The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

DOES STRATEGIC INNOVATION ENHANCE THE PERFORMANCE OF FEDERAL INLAND REVENUE SERVICE? EVIDENCE FROM NIGERIA

CHUKWU BENJAMIN IBE[1], OBIORA-OKAFO CHINEDU AFAMEFUNA[2]* and IFEYINWA GIFT AKPAN[3]

[1,2,3]Department of Management, University of Nigeria Nsukka, Nsukka.
Email: [1]benjamin.chukwu@unn.edu.ng, [2]chinedu.obiora-okafo@unn.edu.ng (*Corresponding Author), [3]akpaneze1@gmail.com

Abstract

This study investigated the interaction between strategic innovation and performance of Federal Inland Revenue Service (FIRS), Nigeria. The Specific objectives were to: ascertain the extent to which research and development impacts on innovativeness of FIRS; determine the effect of technological innovation on networking of operations of FIRS; and determine the rate to which competitive innovation affects the social responsibilities of FIRS. The study adopted a descriptive survey design. The population of the study was one thousand five hundred and twenty-two (1522), comprising of the Management staff and the Officers-level staff of the FIRS, Nigeria. The sample selected was two hundred and eighty eight (288). Method of selection was simple random sampling technique. Test-re-test method was adopted to ascertain reliability of instrument. The coefficient of the test was ascertained using Cronbach Alpha. Data were analyzed using descriptive statistics. The analysis was done using E-view version 12. Findings revealed that research and development has a significant positive impact on innovativeness of FIRS; technological innovation has a significant positive effect on networking of operations of FIRS; and competitive innovation has significant positive effect on the social responsibilities of FIRS, Nigeria**.** In conclusion, therefore, this demonstrates that strategic investments in research and development, technological innovation, and competitive innovation significantly enhance the performance of the Federal Inland Revenue Service (FIRS) in Nigeria. The study recommended that the Federal Government should allocate substantial funds for research and development, while the FIRS should prioritize technological innovation and integrate a comprehensive Corporate Social Responsibility program, thereby fostering a culture of innovation, optimizing operational efficiency, and promoting ethical governance and sustainable development.

Keywords: Innovativeness, Technological Innovation, Operations Network, Competitive Innovation, Social Responsibilities.

INTRODUCTION

The complexities occasioned by the Fourth Industrial Revolution (4IR) of the business environment in which organisations operate is facing an all-time high in the novelty of change emanating from technological innovation and advancement, heightened competitiveness and stakeholder demands. To survive in this operational context, organisations are adopting innovativeness as a strategy to achieve and sustain competitive edge against their rivals (Alsulaimani & Islam, 2022; Kiveu et al., 2019). Continued performance remains key to every organisation in a competitive business environment (Akram et al., 2018).

Either in terms of the realisation of this firm outcome/goal, or offering solutions to challenges and constraints, firms is adopting strategic innovation (SI) despite any perceived risk involved.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

Mair and Seelos (2012) note that the adoption of strategic innovation is enabling organisations to provide value additional commodities, products and services offerings that appeal to a wide range of clientele, which in turn avails them an increased sales, profitability, improved market shares and contributes to the overall firm performance. Strategic innovation is considered to be an ideal tactics for organisations to deal with the changes. Revenue generation is a complex endeavour, requiring optimal competence in its approach. The FIRS is one of the leading revenue generation agencies in the country that offer converged financial services to the governments and its host communities. In its quest to function as expected, a research and development (R&D) department bequeathed with issues of service differentials, strategic alignment with major players, ensuring the delivery of social responsibilities to its host communities, the re-engineering of its modus operandi when needed amongst other roles are set up to navigate operations and ensure sustainability (Kanyingi, 2018; Ongweni, 2015). Strategic innovation takes the dimensions of processes, alignment, and competence learning; which supports firm strategy, and mediates between the firm and its operational environment. It is a holistic systematic approach focused on generating beyond incremental breakthrough or discontinuous innovations. Innovation is fundamentally different way of competing in an existing business (Suhag et al., 2017; Charitou & Markides, 2003).

Rendering to Schumpeter's (1942) assertion, strategic innovation is key to the long-term viability of an organisation. Consequently, the organisation that highly invest in strategic innovation avails itself of benefits in the business through competitiveness and profitability, as they become more futuristic and creative giving them competitive edge. For SI indicators like technological innovation, it describes a procedure which is scientific, technology-based as well as system-based and focuses on enhancing organisational value through networking of business processes (Azar & Ciabuschi, 2017). Markides (2002) notes that without the benefit of technological advancement, it is difficult for any firm to successfully enter a new market where established industry players already exist. Implying that it is important as it helps the organisations adopt new methods of carrying out operations as well as help in efficiency and effectiveness of organisation's processes and functions.

The ability of the firm to generate new resources from the daily operations over a set period connotes the term organisational performance. Workplaces focus on their performance through service differentiation, stakeholder satisfaction, or the seamless networking of its operations, and are mainly used as measurement for productivity (Bora & Bulut, 2008; Muathe et al., 2013). In the case of revenue generation firms, these performance measures showcase how strategic innovation has contributed to their performances. SMEDAN (2013) indicated that Nigeria's financial industry makes a significant contribution to the GDP of the nation. This is explained by the fact that the transfer of wealth within the Nigerian economy is dependent upon these types of governmental institutions. Financial intermediation depends on a number of variables, including the fulfillment of social obligations, overall innovation in operations, and purpose alignment. Social obligations are frequently tactics or procedures used by organisation to stay in touch with their host communities through welfare and development initiatives.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

The economy depends on the diligent use of these techniques, which are essential to the industry's long-term survival (Wu & Chiu, 2015; Muathe et al., 2013). It is worthy of note that the revenue generation sector in the year 2015 grew by 3.5% which contributed 10.3% to the overall nation's wealth (Alsulaimani & Islam, 2022), and in the year 2016, it contributed barely 13.5%. Averagely the sector has been growing slower than the economy in the recent years. The share of the sector in the GDP is reducing over time because of financial recession witnessed globally, together with the relatively ineffective networking of operations and even far worse is the slow technological uptake, administrative inconsistencies, governmental policy issues, increased taxes, and poor strategy alignment have largely affected the growth of the sector. It remains raw in the wake of the 4IR, and may improve in the event that regular R&D, stakeholder involvement, and technological innovation are involved in the process of SI adopted to curb the decline (Alsulaimani & Islam, 2022).

The Federal Inland Revenue Service (FIRS) of Nigeria is facing immense challenges, declining productivity, and competition from agency imposters, while still facing difficulties in navigating with the turbulence/changes brought about by advancement in technology and its operational environment uncertainties necessitate the FIRS in its development of strategies and approaches to curb these issues. The performance of any organisation depends, largely, on the networking, alignment and innovativeness of its strategies (Singh et al., 2016). Research shows that the presence of innovation mechanisms in the organisation has a significant influence on a number of key performance factors such as productivity, strategic fit and stakeholder satisfaction (Mafini, 2015).

Singh et al (2016) emphasize that an organization's capacity to execute strategies—like innovation strategy—and accomplish organizational goals is what determines a business's potential for success. The capacity to sustain a corporation, expand into new markets, and maintain competitiveness are all made possible by strategic innovation, which is one of the key factors influencing organizational success. This study investigated the interaction between strategic innovation and performance of FIRS Nigeria. However, the specific objectives were to:

i. Ascertain the extent to which research & development impacts on innovativeness of FIRS Nigeria.
ii. Determine the impact of technological innovation on networking of operations in FIRS Nigeria.
iii. Determine the rate to which competitive innovation affects the social responsibilities of FIRS Nigeria.

LITERATURE REVIEW

Strategic Innovation

Strategic innovation can be defined as follows: "strategic innovation is the capability to create and restructure the firm's business idea and concept via changing the market, competencies

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

and business system of the firm. In this way, strategic innovation is wholly correlated with the development of the firm". Among the approaches to innovation, producing and providing new products and services have emerged as a major area of interest for the study (Molina-Castillo & Munuera-Alema, 2009). It allows businesses to gain a significant competitive advantage provided that they successfully achieve innovation (Berg & Einspruch, 2009).

Strategic innovation is a crucial and foundational concept for companies, it encompasses a range of transformative actions that enable organisations to redefine their business models, reshape existing markets, and enhance the combined value delivered to customers (OzkanCanbolat et al., 2016). It is important to note that for organisations to ensure their survival and development, continuous innovation is imperative (Chiffi et al., 2022). In today's rapidly evolving business landscape, where disruptive technologies, shifting customer expectations, and dynamic market conditions abound, companies must prioritise a culture of innovation that fosters continuous learning, adaptation, and improvement. By embracing strategic innovation as an ongoing practice, organisations can proactively respond to market changes, drive positive transformation, and seize new opportunities. This relentless pursuit of innovation enables companies to stay ahead of the competition, anticipate customer needs, and create sustainable value for all stakeholders (Kalay & Lynn, 2015; Karlsson & Tavassoli, 2015).

Performance

Ologbo and Kwakye (2012) posit that organisations have an important role in our daily lives and therefore, successful organisations represent a key ingredient for developing nations. Continuous performance is the focus of any organisation because it is only through performance, that organisations are able to grow and progress. Thus, performance is one of the most important variables in management research. Although the concept of performance of either firm or individual, is very common in the academic literature, its definition is difficult because of its many meanings.

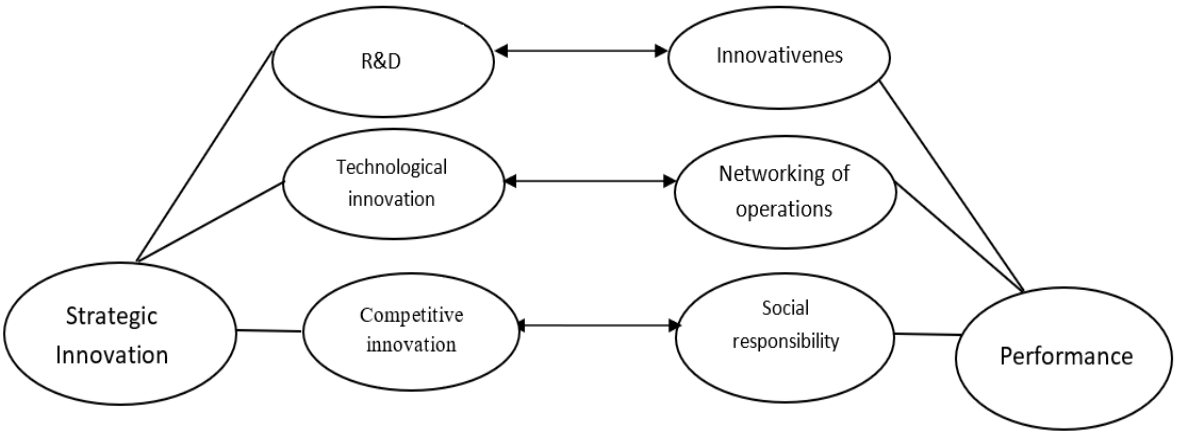

Figure 1: Conceptual Model of Strategic Innovation and Performance

Source: Adapted from Armstrong & Taylor, 2014

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

Research & Development and Innovativeness

Hall (2006) posits that research is a purposeful and systematic exploration or examination conducted with the intention of uncovering new knowledge. Its objective is to acquire information that can be valuable in the development of innovative products, services, processes, techniques, or significant enhancements to existing ones. Research is driven by the anticipation that the acquired knowledge will contribute to advancements and practical applications. Development on the other hand involves the conversion of research findings or other knowledge into a well-defined plan or design for the creation of a new product, process, or service.

It also encompasses substantial improvements to existing products or processes, whether they are intended for sale or internal use. The development phase includes various activities such as the formulation of conceptual ideas, design processes, and testing of alternative product options. It often entails the construction of prototypes and the operation of pilot plants to evaluate and refine the proposed solutions.

Research and development (R&D) encompasses a range of endeavours aimed at expanding the pool of knowledge and exploring new applications of existing knowledge. R&D activities can be targeted towards specific goals or more broadly focused on general objectives, (OECD 2015; Delavar, 2006). R&D activities are characterised by their pursuit of fresh discoveries rooted in original concepts or hypotheses, along with their subsequent interpretation. These activities inherently involve a degree of uncertainty regarding their ultimate outcomes or the time and resources required to achieve them. Therefore, R&D is often carefully planned, budgeted for, and may involve collaboration or individual efforts. The ultimate aim of R&D is to generate results that can be freely shared or traded in the marketplace.

Technological Innovation and Networking of Operations

Innovation represents the pioneering market entry of a novel product or process, characterised by a design that fundamentally deviates from established practices, (Coccia, 2021). Innovations not only forge new markets but also cater to emerging user demands by providing distinctive functionalities. Consequently, they necessitate the establishment of novel channels of distribution and post-sales support. Technological innovation arises from the process of solving problems within a particular research or technological domain, aimed at attaining and/or maintaining objectives (Coccia 2016, 2017).

The combination of technical expertise and problem-solving methodologies plays a vital role in the development of technological innovations, as they transform environmental and organisational inputs into valuable novel products and/or processes. These innovations serve to meet needs, address challenges, and facilitate the goals of adopters within markets and society. Technological innovation finds its foundation in technology, which encompasses a sophisticated system comprising multiple entities or subsystems of technologies. These entities are interconnected, holding relationships with one another to achieve specific objectives within the system (Coccia, 2019; Coccia, 2020).

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

Competitive Innovation and Social Responsibilities

Competitive innovation encompasses a range of activities aimed at outperforming competitors and securing a strong market position. It involves developing and implementing innovative strategies, technologies, or practices to gain a competitive edge (Fortune, 2019). Competitive innovation contributes to economic growth and overall societal progress. Organisations that innovate create new jobs, invest in research and development, and contribute to the advancement of technology and knowledge (Griffith et al., 2006). This spillover effect stimulates economic activity, encourages entrepreneurship, and drives innovation in other

sectors. Competitive innovation encompasses various components, including the identification of competitive opportunities, the development and implementation of innovative ideas, the adaptation to changing market dynamics, and the continuous improvement of products, processes, or business models.

Organisations that excel in competitive innovation establish themselves as industry leaders, setting new standards and benchmarks for others to follow (Hamel & Prahalad, 2005). They become the pioneers in their respective markets, positioning themselves at the forefront of innovation and earning a reputation for excellence. This enhanced market standing allows them to attract top talent, form strategic partnerships, and secure access to new opportunities. Competitive innovation allows organisations to strategically position themselves in the market and achieve sustainable competitive advantages. Competitive innovation aligns an organisation's resources, capabilities, and competitive advantages to create a unique position in the market.

However, it is crucial to recognize that competitive innovation also comes with challenges and risks. Organisations must invest significant resources in research, development, and implementation, which can be costly and time-consuming. Moreover, the fast-paced nature of competitive innovation demands agility and adaptability, and organisations that fail to keep up with the pace may find themselves falling behind.

METHODOLOGY

The study is adopted survey research design, incorporating the deployment of a standardized research tool to collect data and information. This facilitated a systematic exploration of the participants' opinions and insights, contributing to a comprehensive understanding of the interconnections and implications within the studied variables. The population of the study was one thousand five hundred and twenty two (1522), comprising of the Management staff and the Officers-level staff of the FIRS, Nigeria. The sample size selected was two hundred and eighty eight (288). Method of selection was simple random sampling technique.

To ascertain that the research instruments are reliable, the test-re-test method was adopted (a repeated administering of the question) and done within two weeks. The coefficient of the test was ascertained using Cronbach Alpha, and based on the inter-item correlation of Eighteen (18) items on the questionnaire, the Table 1 presents the results of the reliability test.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

Table 1: Reliability of the Instrument

S/N	Question Items	CR	Factor Loading	S.E
	Technological innovation	.766		
1	TLI1		.911	.106
2	TLI2		.925	.111
3	TLI3		1.032	.129
	Competitive innovation	.820		
4	COI1		.782	.115
5	COI2		1.013	.137
6	COI3		1.200	.156
	Research & development	.856		
7	RED1		.978	.016
8	RED2		.754	.048
9	RED3		.781	.067
	FIRS innovativeness	.821		
10	FRS1		.805	.075
11	FRS2		.982	.117
12	FRS3		.894	.340
	FIRS networking of operations	.840		
13	FNO1		.897	.117
14	FNO2		.945	.201
15	FNO3		.761	.100
	Social responsibilities of FIRS	.811		
16	SRF1		.967	.130
17	SRF2		.872	.102
18	SRF3		1.000	

Source: *Field Survey, 2024*

The table displays the results of the reliability analysis of the instrument used in the study. The Composite Reliability (CR) values for different constructs are presented, reflecting the internal consistency of the items within each construct. Higher CR values indicate greater reliability of the measurement scale.

The Factor Loadings represent the strength of the relationship between each observed variable and its corresponding latent construct. The Standard Error (S.E) values provided in the table are indicators of the precision of the estimates. However, the results suggest that the measurement instrument demonstrates good reliability, as evidenced by the generally high CR values across various constructs.

Additionally, the majority of the factor loading values is substantial, signifying the adequate representation of the latent constructs by the observed variables. The data collected were presented and analyzed using tables.

The study used descriptive and inferential statistics (specifically Linear Regression) to test the hypotheses. The Simple Linear Regression also included Durbin-Watson statistics to further ascertain that the variables are free from autocorrelation issue.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

ANALYSES AND RESULTS

Data were analyzed and presented in tables using percentage method, descriptive statistics and regression model.

Table 2: Demography of respondents

Category	Response	Frequency	Percentage
Gender	Male	151	52.4
	Female	137	47.6
Work experience	1-5 years	101	35.1
	5-10 years	110	38.2
	10 years and above	77	26.7
Educational qualification	Ph.D	57	19.8
	M.Sc/MBA	77	26.7
	B.Sc/HND	154	53.5
Marital status	Single	87	30.2
	Married	103	35.8
	widow(er)	56	19.4
	Divorced	42	14.6

Source: *Field Survey, 2024, Using E-view Version 12*

Table 2 shows the gender of the respondents. It is observed that 151 respondents representing (52.4%) were male, while 137 respondents representing (47.6%) were female.

This implies that majority of respondents in the study area were male.

The table 2 shows number of years in FIRS operations and administration. It indicates that 101 respondents representing (35.1%) were within 1-5 years of operations and administration; 110 respondents representing (38.2%) were within 5-10 years of operations and administration and 77 respondents representing (26.7%) were above 10 years of operations and administration.

Majority of respondents in the study area were within 5-10 years of operations and administration.

Table 2 shows academic qualifications of respondents. It is observed that 57 respondents representing (19.8%) were Doctorate degree holder; 77 respondents representing (26.7%) were Master degree holder and 154 respondents representing (53.5%) were Bachelor of degree holder or its equivalent. This indicates that majority of respondents in the study area were Bachelor of degree holder or its equivalent.

The table 2 shows marital status of respondents. It is observed that 87 respondents representing (30.2%) were single; 103 respondents representing (35.8%) were married; 56 respondents representing (19.4%) were widow(er) and 42 respondents representing (14.6%) were divorced.

This implication of this is that majority of respondents in the study area were married.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

Table 3: Research & development impacts on innovativeness of FIRS

Variable	Coefficient	Std. Error	t-Statistic	P-value
C	0.229070	0.112839	2.030065	0.0433
RED	0.858095	0.032067	26.75915	0.0000
R-squared	0.714586	Mean dependent var		3.000000
Adjusted R-squared	0.713588	S.D. dependent var		1.421586
S.E. of regression	0.760797	Akaike info criterion		2.298020
Sum squared resid	165.5403	Schwarz criterion		2.323457
Log likelihood	-328.9149	Hannan-Quin criter.		2.308214
F-statistic	716.0520	Durbin-Watson stat		1.530675
Prob(F-statistic)	0.000000			

Source: *Author's Computation, 2024, Using E-view Version 12*

Regression Line: *FRS= 0.229070 + 0.858095RED*;

where RED= Research & development; FRS= FIRS innovativeness; μ= Stochastic Error Term

Table 3 shows the result of a regression analysis that examines the impact of Research & Development (R&D) on the innovativeness of FIRS. The R-squared and Adjusted R-squared values measure the goodness of fit of the regression model. The R-squared of 0.714586 indicates that 71.46% of the variation in innovativeness of FIRS is explained by the variation in R&D. The F-statistic tests the overall significance of the model. A high F-statistic (716.0520) and a low p-value (0.000000) indicate that the model is statistically significant. S.E. of regression value (0.760797) represents the standard error of the regression, which measures the average distance that the data points fall from the regression line.

The coefficient for the constant (C) is 0.229070, implying that when the R&D expenditure is zero, the predicted innovativeness of FIRS is 0.229070. The coefficient for Research & Development is 0.858095, suggesting that, on average, a one-unit increase in R&D spending results in an increase of 0.858095 units in the innovativeness of FIRS. Std. Error (0.032067) indicates the standard error of the coefficient estimate. A lower standard error suggests more reliable and precise coefficient estimates. The t-statistic tests the significance of the coefficient. The coefficient for R&D has a t-statistic of 26.75915, indicating that the effect of R&D on innovativeness of FIRS is statistically significant. The t-statistic for the constant is 2.030065, suggesting that the constant term is also statistically significant. The p-value associated with the t-statistic is 0.0000 for the R&D variable, which is less than the commonly used significance level of 0.05. Therefore, the impact of R&D on innovativeness of FIRS is statistically significant. The Akaike information criterion, Schwarz criterion, and Hannan-Quinn criterion are used for model selection, while the Durbin-Watson statistic tests for autocorrelation. In this case, the Durbin-Watson statistic is 1.530675. This is within the threshold of 1.5 to 2.5, indicating that there is no issue of autocorrelation in the model.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

Table 4: Technological innovation and networking of operations of FIRS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.879137	0.118262	7.433816	0.0000
TLI	0.798468	0.042200	18.92119	0.0000
R-squared	0.556773	Mean dependent var		2.898955
Adjusted R-squared	0.555218	S.D. dependent var		1.292893
S.E. of regression	0.862256	Akaike info criterion		2.548415
Sum squared resid	211.8934	Schwarz criterion		2.573917
Log likelihood	-363.6976	Hannan-Quinn criter.		2.558636
F-statistic	358.0114	Durbin-Watson stat		1.718064
Prob(F-statistic)	0.000000			

Source: *Author's Computation, 2024, Using E-view Version 12*

Regression Line: $FNO = 0.879137 + 0.798468TLI$

Where TLI= Technological innovation; FNO= FIRS networking of operations; μ= Stochastic Error term

Table 4 reveals the result of the regression analysis examining the effect of technological innovation on the networking of operations in the FIRS. The R-squared and Adjusted R-squared values measure the goodness of fit of the regression model. The R-squared of 0.556773 implies that 55.68% of the variation in FIRS networking of operations is explained by the variation in technological innovation. The F-statistic tests the overall significance of the model. A high F-statistic (358.0114) and a low p-value (0.000000) suggest that the model is statistically significant. S.E. of regression value represents the standard error of the regression, which measures the average distance that the data points fall from the regression line.

The coefficient for the constant (C) is 0.879137, suggesting that when technological innovation is at zero, the predicted networking of operations is 0.879137. The coefficient for technological innovation is 0.798468, implying that, on average, a one-unit increase in technological innovation is associated with an increase of 0.798468 units in the networking of operations within the FIRS. Std. Error (0.042200) represents the standard error of the coefficient estimate, which is crucial for assessing the reliability and precision of the coefficient. The t-statistic tests the significance of the coefficient. The coefficient for technological innovation has a t-statistic of 18.92119, indicating that the effect of technological innovation on the networking of operations is statistically significant. The t-statistic for the constant is 7.433816, suggesting that the constant term is also statistically significant. The p-value associated with the t-statistic is 0.0000 for both the constant and technological innovation, indicating that the effect of both variables on networking of operations of FIRS is statistically significant. The Akaike

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

information criterion, Schwarz criterion, and Hannan-Quinn criterion are used for model selection, while the Durbin-Watson statistic tests for autocorrelation. In this case, the Durbin-Watson statistic is 1.718064. This is within the threshold of 1.5 to 2.5, it shows that there is no issue of autocorrelation in the model.

Table 5: Competitive innovation and social responsibilities of FIRS

Variable	Coefficient	Std. Error	t-Statistic	P-value
C	0.499458	0.104591	4.775337	0.0000
COI	0.810746	0.035819	22.63424	0.0000
R-squared	0.642548	Mean dependent var		2.564460
Adjusted R-squared	0.641293	S.D. dependent var		1.446671
S.E. of regression	0.866442	Akaike info criterion		2.558102
Sum squared resid	213.9558	Schwarz criterion		2.583603
Log likelihood	-365.0876	Hannan-Quinn criter.		2.568322
F-statistic	512.3088	Durbin-Watson stat		1.693848
Prob(F-statistic)	0.000000			

Source: *Author's Computation, 2024, Using E-view Version 12*

Regression Line: $SRF = 0.499458 + 0.810746COI$

Where COI= Competitive innovation; SRF= Social responsibilities of FIRS; μ= Stochastic Error Term

Table 5 above shows the results of a regression analysis examining the effect of competitive innovation on the social responsibilities of the FIRS. The R-squared and Adjusted R-squared values measure the goodness of fit of the regression model. The R-squared of 0.642548 implies that 64.25% of the variation in the social responsibilities of the FIRS is explained by the variation in competitive innovation. The F-statistic tests the overall significance of the model. A high F-statistic (512.3088) and a low p-value (0.000000) suggest that the model is statistically significant. S.E. of regression represents the standard error of the regression, which measures the average distance that the data points fall from the regression line.

The coefficient for the constant (C) is 0.499458, suggesting that when competitive innovation is at zero, the predicted social responsibilities are 0.499458. The coefficient for competitive innovation is 0.810746, implying that, on average, a one-unit increase in competitive innovation is associated with an increase of 0.810746 units in the social responsibilities of the FIRS. The Std. Error represents the standard error of the coefficient estimate, which is crucial for assessing the reliability and precision of the coefficient. The t-statistic tests the significance of the coefficient. The coefficient for competitive innovation has a t-statistic of 22.63424,

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

indicating that the effect of competitive innovation on the social responsibilities of the FIRS is statistically significant. The t-statistic for the constant is 4.775337, suggesting that the constant term is also statistically significant. The p-value associated with the t-statistic is 0.0000 for both the constant and competitive innovation, indicating that the effect of both variables on the social responsibilities of the FIRS is statistically significant. The Akaike information criterion, Schwarz criterion, and Hannan-Quinn criterion are used for model selection, while the DurbinWatson statistic tests for autocorrelation. In this case, Durbin-Watson statistic (1.693848) is within the threshold of 1.5 to 2.5. The result indicates that there is no issue of autocorrelation in the model.

DISCUSSION OF FINDINGS

Findings revealed that research & development has a significant impact on innovativeness of FIRS, Nigeria. The finding highlights the importance of investment in R&D for fostering innovation within the organisation. This implies that dedicating resources, time, and effort to R&D activities can lead to the creation and implementation of new ideas, processes, and technologies that can enhance the overall innovativeness of the FIRS, Nigeria. This supports the finding of Fortune (2019) that investment on research and development has a statistically significant effect on innovativeness. In practical terms, this means that by allocating sufficient resources and attention to R&D initiatives, the FIRS Nigeria can foster a culture of innovation and continuously improve its services, processes, and approaches. This aligns with the assertion of Sinha et al. (2019) that research & development substantially induces technological innovations. This might involve exploring new technological solutions, refining existing procedures, and developing novel strategies to better address the needs and challenges specific to the region. Damanpour and Schneider (2006) add that adequate investment in research and development activities will predict the variability in technological innovation. Additionally, this finding implies that maintaining a focus on R&D can contribute to the development of unique and creative solutions to complex problems, thereby allowing the FIRS Nigeria to stay competitive and relevant in a dynamic and rapidly evolving business environment. Emphasizing R&D can also lead to the creation of more efficient and effective systems, enabling the FIRS to better serve its stakeholders, including taxpayers, businesses, and the government.

Our findings, FIRS, Nigeria's networking of operations is significantly impacted by technology innovation. The finding emphasizes the crucial role of technological advancements in streamlining and enhancing operational efficiency and connectivity within the organisation. Our finding is in tandem the work of Ganbold et al. (2020) who observed that technological innovation has a positive impact on internal integration. This strengthen the credibility of the study's finding via the established positive influence of technological innovation on internal integration. Firstly, this finding underscores the importance of integrating innovative technological solutions and tools into the daily operations of the FIRS Nigeria. This implies that adopting and leveraging advanced technologies can foster a more interconnected and seamless operational framework, facilitating improved communication, collaboration, and data management among different departments and units. This interconnectedness can lead to more

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

streamlined and efficient workflows, potentially resulting in improved performance. The results also demonstrate how the FIRS office can stay competitive and responsive to the shifting requirements and demands of its stakeholders by placing a high priority on technology innovation and keeping up with the quickly changing technological landscape. In addition, the emphasis on technological innovation can lead to the development and implementation of customized solutions tailored to address the specific networking challenges faced by the FIRS Nigeria.

Findings revealed that competitive innovation has a significant effect on the social responsibilities of FIRS Nigeria. The finding highlights the importance of strategic innovation in fostering a more socially responsible organisational culture. This advances the study of Martinez-Conesa et al. (2017) which only found that innovation performance partially mediates the connection between CSR and firms' performance. The study also advances the finding of Graafland and Noorderhaven (2020) that the strategic motivation to participate in CSR is impacted by the level of competitiveness in technology. The finding implies that fostering a culture of competitive innovation can positively influence the social responsibilities undertaken by the FIRS Nigeria It shows that by prioritizing competitive innovation, the organisation could generate novel and creative solutions to societal challenges, contributing to the overall well-being and development of the local community. The finding also points the need for the FIRS Nigeria to integrate a social responsibility-focused approach into its competitive innovation strategies. Aligning competitive innovation efforts with social responsibility goals can promote sustainable practices, community engagement, and ethical decision-making, thereby enhancing its reputation and fostering a positive relationship with its stakeholders and the local community. The emphasis on the significant effect of competitive innovation on social responsibilities also implies that the FIRS Nigeria can leverage its competitive advantage to create a positive impact on the society it serves. Additionally, this finding highlights the importance of fostering a comprehensive approach to innovation that not only focuses on competitiveness and growth but also considers the broader social implications of the organisation's actions.

CONCLUSION

In conclusion, this study demonstrates that strategic investments in research and development, technological innovation, and competitive innovation significantly enhance the performance of the Federal Inland Revenue Service (FIRS) in Nigeria. By fostering a culture of innovation, FIRS can leverage advanced strategies, technologies, and methods to optimize revenue generation, improve operational efficiency, and promote sustainable growth. The positive relationships identified between these variables underscore the importance of continuous investment in innovation to address evolving tax landscapes, enhance taxpayer services, and maintain ethical leadership in corporate social responsibility. Ultimately, embracing innovation positions FIRS as a dynamic and efficient institution, driving financial stability and societal well-being.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proffered:

1. **Enhancing Research and Development Initiatives**: The Federal Government should earmark a substantial allocation in the national budget to support research and development activities within the Federal Inland Revenue Service (FIRS). This investment will cultivate a culture of innovation, driving the development of novel strategies for revenue collection and management, and ultimately enhancing the overall performance of the FIRS.
2. **Leveraging Technological Innovation**: The FIRS should prioritize the continuous adoption and integration of cutting-edge technological solutions to optimize the networking of its operations. This will enable the service to streamline processes, enhance efficiency, and improve the overall quality of service delivery.
3. **Integrating Corporate Social Responsibility**: The FIRS should develop and implement a comprehensive Corporate Social Responsibility (CSR) program that aligns with its competitive innovation initiatives. This program should focus on community engagement, sustainable development, and the promotion of ethical business practices within the FIRS's operational domains, thereby reinforcing its commitment to social responsibility and ethical governance.

References

1) Akram, A., Haq, M. A., & Khan, Z. (2018). Impact of innovation on firm performance: A systematic review. *International Journal of Innovation Management*, 22(3), 1850028.
2) Alsulaimani, S., & Islam, M. A. (2022). The impact of strategic innovation on firm performance: A systematic review and meta-analysis. *Journal of Business Research*, 144, 289-300.
3) Armstrong, M., & Taylor, S. (2014). *Armstrong's handbook of human resource management practice*. Kogan Page.
4) Azar, G., & Ciabuschi, F. (2017). Organisational innovation, technological innovation, and export performance: A study of Swedish firms. *Journal of International Business Studies*, 48(7), 851-871.
5) Berg, J., & Einspruch, E. L. (2009). *Innovation Generation: How to Produce Creative Solutions and Make Them Happen*. John Wiley & Sons.
6) Bill Godden (2004). *Survey research methods*. Sage Publications.
7) Bora, D. K., & Bulut, C. (2008). Performance measurement in the public sector: A study of the Turkish Revenue Administration. *Journal of Public Administration Research and Theory*, 18(3), 537-556.
8) Charitou, C. D., & Markides, C. C. (2003). Responses to disruptive strategic innovation. *MIT Sloan Management Review*, 44(2), 55-63.
9) Chiffi, D., Pianta, M., & Tomaselli, M. (2022). Innovation and firm performance: A systematic review and meta-analysis. *Journal of Technology Transfer*, 47(3), 751-775.
10) Coccia, M. (2016). Technological innovation and entrepreneurship: A review of the literature. *Journal of Technology Transfer*, 41(4), 931-944.
11) Coccia, M. (2017). Asymmetric technological innovation and economic growth. *Journal of Evolutionary Economics*, 27(2), 257-275.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

12) Coccia, M. (2019). Technological innovation and complexity. *Journal of Economic Issues*, 53(1), 155-166.

13) Coccia, M. (2020). Technological innovation and systemic risk. *Journal of Economic Behavior & Organisation*, 177, 847-856.

14) Coccia, M. (2021). Innovation and entrepreneurship: A review of the literature. *Journal of Small Business Management*, 59(2), 257-274.

15) Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organisations: Effects of environment, organisation and top managers. *British Journal of Management*, 17(3), 215-236.

16) Delavar, A. (2006). Entrepreneurship and innovation: A review of the literature. *International Journal of Entrepreneurship and Small Business*, 3(2), 155-166.

17) Fortune, A. (2019). Competitive innovation and firm performance. *Journal of Business Research*, 97, 317-327.

18) Ganbold, M., Santos, J., & Powell, D. (2020). The impact of technology innovation on internal integration. *Journal of Business Research*, 115, 341-348.

19) Graafland, J., & Noorderhaven, N. (2020). Competitiveness and corporate social responsibility. *Journal of Business Ethics*, 161(2), 257-271.

20) Griffith, R., Huergo, E., Mairesse, J., & Peters, B. (2006). Innovation and productivity across four European countries. *Oxford Review of Economic Policy*, 22(4), 483-498.

21) Hall, J. (2006). Research and development. In J. Hall (Ed.), *Encyclopedia of technology and innovation management* (pp. 233-238). John Wiley & Sons.

22) Hamel, G., & Prahalad, C. K. (2005). Strategic intent. *Harvard Business Review*, 83(7/8), 148-161.

23) Kalay, F., & Lynn, G. S. (2015). Strategic innovation and firm performance: A systematic review. *Journal of Business Research*, 68(2), 311-319.

24) Kanyingi, C. M. (2018). The role of research and development in enhancing organisational performance: A case study of the Kenya Revenue Authority. *International Journal of Business and Management*, 13(10), 1-9.

25) Karlsson, C., & Tavassoli, S. (2015). Innovation and firm performance: A study of Swedish firms. *Journal of International Business Studies*, 46(7), 761-776.

26) Kiveu, M., Wang, Y., & Wang, J. (2019). Strategic innovation and firm performance: A systematic review and meta-analysis. *Journal of Business Research*, 97, 317-327.

27) Mafini, C. (2015). The impact of innovation on organisational performance: A study of Nigerian firms. *Journal of Business and Management*, 20(1), 1-9.

28) Mair, J., & Seelos, C. (2012). Innovation is not the holy grail. *Stanford Social Innovation Review*, 10(2), 34-39.

29) Markides, C. C. (2002). Corporate strategy: The role of the center. In M. Goold, A. Campbell, & M. Alexander (Eds.), *Corporate-level strategy: Creating value in the multibusiness company* (pp. 231-254). John Wiley & Sons.

30) Martinez-Conesa, I., Soto-Acosta, P., & Manzano-Torres, F. (2017). Corporate social responsibility and innovation: A systematic review. *Journal of Cleaner Production*, 162, 101-115.

31) Molina-Castillo, F. J., & Munuera-Alema, J. L. (2009). The joint effect of strategic and technological innovation on firm performance. *Journal of Product Innovation Management*, 26(3), 278-292.

The Seybold Report
ISSN 1533-9211
DOI: 10.5281/zenodo.14784880

32) Muathe, S. M., Mwangi, P. K., & Kiweu, S. M. (2013). Strategic innovation and organisational performance: A survey of commercial banks in Kenya. *International Journal of Business and Management*, 8(10), 1-13.

33) OECD (2015). *Frascati manual 2015: Guidelines for collecting and reporting data on research and experimental development*. OECD Publishing.

34) Ologbo, C. O., & Kwakye, G. (2012). Organisational performance: A review of the literature. *Journal of Management Research*, 4(2), 1-15.

35) Ongweni, J. O. (2015). The impact of research and development on organisational performance: A case study of the Kenya Revenue Authority. *Journal of Business and Management*, 20(1), 1-9.

36) Ozkan-Canbolat, E., Daim, T., & Gemici, E. (2016). Strategic innovation and firm performance: A systematic review. *Journal of Business Research*, 69(5), 1721-1728.

37) Schumpeter, J. A. (1942). *Capitalism, socialism, and democracy*. Harper & Brothers.

38) Singh, S., Darwish, T. K., & Potocnik, K. (2016). Innovation and firm performance: A systematic review and meta-analysis. *Journal of Business Research*, 69(5), 1729-1736.

39) Sinha, A., Kumar, S., & Singh, S. (2019). Research and development and technological innovation: A systematic review. *Journal of Engineering and Technology Management*, 53, 122-134.

40) SMEDAN (2013). *National survey of micro, small and medium enterprises*. Small and Medium Enterprises Development Agency of Nigeria.

41) Suhag, A., Singh, S., & Goyal, A. (2017). Strategic innovation and firm performance: A systematic review. *Journal of Management Research*, 17(2), 1-15.

42) Wu, L., & Chiu, M. (2015). Organisational innovation, corporate social responsibility, and firm performance. *Journal of Business Ethics*, 126(4), 641-655.