linkages. The study highlights the importance of creating market-oriented cultures supported by flexible structures and innovation networks to drive continuous learning and innovation. It offers valuable insights for SME managers aiming to improve innovation outcomes and contributes to the broader literature on innovation management in SMEs.

Similarly, Didonet et al. (2015) examined the relationship between organizational structure and performance in the Aghajari Oil and Gas Production Company. The study employed a descriptive-survey method, with a sample size of 240 employees. Data was analyzed using SPSS software. The results revealed that structural elements such as complexity, formality, and centralization significantly affected organizational performance. The study concluded that adjusting these structural components to balance authority distribution and procedural flexibility leads to better overall performance and employee effectiveness.

Edison et al. (2019) conducted a case study on product innovation through internal startups in large software companies. The study examined 12 internal startup initiatives within three multinational software firms. The findings revealed that organizational culture significantly influenced the success of internal startups, with companies fostering open communication and risk-taking achieving higher innovation outcomes. The study concluded that a flexible and experimental organizational culture is key to sustaining innovation in product development.

3. METHODOLOGY

The study adopted a survey research design. The study used the entire 50 Management Staff of five selected paint manufacturing firms, including; Star paints (6), Chidons paint Venture (5), Dulux Colour shop (9), Permolit paints Nigeria (8), peculiar ultimate paint (6), Fine coat paint (5), Alexis painting world (11). The survey design is justified for this study as it allows for the efficient collection of quantitative data from a relatively small but diverse population across multiple firms, enabling the researcher to capture a broad range of perspectives on innovative management practices and product development success. The use of an exhaustive survey ensures that every member of the target population is included, thereby enhancing the accuracy, reliability, and generalizing the findings within the selected paint manufacturing firms.

3.1 Techniques for data analysis

The study adopted a quantitative approach with descriptive statistics, including frequencies, percentages, means, and standard deviations, to summarize the data. To assess the relationships between the variables, Pearson correlation analysis was conducted. This approach was chosen due to the nature of the study, which involved census data from a relatively small population. Hypotheses were tested using multiple regression analysis.

3.2 Model Specification

$$PD = f (IM, U) \dots\dots\dots \text{Equation (1)}$$

$$IM = (OS, OST, \text{ and } OC) \dots\dots\dots \text{Equation (2)}$$

Equation (1) is expanded as follows:

$$PD = a + \beta^1 OS + \beta^2 OST + \beta^3 OC + U \dots\dots\dots \text{Equation (2)}$$

Where:

IM = Innovation Management

PD = Product Development

OS = Organizational Structure

OST = Organizational Strategy

OC = Oorganizational Culture

U = Error term or stochastic variables.

B^0 - β_n = Coefficient of Regression.

4. RESULTS AND DISCUSSION

This section presents the data analysis, results and discussion of the study on innovation management and product development. The analysis includes descriptive statistics and multiple regression analysis to test the research hypotheses.

4.1 Descriptive Analysis

Table 4.1. Summary of the Descriptive statistic for the Variables

Variable	Mean	Standard Deviation
Structure	3.50	0.42
Strategy	3.51	0.41
Culture	3.54	0.45
Product Development Success	3.62	0.40

Source: Authors' Computation, 2025

Table 4.1 presents the summary of the descriptive statistics for the study variables, showing that all variables have mean values ranging from 3.50 to 3.62, indicating a generally high level of agreement among respondents. The standard deviation values, which range from 0.40 to 0.45, suggest a relatively low variability in responses across the variables.

4.2 Multiple Regression Analysis

A multiple regression analysis was conducted to determine the combined influence of Structure, Culture, and strategy on product development. This helps to quantify the extent to which the independent variables predict the dependent variable.

Model	R	R ²	Adj R ²	Std Error of Est
1	0.824	0.679	0.659	0.24321

Source: Authors' Computation, 2025.

The R value of 0.824 shows a strong correlation between the observed and predicted values of product development success. R^2 of 0.679 means that approximately 67.9% of the variation in product development success is explained by the three predictors: Structure, Culture, and Strategy.

Table 4.2. ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.432	3	3.811	56.98	0.000**
Residual	5.408	46	0.118		
Total	16.840	49			

Source: Authors' Computation, 2025

The F-statistic of 56.98 is significant at $p < 0.001$, indicating that the overall regression model is a good fit for the data.

Table 4.2. Regression Coefficients

Predictor	Unstandardized Coefficients (B)	Std. Error	Beta (β)	T	Sig.
Constant	0.384	0.213	–	1.803	0.078
Structure	0.301	0.082	0.336	3.671	0.001**
Strategy	0.339	0.077	0.367	4.403	0.000**
Culture	0.294	0.075	0.328	3.920	0.000**

Source: Authors' Computation, 2025

The regression results indicate that Structure ($B = 0.301$, $p = 0.001$), Strategy ($B = 0.339$, $p = 0.000$), and Culture ($B = 0.294$, $p = 0.000$) all have positive and statistically significant effects on Product Development Success. The high Beta values suggest that Strategy has the strongest standardized impact, followed closely by Structure and Culture. The model's constant is not statistically significant ($p = 0.078$), implying that when all predictors are zero, the dependent variable does not significantly deviate from zero.

4.3 Hypotheses Testing

Hypothesis One

H0₁: Organisational structure has no significant relationship with Product Development Success

Result:

Pearson $\beta = 0.743$, $p = 0.000$

Decision: Since Organisational structure has ($\beta = 0.743$, $P = 0.000$), we reject the null hypothesis (**H0₁**) and accept the alternative, implying that organizational Structure has a significant positive relationship with Product Development Success.

Organizational Structure has a significant positive relationship with Product Development Success.

Hypothesis Two

H0₂: Organizational strategy does not play a significant role in product development success.

Result:

Pearson $\beta = 0.778$, $p = 0.000$

Decision: Since Organizational Strategy has ($\beta = 0.778$, $P = 0.000$), we reject the null hypothesis (**H0₂**) and accept the alternative, implying that Organisational Strategy plays a significant role on Product Development Success.

Organizational Strategy plays the most significant role on Product Development Success among the three dimensions studied.

Hypothesis Three

H0₃: Organizational culture does not significantly impact on product development success.

Result:

Pearson $\beta = 0.762$, $p = 0.000$

Decision: Since Organisational Culture has ($\beta = 0.762$, $P = 0.000$), we reject the null hypothesis(**H0₃**) and accept the alternative, implying that organisational culture significantly impacts ProductDevelopment Success.

Conclusion: Organisational Culture significantly impacts Product Development in the studied firms.

4.4 Discussion of Findings

The analysis of data collected from 50 respondents in this study revealed a strong and statistically significant relationship between innovation management practices and product development success in the paint manufacturing firms. Innovation management, which in this context refers to the strategic integration of organizational structure, strategy, and culture to drive innovation, was found to have a direct and positive influence on the ability of firms to develop new or improved products.

The Pearson correlation coefficients showed high positive relationships between each innovation management component and product development success, with strategy recording the highest correlation ($r = 0.778$), followed closely by culture ($r = 0.762$) and structure ($r = 0.743$). This implies that all three dimensions of innovation management practices are integral to achieving excellence in product development success. The regression analysis confirmed these findings, with significant beta coefficients ($\beta = 0.336$ for structure, $\beta = 0.367$ for strategy, and $\beta = 0.328$ for culture), all at $p < 0.01$, indicating strong predictive capacity.

These results validate the conceptual framework of this study and align with the Resource-Based View (RBV) of the firm, which posits that firms derive competitive advantage through the effective utilization of internal resources and capabilities. This finding echoes the work of Abdel-Kader et al. (2009) and Al Suwaid et al. (2021), who emphasized the importance of strategic positioning and planning in innovation success.

Organizational culture, the second strongest predictor, also plays a major role. A culture that promotes creativity, experimentation, and openness to change fosters an environment in which innovation can thrive. When employees feel safe to share ideas and challenge conventional methods, the likelihood of generating successful new products increases significantly. This finding aligns with the work of Ballardo Cárdenas et al. (2022), who argued that organisations with a strong innovation culture are more adaptive and responsive to changing market conditions.

The relationship between structure and product development, though slightly lower in strength, remains highly significant. The data suggest that flexible and decentralized organizational

structures facilitate innovation by enabling faster decision-making, enhanced communication and collaboration across functions. These findings are consistent with Burns and Stalker's theory (1961) on the superiority of organic structures in turbulent and innovation-driven environments.

When all three innovation management components were analyzed collectively through multiple regression, they explained 67.9% of the variance in product development success ($R^2 = 0.679$), with the model itself being statistically significant ($F = 56.98, p < 0.001$). This demonstrates that innovation management is not a one-dimensional concept, but rather a multifaceted system in which structure, culture, and strategy work together to influence innovation outcomes. This finding has closed the gap in literature.

5. CONCLUSION AND RECOMMENDATIONS

The study concludes that innovation management has a profound and positive effect on product development success in Nigerian paint manufacturing firms. All three core elements of innovation management—structure, culture, and strategy, were found to significantly enhance the capacity affirms to generate, design, and market new and improved paint products. This study confirms that a flexible and responsive structure facilitates efficient decision-making, encourages teamwork, and allows for fast-tracked development cycles. Also, An innovation-aligned strategy ensures that company efforts are directed toward long-term value creation through customer-driven and technology-enabled product development. As well as a supportive culture acts as a breeding ground for ideas, experimentation, and collaborative innovation.

The integration of these three variables significantly influences a company's innovation trajectory. Paint firms that adopt such practices are more likely to sustain market leadership, adapt to consumer preferences, and withstand competitive pressures.

5.1 Recommendations

Based on the study, the research made the following recommendations;

1. **Firms Should Adopt Adaptive Organizational Structures:** Manufacturing companies should dismantle overly bureaucratic structures and create flexible organizational frameworks that empower employees, foster team collaboration, and facilitate agile decision-making processes.
2. **Promote an Innovation-Centric Organizational Culture:** Management must cultivate workplace culture that values creativity, encourages knowledge sharing, tolerates smart failure,

and supports continuous learning. Internal workshops, employee suggestion programs, and innovation hubs should be initiated.

3. Integrate Innovation into Strategic Planning: Innovation should be a core element of corporate strategy. Firms should set clear innovation goals, allocate budgets for R&D, invest in digital tools, and track innovation metrics. This ensures that innovation is not just reactive but proactively pursued.

4. Invest in Talent and Training: Paint firms should invest in human capital by organizing innovation workshops, sending employees to technical expos and conferences and facilitating cross-training across departments to expand skill sets and knowledge transfer.

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