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Sustainable Development Goals (SDG) Reporting: An Analysis of Disclosure

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Abstract

Purpose: This study provides empirical examination of SDG reporting of the top fifty (50) listed companies in Nigeria for the period of 2016 to 2018.

Design/methodology/approach: The study adopts survey method and content analysis technique to analyze corporate SDG reporting of the selected firms. The study examines the top 50 listed firms in Nigeria based on their market capitalization. Questionnaire was distributed to financial managers of the top-50 listed firms and staffs of the big four audit firms from the Governance and Sustainability department. The fifty (50) firms selected are as follows: 17 firms from the financial sector, 13 firms from the consumer goods sector, 5 firms from the healthcare sector, 6 firms from the Oil and Gas sector, 5 firms from the industrial goods sector and 4 firms from the information technology sector. The content analysis was utilized through the PwC framework, GRI framework and IIRC framework to gauge the extent of firms' compliance regarding corporate SDG reporting. Also, the business reporting indicators for each SDG developed by GRI was employed to determine the compliance level of the selected firms with respect to corporate SDG reporting.

Findings: The empirical evidence shows that corporate organizations in Nigeria have performed poorly in corporate SDG reporting. The result of the content analysis shows poor reporting on SDG activities. Also, the result of the research survey indicates that voluntary disclosure, lack of management commitment, and lack of regulatory enforcement accounts for low SDG disclosure by the selected Nigerian firms.

Practical Implications: This study's findings call for clear responsibility and a strong drive for SDG performance from corporate institutions in Nigeria. Whilst the overall responsibility rests on the government, the actualization of SDG cannot be achieved without support from corporate organizations. The empirical approach used in this study emphasizes the need for corporate organizations to embrace sustainable practices and to integrate SDG information into their reporting cycle.

Social Implications: The finding implies that non-compliance with SDG reporting by corporate organizations may have an adverse effect on inclusive growth and hamper economic, social and governance (ESG) development in the long run.

Originality/value: This study contributes to growing literature in the area of corporate reporting and SDG research in Nigeria and other emerging economies. Also, this study provides original insight into the contribution of accounting research towards the achievement of SDG.

Keywords: Corporate Organizations, Content Analysis, Institutional Theory, Nigerian Listed Companies, SDG Reporting

1. Introduction

In 2015, member countries of the United Nations agreed to adopt the seventeen new Sustainable Development Goals (SDG) which replaced the Millennium Development Goals (MDG). The SDG consists of 17 major targets or objectives that countries must meet in order to achieve the 2030 global agenda. The major reasons for SDG adoption as suggested by Global Reporting Initiative (GRI) (2016) are to fight inequality, tackle poverty and provide inclusive development for all. Konstantinos and Dimitrios, (2016); Schaltegger, Etxeberria, and Ortas (2017) revealed that SDG has major implications for the future of corporate reporting. They argued that the inclusion of SDG targets in corporate information will further enhance the quality of financial reporting. The inclusion of SDG in the annual report further provides opportunities for firms to engage in sustainable practices and compel them to report SDG activities in their corporate annual report. International Integrated Reporting Council (IIRC) (2015) noted that SDG reporting by corporate organizations is a major achievement to overcome the limitation of conventional corporate practices. It is believed that SDG reporting will tackle real-life phenomena which take into consideration the societal issues beyond the shareholders' needs. Baker and Schaltegger (2015) revealed that SDG reporting places greater emphasis on the need for implementation of sustainability projects by corporate organizations.

The pronouncement of SDG in 2015 led to various reforms both in the public and private institutions. These reforms have a significant influence on corporate disclosure especially on issues relating to sustainable development (Li and Mckernan, 2016). The emergence of SDG raised concerns among nations on the need to develop the environment positively and creates a sustainable future for all. In the meantime, corporate organizations are showing commitment to sustainable development principles (Akinlolu, 2017), by ensuring all stakeholders are captured in the value creation process. Also, international organizations, regulatory institutions, standard-setters, and professional bodies continuously seek ways to improve corporate information, especially on the issues of sustainability after the emergence of SDG in 2015. It is believed that the SDG reporting will advance the issue of sustainability activities in corporate annual reports (Bebbington, and Larrinaga, 2014; Faisal, Tower and Rusmin, 2015; Olojede, 2021, Bamigboye, 2021). The emergence of SDG has given corporate organizations a good platform to incorporate sustainability issues in their corporate reports (Hak, Janouškova, and Moldan, 2016; Olojede et al. 2020; Adegboye, 2021). It is also seen as a better way to report non-financial information in order to ensure a balance corporate reporting that serves stakeholders' need.

Quite a number of studies such as Tamoi, Faizah, Yussri and Mustaffa, 2013; Uram, Ozer and Acheampong, 2014; Adeyemi and Ayanlola, 2015; Erin, Afeisume, and Owodunni, 2016; Li and Mckernan, 2016; Moses, Ehalaiye, Maimako, and Fasua, 2018 have shown that the conventional annual corporate report is insufficient to capture stakeholders' needs. In recent times, advocates from various interest groups such as civil societies, regulators, international organization, non-governmental organization (NGO) and environmentalists have demanded more extensive reporting from corporate organizations. In support of this assertion, Bebbington and Unerman (2018) believed that SDG reporting is inevitable by corporate organizations if they are to create value for their stakeholders in the 21stcentury. They strongly argued that companies need to identify important SDG targets and incorporate them into their business plan and model while also contributing to sustainable development globally. In emerging economies, especially African countries where the issue of sustainable development has become important (Oyewo and Isa, 2017), there is the need to pay crucial attention to the subject of corporate SDG reporting. Therefore, we are motivated to provide a detailed analysis of how corporate organizations have embedded SDG reporting in their annual corporate report with a focus on top 50 listed firms on the Nigerian Stock Exchange (NSE) for the period of three (3) years (2016-2018).

There are extant literature on the subject of sustainability reporting in emerging economies (Uwuigbe and Egbide, 2012; Tamoi, Faizah, Yussri and Mustaffa, 2013; Ngatia, 2014; Lauwo, Otusanya and Bakre, 2016; Blake et al., 2016; Zaini., Samkin, Sharma and Davey, 2018; Moses, Michael and Dabel-Moses, 2019) but none of these studies have examined the issue of SDG reporting. Though there are few studies on SDG reporting in developed countries (Feger and Mermet, 2017; Li and Mckernan, 2017; Bebbington and Unerman, 2018), there is the need to examine this study in emerging economies. Due to the timely importance of this study on the future of corporate reporting; we are motivated to examine this study and present our findings that will help shed light on the current state of SDG reporting in emerging economies, with Nigeria as a focus of study. Against this backdrop, this paper highlights the link between the disclosure of sustainability activities undertaken by the Nigerian corporate firms and their alignment with the Sustainable Development Goals (SDG) from 2016–2018.

The proposed contribution of this study is in twofold. First, this study contributes to accounting literature in the area of corporate reporting and sustainability accounting, and how sustainability (SDG) issues are addressed in corporate information. This study also provides original insight in to how corporate organizations have shown commitment to sustainability matters. Secondly, the study seeks to examine the expanded purpose of SDG reporting within the SDG context and its significant influence on society.

2. Institutional Setting-Nigeria

Nigeria is one of the largest emerging nations in the Sub-Saharan Africa. It has a gross domestic product higher than the $US2 trillion in 2017 and is one of the fast flourishing economies in the world with an annual growth rate of 7.3% as stated by the World Bank (2017). In spite of these promising economic indicators, Nigeria has a very high illiteracy rate (26%) and mortality rate (40.5 deaths/1,000 live births) relative to other African countries while a high percentage of people are living below the poverty line (51.9%) as reported by United Nations Development Programme (2018). Nigeria also has low financial inclusion with high water stress levels, poor sanitation, health facilities, waste management facilities, education, and livelihood opportunities (Morrison, Morikawa, Murphy, and Schulte, 2009).

These factors highlight the need for Nigerian companies and government to commit towards achieving the SDG. Nigeria is a member nation of the UN, and the Nigerian companies in the past had also been following the guidelines issued by the UN, like the United Nations Global Compact and the MDGs (Ahmad et al., 2016; Millennium Goals, 2015). The SDG have succeeded the fairly successful MDGs, which wrapped up in 2015 (Gore, 2015). One of the concerns of the MDGs is the lack of inclusion of the businesses- a concern which arguably appears to have been addressed in the SDG implementation process (Labonté, 2014; Scheyvens et al., 2016).

For the corporate sector, sustainability initiatives play an integral role in achieving the SDG in both developed and developing economies. Nigeria as a developing nation can help meet these development goals by directing sustainability or CSR activities towards the SDG. However, this is not a widespread exercise in Nigeria currently. In this paper, the researchers highlight the organic link between the sustainability disclosure activities undertaken by the corporate sector and their alignment with the SDG. A company can experience a number of benefits by synchronizing the CSR and SDG. First, the CSR activities will become more focused as the SDG are elaborately spelt out. Second, the companies will be able to contribute towards the national development goals and also the SDG in a more systematic manner. Third, the companies will undoubtedly uplift its image in terms of being more socially and environmentally conscious as working towards the actualization of SDG.

3. Literature Review

3.1 Accounting for Sustainable Development

Sustainable development is frequently defined as development of the present generation without compromising the ability of future generation (Li and Mckernan, 2016). The United Nations took the extremely ambitious step of setting the 17 Sustainability Development Goals (also known as the SDG or Global Goals) in 2015. The goal of sustainable development is to provide inclusive growth, economic prosperity and social transformation for everyone by 2030. GRI (2015) averred that every organization have an important role to play in achieving this goal, since organizations are key forces in the society. Accounting for sustainable development can be described as giving a stewardship report on the extent to which the firm activities have been directed towards achieving the 17 set of sustainable development goals.

Bebbington and Larrinaga (2014) argued that if accounting practices are to develop in a manner that can positively contribute towards sustainable development, there is need for researchers to draw more insights from the latest knowledge provided by sustainability science. From this perspective, effective research into accounting for sustainable development requires a move far beyond the present social and environmental accounting researches, where studies often examine rather conventional accounting elements of sustainability accounting. This, they argue, will require researchers to be more open to appreciating the broader context of sustainability science and sustainable development. Researchers then need to embrace greater levels of uncertainty and unpredictability in relationships, being researched, with sustainable development.

3.2 Sustainability Reporting and SDG Reporting

The study of Dagiliene and Sutiene (2019) examined the corporate sustainability system of large Lithuanian firms using the legitimacy-based approach. The study highlights the need to capture sustainability issues within the internal corporate information system. Integrating stakeholders' involvement within the sustainability accounting information has been the major challenge. Therefore, the study advocated for a more robust corporate sustainability report that capture stakeholders' information from both the internal and external environment. In the same vein, the study of Persic, Jankovic and Krivacic (2020) examined how CSR can be improved through sustainability reporting. The study emphasized the need for sustainability reporting to include more information about stakeholders and how they can be integrated into the CSR. The study calls for further research on the need for corporate organizations to integrate UN SDG into their sustainability reports to capture more information about the stakeholders.

One important sustainability reporting study in Africa relates to the work of Tilt, Qian, Kuruppu and Dissanayake (2020). The study looked at the state of business sustainability reporting in Sub-Saharan Africa. The study examined an in-depth analysis vis-à-vis the quality of sustainability reports. Using the GRI evaluation, the findings reveal that most sustainability reports failed to capture pertinent information that relates to social and environmental issues. The study reiterates the need for more regulations from policymakers on the need for African companies to capture important sustainability issues. It is important that our study further examines the issue of sustainability reporting in Africa by critically evaluating how SDG information is captured within the sustainability reporting framework.

The study of Bebbington and Unerman (2018) examined the role of accounting research in the pursuit of UN SDG. The authors advocated for the inclusion of SDG within the sustainability reporting framework by corporate organizations. The contribution from the study opens an avenue for a new research agenda on sustainability accounting literature. In support of the work of Bebbington and Unerman (2018), Hopper (2019) emphasized the need for firms to measure, monitor and make organizations accountable to help achieve SDG. Hopper's study calls for accounting research in the area of SDG reporting within the organization context. Our study extends the call for further research as suggested by Bebbington and Unerman (2018) and Hopper (2019) to unravel how corporate organizations report on SDG. We extend the scope of research on SDG activities by examining how corporate organizations in Nigeria disclose specific information regarding each SDG.

The concept of SDG reporting has become globally relevant due to its impact on business sustainability (PwC, 2017). In reference to Bebbington and Unerman (2018), SDG reporting is a holistic reporting that captures all sustainability issues of the SDG targets. In support of this view, Gray Adams, and Owen, D (2014) averred that SDG reporting is the total sustainability reporting that captures all environmental, social and governance issues in one comprehensive report. SDG reporting presents a clearer picture to organizations on what should constitute a corporate sustainability report. Due to the adoption of the 17 SDG in 2015, it has become imperative for corporate organizations to capture relevant SDG in their sustainability report (GRI, 2017). Prior to the pronouncement of the 17 SDG, most organizations lacked focus on relevant issues that should be contained in the sustainability report. It is believed that the emergence of the 17 SDG will drive corporate sustainability reporting and provide more inclusive information that will serve all stakeholders' need. Similarly, Bebbington and Larrinaga (2014) argued that for development to be sustainable there must be efficient management of resources (material and human) taken into cognizance both the present and future generation.

The studies of Lanka, Khadaroo and Bohm (2016) observed that SDG reporting is a major deviation from the current sustainability reporting. They argued that the current sustainability reporting lacks the basis of measurement, it lacks materiality and it is fragmented in nature. It thus means that corporate SDG reporting is expected to overcome the limitations of thecurrent sustainability reporting used by most corporate organizations. Furthermore, the studies of Kroll (2015) and Cuckston (2017) reported that SDG reporting provides a more detailed, comprehensive and clearer picture of what is expected of a corporate sustainability report. The 17 SDG provide a basis for key performance indicators (KPIs) to measure sustainable performance. After the pronouncement of the 17 SDG in 2015, most regulatory agencies, interest groups, and standard setters advocated for a performance-based sustainability reporting from corporate organizations.

Czaja-Cieszynska and Kochanski (2019) studied sustainable development reporting of selected socially responsible listed companies in Poland. They used literature review, analysis of legal regulations, desk research, inductive and synthetic reasoning strategies in conducting their study. The study analyzed the structure and content of the companies' non-financial information disclosures, particularly in respect of 12 out of the 31 Polish companies in the RESPECT Index. The outcome of their study revealed that a wide variety of companies' disclosures, but there were deficiencies in some of these reports regarding narratives, comparability and external verification. They concluded that it is not enough to be a socially responsible; the reporting should be done with dexterity.

Nichitaa, Nechitaa, Maneaa, Maneaa and Irimesc (2020) reviewed reporting on sustainable development goals using a based-score approach with company-level evidence from Central-Eastern Europe economies. The study used a set of panel data extracted from non-financial reports and websites of the 10 largest companies in the chemical industry operating in countries from Central-Eastern Europe consisting of Czech Republic, Hungary, Poland, Romania, and Slovakia. The study period was from 2015 to 2019. They employed a textual and content analysis, and developed a score, with qualitative and quantitative features, to deliberate the disclosure of SDG information incorporated in the reports. Their findings indicate that 63% of the analyzed reports did not clearly mention the SDG that were targeted by companies' investments. Also, the results revealed that the presentation of the SDG reports was not similar, notwithstanding that they belong the same industry.

Furthermore, KPMG (2020) reviewed sustainability reporting of 5200 companies in 52 countries and jurisdiction. The data was sourced from the PDF and printed reports as well as web-only content published report between 2019 and 2020. From their findings, a significant majority of the companies now connect their business activities with SDG in their corporate reporting. However, SDG reporting is often unbalanced and disconnected from business goals. The study also showed that the SDG linked to economic, climate change, and responsible consumption are most frequently prioritized by businesses, while SDG linked to protecting biodiversity are least commonly prioritized by businesses. Above all, 80% of companies worldwide now report on sustainability.

Therefore, we view SDG reporting as a summarized report that contains environmental, social and governance issues within the SDG context. The study of Li and Mckernan (2016) found that corporate SDG reporting is important for organizations as it enables them to report key sustainability indicators. This would also enable them to benchmark performance against the SDG indicators and also against their peers in the same industry. The survey conducted by PwC (2018) revealed that most corporate organizations made a statement about SDG in their sustainability report but failed to benchmark their SDG activities against specific Key Performance Indicators (KPI). The study advocated for a more comprehensive and detailed SDG reporting where organizations will benchmark their reporting framework against specific SDG indicators.

3.3 Regulatory Frameworks

3.3.1 GRI Framework

Global Reporting Initiative Framework are guidelines that are devised based on consultation with various stakeholder groups from all over the world so as to ensure that a wider range of issues are reflected in the guidelines, making them applicable to a large number of organizations including small enterprises, NGOs, large MNCs and public sector organizations (GRI, 2015). The Global Reporting Initiative was created by the North American Coalition for Environmentally Responsible Economies (CERES) of the Tellus Institute and Boston in the year 1997, later joined by United Nations Environment Programme two years after, to be precise 1999 as a partner, in order to guarantee International perspective.

It is an acknowledged fact that corporate organizations would not be at their best in a world full of hunger, abject poverty, unrests, inequality, and environmental stress and as such, they are expected to have indispensable interest to pursue and to ensure that the 17 SDG are achieved ahead of the set 2030 Agenda. GRI framework is designed in away to incorporate SDG into the organization's activities and it's reporting, by recognizing all environmental and social issues. Harmonization of sustainability report and the financial reports is the main purpose of GRI and thus to ensure comparability and consistency of reports among organizations around the globe. GRI represents a means of achieving corporate accountability (Bowen 2000; Willis, 2003). Moneva, Archel, and Correa (2006) criticized the adoption of GRI guideline in the body of knowledge, as many companies claiming to have adopted it do not necessarily witness a better performance, but only appear to be more transparent by adopting the framework.

The study of Muff, Kapalka and Dylick (2017) provided empirical evaluation of how SDG are relevant to national challenges for strategic business opportunities. The study provides critical examination of SDG reporting of listed firms in Switzerland using the GRI framework. The study found that the level of compliance on SDG reporting is about 60% for the selected firms used in the study. In the same vein, Rosati and Faria (2019) examined the role of institutional factors by addressing SDG in sustainability reports. The authors conducted a country-level analysis of 90 countries using the GRI framework. The result showed that corporate organizations are paying more attention to SDG issues in their sustainability reports.

3.3.2 IIRC Framework

The formation of the International Integrated Reporting Council is a step taken in the pursuant of SDG through corporate organization. The council is a consortium of leaders in the business world both in the private and the public sector, leaders in accounting field, regulatory bodies, academia, standard setting, as well as civil societies. In order to achieve the SDG, organizations are expected to give full detail of the environmental, governance and social issue at the end of its fiscal and accounting year. However, IIRC developed a concept discussion paper that explicitly highlights what the Integrated Report of an organization should look like, thus; Integrated Reporting should comprehensively explain everything about material information on how the strategy of an organization looks like, the corporate governance and the performance showing the commercial, social and environmental context of the firm. <IR> is basically a stewardship report of an organization provided in a clear and concise form to highlight how it creates and sustain values.

IIRC framework provided five basic steps to follow while reporting SDG information. Firstly, understand the relevant sustainable development issue relating to the external environment of the organization. Secondly, identify the material SDG goals that create and influence the firm's value. Thirdly, a business model should be designed to contribute to the SDG. Fourthly, integrated thinking, connectivity, and governance should be developed. And lastly, an integrated report should be prepared. IIRC framework specifically requests and recommends an Integrated Report from every organization whereby an organization's value creation over time would be reported to communicate the performance and prospect of the firm with the inclusion of the strategy and governance, in the context of the external environment (IIRC, 2015).

The study of Biggeri, Clark, Ferrannini and Mauro (2019) provided empirical evidence of how SDG reporting could be tracked using the IIRC framework among 40 countries. The study introduced "Integrated-Sustainable Development Index (I-SDI)" to evaluate SDG reporting among countries or within corporate organizations. The study found that IIRC framework through the use of I-SDI provides effective SDG reporting. Also, the study of Oyewo and Isa (2017) explored the use of integrated reporting to improve corporate sustainability reporting of both South African and Nigerian firms. The study utilized the IIRC framework to link the connection between integrated reporting and sustainability reporting. The study found that compliance to IIRC framework improves SDG issues in corporate sustainability reports of companies.

3.3.3 PwC Framework

According to the study of PwC (2018), a research was conducted to determine the extent to which organization and companies are embedding the SDG within core business strategies using the PwC framework. A survey and analysis were made on 729 companies around the world in which about three-quarter (72%) mentioned SDG in their annual corporate and sustainability reports, but it was only 23% that disclosed "meaningful" Key Performance Indicator (KPIs) and targets relating to the Goals. The report reveals that a gap still remains between intention and integration in the report of companies all over the world.

PwC framework offers a four-step blueprint that can enhance SDG activities in an organization's business core value. The first is to recognize that every part of the organization has an important role to play, and sustainability is not just about corporate social responsibility issue. Secondly, there should be a clear understanding that leadership is key, that is, the CEO and the senior executives need to take an active interest in pursuing progress. Thirdly, the firm should establish meaningful key performance indicators (KPIs) to drive action and report on the progress. And lastly, there should be a target for the same level of quality of reporting on both financial and non-financial information. As a recommendation to corporate organizations, PwC suggested that companies look at the SDG on which they can have the greatest impact, then identify the targets that most directly relate to the issue on which they work.

3.4 Theoretical Underpinning

There are theories underpinning the motivation behind sustainability and SDG studies. These theories are captured under social, environmental and governance theories such as legitimacy theory (Suchman, 1995; Deegan, Rankin, and Tobin, 2002); institutional theory (Meyer and Rowan, 1977; Tate, Dooley and Ellram, 2011); and stakeholder theory (Freeman (1984; Gray, Adams, and Owen, 2014).

Legitimacy Theory

Legitimacy theory is one of the most popular theories used in management science research. Suchman (1995) considers legitimacy as the assumptions and perception generalized, describing the desired, proper and appropriate action of an entity within a constructed social system of value, norm, believe and definition. Several literature have shown that companies most times try to gain, maintain or repair their legitimacy by reporting on company's social and environmental information (e.g., Campbell, Craven, and Shrives, 2003; Deegan, Rankin, and Tobin, 2002; Kilian and Hennigs ,2014; Liesen, Hoepner, Patten,and Figge, 2015; Milne and Patten, 2002; Nègre, Verdier, Cho, and Patten, 2017; Tilling and Tilt, 2010; Patten and Zhao, 2014). Therefore, organizations especially multinationals support SDG fulfillment from the perspective of organizational legitimacy (Kolk and Perego, 2010; Faisal, Tower and Rusmin, 2015).

Legitimacy theory posits that the voluntary report of information of activities perceived to be expected by communities where they operate should be made, this helps them to operate within the norms and bounds of the society (Deegan, Rankin, and Voght 2000; Cormier and Gordon, 2001; Deegan 2002). In support of this, Kamal and Deegan (2013) inquired into a sample of Australian companies (textiles and garments) in Bangladesh and the report showed that many companies' report was targeted at meeting the expectation of the immediate and local communities, neglecting the working condition and the workplace's safety; hence the related companies' report fell short of the international standard expected, consequently resulting in limited transparency and accountability in the report. Also, from the organizational perspective, legitimacy is important to an organization because it attracts the support of its stakeholders.

Institutional Theory

The origin of institutional theory can be traced back to foundational articles in organizations, in which changes were propelled by symbolic external influence, and action (Meyer and Rowan, 1977). The adoption of social and environmental supply chain strategies is driven by the pressure of the institution (Tate, Dooley and Ellram, 2011). The application of institutional theory in the work of Sancha, Longoni and Giménez, (2015); Zhu, Sarkis and Lai (2013) and Wu, Ding and Chen (2012) confirms that incorporation of environmentally sustainable practice in financial report is as a result of institutional pressure. According to Kauppi, (2013); Tate, Ellram and Dooley (2012), there are limited journals that have anchored institutional theory on SDG, though a little bit surprising considering the fact that this theory explains the interaction between the society and the business. However, recently some researchers have started linking the theory with the managerial social matters within the CSR context. The explanation of social responsibility practice adoption using the institutional theory amongst firms was explained in the study of (Campbell 2007; Misani 2010; Brammer, Jackson and Matten, 2012; Glover, Champion, Daniels and Dainty, 2014)

Maignan and Ralston (2002) and Matten and Moon (2008) described the structure of the governance, culture and political environment as key factors determining the firm's socially responsible behavior. It is worthy to note that there is a growing usage of institutional theory in the management research. Also, the scholars of SDG have identified the link that exists between corporate institutions and actualization of SDG. Therefore, the importance of this theory to the actualization of 2030 agenda for sustainable development cannot be undermined. Erin and Asiriuwa (2018) emphasized the need for institutions to play a key role in facilitating SDG reporting in corporate report. Consistent with this view, IFAC (2017) view institutions as key drivers in addressing SDG challenges in corporate organizations. They believed that strong institutions with effective governance structure will drive the inclusion of SDG reporting in corporate annual reports.

Stakeholder Theory

Stakeholder theory is another popular theory that motivates and drives SDG. Freeman (1984) described stakeholder as anyone or group of people who is involved, can affect or be affected by the achievement of the firm's objective. Stakeholder(s) could be formal or informal, individual or group of people that constitute component of the organization's external environment (Murray and Vogel, 1997). The position of stakeholder theory in achieving stakeholder's needs, demand, and expectations are the primary functions of managers and they should be able to manage the conflicting interest of the various stakeholders using different criteria to allocate priorities to different stakeholders' demands and views (Ngatia, 2014). However, most studies (Bebbington and Thomson, 2013; Spence and Rinaldi, 2014; Gray, Adams, and Owen, 2014) argued that SDG should be anchored on stakeholder theory; since SDG performance primarily focused on the needs of various stakeholders in the society. SDG is designed in a way to meet the needs of direct and indirect stakeholders of an organization, as stated in the United Nations General Assembly (2015). In the same vein, Deegan and Blomquist, (2006) viewed stakeholders' engagement as the process of actualizing SDG which is critical to the survival, attainment, and development of any society or the organization.

Organizations must consider the expectations of stakeholders, regardless of the level of power exercised and their ability to influence business activity. In this perspective, all stakeholders have the right to be informed not only about financial aspects but also about social, environmental, and governance aspects. The stakeholders' right of information corresponds to the companies' ethical-moral responsibility of reporting. The reasons for disclosure are therefore linked to ethical and moral principles (Maroun, 2017). Companies should try to meet the information needs of stakeholders which are considered relevant from a strategic point of view (Gray, Owen, and Adams, 1996). According to this perspective, disclosure should be demand driven and related to information requests from stakeholders (Deegan and Blomquist, 2006).

Gray, Owen, and Adams (1996) highlight the existence of an overlap between stakeholder and legitimacy theories. To manage legitimacy, organizations must be able to identify who its stakeholders are and what their needs or demands are (Deegan and Blomquist, 2006). To this end, Deegan and Unerman (2006) postulated that organizations could protect their legitimacy in society by addressing the divide between sustainability reporting and stakeholder concerns through engagement of stakeholders on the need to create value in the short, medium and long term.

4. Research Methods

4.1 Design

The relationship between SDG and management studies represents a new and not well explored field of study (Guthrie et al., 2019). The relevance of the theme is connected to the opportunity for accounting scholars to provide further suggestions in order to favor the engagement with private sector's actors (Bebbington and Unerman, 2018). Moreover, previous studies denoted how accounting scholars could favor the diffusion of these new paradigms with practitioners (Rinaldi, 2018; Hopper, 2019).

This study engaged the use of survey design and content analysis to capture the level of SDG disclosure by top 50 listed firms in Nigeria. We used content analysis to capture qualitative SDG information of the selected firms. The study covers a three-year period (2016-2018) since the adoption of SDG was pronounced in 2015. We selected the top 50 listed companies based on their market capitalization. The fifty (50) firms selected are as follows: 17 firms from the financial sector, 13 firms from the consumer goods sector, 6 firms from the Oil and Gas sector, 5 firms from the healthcare sector, 5 firms from the industrial goods sector and 4 firms from the information technology sector. Our survey was targeted at the financial managers of the selected firms used in this study, since they are the preparers of financial statement. Therefore, we distributed two (2) questionnaire per firm, making a total of 100 questionnaire. Also, we survey the opinion of the Big Four audit firms; we target the staffs of the Sustainability and Governance department of these firms. Since these big four firms are the external auditors of the top-50 firms, it is necessary to engage and seek their opinion on the compliance level of SDG reporting of these firms.

The approach to use both the content analysis and survey method in this study is to provide robust and evidenced-based findings. The content analysis provides a rigorous approach in analyzing documents on SDG disclosure of the selected firms. While the survey method helps us to seek expert opinion on the state of SDG reporting to draw conclusions and make important decisions. Combining both methods in a single study provides a strong and robust basis for the findings of this research.

We purposely selected 25 staffs from each of the big four audit firms. PwC Nigeria has total staff strength of over 1200 with 150 staffs belonging to Sustainability and Governance units. For KPMG, a staff profile of 1,135 while about 120 staffs work in Sustainability and Regulation units. Ernst and Young have staff strength of about 750 staffs with 100 staffs belonging to Sustainability unit. Lastly, Akintola Williams Deloittle has total of 600 staffs with 80 people in the Sustainability and Governance unit. We collected this information from the firms' corporate website. The entire questionnaire distributed was physically delivered at the respondents' workplace. We collected this information within the period of 6 months (June 2019 to December 2019).

The breakdown of the questionnaire distributed and retrieved is highlighted below:

Table 1: Questionnaire Distributed and Retrieved-Top 50 Listed Firms in Nigeria

Sector	**Questionnaire Distributed**	**Questionnaire Retrieved**
Financial	34	30
Consumer Goods	26	22
Industrial Goods	10	10
Oil and Gas	12	10
Healthcare	10	8
Technology	8	8
Total	**100**	**88**

Table 2: Questionnaire Distributed and Retrieved-Big Four Audit Firms

Firms	**Questionnaire Distributed**	**Questionnaire Retrieved**
PwC	25	20
KPMG	25	18
Ernst and Young	25	23
Akintola Williams Deloittle	25	21
Total	**100**	**82**

We distributed a total of 200 questionnaire, 170 was retrieved which represent about 85% collection rate. We prepare our questions based on five-Likert scale of 1 to 5. 1- Strongly agree, 2-agree, 3-undecided, 4-disagree and 5-strongly disagree.

We used content analysis to capture qualitative SDG information of the selected firms. The study covers the period of three (3) years (2016-2018) since the adoption of SDG was pronounced in 2015. The content analysis was utilized through the PwC framework, GRI framework and IIRC framework to gauge the extent of firms' compliance regarding corporate SDG reporting. Also, the business reporting indicators for each SDG developed by GRI was employed to determine the compliance level of the selected firms regarding corporate SDG reporting.

Disclosures on SDG reporting were sourced from the annual reports of selected firms for the period of 2016-2018. Content analysis was used to quantify the qualitative information into the quantitative method. Content analysis methodology is a process that quantifies qualitative information in a way using word counts, pages, sentences in the annual report or other useful research materials. For example, studies like Uwuigbe and Egbide, 2012; Solomon and Maroun, 2012; Nwobu, 2015; Mousa and Hassan, 2015; Oyewo and Isa, 2017; Bebbington and Unerman, 2018 used disclosure content analysis on sustainability accounting research.

4.2 The Disclosure Checklist and SDG Disclosure Indicators

The disclosure content analysis was utilized through the PwC framework (2016), GRI framework (2016) and IIRC (2015) to gauge the extent of firms' compliance regarding corporate SDG reporting. The PwC framework spelled out nine (9) relevant indicators on how corporate organizations can measure and report on SDG activities and integrate them into their sustainability report. The GRI framework developed fifteen (15) relevant indicators for measuring SDG reporting. While the IIRC framework outlined ten (10) important indicators for evaluating compliance to SDG reporting. This study utilized all the frameworks (PwC, GRI and IIRC) to measure and evaluates the extent of SDG disclosure by the top 50 firms in Nigeria. Furthermore, we evaluated the business reporting indicators for each SDG developed by GRI (2016) to determine the compliance level of the selected firms regarding corporate SDG reporting.

For each of the framework, there is indicators/statement/information on how SDG activities should be disclosed in the corporate annual report. So, if a company report on each of the indicator, we score the company one (1), otherwise zero (0). For example, if three (3) companies out of fifty (50) report on any indicator, the score is three (3). We find the average for the three years (2016-2018) used in this study. In overall, we computed the percentage (%) of the disclosure of the average for the three years.

5. Result and Discussion

In this section, we provided the result of both the content analysis and survey carried in this study.

Section A: Results of Content Analysis

Table 3: Overall SDG Reporting Disclosure using PwC Framework

	Key Indicators	2016	2017	2018	Average	Overall %
1	Do companies mention SDG in their corporate sustainability reporting?	4	5	5	5	10
2	Do companies identify priority SDG?	3	3	3	3	6
3	Do companies disclosed meaningful KPIs and target related to SDG	3	4	4	4	8
4	Do companies mention SDG as part of their business strategy or business model?	0	2	3	2	4
5	Do companies specify basic measurement approach used to identify SDG?	0	1	1	1	2
6	Do companies identify any reporting framework for SDG?	0	0	0	0	0
7	Do the word 'SDG' mentioned in the CEO or Chairman statement/report?	4	5	7	5	10
8	Do companies have separate integrated report on SDG?	0	0	0	0	0
9	Do companies identify material sustainable development issues that affect value creation in their report?	2	2	2	2	4

Source: https://www.pwc.com/sdgreporting

Table 3 presents the overall SDG reporting disclosure using the PwC framework with nine (9) indicators developed in 2016. The result shows the aggregate average for the periods of three (3) years (2016-2018) and the overall percentage for the top-50 companies. The first key indicator shows that only 10% of the entire firms mentioned SDG in their corporate sustainability report. This implies that five companies overall were responsible for the disclosures. This result reveals a low level disclosure knowing that these companies have a large range of stakeholders. The second indicator reveals that only 6% of the top-50 firms identified priority SDG, which are only three out of fifty companies. This result shows less compliance by Nigerian firms on issues relating to SDG activities and performance. The third key indicator shows that 8% of firms disclosed KPIs and targets related to SDG. This result showed that few Nigerian firms disclosed targets relating to SDG. For example, Guinness Nigeria Plc identified KPI for SDG 6 (clean water and sanitation) by making commitment such as “we are providing access to safe drinking water and sanitation for over 33 million Nigerian in 22 states in Nigeria through our Water of Life Scheme”.

Furthermore, the fourth key indicator reveals that only 4% of companies mentioned SDG as part of their business strategy. This means only two companies identified SDG in developing their business model. This result implies that most Nigerian firms failed to incorporate SDG in their strategic corporate goals. The fifth key indicator shows that 2% specified basic measurement approach used in the SDG reporting. This could mean that firms are unaware of the measurement approach or they are indifferent to the issue of measurement since there are no regulatory requirements in this regard. The sixth key indicator shows that no Nigerian company has any reporting framework for SDG reporting.

The seventh key indicator reveals on the average that 5 firms mentioned SDG in the CEO/Chairman statement which shows 10%. The eighth key indicator shows that no Nigerian companies have a separate integrated report on SDG. Most of the firms have a sustainability report section in their corporate annual reports. Even with the separate sustainability report, most of these companies failed to recognize the SDG activities within the sustainability framework. Lastly, the ninth key indicator shows that 4% of firms identified sustainable issues that affect value creation in their report.

Table 4: Overall SDG Reporting Disclosure using GRI Framework

	Key Indicators	**2016**	**2017**	**2018**	**Average**	**Overall %**
1	Do companies mention the word ‘SDG’ in their annual report?	4	5	5	5	10
2	Do companies specify any business case regarding SDG?	2	2	2	2	4
3	Do companies identify specific responsibilities for achieving SDG?	3	4	4	4	8
4	Do companies map out SDG against value chain processes?	2	2	2	2	4
5	Do companies specify relevant indicators and data collection process on SDG?	1	1	1	1	2
6	Do companies define priorities for SDG performance?	3	3	3	3	6
7	Do companies specify their SDG goals and KPI?	1	2	2	2	4

8	Do companies set a baseline and SDG goal type?	4	4	4	4	8
9	Do companies specify strategy used in achieving SDG?	1	3	3	2	4
10	Do companies make an announcement on the commitment to SDG?	5	7	7	6	12
11	Do companies anchor SDG within its business process?	4	5	5	5	10
12	Do companies embed sustainability across all business functions?	6	6	7	6	12
13	Do companies specify external partnership and engagement regarding SDG?	2	2	2	2	4
14	Do companies communicate on SDG performance?	2	2	2	2	4
15	Do companies provide effective reporting on SDG?	3	3	3	3	6

Source: https://www.globalreporting.org/public-policy-partnerships/sustainable-development/integrating-SDG-into-sustainability-reporting/

Table 4 presents the overall SDG reporting disclosure using the GRI framework with fifteen (15) indicators developed in 2016. The result shows the aggregate average for the periods of three (3) years (2016-2018), and the overall percentage of the top-50 listed firms in Nigeria. The first key indicator shows that only 10% of the entire firms mentioned SDG in their corporate annual report. This means that on the average only five companies out of the top fifty mention the word 'SDG' in the entire annual report. This signifies that few Nigerian companies identified issues relating to SDG as part of their business operations. This portends great danger for the actualization of SDG by 2030 if no drastic step is taken to change the tide. The second indicator shows that 4% specified the business case in their annual report. This implies that only two Nigerian companies deemed it fit to justify the reasons for engaging in SDG activities. Similarly, only 8% of Nigerian top-50 companies identified specific responsibilities for achieving SDG target. This result suggests that these companies do not have a clear objective to pursue sustainable issues within the SDG context.

The fourth key indicator reveals that only 4% of the selected firms mapped out SDG in their value chain program. The analysis shows that only Unilever Nigeria Plc and Guinness Nigeria Plc referred to SDG activities as part of their value chain processes. In the same vein, we observed that only one company specified relevant indicators for measuring SDG target and how data were collected regarding SDG activities. This result shows that almost all Nigerian firms do not have relevant indicators for measuring SDG performance and activities. The sixth indicator reveals that only 6% of the top-50 firms identified priority SDG which means that three out of fifty companies pay attention to SDG. This finding presents a poor situation of SDG activities by Nigerian companies.

Furthermore, the seventh key indicator shows that 8% of firms disclosed KPIs and targets related to SDG; this disclosure is generally low. The eighth key indicator shows that only 4 companies set a baseline and SDG type. These companies mentioned the type of SDG they are willing to pursue in the nearest future. On average, only two companies specified the strategy used in achieving their SDG within the business operations. The result of the tenth key indicator reveals that 12% of the companies within the top-50 firms made a commitment to pursue SDG targets in the foreseeable future. This implies that 6 companies out of 50 companies actually signify to pursue SDG activities in their corporate annual reports. Corporate organizations should understand that the actualization of SDG cannot be left in the hand of the government alone. Several studies advocated for public- private partnership if SDG is to be actualized globally by the year 2030 (Bebbington and Unerman, 2018; Hopper, 2019). The eleventh key indicator reveals that only 10% of companies mentioned SDG as part of their business process. This means only five companies identified SDG within their business activities. While the twelfth key indicator reveals that 12% of the companies embedded sustainability across all their business functions as mentioned in the corporate sustainability report.

The result of the thirteenth key indicator shows that only two companies specified external partnership regarding SDG activities. This implies that 4% of the selected companies seek external collaboration with other partners to pursue SDG activities. In the 2018 annual report of Unilever Nigeria Plc, it was stated that “Unilever Nigeria Plc partnered with Lagos Business School (LBS) and other multinationals, environmental specialist and government agencies to deliberate on SDG issues in order to deliver value to various stakeholders. From the fourteenth key indicator, only 4% disclosed issues on SDG performance. While the last indicator revealed that only three companies of the fifty selected companies provide effective SDG reporting in their corporate annual report.

Table 5: Overall SDG Reporting Disclosure using IIRC Framework

	Key Indicators	2016	2017	2018	Average	Overall %

1	Do organization specifically mention the word "SDG" in their sustainability reports?	4	5	5	5	10
2	Do companies identify how SDG activities affect their external environment?	3	3	3	3	6
3	Do companies provide specific relationship between SDG activities and risk management framework?	3	4	4	4	8
4	Do companies provide specific measurement or methods to evaluate SDG performance?	0	2	3	2	4
5	Is there any reporting framework linked to SDG issues?	0	1	1	1	2
6	Do organizations engage external stakeholders or partnership regarding SDG activities?	2	2	2	2	4
7	Do companies link SDG matters with integrated thinking and value creation process?	4	5	7	5	10
8	Do companies have separate integrated report on SDG activities?	0	0	0	0	0
9	Do companies identify or specify relevant indicators or data collection process on SDG?	2	2	2	2	4
10	Do organizations provide adequate or effective reporting regarding SDG activities in their sustainability reports?	3	3	3	3	6

Source: https://integratedreporting.org/resource/SDG-integrated-thinking-and-the-integrated-report/

Table 5 presents the overall SDG reporting disclosure using the IIRC framework with ten (10) indicators developed in 2015. The result shows the aggregate average for the periods of three (3) years (2016-2018) and the overall percentage for the top-50 companies. The first key indicator shows that only 10% of the entire firms mentioned SDG in their corporate sustainability report. This implies that five companies were responsible for the disclosures. The second indicator reveals that only 6% of the top-50 firms show how SDG activities are shaping their environment. The third key indicator is about the relationship between SDG issues and risk management framework. Only 4 firms discussed the impact of risk governance in achieving their SDG targets.

Furthermore, the fourth key indicator reveals that only 4% of companies mentioned SDG as part of their business strategy. This means only two companies identified SDG in developing their business model. This result implies that most Nigerian firms failed to incorporates SDG in their strategic corporate goals. The fifth key indicator shows that 2% specified basic measurement approach used in the SDG reporting. This could mean that firms are unaware of the measurement approach or they are indifferent to the issue of measurement since there are no regulatory requirements in this regard.

The eighth indicator shows that no Nigerian companies have a separate report on SDG. Most of the firms have a sustainability report section in their corporate annual reports. Even with the separate sustainability report, most of these companies failed to recognize the SDG activities within the sustainability framework. The ninth key indicator shows that 4% of firms identified sustainable issues that affect value creation in their report.

Table 6: SDG and Business Reporting Indicators (GRI)

SDG	Reporting Indicators	2016	2017	2018	Average	Overall %
SDG 1- No poverty	Report on the firm's activities to support poor communities around its environment.	7	7	7	7	14
SDG 2- Zero Hunger	Report on the company's effort to end hunger through the support of the food campaign program or other means.	5	5	5	5	10
SDG 3- Good health and well-being	Report on the firm's activities to promote quality healthy lives both for internal and external stakeholders.	4	4	4	4	8
SDG 4- Quality education	Report on the firm's activities to promote quality education and support education as part of corporate social responsibility (CSR).	9	9	9	9	18
SDG 5- Gender Equality	Report on the representation of women in the management and executive position. Also, report ensuring equal pay for equal work between men and women.	8	8	8	8	16
SDG 6- Clean water and sanitation	Report on the proportion of recycling or waste water treated safely.	6	8	8	7	14
SDG 7- Affordable and clean energy	Report on the increase of energy save or percentage of energy from renewable sources.	5	5	5	5	10

SDG 8- Decent work and economic growth	Report on the percentage of workers who have permanent employment status with fair labour practices.	8	8	8	8	16
SDG 9- Industry, innovation, and infrastructure	Report on the company's activities to support the inclusion of small-scale enterprise in their business operations.	7	7	7	7	14
SDG 10- Reducing inequalities	Report on the company's emphasis on equal opportunities for all employees. Also, report on the number of employees with diverse background and disabilities.	10	10	10	10	20
SDG 11- Sustainable cities and communities	Report on the company's investment in transportation, sanitation, and energy. Also, report on providing safe and sustainable means of transportation for employees.	5	5	5	5	10
SDG 12- Responsible consumption and production	Report on the company's proportion or percentage of recycled waste.	6	8	8	7	14
SDG 13- Climate Action	Report on the company's target to manage climate-related risks and the measurement of performance against targets.	2	2	2	2	4
SDG 14- Life below water	Report on how the company will address future risks on aquatic ecosystem depletion.	4	4	4	4	8
SDG 15- Life on land	Report on how the company will address future risks on terrestrial ecosystem resource depletion.	4	4	4	4	8
SDG 16- Peace, justice, and strong institutions	Report on the company's activities to promote equity and fair business.	6	6	6	6	12
SDG17- Partnership for the goals	Report on the company's investment in multi-stakeholder partnerships.	5	7	7	6	12

Source: https://www.globalreporting.org/public-policy-partnerships/sustainable-development/integrating-SDG-into-sustainability-reporting/

Table 6 presents the findings on relevant SDG disclosure in the company's annual report with each business reporting indicators. The SDG 1 (No poverty) showed that 14% of the selected firms report issues relating to SDG 1. This implies that few firms have the agenda to support the eradication of poverty; this result is not good enough knowing that the poverty rate in

Nigeria is high. Considering SDG 2 (hero hunger), it was observed that five firms report on the effort to end hunger through various programs and other means. The SDG 3 (Good health and well-being) results revealed that 8% of the firms actually report on activities to promote good health and well-being. This poor SDG disclosure is a clarion call to private institutions to support the government in their effort in fighting endemic poverty in Nigeria and other countries in Sub-Saharan Africa.

The disclosure of SDG 4 (Quality education) revealed that 18% of firms provide information on their activities to promote quality education. This result shows a relatively high percentage compared to other SDG reported. Firms are expected to disclose how they support education in their corporate social responsibility (CSR) report. This has been the norms for firms to support education either through scholarship or infrastructure. The result of SDG 5 (Gender equality) observed that 16% of the firms disclosed issues on equal pay between men and women. While most firms provided the numerical representation between the genders, they fail to disclose issues on the importance of gender equality and balance in their corporate sustainability report. There report on SDG6 (clean water and sanitation) showed that seven firms of the selected fifty firms disclosed issues relating to the proportion of recycled water treated safely.

Furthermore, SDG 7 (affordable and clean energy) revealed that 10% of the firm report sustainable issues in the area of renewable energy. This shows that only five companies are generating their energy through renewable sources. Considering SDG 8 (Decent work and economic growth), the results observed that 16% of the firms report on the percentage of workers who have permanent employment status. While the SDG 9 (Industry, innovation, and infrastructure) findings showed that an average of seven firms supports the inclusion of small-scale business in their operation.

Our findings further showed that 20% of firms emphasize equal opportunities for all employees. It is important for corporate organizations to report this in their annual report. The same also presents information on the number of employees with a diverse background. Few companies report on SDG 11 (Sustainable cities and communities). The findings revealed that five firms report on sustainable means of providing transportation for its employees. The result of SDG 12 (Responsible consumption and production) shows that only 14% of the firms report on the percentage of recycling waste in their sustainability report. The result is the same as SDG 6 (Clean water and sanitation). While SDG 13 (Climate action) shows the poor performance of Nigerian firms in tackling climate-related issues. This implies that top Nigerian firms take the issue of environmental matters with less concern.

The disclosure of SDG 14 (Life below water) shows that only four firms report on how they manage ecosystem depletion. The four firms that disclosed SDG 14 are from the Oil and Gas sector. This may be due to the nature of their business operations. The same as SDG 14, SDG 15 (Life on land) presents similar results from the same companies. Only the four firms in the Oil and Gas sector report on how the companies manage terrestrial ecosystem depletion. SDG 16 (Peace, justice and strong institutions) shows that 12% of the firms report on the firm's activities to promote equity and fair business practices in their sustainability report. Lastly, SDG17 (Partnership for the goal) shows on the average that six firms provided information on their investment in a multi-stakeholder partnership.

Table 7: Overall SDG Reporting Disclosure by Different Sectors (Overall %)

Key Indicators	Financials	Consumer Goods	Industrial Goods	Oil and Gas	Healthcare	Technology
PWC Framework	24	40	14	10	8	4
GRI Framework	22	42	12	10	10	4
IIRC Framework	20	44	14	10	8	4

Source: Compiled by Authors (2019)

Table 7 shows the overall SDG disclosure by the different sectors. From the PwC framework, the consumer goods sector has the highest in terms of the SDG disclosure. The result shows that 40% of the firms in the sector disclosed issues on SDG performance compared to the overall disclosure by listed firms in Nigeria. Followed by the financial sector which had 22% disclosure compared to the overall disclosure of Nigerian firms. The lowest is the technology sector with 4% disclosure. GRI framework presents similar information with the PwC framework. Consumer goods sector has the highest disclosure of SDG activities with 42%; followed by the financial sector with 22%. In the same vein, IIRC framework shows that consumer goods sector has the highest disclosure of SDG activities of 44%; followed by the financial sector with 20%. This result reveals that multinational companies operating in the consumer goods sector have started complying with SDG disclosure. In overall, the SDG disclosure by the top-50 listed firms in Nigeria is still very low. This may be due to regulatory laxity to make SDG activities and reporting a mandatory requirement for corporate organizations in Nigeria.

Section B: Results of the Survey

Table 8: Survey Result-Top 50 Listed Firms in Nigeria

Q	SDG REPORTING	SA (%)	A (%)	U (%)	D (%)	SD (%)
1	Reporting on SDG activities would enhance the quality of corporate sustainability report.	42 (47.7)	29 (33)	10 (11.4)	6 (6.8)	1 (1.1)
2	Mentioning specific SDG target to be pursued by companies is important.	42 (47.7)	24 (27.3)	8 (9.1)	10 (11.4)	4 (4.5)
3	Professional accountants have functional role to play in corporate SDG reporting.	38 (43.2)	31 (35.2)	13 (14.8)	4 (4.5)	2 (2.3)
4	Is there any connection between SDG reporting and value creation process?	32 (36.4)	28 (31.8)	14 (15.9)	9 (10.2)	5 (5.7)
5	Should corporate organizations incorporate SDG activities in their business model/strategy?	41 (46.6)	33 (37.5)	10 (11.4)	3 (3.4)	1 (1.1)
6	There is need to create a sustainability department that would oversee and produce SDG reports.	28 (31.8)	28 (31.8)	16 (18.2)	12 (13.6)	4 (4.5)
7	Do you think SDG reporting would improve the overall quality of corporate annual reports to stakeholders?	31 (35)	40 (45.5)	12 (13.6)	5 (5.7)	Nil
8	What factors or challenges could be responsible for low level of SDG disclosure by Nigerian firms?					

Source: Field Work (2019)

Most respondents attest that reporting on SDG activities would enhance the quality of corporate sustainability report. Since the most responses fall within 1 and 2, which signifies strongly agreed and agreed. 78% of the respondents agreed that professional accountants have a key role to play in SDG reporting. Also, most of the respondents believe that reporting on SDG activities will lead to value creation for the organization in the long run. Furthermore, 63% attest that creation of sustainability department/unit is important in order to provide effective SDG reporting. The result shows that SDG reporting would improve the overall quality of corporate reports to stakeholders. The challenges (Q8) that could be responsible for low SDG disclosure by Nigerian firms are discussed in Figures 1.

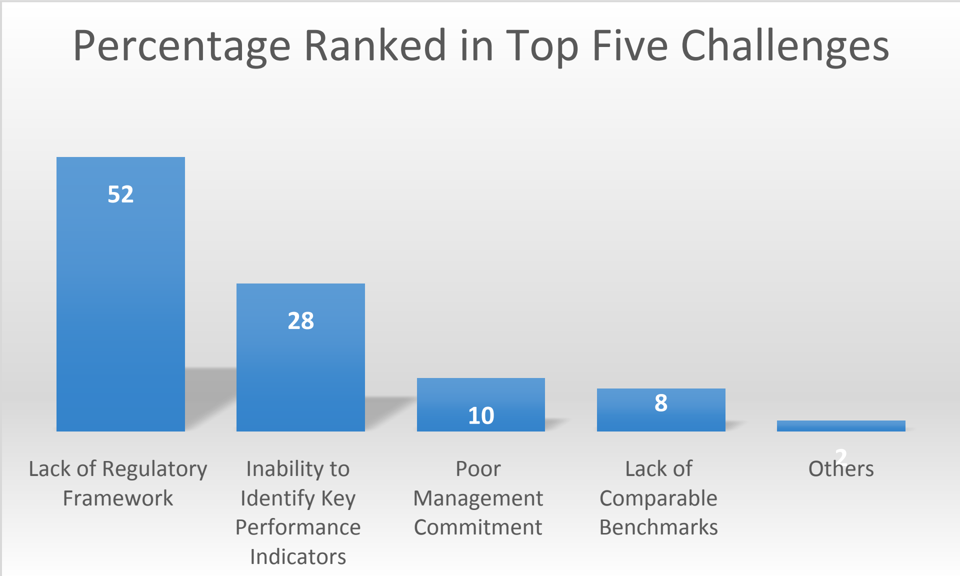
Table 9: Survey Result-Big Four Audit Firms

Q	SDG REPORTING	SA (%)	A (%)	U (%)	D (%)	SD (%)
1	Reporting on SDG activities would enhance the quality of corporate sustainability report.	50 (60.9)	16 (20)	8 (9.8)	5 (6.1)	2 (2.3)
2	Mentioning specific SDG target to be pursued by companies is important.	43 (52.4)	24 (29.3)	5 (6.1)	8 (9.8)	2 (2.3)
3	Professional accountants have functional role to play in corporate SDG reporting.	40 (48.8)	24 (29.3)	10 (12.2)	4 (4.9)	4 (4.9)
4	Is there any connection between SDG reporting and value creation process?	42 (51.2)	26 (31.7)	4 (4.9)	6 (7.3)	4 (4.9)
5	Should corporate organizations incorporate SDG activities in their business model/strategy?	36 (43.9)	25 (30.5)	8 (9.8)	9 (10.9)	4 (4.9)
6	There is need to create a sustainability department that would oversee and produce SDG reports.	30 (36.6)	28 (34.1)	12 (14.6)	6 (7.3)	6 (7.3)
7	Do you think SDG reporting would improve the overall quality of corporate annual reports to stakeholders?	52 (63.4)	24 (29.3)	6 (7.3)	Nil	Nil
8	What factors or challenges could be responsible for low level of SDG disclosure by Nigerian firms?					

Source: Field Work (2019)

The result of table 9 shows that majority of the respondents attest that reporting on SDG activities would enhance the quality of corporate sustainability report. 82% of the respondents believe that companies need to identify SDG targets to be pursued in their SDG report. Also, 83% of the respondents feel that there is a relationship between SDG reporting and value creation process. Majority of the respondents are of the opinion that corporate organizations should incorporate SDG activities in their business strategy. In the same vein, 94% of the respondents believe that SDG reporting would improve the overall quality of corporate reports to stakeholders. The challenges (Q8) that could be responsible for low SDG disclosure by big four audit firms are discussed in Figure 2.

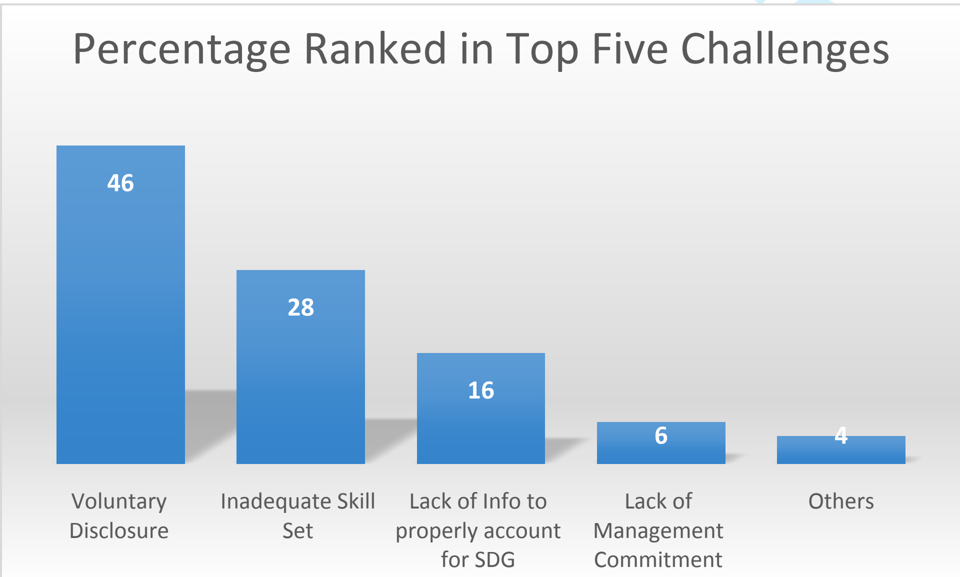
Figure 1: Challenges of SDG Reporting (Top 50 Listed Firms in Nigeria)



Source: Compiled by Authors (2019)

Figure 1 above shows the opinions of the respondents of the top 50 listed firms in Nigeria regarding the various challenges associated SDG reporting. Majority of the respondents identified lack of regulatory frameworks as a major contribution to poor SDG disclosure in Nigeria. This is followed by inability to identify key performance indicators in measuring specific SDG activities. Also, poor management commitment or indifferent attitude of senior executives to the issues of SDG is another challenge. Lack of comparable benchmarks were identified has a contributing factor to low level of SDG reporting.

Figure 2: Challenges of SDG Reporting (Big Four Audit Firms)



Source: Compiled by Authors (2019)

The major challenge of SDG reporting identified by staffs of the Big four audit firms reveal that voluntary disclosure of SDG activities account for poor SDG reporting in Nigeria. Since reporting on SDG activities is not a mandatory requirement for organizations, most firms feel there is no need to add to the current reporting lines. Inadequate skill is another challenge of SDG reporting. This shows that accounting professional do not have the technical expertise in reporting on SDG activities. Another identified challenge is lack of information needed to account for SDG reporting. This might be inability to get or generate appropriate data to account for SDG issues. Also, poor management commitment or indifferent attitude of senior executives to the issues of SDG, this corroborate the result in Figure 1. This result underscores the importance of the executive management in SDG disclosure.

Our findings provide an important discussion on the theoretical role discussed in the literature review. Since organizations are bound by social contracts within their environment, it is legitimate for them to provide useful information regarding their SDG activities. The result of this study shows that without the support of corporate institutions, achieving effective SDG disclosure will be practically impossible. This is consistent with the study of Erin and Asiriuwa (2019) which report that institutions (corporate organization) play a critical role in facilitating SDG reporting in corporate report. It is believed that strong institutions with effective governance structure will drive the inclusion of SDG reporting in corporate annual reports. Also, the role of stakeholders (regulatory agencies, executive management, employees, NGOs, investors and external environment) determine the success of SDG disclosure. Importantly, Akisik and Gal, 2019 explained that ESG disclosure like SDG reporting further enhances organizational legitimacy within the broader stakeholders' model. Therefore, the combination of legitimacy theory, institutional theory and stakeholder theory explain the need for effective reporting of the SDG.

Affirming the institutional theory underpins the role of staff and departments involved in the SDG process. A further way to draw on this theory is the emphasis on the shared understanding among key players to advance the continual development of SDG process within the organizational hierarchy. This buttresses the claim of Bebbington and Larrinaga (2016) that corporate institutions should adopt a strategic approach so that sustainable development is integrated into vision and leadership, strategic planning, and objectives. SDG reporting poses a new challenge on institutional change to adapt to a new form of corporate reporting. Our study advances the role of institutional theory in addressing the issue of sustainable development within the organizational context.

The major point made in this study is that the successful adoption of policies that ensure corporate sustainability will depend crucially on the institutions of a given country. Institutions are the formal laws and informal norms that constrain and shape economic decisions. Institutional theory can be used to explain how changes in social values, technological advancements, and regulations affect decisions regarding sustainable activities. The finding from this study shows that without the support of corporate institutions, achieving effective SDG disclosure will be practically impossible. The power players (CEO, the board and management) of corporate institutions can influence social change within the organization especially issues relating to sustainability. From the findings, a *gap* seems to exist between the extent to which boards recognize that sustainability is a critical business issue and their effectiveness in measuring and managing it. Affirming the institutional theory's role in this study explains the importance of boards' support to develop and implement a strategy that enables and secures long-term sustainable value creation.

Whilst the overall responsibility rests on the government, the actualization of SDG cannot be achieved without support from corporate organizations. Our finding is in support of Bebbington and Unerman, 2018 which advocated for separate SDG disclosure in the corporate annual report. The support of corporate organizations affirms the institutional role theory in contributing to SDG activities. The findings of this study corroborate the study of Alawattage and Fernando, 2017 which found that the contribution of institutions is a crucial factor in achieving and actualizing SDG objectives globally.

The low level of SDG disclosure in Table 6 underscores the need for stakeholders in contributing to the issue of sustainability in corporate organizations. Stakeholder theory assumes the existence of different actors that are characterized by particular interests. Li and Mckernan (2016) indicate that stakeholder theory has to stand at the same time for power, urgency and legitimacy. Only with that, management can act in accordance with the legal and moral interests of legitimate stakeholders. The engagement of various stakeholders is essential to cater for the implementation of sustainable development. Knowledge sourced from stakeholders affects the sustainable innovation orientation that may contribute to sustainable development. Furthermore, stakeholder involvement in sustainability decision-making improves the quality of corporate decisions.

5.1 Policy Implications

Our study adds to academic debates on accounting for SDG disclosure within the Nigerian corporate environment. Our study has implications for various stakeholders. First, our findings reiterate the need for corporate firms in restructuring their business processes according to the challenges of our time. There is a need for firms to restructure their internal management accounting and control aspects for effective SDG reporting. Second, the study has important implications for government institutions and policymakers. There is a need to create conducive environment for SDG achievement by ensuring accountability and transparency in policy-making as well as political responsiveness. Third, investors' stands to benefits from sustainably responsible firms' through the provision of relevant SDG data to helps investors make informed decisions and direct capital towards investments with positive real-world impact. Lastly, our study has important implication on stakeholders' inclusiveness by ensuring that various stakeholders' interests are represented in corporate SDG reporting.

6. Conclusion

This study examines the corporate SDG reporting of the top-50 listed firms in Nigeria. The study used survey method and content analysis to evaluate the SDG activities of the listed firms for three (3) years (2016, 2017, and 2018). Questionnaire was distributed to financial managers of the top-50 listed firms and staffs of the big four audit firms from the Governance and Sustainability department. In using the content analysis, we engaged the PwC framework, GRI framework and IIRC framework to analyze the content of SDG activities of the selected firms. The overall findings of this study show that corporate organizations are doing little to contribute to SDG performance. This shows that Nigerian firms have demonstrated little concern for SDG disclosure as is shown in the business reporting indicators (Table 6). This study presents a considerable implication for the future of SDG in Nigeria. This result calls for clear responsibility and a strong drive for SDG performance from corporate institutions in Nigeria.

This study contributes to growing literature in the area of corporate reporting, sustainability reporting and SDG research in Nigeria and other emerging economies. The empirical approach used in this study emphasizes the need for corporate organizations to embrace sustainable practices and to integrate SDG information into their reporting cycle. Also, this study provides original insight into the contribution of accounting research towards the achievement of SDG. This study provides an avenue for future research in the area of SDG reporting in other emerging countries especially other African countries. Also, future studies could examine the comparative analysis of SDG disclosure of different countries. The study suffered a few limitations. The study was limited by sample size of 50 companies and period of three years (2016-2018); however, it sets the tone for future empirical research on the subject matter. Also, this study fails to consider the qualitative research approach in determining the extent of SDG disclosure. As the study did not allow respondents to freely express their opinion on SDG disclosure since a large part of the survey used close-ended questionnaires.

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Appendix 1

List of Top 50 Companies Listed on the Nigerian Stock Exchange

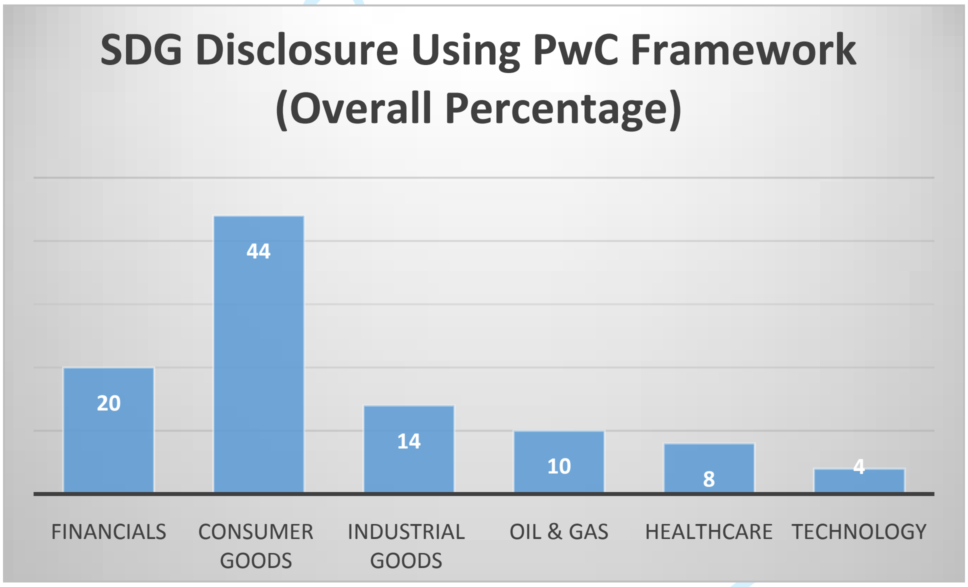
S/N	Companies	Sector
1	Access Bank	Financial Services
2	Diamond Bank	Financial Services
3	UBA	Financial Services
4	First Bank Plc	Financial Services
5	FCMB Plc	Financial Services
6	Fidelity Bank	Financial Services
7	GTBank	Financial Services
8	StanbicIBTC	Financial Services
9	Sterling Bank	Financial Services
10	Ecobank	Financial Services
11	Unity Bank	Financial Services
12	Wema Bank	Financial Services
13	Union Bank	Financial Services
14	Skye Bank	Financial Services
15	Zenith Bank	Financial Services

16	AIICO	Financial Services
17	African Alliance Insurance	Financial Services
18	Cadbury Nigeria Plc	Consumer Goods
19	Dangote Flour Mills	Consumer Goods
20	Guinness Nigeria Plc	Consumer Goods
21	Nestle Nigeria Plc	Consumer Goods
22	Unilever Nigeria Plc	Consumer Goods
23	PZ Cussons Nigeria	Consumer Goods
24	Cadbury Nigeria	Consumer Goods
24	Flour Mills of Nigeria	Consumer Goods
25	Honeywell Flour Mills	Consumer Goods
26	7-up Bottling Company	Consumer Goods
27	Nigerian Breweries	Consumer Goods
28	Dangote Sugar Plc	Consumer Goods
29	Vitafoam Nigeria	Consumer Goods
30	International Breweries	Consumer Goods
31	Dangote Cement	Industrial Goods
32	Lafarge Africa	Industrial Goods
33	UAC	Industrial Goods
34	A.G. Leventis	Industrial Goods
35	Julius Berger Nigeria	Industrial Goods
36	Mobil Oil	Oil and Gas
37	Total Nigeria	Oil and Gas
38	Forte Oil	Oil and Gas
39	Seplat Petroleum	Oil and Gas
40	Japaul Oil and Maritime Services	Oil and Gas
41	Conoil	Oil and Gas
42	May and Baker	Health Care
43	GlaxoSmithKline	Health Care
44	Fidson Healthcare	Health Care

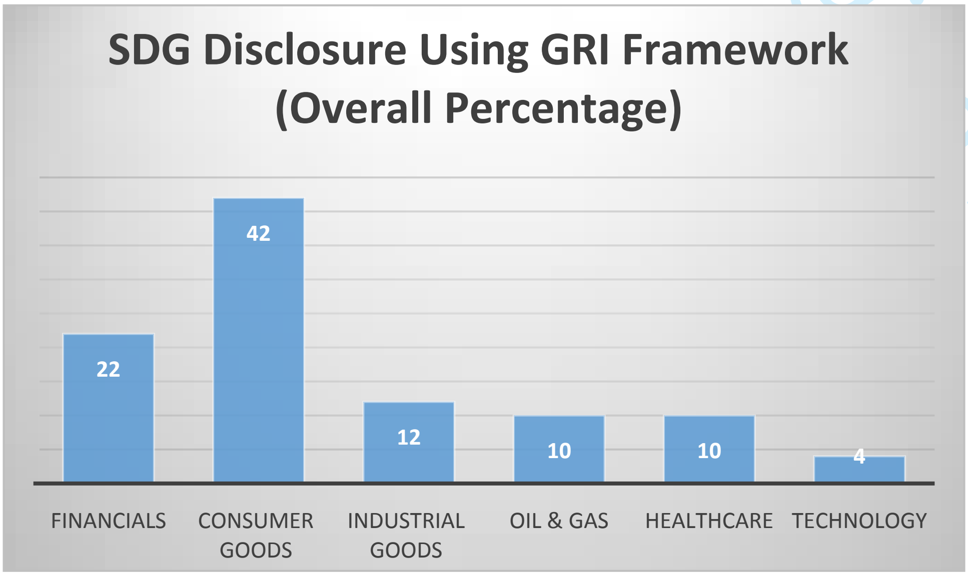
45	Neimeth International	Health Care
46	Nigerian-German Chemicals	Health Care
47	Chams Nigeria	Technology
48	NCR Nigeria	Technology
49	Computer Warehouse Group	Technology
50	E-tranzact International	Technology

Source: Nigerian Stock Exchange Report (2018)

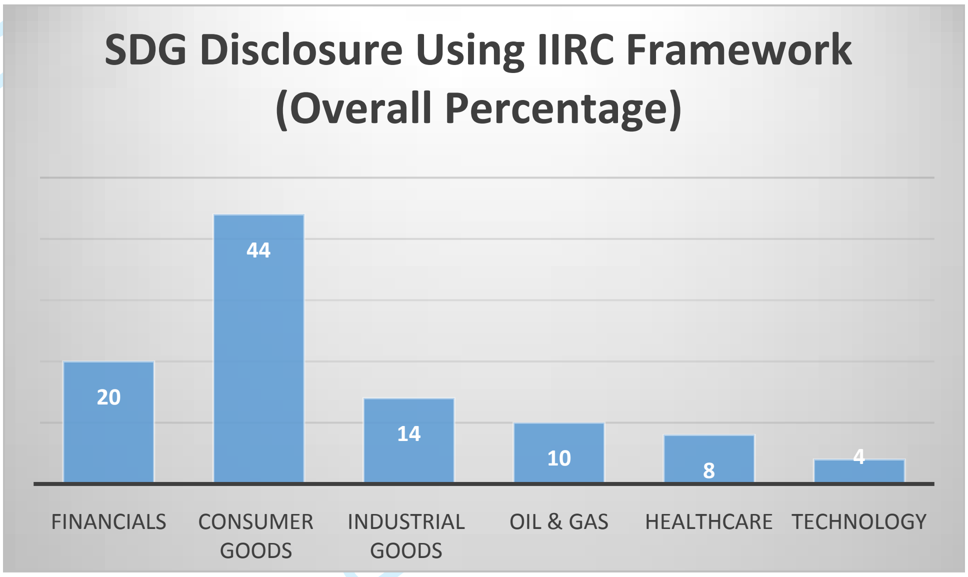
Appendix 2: Line Chart on SDG Reporting Using the PwC Framework



Appendix 3: Line Chart on SDG Reporting Using the GRI Framework



Appendix 4: Line Chart on SDG Reporting Using the IIRC Framework



Appendix 5: Line Chart on Business Reporting Indicator on Each SDG Target