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FIRMS' INNOVATIVENESS, MANAGERIAL DYNAMICS AND SUISTA NABILITY REPORTING AMONG LISTED MANUFACTURING COMPANIES IN NIGERIA

BY

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DECLARATION

I hereby declare that this thesis titled "firm's innovativeness, managerial dynamics and Sustainability Reporting among listed manufacturing companies in Nigeria" is my research work. It has neither been presented nor accepted in any previous application for higher degree.

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DEDICATION

This research work is dedicated to my Step Mother, Late Mrs Hiddiyat Alabere, May Allah forgive her shortcomings and grant her Aljanat Fridaus.

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All praises and adorations belong to Almighty Allah, the creator of the entire universe, the most beneficent, the most merciful for giving me the grace to complete this research work. May the unending blessing of the Almighty Allah continue be upon his beloved prophet Muhammed (SAW), his households and his companions.

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ABSTRACT

With persistence increase in global economy, sustainability reporting is deteriorating and the problem of global warming is becoming more and more serious. Thus, sustainability reporting practices has become more worrisome among communities, shareholders and other stakeholders. However, the common practice in corporate reporting principles is primarily focus on financial performance neglecting social and environmental issues. On the contrary, sustainability reporting practice is chosen as a vital tool in dealing with economic, environmental, and social issues. Issues such as pollution, waste, resources depletion, product quality and safety, the rights and status of workers, and the power of large corporations which has become the focus of increasing attention and concern among stakeholders. By implication, the above challenges have driven the attention for this study. Therefore, this study investigates effect of firm's innovativeness and managerial dynamics on sustainability reporting of selected listed manufacturing companies in Nigeria. Specifically, to determine the extent to which firm's complexity, technological infrastructure, research and development and managerial efficiency influences the sustainability reporting among manufacturing sector in Nigeria. With Ex-post factor research design and population of seventy-six (76) listed manufacturing companies, using Krejcie and Morgan (1970) 63 were sample size. However, due to unavailability of data and consistence listing of the companies forty-nine (49) out of the companies were chosen as the sample size determination table spanning across seven (7) sectors. Data obtained from these companies was subjected to Generalized Least Square and Panel Corrected Standard Error Estimation. Findings revealed that firms' complexity and technological infrastructure has negative significant effect on economic, environmental, social and sustainability disclosure while research and development and managerial efficiency have positive significant effect on economic, environmental, social and sustainability disclosure. The study therefore concluded that research and development and managerial efficiency are factors influencing economic, environmental and social disclosure of listed manufacturing companies in Nigeria. Therefore, the study recommends that Nigeria Exchange Group (NGX) should establish policy and penalties for companies that refuse adequate information disclosure about their firms operating segment and new asset acquire. In addition, the (NGX) and other regulatory body should establish more control that will ensure selected listed manufacturing companies continue disclosing information about their research and development and efficiency of their management.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The demands from corporate organizations across the globe have gone beyond the maximization of shareholder wealth to the incorporation of other stakeholders' needs. These diverse users (such as employees, community, suppliers and customers) of financial and non-financial information are demanding for the satisfaction of their own interest in their various firms; this is as a result of the effects of the firm's activities on community, environment, and social impact. Hence, there is need for firms to take a wider perspective on their reports by incorporating sustainability reporting information that is essential to meet these goals and reduce information asymmetry (Hamad, Draz & Lai, 2020). Sustainability reporting allows businesses to reveal their policies, objectives, and results in all economic, governance, social, ethical, and environmental (EGSEE) issues, thereby ensuring the attainment of long-term financial goals.

More so, concerns that some firm's innovative activities have serious environmental negative impact that can influence natural disasters, air pollution and negative impact to the employees had led to increasing acceptance of sustainability disclosure as a means of communicating firm's commitment towards preserving the environment and social effect so that future generation can achieve their own needs. In addition, companies have some level of interaction with the environment and society. Through sustainability disclosure, environmental or corporate social responsibility as it often called, firms provide information to show that they behave in an environmentally sustainable and socially responsible manner.

However, the persistence of reported cases of failure and collapse of firms around the globe has raised questions on sustainability reporting. For instance, the manufacturing sector is playing a crucial role in the growth of the economy of Italy. After service and agriculture, it is the third largest sector of Italy. The share of the manufacturing sector in the GDP of Italy is 18.7%. The manufacturing sector of Italy posted a growth rate of 3.56% during the fiscal year 2011-2012 with investments reaching $1485.0 billion (Evidence from United Nations Conference on Trade and Development (UNTAD).

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Recently, the alarming rate of manufacturing firms folding up in Italy has required much attention. This is as a result of investors and other stakeholders demanding for environmental and social reporting effects on corporate firm's innovative activities to humans and environment over the years. Thus, companies can promote sustainable development agenda or goals through sustainability reporting. Hence, firm innovation and management skill is widely known to ensure the sustainability reporting disclosure which is generally significant to shareholders and other stakeholders of firms.

Sustainability Reporting in developing countries represents the report on activities of corporations that have a direct impact on society, its environment, and economic performance (Shabbir & Wisdom 2020). However, firm's activities on innovation have been considered dominant factor in firm competitiveness and the ability to innovate the single of most important factor in enhancing and sustaining competitiveness. Also, managerial ability is the process that helps to ensure that the resources or configurations of an organization are congruent with the changing external environment (Demerjian, Lev, Lewis & McVay, 2013). In view of this, there has been an increase in demand by regulators and others stakeholders for trustworthy information on environmental, social and economic (ESE) performance of the firms as a result of the degrading environmental effects of corporate firm's activities to human and environment over the years.

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In addition, firm survival is dependent on finding a trade-off between exploiting the existing resource and capability-based, and often concurrently, exploring new opportunities for long-term growth (Güttel& Konlechner, 2009). Different dynamic environments make use of differently shaped dynamic capabilities. However, firms are expected to take cognizant of this in the annual report especially the economic and social impact on the environment where companies are operating.

In Nigeria, the increase in natural disasters, carbon emissions, as well as pollution problems (water and air), and social inequalities, has become major problems among all Nigerian firms, especially manufacturing firms. In terms of industrialization and globalization, these disasters are considered the potential repercussions of poor sustainability practices. The report on substantiality practice in some non-financial firms in Nigeria is low Evidence from Nigeria

Exchange group (NGX). Using the Global Reporting Initiative disclosure checklist (GRI-G4 reporting guidelines), it was reported that the report on sustainability practices by the industrial goods firms such as Lafarge, Dangote Cement, and the rest of the manufacturing firms are very low on average were 25%. Prior report observed that sustainability reporting in Oil and Gas firms in Nigeria is unfriendly as evidenced by Nigeria Exchange Group (NGX) in year 2013.

Furthermore, accountability for social and environmental impact cannot be ignored as it is essential to meet other stakeholders' needs aside from the shareholders. Lately, the 2019 Nigeria Exchange Group (NGX) has reported that listed manufacturing companies in Nigeria have low reporting practices on sustainability which has resulted in ineffective and poor firm innovation practices. However, good innovative practices such as technological infrastructures, research and development, and managerial dynamic mechanism such as managerial efficiency will enable companies to place priority on innovations that are environmentally friendly, social impact, and sustainable economic growth of the firms.

To reduce these calamities, various guidelines had been issued to regulate sustainability reporting such as sustainability reporting guidelines issued by Nigeria Exchange Group (NGX) which is in line with Global Reporting Initiative (GRI) published in 2011. Despite these revisions, natural disasters, carbon emissions, as well as pollution problems that have resulted in the collapse and delisting of manufacturing firms still intact on the issues that should have been revealed in the annual report and account. This has been attributed to firm innovation and managerial skills put in place by the manufacturing companies in Nigeria. As a result of this menace, this study examines firms' innovativeness, managerial dynamic, and sustainability reporting among listed manufacturing companies in Nigeria.

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1.2 Statement of the Problem

In Nigeria, Economic, Environmental and Social Disclosures constitute the major concern to communities, shareholders, and other stakeholders. However, the common practice in corporate reporting principles is primarily focus on financial performance rather than social and environmental issues. On the contrary, sustainability reporting practice is chosen as a vital tool in dealing with economic, environmental, and social issues. Sustainability reporting represents the report on activities of corporations that have direct impact on society, environment, and economic performance

It is noteworthy that issues such as pollution, waste, resources depletion, product quality and safety, the rights and status of workers, and the power of large corporations should become the focus of increasing attention and concern. More so, evidence showed (NGX) that, from the fear associated with water, land and air pollution, land and resources degradation, and deforestation have altogether led to a new paradigm for resource utilization aimed at meeting the present human need and compromising the future needs of such resource by the future generations.

Most importantly, environmental disasters such as oil spollage, environmental hazard, among others that has consequently create problems among communities where companies are situated cannot be underestimated. Also, factory workers had expressed a showy concern about the ability of companies to regulate company's behavior. Consumers derived benefits from inexpensive products made with cheap labor or cost-cutting initiatives is often harmful to the environments and communities, Thus, citizen (consumer) interests are too conflicted to be counted upon to act as neutral arbiter of what constitutes a responsible company.

Consequently, the scarce resources spent on dealing with climate and other environmental related issues will compete with what could have been achieved for economic growth and development of the nation. Findings show that Nigeria Exchange Group (NGX) assessment report on disaster reduction of the year 2015 has put economic losses from disasters such as earthquakes, tsunamis, cyclones and flooding at an average of #250 billion to #300 billion annually. These resources could be used in infrastructure, social protection, public health and public education. Furthermore, Nigeria Exchange Group (NGX) discovered that 85 top entities

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that employ more than 600 employees have not disclosed non-financial information such as economic, environmental, and social disclosures in their annual reports and accounts.

More so, manufacturing sector have been credited for their contribution towards economic and technological development. Although, there exists lot of obvious criticisms against this sector due to its major involvement in the creation of environmental and societal problem. Hence, it is paramount for every manufacturing sector to show deep commitments towards shrinking the social and environmental issues as a result of production process. Several studies have examined the determinants of sustainability reporting practices and prominent among them are Nandia & Ghosh (2014); Albitar (2015); Abdullahi & Makara (2021); Dittma et.al (2014). The common determinants as established in the literature include firm size, profitability, financial leverage, firm age, audit firm size, ownership structure and industry type. Few among these studies adopted firm innovation and managerial efficiency as the determinants for sustainability reporting practice.

The growth of environmental and societal challenges had seriously threatening the sustainable development of manufacturing firms and may consequently lead to decrease in value of companies. The challenges have been traced to complexity of firm's activities in the manufacturing sector known to be environmental hazardous and societal needs of each companies operating segment. Also, firm's complexity without adequate and commensurate economic, environment and social disclosures often resulted into stakeholders' loss of credibility in annual report.

Additionally, due to heavy competition occasioned by the changing consumers demand who frequently stop at nothing in craving for more quality and dynamic manufacturing products, most manufacturing companies deplore massive environmentally hazardous and life threatening technology infrastructure. These technologies pose serious social and environmental challenge in the vicinity where they are put to use. This raises concern for the reporting of the sustainability activities of these technological infrastructures.

Furthermore, according to respondents to Research and Development (R&D) World magazine's 2020; Global R&D funding forecast reader survey performed in September, 2019, most

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researchers have seen significant technology changes over the past year (September, 2018 to September, 2019), 89% of the survey respondents experienced technology growth in their industry, while only 6% saw a slowdown in their industry's technology growth. Consequently, despite the increase in Research and Development, Nigeria Exchange Group (NGX) in late 2019 confirmed that firms fail to disclose their economic impact, and social effect of the research and development. The implication is that, it creates stakeholders and public distrust in the annual report of their company.

More so, poor corporate financial reporting can be hinged on the inefficiency on the part of management of the company including manufacturing companies as it is conjectured that managerial efficiency will inform sound financial reporting. The literature is unclear whether managerial dynamism can be attributed to the level of economic, social and environmental information disclosure by the manufacturing companies.

To that effect, it has become necessary to resolve some of these salient issues. In order to achieve this aim, this study assesses the firm's innovativeness and managerial dynamics as determinants of sustainability reporting practices of listed manufacturing companies in Nigeria.

1.3 Research Questions

Drawing from the problem stated above, the following research questions were raised;

i. To what extent does firm's complexity influence sustainability reporting among listed manufacturing companies in Nigeria?
ii. How do technological infrastructures affect the sustainability reporting among listed manufacturing companies in Nigeria?
iii. To what level does research and development influence sustainability reporting among listed manufacturing companies in Nigeria?
iv. To what extent does managerial efficiency influence the sustainability reporting among listed manufacturing companies in Nigeria?
v. Are there variations between the sustainability reporting among sectors of listed manufacturing companies in Nigeria?

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1.4 Research Objectives

The main objective of this study is to investigate impact of the firm's innovativeness and managerial dynamic on sustainability reporting among listed manufacturing companies in Nigeria. The specific objectives are to:

i. Determine the extent to which firm's complexity influences the sustainability reporting among listed manufacturing companies in Nigeria.
ii. Determine the extent to which technological infrastructure influences sustainability reporting among listed manufacturing companies in Npigeria.
iii. Examine the extent to which research and development influences the sustainability reporting among listed manufacturing companies in Nigeria.
iv. Investigate if managerial efficiency influences the sustainability reporting among sectors of listed manufacturing companies in Nigeria.
v. ascertain the level of variations in sustainability reporting among sectors of listed manufacturing companies in Nigeria

1.5 Research Hypotheses

The following research hypotheses were stated in null form and tested with a view to achieving the research objectives:

$H_0$1: Firm's complexity does not significantly influence the sustainability reporting among listed manufacturing companies in Nigeria. Sub hypotheses

i. Firm's complexity does not significantly influence the economic disclosure among listed manufacturing companies in Nigeria.
ii. Firm's complexity does not significantly influence the environmental disclosure among listed manufacturing companies in Nigeria.
iii. Firm's complexity does not significantly influence the social disclosure among listed manufacturing companies in Nigeria.

$H_0$2: Technological infrastructures do not significantly influence thesustainability reporting among listed manufacturing companies in Nigeria. However, the sub-hypotheses are:

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i. Technological infrastructures do not significantly influence the economic disclosure among listed manufacturing companies in Nigeria.
ii. Technological infrastructures do not significantly influence the environmental disclosure among listed manufacturing companies in Nigeria.
iii. Technological infrastructures do not significantly influence the social disclosure among listed manufacturing companies in Nigeria.

$H_0$3: Research and development does not significantly influence sustainability reporting among listed manufacturing companies in Nigeria. Sub hypotheses:

i. Research and development does not significantly influence economic disclosure among listed manufacturing companies in Nigeria.
ii. Research and development does not significantly influence environmental disclosure among listed manufacturing companies in Nigeria.
iii. Research and development does not significantly influence social disclosure among listed manufacturing companies in Nigeria.

$H_0$4 Managerial efficiency (in terms of input and output) does not significantly influence the sustainability reporting among listed manufacturing companies in Nigeria. However, sub hypotheses are:

i. Managerial efficiency (in terms of input and output) does not significantly influence the economic disclosure among listed manufacturing companies in Nigeria.
ii. Managerial efficiency (in terms of input and output) does not significantly influence the environmental disclosure among listed manufacturing companies in Nigeria.
iii. Managerial efficiency (in terms of input and output) does not significantly influence the social disclosure among listed manufacturing companies in Nigeria.

$H_0$5: There are no significant variations in sustainability reporting levels among sectors of listed manufacturing companies in Nigeria.

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1.6 Justification for the Study

The investigation of the impact of a firm's innovativeness and managerial dynamics on sustainability reporting is critical because of the contribution it intends to add to the existing body of knowledge, policy, and regulation as well as to subsequent empirical works on sustainability reporting.

First and foremost, the emergence of this study is justified due to the gaps identified in the literature it intends to fill. Even though previous studies have attempted to examine the impact of a firm's innovativeness and managerial dynamics on sustainability reporting in both developed and developing countries (Agala et.al 2015; Boyatzis 2014; Abdullahi et.al 2021; Nandia 2015) there exist gaps which are related to the concept of firms innovativeness and managerial dynamics, the geographical location at which the studies were conducted, the time the study was conducted and the methodology employed.

This study conceptualizes a firm's innovativeness into three (3) components; firm complexity, technological infrastructure, research and development, and managerial dynamic also conceptualize as managerial efficiency in order to fill the conceptualization gap. The study is conducted using manufacturing companies in other to fill the geographical gap, as no or few to the best of knowledge of the researcher has been conducted in Nigeria. The study employs Generalized Least Square and Panel Corrected Standard Error to fill the methodological gap as logistic and ordinary least square were in the previous study may lead to an invalid conclusion.

Considering the importance of the outcome of this study to the existing body of knowledge, however, the results of this research will add insight and knowledge to the development of science in the field of financial reporting and sustainability reporting practices especially as it relates to innovativeness. More so, the significance of this study is also based on the fact that it will provide an opportunity to empirically test and validate prior findings in developing economies like Nigeria.

Practically, the study would increase the awareness of both financial and non-financial users of financial statement, to ensure companies disclose and compliance with GRI in their preparation of annual report. It will also create future benefits for investors, shareholders, creditors and other users of financial statement through more creativities and innovations. More so, it will provide

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insight and dissemination of knowledge to financial analysts and accountants on quality service delivery to their clients and employer respectively.

As to the importance of this study to policy and regulations, the outcomes of this study will provide relevant information as to the various strategies that stakeholders of manufacturing companies and government regulatory agency (NGX) can employ to tackle the falling in disclosure of non-financial information. This study also specifically gives information about various guidelines and policy of non-financial information that can be employed by various government regulatory agencies to the listed companies, specifically, manufacturing companies in order to reduce the level of non-financial disclosure.

1.7 Scope of the Study

The study focuses on the impact of firm's innovativeness and managerial dynamic on sustainability reporting of listed manufacturing companies. Manufacturing companies is chosen because, is one of the highest sectors that contribute highest to Gross Domestic Product (GDP) of Nigeria economy. In addition, because of their complexity of production to meet aggregate demand in Nigeria economy.

From period perspective, this study covers the period of 10 years' annual reports from 2011 up to 2020. The reason for the 10 years is for is for convenience. The year 2011 was considered for this study because it was the year Nigeria Exchange Group (NGX)mandated all listed manufacturing companies to comply with Global Reporting Initiative (GRI). As at when this research is conducted only 2020 annual report is available for use.

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CHAPTER TWO

LITERATURE REVIEW

The chapter is subdivided into six sections. The first section which is a conceptual review dwells on a review of related research concepts including the firm's innovativeness, managerial dynamic, and sustainability reporting. The second section discusses the various theories bed-rocking the study. The third section discusses and reviews the extant literature on consecution between a firm's innovativeness and sustainability reporting and managerial dynamic and sustainability reporting from which the research gaps are identified. Section four focuses on the conceptual gap, section five covers the conceptual framework and section six constitutes the theoretical framework.

2.1 Conceptual Review

The section digs into numerous concepts and issues which are relevant to the subject matter. These are the concepts of a firm's innovativeness (firm's complexity, technological infrastructures, and research and development), managerial dynamic (output and input), and sustainability reporting (economic, environmental, and social disclosures).

2.1.1.1 Firm's Innovativeness

According to Kline and Rosenberg (2010) defined Innovation as a source of the strategic logic for high growth and this is proven to the companies with high growth in terms of strategy, customers, assets and capabilities, and product or service offerings. Also cited in the work by Brunswicker and Schecter (2019) innovation refers to the transformation process in an innovation trajectory. Here, as in most studies, the innovation process (e.g. cooperation in innovation projects) is modeled as influencing the innovative input and output. The processor throughput indicators are used to explain the effectiveness of the transformation processes of innovative input to innovative outputs.

However, a firms' innovation has a significant linkage between the outcome of innovation and financial performance such as return on investment, market share, competitive position versus direct competitors, and value to customers. Therefore, Innovation is seen as crucial since the

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global marketplace is portrayed by intense social, economic, and technological changes. Hence, in adapting to changes, innovation plays a major role in nurturing the economy, enhancing and sustaining the high performance of firms in building competitiveness (Smith & Raven, 2012).

More so, innovativeness may come from new technologies, methods, production techniques, management, and business models, as well as transactional strategies (Onetti, Zucchella Jones & Dougall-Covin 2012). Therefore, innovation is the result of any of its capabilities, or a combination thereof, depending on firms' internal resources and market conditions. From this perspective, one should expect new products, processes, organizations, or transaction actions as novelties that could outperform the market's existing technical and economic value solutions and generate extraordinary profits. This Schumpeterian way of understanding a firm's dynamics and success draws on the shape of its innovative performance.

Traditionally, Innovation plays an important role in the difficult transition to a knowledge-based economy that manufacturing companies is experiencing. Despite this transition, companies tend to innovate, build, and sustain their competitive advantage to offer customers superior value. All these processes involve gathering and processing information related to customers, competitors, and the market, thus, to the concept of market orientation. Asset innovation is a strategic posture of a company that obtains internal and external information and disseminates it throughout the company (Prifti& Alimehmeti, 2017).

Given the above pieces of evidence, since innovation is seen as crucial and stakeholders are portrayed by interesting in social, economic, and technological changes in a few of these, This study tends to look into one extreme of this continuum which egregiously affects a firm's innovativeness such as the used firm's complexity, technological infrastructures and research and development (R&D) which may result in economic, environmental and social disclosures.

2.1.1.2 Firm Complexity

Porter and Heppelmann (2015) defined Firm complexity as firms operating segments, a company with a large number of business segments usually has more production lines, departments, or marketing strategies.. In a few of these, a firm's complexity will increase risks at different levels

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including operational and technological risks, leading to a greater demand for monitoring risk. Specifically, the study gauge the complexity of a company by how often the firm discloses in its annual report from our new firm's list. Higher counts of words associated with complex events, transactions, and intricate business practices should be linked with larger levels of firm-level complexity.

Furthermore, a firm's complexity, although to some extent correlated with size, measures an entirely distinctive and important aspect of a firm. Because a firm's complexity can be considered from many different perspectives and because it is difficult to measure, complexity is not a prominent variable in regression specifications (Jasky, 2015). Complexity at the firm level can be viewed, for example, in the context of management hierarchy, product logistics, accounting ambiguities, financial engineering, or information dissemination. The relevance of a firm's complexity to this study can be seen from the definition above, companies are expected to prepare separate accounts for their business segment. Because of these, companies are expected to comply with global reporting initiatives in terms of economic, environmental, and social disclosures.

2.1.1.3 Technological Infrastructures

Lovio, Mickwitz, and Heiskanen (2011) defined technological infrastructure as a process of creative destruction, research supports the idea that technologies evolve through cycles of the long period of incremental change, which enhance and institutionalize existing technological discontinuities in which new, radically superior technologies displace old, inferior ones, making possible order-of-magnitude or more improvements in organizational performance.

Also, the innovative infrastructures can either be competence-enhancing, building on existing know-how and reinforcing incumbents' positions, or competence-destroying, rendering existing know-how obsolete and making it possible for newcomers to become technologically superior competitors. The technological ferment spawned by the discontinuity ends with the emergence of a dominant design, a single architecture that establishes dominance in a product class (Uusitalo, 2014), and technological advance returns to incremental improvements on the dominant technology. Although the universality of this technology cycle is debated, it has proved to illuminate a wide variety of industries.

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However, technological infrastructure also creates uncertainty and risk for incumbents because its outcomes can be only imperfectly anticipated. An innovation's impact may not be known until it is too late for incumbents using older know-how to compete successfully with new competitors; gambling too early on a given innovation may jeopardize an incumbent's survival if that technology turns out not to become dominant. Thus, underlying technologies and technological innovation may influence organizational populations' competitive dynamics and evolution profoundly. Ecological research relating technology cycles to population dynamics, although limited in scope, yields compelling support for this assertion (Ochuko & Oluwaseun 2018).

It is also important to discuss the usefulness of this concept to this study, technological infrastructures have come to stay, for companies to improve their performance, there is a need for the firms to acquire new assets, introduce new products in the market, and improve in the existing product using creativities.

2.1.1.4 Research and Development

Firms enhance their level of competition and capacity to earn profits once they invest in R&D (Enkel, Gassmann & Chesbrough 2019). It is widely viewed that innovation through R&D makes a vital contribution to firms' sales performance productivity and profit. Therefore, this shows that the stochastic outcome of the firm's investments in R&D, physical capital, human capital, marketing, and competitive pressure from other firms within or outside the industry determines the sales performance of a firm.

Despite the existence of significant literature on the influence of R&D on performance, very little contemplation has been given to the reverse relationship. Existing empirical results are not conclusive on the nature of the relationship or the effects of firm performance on innovation (Gunday, Ulusoy, Kilic& Alpkan 2011). It is also important of the reverse link between sustainability reporting and innovation through R&D connects to the recent empirical findings suggesting that R&D activities are difficult to finance through external funding sources. Due to limited access to external finance, investment in R&D activities for firms in developing countries, tend to be low, thus yielding little innovation.

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