

## A Correlational Analysis of Integrated Reporting and Financial Reporting Quality Among Nigerian Listed Firms

<sup>1</sup>Hassan, A. K., <sup>2</sup>Owolabi, S. A. & <sup>3</sup>Olaoye, S. A.

Department of Accounting, School of Management Sciences,  
Babcock University, Ilishan-Remo, Ogun State, Nigeria

### Abstract

The primary objective of financial reporting is to examine the degree of association between Integrated Reporting (IR) and Financial Reporting Quality (FRQ) among Nigerian listed firms. The study adopted survey design with stakeholders in financial reporting chain as the population. Stratified sampling technique was used to select 475 respondents (64% return rate). Responses were analysed using percentages and correlation analyses. The paper found that integrated reporting, measured by financial capital, manufactured capital, intellectual capital, social relationship capital, human capital and natural capital exhibited significant positive association with the financial reporting quality. The results of the association of each of the individual components of integrated reporting with the quality of financial statements revealed that disclosing information about each of the capital components of IR also showed positive significant relationship with the financial reporting quality. The paper recommended that management of Nigerian listed companies should give necessary attention to the disclosure of integrated reporting in their financial statements and the regulators and gatekeepers should make it mandatory for listed companies in Nigeria to start disclosing integrated reporting in their published financial statements.

**Keywords:** *Enhancing characteristics, Financial reporting quality, Fundamental quality, Integrated reporting, Non-financial capital*

Corresponding Author: **Hassan, A. K.**

## **Background to the Study**

The primary purpose of published financial statements is to provide relevant and reliable information for the needs of stakeholders who need them for various decision making purposes. However, the statistics and trend of corporate failures across the world today suggests the degree on the worry and concern of stakeholders on the quality of financial reporting among companies viz-a-viz meeting the needs of relevant stakeholders (Ogundana, Ojeka, Ojua and Nwaze, 2017; Tontiset and Kaiwinit, 2018). Several efforts and steps have been taken by regulators but no success has been recorded. The debates on what needs to be done to restore the confidence of the investors therefore had increased in coverage and intensity around the world (Okafor, 2012). Bhasin (2017) affirmed that the traditional financial reporting, as a means of stewardship and accountability, has failed in meeting the numerous and varied needs of stakeholders for informed, effective and efficient decision making. This was revealed by the reports of various financial scandals and eventual erosion of public trust and investors' confidence in the quality and usefulness of published financial statements (Ogundana, Ojeka, Ojua and Nwaze, 2017; Tontiset and Kaiwinit, 2018). Several suggestions had been made to include information on other forms of capital components, thus leading to the calls for integrated reporting (Bhasin, 2017; IIRC, 2011). The argument is that since the information needs of users are many and varied, this step would attend to the needs of each major stakeholder and other users of financial statements (Arguelles, Balatbat and Green, 2012; Camileri, 2018; IIRC, 2011). There is therefore need to investigate ways by which investors' confidence can be restored in the aftermath of these scandals and failures, especially the veracity of the claim that integrated reporting has the capability of meeting the varied needs of stakeholders thereby inducing their trust in the quality of financial reporting. This is the gap this study attempted to cover.

The main objective of the study was to examine the extent and direction of the association between integrated reporting and quality of financial reporting. Specific objectives pursued were to examine if:

- 1) Integrated Reporting has significant relationship with the Relevance Quality of Financial Reporting
- 2) Integrated Reporting has significant relationship with the Faithful Representation Quality of Financial Reporting
- 3) Integrated Reporting has significant relationship with the Comparability Quality of Financial Reporting
- 4) Integrated Reporting has significant relationship with the Verifiability Quality of Financial Reporting
- 5) Integrated Reporting has significant relationship with the Timeliness Quality of Financial Reporting
- 6) Integrated Reporting has significant relationship with the Understandability Quality of Financial Reporting

## **Hypotheses**

To give focus to the study, the following hypotheses stated in null, were drawn and tested at 5% significance level:

- 1) Integrated Reporting does not have significant relationship with the Relevance Quality of Financial Reporting
- 2) Integrated Reporting does not have significant relationship with the Faithful Representation Quality of Financial Reporting
- 3) Integrated Reporting does not have significant relationship with the Comparability Quality of Financial Reporting
- 4) Integrated Reporting does not have significant relationship with the Verifiability Quality of Financial Reporting
- 5) Integrated Reporting does not have significant relationship with the Timeliness Quality of Financial Reporting
- 6) Integrated Reporting does not have significant relationship with the Understandability Quality of Financial Reporting

## **Literature Review**

### **Conceptual Review**

#### **Integrated Reporting**

To improve the usefulness of corporate reporting, the International Integrated Reporting Council (IIRC) launched IR as a global framework in December 2013. The IIRC is a powerful global coalition of regulators, investors, companies, standard setters, the accounting profession and non-government organisations who share the view that better communication about value creation should be the next step in the evolution of corporate reporting.

Integrated report is "... a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term" (IIRC, 2013). IR is a process founded on integrated thinking that results in a periodic integrated report by an organization about value creation over time and related communications regarding aspects of value creation. It aims "... to provide a more holistic form of reporting the value created by a business, by considering non-financial resources such as human, social and intellectual capitals as well as financial capital" (Robertson, 2015). IR creates a shift in focus from short-term financial goals, to a long-term business strategy, which makes a commitment to social and environmental issues, as well as sustainable businesses and society (Robertson, 2015). Instead of the traditional approach which focuses only on financial capital, integrated thinking involves greater cooperation among organizational stakeholders, from diverse functions and backgrounds, to accomplish strategic objectives. The IIRC's Framework identified six value creating capitals which are relevant in the life of a firm in the process of producing its products and/or services and making them available to the consumers of such products/services. These are (i) Financial Capital; (ii) Manufactured Capital; (iii) Intellectual Capital; (iv) Social and Relationship Capital; (v) Natural Capital; and (vi) Human Capital (IIRC, 2013).

#### **The Value Creating Capitals of IR**

1) **Financial Capital:** Financial capital is 'the pool of funds that is available to an organization for use in the production of goods or the provision of services, obtained through financing, such as debt, equity or grants, or generated through operations or investments' (IIRC, 2013b).

**2) Manufactured Capital:** Manufactured capital is seen as human-created, production-oriented equipment and tools. It may take the form of physical objects, such as buildings, infrastructure, and equipment that can be used by an organization to produce goods or services. It is measured through its reported values for roads, bridges, Property, Plant and Equipment (PPE) (Hoque, 2017).

**3) Intellectual Capital:** Intellectual capitals are intangibles that provide competitive advantage, including intellectual property (such as patents, copyrights, software, rights, licences, etc.). It also includes the intangibles that are associated with the brand and reputation that an organization has developed. With the emergence of globalization and the knowledge economy, intellectual capital as creative capabilities and innovation have become the basis for success and development of the firms and are enhancing its competitive position (Al-Hajaya, Altarawney and Altarawney, 2019).

**4) Social Relationship Capital:** These are institutions and relationships established within and between each community, group of stakeholders and other networks to enhance individual and collective well-being. This also includes the ability to share information to enhance individual and collective well-being. This type of capital is carried by the network of human beings. Through Social and Relationship capital, there is constant stakeholders engagement for whereby issues of common interests are deliberated upon and resolved in the most amicable manner (IIRC, 2013).

**5) Human Capital:** This represents people's skills and experience, and their capacity and motivation to innovate. The human capital is comprised of the competencies, capabilities, and experience, as well as motivations to innovate of a firm's human resources. Human capital may also include employees' alignment with the firm's governance framework, ethical values and risk management practices, abilities to develop and implement the firm's strategy; and motivating and commitment to improve the firm's processes, goods, and services (IIRC, 2013). Al-Hajaya, Altarawney and Altarawney (2019) also asserted the relevance of human capital company growth.

**6) Natural Capital:** Natural Capital is an input to the production of goods or the provision of services. Natural capital is also seen as “all renewable and non-renewable environmental resources that provide goods or services that support the past, current or future prosperity of an organization”.

Fenichel and Hashida (2019) observed that in the context of natural capital what is 'sustainable' cannot be a mere synonym for good. They argued that whether a society is on a sustainable path depends on how much of its natural resources is consumed, how much is saved, invested or conserved, noting that majority of current economic researches have focused on how best to allocate natural resources rather than taking steps to preserve and sustain the natural endowments.

### **Financial Reporting Quality**

Financial accounting reporting is a set of procedures, process, rules, regulations and minimization of discretionary behaviours that are used in the treatment of business transactions, preparation and presentation of accounting information to the stakeholders and its level of relevance, reliability, transparency, faithfulness of such information towards eminent decision making (De-Meyere, Bauwhede and Van-Cauwenberge, 2018). Financial accounting should have quality in itself before anyone may expect from it qualitative financial information (Diaz, Gregory and Wayne, 2017). Thus, financial information should come out of a well-structured financial accounting system, so that the financial statements convey information to users for decision making. Financial reporting quality provides true and fair information about the under-lying the past financial position and financial performance of an entity, and it must be transparent for decision makers (Tasios and Bekarias, 2012).

According to International Accounting Standards Board (IASB) (2008), the essential principle of assessing the financial reporting quality is related to the faithfulness of the objectives and quality of disclosed information in a company's financial reports. These qualitative characteristics enhance the facilitation of assessing the usefulness of financial reports, which will also lead to a high level of quality. To achieve this level, financial reports must be faithfully represented, comparable, verifiable, timely, and understandable. Thus, the emphasis is on having transparent financial reports. The importance of preciseness and predictability are indicators of a high financial reporting quality (Gajevszky, 2015).

The Conceptual Framework for Financial Reporting of the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), stipulated that the agreed upon elements of high quality financial reporting are its Qualitative Characteristics which include Relevance and Faithful Representation as the fundamental and the Enhancing Characteristics as Comparability, Verifiability, Timeliness and Understandability.

**Relevance of Financial information:** This is the capacity of financial statements to create difference in decision making process by users. This is to say that financial information must have capacity of influencing decision towards predicting value, and confirmation of the value of a specific item (Power, 2010). Information relevance confirms the financial information provided by management to decision makers can be used as predictors of future longevity of business (Bambang, Kot, Adiati and Nur, 2018; Olayinka, Olojede and Olaoye, 2017).

International Accounting Standards Board (IASB) (2008) considered financial information relevance as the capability that makes a significant difference in decision making by different information users. It stressed further that continued by mentioning that for an information to be relevant it must have capacity of predictive and confirmatory value. This means that an information from the company must have capacity to provide important future cash flows.

**Faithful Representation of Financial Information:** Financial information is to be useful, if it is dependable by decision makers, thus, it must faithfully represent the financial position and performance of a company. The financial statements must reflect economic substance of all

transactions that took place during the accounting period, their clear disclosures that are useful in decision making (Kabinu and Rufai, 2014). Faithful representation is attained when “the depiction of the economic phenomenon is complete, neutral and free from material error” (IASB, 2008).

**Comparability of Financial Information:** Comparability of financial information means that company's situations (past and present) can be analyzed using at least two years comparative information especially about the financial position and performance to measure the profitability level, and returns on investment. Comparability of accounting information helps in making choices between many alternatives and substitutable cases in the decision making process by users. Comparison of financial information can also be between two or more companies where, one compares its level of profitability and financial position to others in the same industry or sector using different periods of business (Gaynor, Andrea, Molly and Teri, 2016). Financial statements should have capacity of being compared to evaluate firm's financial position, past performance, level of cash flows and effectively plan for its future outcomes. This may be done for time series in measuring trends and even in the industry (Cheung, Evans and Wright, 2010).

**Timeliness of Financial Information:** IASB (2008) defines timeliness as “having information available to decision makers before it loses its capacity to influence decisions”. Timeliness of financial information requires the presentation and communication of financial information before it loses its core value for decision making and change. Professional accountants and management are required to be aware that financial information is needed by users for a specific and timely purpose and have to present it in a very short time after the end of accounting period. Financial information is relevant when is presented on time and influences decision making process otherwise it loses its quality of being relevant. Efobi and Okougbo (2015) posited that financial statements that are published in 122 days after the year end, has significant relationship on company's performance.

**Verifiability of Financial Information:** Verifiability is a quality of information that helps assure users that information faithfully represents the economic phenomenon that it purports to report” (IASB, 2008). This quality refers to the credibility of the information that is contained in its financial statements which aims at providing assurance that the financial statements provide information which accurately show the business transactions that really took place in nature and in a legal form. Such information could be verified and tested by any third party if users are not satisfied or have issues in analysis of the financial information issued by management.

**Understandability of Financial Information:** IASB (2008) asserts that understandability “is the quality that enables users to comprehend in meaning” and that information that users do not understand is not useful even in the case it is relevant. The reliability of financial information has to do with the attribute of financial reports which make them easy to read and understand and must not confuse the readers and decision makers. Therefore, accountants need to prepare financial accounting information in a recognized language and supply more

explanations or details about business activities of their entity in a clear and full disclosure even if there is an assumption that users need to have basic knowledge of business and economic activities. Professionals in charge of preparing and presenting financial statements should use the terms that are familiar to users who even may not have accounting background, therefore the sentences should be understandable, clearly readable with clear content (FASB, 2010).

### **Theoretical Framework**

This study is anchored on the Stakeholders Theory as propounded by Edwin Freeman (1984). It was seen as a development out of the weakness of the Agency Theory. It became popular because of the conflict of interest between the manager (agent) and the management (principal) leading to the issue of information asymmetry. The John Elkington's Triple Bottom Line Theory of 1997 expanded the scope of stakeholders to include shareholders, stockholders, employees, customers, creditors, local community, Government and its Agencies (Central Bank of Nigeria, Corporate Affairs Commission, National Bureau of Statistics, Tax Authorities, etc) and that their individual interests must be catered for in all policy decisions affecting the organization. The implication of this expansion is the incorporation of corporate reporting and internal mechanisms required to create and deliver relevant information needed by the concerned stakeholders in taking informed investment and other business decisions.

### **Empirical Review**

Bhasin (2017) argued that financial reporting is the channel through which the performance of an entity are communicated to the various stakeholders, contending further that these reports have been deficient and unreliable for decision making by the concerned stakeholders. He thus called for a global focused attention to address the poor quality of such reports with a view to re-building the confidence of investors and sustain the sustainability of the firms. This poor Financial Reporting Quality has led to impromptu business close downs with their attendant job losses globally and the reported financial scandals across the globe, including Nigeria (Akintoye, 2019; Nwaobia, Kwarbai and Ajibade, 2016). In his study, Hoque (2017) observed that practitioners and supporters of Integrated Reporting (IR) asserted that IR brings more transparency on corporate commitments to sustainable performance in a single report. He concluded that in order to be sustainable and attractive in this competitive business world, companies require to meet stakeholders demand by disclosing both financial and non-financial information with the demonstration of the sustainable strategies in the first place.

Al-Hajaya, Altarawney and Altarawney (2019) suggested that the success of companies in the first half of the last century was basically measured by what tangible assets they possessed, the large size of the factories and the large size of labour force. However, the scholars observed that the situation has remarkably changed with the emergence of globalization and the knowledge economy, noting that nowadays creative capabilities and innovation with associated skills and experience possessed by the personnel working in the firm, i. e. the intellectual capital of the firm, have become the basis for success and development. Accounting reporting quality is the aptitude of accounting process and measurements to

replicate the company's financial position and performance. The analysis of this definition shows that the core value of accounting process is to provide relevance and reliability of financial information which is useful for decision making. This further indicates that the main objective of accounting reporting quality is to minimize the manipulating effects and intention of managers towards misleading investors and other stakeholders (Barth, 2018; Kyle, Roy and Wilks, 2015).

According to International Accounting Standards Board (IASB) (2008), the essential principle of assessing the financial reporting quality is related to the faithfulness of the objectives and quality of disclosed information in a company's financial reports. These qualitative characteristics enhance the facilitation of assessing the usefulness of financial reports, which will also lead to a high level of quality. To achieve this level, financial reports must be faithfully represented, comparable, verifiable, timely, and understandable. Thus, the emphasis is on having transparent financial reports, and not having misleading financial reports to users; not to mention the importance of preciseness and predictability as indicators of a high financial reporting quality (Gajevszky, 2015).

As it is defined in the Conceptual Framework for Financial Reporting of the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), there are agreed upon elements of high quality financial reporting. The Qualitative Characteristics of financial reporting quality include Relevance, Faithful Representation while the Enhancing Characteristics include Comparability, Verifiability, Timeliness and Understandability.

Relevance of financial information can be termed as its capacity in creating the difference in decision making process by users. This is to say that financial information must have capacity of influencing decision towards predicting value, and confirmation of the value of a specific item. That is to mean that financial information has such capacity if the outcomes can be reliable predicted based on current and past situations of business (Power, 2010). In this case, decision makers especially investors, lenders and creditors base their decision on financial information presented by company's management in order to measure its level of return on investments, capacity to pay liabilities and payables. Financial information relevance comes as to confirm the financial information provided by management to decision makers and concerns, past and current events or situation that can be used as predictors of future longevity of business (Olayinka, Olojede and Olaoye, 2017; Bambang, Kot, Adiati and Nur, 2018;).

International Accounting Standards Board (IASB) 2008, considered financial information relevance as the capability that makes a significant difference in decision making by different information users especially the owners of capital and others financial resources. It stress further that continued by mentioning that for an information to be relevant it must have capacity of predictive and confirmatory value. This means that an information from the company must have capacity to provide important future cash flows. While a predictive value is when an information has a certain value as input in predictive processes used by the owners of investors and other stakeholders to form their views about the company's future and what it will give them as a result of investing in such business.



Financial information is to be useful, if it is dependable by decision makers, thus, it must faithfully represent the financial position and performance of a company. The financial statements must reflect economic substance of all transactions that took place during the accounting period, their clear disclosures that are useful in decision making (Kabinu and Rufai, 2014). Tasios and Bekiaris (2017) observed that faithful representation is attained when “the depiction of the economic phenomenon is complete, neutral and free from material error” (IASB, 2008). The phenomenon to be presented are “economic resources, obligations and the transactions and events that change those resources and obligations” (FASB, 1980).

Braam and Beest (2013) proposed that among different types of decisions to be made, comparability of financial information aims at helping decision makers or user to find out and get clear understanding of the existing similarities and level of differences that may exist within a company or industry and come up with strong corrective measures, and or new vision about what the entity is doing. For the industrial perspective, comparability of financial information mainly refer to the application of accounting principles, standards, policies and procedures towards their improvement or restructure.

### Methodology

The study adopted survey research design with population covering stakeholders in the financial reporting chain for companies listed in Nigeria stock exchange. A sample of 475 was selected using Stratified sampling technique from the stakeholders in the financial reporting chain among companies listed in Nigeria. Return rate was 64%. Structured questionnaire was used to gather primary data from respondents. The results of the reliability test for the instrument showed it was reliable. The *CronbachAlpha* for IR was 0.920 using 30 items and 0.625 using 5 items for the quality of financial reporting; the responses were analysed using percentages and correlation analyses. The hypotheses were tested using Pearson correlation at 5% level of significance.

### Results and Discussion of Findings

**Table 1:** Correlation of Integrated Components and the Financial Reporting Quality

		FUN D QC	ENH QC	FIN CAP	MAN CAP	INT CAP	HUM CAP	SOC CAP	NAT CAP	INT REP
<b>Quality of Financial Reporting</b>	Pearson Cor.	.551**	.795**	.320**	.250**	.205**	.387**	.409**	.336**	.355**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	289	289	288	289	289	289	287	287	284
<b>Fundamental Qualitative Characteristics</b>	Pearson Cor.	1	.436**	.377**	.204**	.244**	.362**	.520**	.229**	.512**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
	N	297	289	296	297	297	297	295	295	292
<b>Enhancing Qualitative Characteristics</b>	Pearson Cor.	.436**	1	.341**	.278**	.239**	.329**	.429**	.328**	.348**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000
	N	289	295	294	295	295	295	293	293	290

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### **Association of Integrated Reporting and the Quality of Financial Reporting**

The results ( $r = 0.355$ ;  $p < 0.05$ ) revealed that integrated reporting has significant positive association of 0.320 with quality of financial reporting. This implies that reporting information about integrated reporting and quality of financial reporting moves in the same direction, meaning that if integrated reporting is improved by one unit, the expectation is that quality of financial reporting of listed companies in Nigeria would also be improved but by 35.5% (0.355).

When quality of financial reporting is broken down, a direct significant association ( $r = 0.512$ ;  $p < 0.05$ ) is also found between integrated reporting and fundamental quality of financial reporting. This implies that integrated reporting and fundamental quality of financial reporting moves in the same direction, such that if integrated reporting is improved by one unit, the expectation is that fundamental quality of financial reporting of listed companies in Nigeria would be improved but by 51.2% (0.512). Similarly, a direct significant association ( $r = 0.348$ ;  $p < 0.05$ ) is found between integrated reporting and enhancing quality of financial reporting. This implies that integrated reporting and enhancing quality of financial reporting move in the same direction, meaning that if integrated reporting is improved by one unit, the expectation is that enhancing quality of financial reporting of listed companies in Nigeria also get improved but by 34.8% (0.348). Comparatively, IR is found to exhibit higher significant correlation with both fundamental and enhancing characteristics, however fundamental characteristics showed higher degree of association ( $r = 0.512$ ) than enhancing characteristics ( $r = 0.348$ ).

### **Association of Financial Capital and the Quality of Financial Reporting**

The results ( $r = 0.320$ ;  $p < 0.05$ ) revealed that reporting information about the financial capital has significant positive association of 0.320 with quality of financial reporting. This implies that reporting information about the financial capital and quality of financial reporting moves in the same direction, meaning that if reporting information about the financial capital is improved by one unit, the expectation is that quality of financial reporting of listed companies in Nigeria would also be improved but by 32% (0.320).

When quality of financial reporting is broken down, a direct significant association ( $r = 0.377$ ;  $p < 0.05$ ) is also found between reporting information about the financial capital and fundamental quality of financial reporting. This implies that reporting information about the financial capital and fundamental quality of financial reporting moves in the same direction, such that if reporting information about the financial capital is improved by one unit, the expectation is that fundamental quality of financial reporting of listed companies in Nigeria would be improved but by 37.7% (0.377). Similarly, a direct significant association ( $r = 0.341$ ;  $p < 0.05$ ) is found between reporting information about the financial capital and enhancing quality of financial reporting. This implies that reporting information about the financial capital and enhancing quality of financial reporting move in the same direction, meaning that if reporting information about the financial capital is improved by one unit, the expectation is that enhancing quality of financial reporting of listed companies in Nigeria also get improved but by 34.1% (0.341).

### **Association of Manufactured Capital and the Quality of Financial Reporting**

The results ( $r = 0.250$ ;  $p < 0.05$ ) revealed that reporting information about the manufactured capital has significant positive association of 0.250 with quality of financial reporting. This implies that reporting information about the manufactured capital and quality of financial reporting moves in the same direction, meaning that if reporting information about the manufactured capital is improved by one unit, the expectation is that quality of financial reporting of listed companies in Nigeria would also be improved but by 25% (0.250).

When quality of financial reporting is broken down, a direct significant association ( $r = 0.204$ ;  $p < 0.05$ ) is also found between reporting information about the manufactured capital and fundamental quality of financial reporting. This implies that reporting information about the manufactured capital and fundamental quality of financial reporting moves in the same direction, such that if reporting information about the manufactured capital is improved by one unit, the expectation is that fundamental quality of financial reporting of listed companies in Nigeria would be improved but by 25% (0.250). Similarly, a direct significant association ( $r = 0.278$ ;  $p < 0.05$ ) is found between reporting information about the manufactured capital and enhancing quality of financial reporting. This implies that reporting information about the manufactured capital and enhancing quality of financial reporting move in the same direction, meaning that if reporting information about the financial capital is improved by one unit, the expectation is that enhancing quality of financial reporting of listed companies in Nigeria also get improved but by 27.8% (0.278).

### **Association of Intellectual Capital and the Quality of Financial Reporting**

The results ( $r = 0.205$ ;  $p < 0.05$ ) revealed that reporting information about the intellectual capital has significant positive association of 0.205 with quality of financial reporting. This implies that reporting information about the intellectual capital and quality of financial reporting moves in the same direction, meaning that if reporting information about the intellectual capital is improved by one unit, the expectation is that quality of financial reporting of listed companies in Nigeria would also be improved but by 20.5% (0.205).

When quality of financial reporting is broken down, a direct significant association ( $r = 0.362$ ;  $p < 0.05$ ) is also found between reporting information about the intellectual capital and fundamental quality of financial reporting. This implies that reporting information about the intellectual capital and fundamental quality of financial reporting moves in the same direction, such that if reporting information about the intellectual capital is improved by one unit, the expectation is that fundamental quality of financial reporting of listed companies in Nigeria would be improved but by 36.2% (0.362). Similarly, a direct significant association ( $r = 0.329$ ;  $p < 0.05$ ) is found between reporting information about the intellectual capital and enhancing quality of financial reporting. This implies that reporting information about the intellectual capital and enhancing quality of financial reporting move in the same direction, meaning that if reporting information about the intellectual capital is improved by one unit, the expectation is that enhancing quality of financial reporting of listed companies in Nigeria also get improved but by 239% (0.341).

### **Association of Human Capital and the Quality of Financial Reporting**

The results ( $r = 0.387$ ;  $p < 0.05$ ) revealed that reporting information about the human capital has significant positive association of 0.387 with quality of financial reporting. This implies that reporting information about the human capital and quality of financial reporting moves in the same direction, meaning that if reporting information about the human capital is improved by one unit, the expectation is that quality of financial reporting of listed companies in Nigeria would also be improved but by 38.7% (0.387).

When quality of financial reporting is broken down, a direct significant association ( $r = 0.362$ ;  $p < 0.05$ ) is also found between reporting information about the human capital and fundamental quality of financial reporting. This implies that reporting information about the human capital and fundamental quality of financial reporting moves in the same direction, such that if reporting information about the human capital is improved by one unit, the expectation is that fundamental quality of financial reporting of listed companies in Nigeria would be improved but by 36.2% (0.362). Similarly, a direct significant association ( $r = 0.329$ ;  $p < 0.05$ ) is found between reporting information about the human capital and enhancing quality of financial reporting. This implies that reporting information about the human capital and enhancing quality of financial reporting move in the same direction, meaning that if reporting information about the human capital is improved by one unit, the expectation is that enhancing quality of financial reporting of listed companies in Nigeria also get improved but by 32.9% (0.329).

### **Association of Social Capital and the Quality of Financial Reporting**

The results ( $r = 0.409$ ;  $p < 0.05$ ) revealed that reporting information about the social capital has significant positive association of 0.320 with quality of financial reporting. This implies that reporting information about the social capital and quality of financial reporting moves in the same direction, meaning that if reporting information about the social capital is improved by one unit, the expectation is that quality of financial reporting of listed companies in Nigeria would also be improved but by 40.9% (0.409).

When quality of financial reporting is broken down, a direct significant association ( $r = 0.520$ ;  $p < 0.05$ ) is also found between reporting information about the social capital and fundamental quality of financial reporting. This implies that reporting information about the social capital and fundamental quality of financial reporting moves in the same direction, such that if reporting information about the social capital is improved by one unit, the expectation is that fundamental quality of financial reporting of listed companies in Nigeria would be improved but by 52% (0.520). Similarly, a direct significant association ( $r = 0.429$ ;  $p < 0.05$ ) is found between reporting information about the social capital and enhancing quality of financial reporting. This implies that reporting information about the social capital and enhancing quality of financial reporting move in the same direction, meaning that if reporting information about the social capital is improved by one unit, the expectation is that enhancing quality of financial reporting of listed companies in Nigeria also get improved but by 42.9% (0.429).

### **Association of Natural Capital and the Quality of Financial Reporting**

The results ( $r = 0.336$ ;  $p < 0.05$ ) revealed that reporting information about the natural capital has significant positive association of 0.320 with quality of financial reporting. This implies that reporting information about the natural capital and quality of financial reporting moves in the same direction, meaning that if reporting information about the natural capital is improved by one unit, the expectation is that quality of financial reporting of listed companies in Nigeria would also be improved but by 33.6% (0.336).

When quality of financial reporting is broken down, a direct significant association ( $r = 0.229$ ;  $p < 0.05$ ) is also found between reporting information about the natural capital and fundamental quality of financial reporting. This implies that reporting information about the natural capital and fundamental quality of financial reporting moves in the same direction, such that if reporting information about the natural capital is improved by one unit, the expectation is that fundamental quality of financial reporting of listed companies in Nigeria would be improved but by 22.9% (0.229). Similarly, a direct significant association ( $r = 0.328$ ;  $p < 0.05$ ) is found between reporting information about the natural capital and enhancing quality of financial reporting. This implies that reporting information about the natural capital and enhancing quality of financial reporting move in the same direction, meaning that if reporting information about the natural capital is improved by one unit, the expectation is that enhancing quality of financial reporting of listed companies in Nigeria also get improved but by 32.8% (0.32.8).

Comparative analyses of the association of each capital component of IR against quality of financial reporting revealed that association with each of financial capital, intellectual capital, human capital and social capital had higher degree with the fundamental quality of financial reporting than enhancing characteristics. On the other hand, only in the case of association of manufactured capital was higher association found with enhancing characteristics than with fundamental characteristics. In all, highest level of correlation was recorded between social capital and quality of financial reporting.

It is noteworthy that, either as total quality of financial reporting or as individual fundamental characteristics or enhancing characteristics, the highest correlation was recorded from association with social capital. These results imply that perception of stakeholders in financial reporting chain showed that reporting information on social capital on the financial statements was comparatively given more priority than any other capital component.

## Discussion of Findings

**Table 2:** Summary of Results

		FIN CAP	MAN CAP	INT CAP	HUM CAP	SOC CAP	NAT CAP	INT REP
<b>Quality of Financial Reporting</b>	Pearson Cor.	.320**	.250**	.205**	.387**	.409**	.336**	.355**
	Sig. (2-tailed)	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	3 <sup>rd</sup>	-----
	Weight	3	2	1	5	6	4	
<b>Fundamental Qualitative Characteristics</b>	Pearson Cor.	.377**	.204**	.244**	.362**	.520**	.229**	.512**
	Sig. (2-tailed)	2 <sup>nd</sup>	6 <sup>th</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	5 <sup>th</sup>	1 <sup>st</sup>
	Weight	5	1	3	4	6	2	
<b>Enhancing Qualitative Characteristics</b>	Pearson Cor.	.341**	.278**	.239**	.329**	.429**	.328**	.348**
	Sig. (2-tailed)	2 <sup>nd</sup>	6 <sup>th</sup>	5 <sup>th</sup>	3 <sup>rd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	2 <sup>nd</sup>
	Weight	5	1	2	4	6	3	
Total Weight		13	4	6	13	18	9	
<b>Ranking of IR Components</b>		<b>2<sup>nd</sup></b>	<b>6<sup>th</sup></b>	<b>5<sup>th</sup></b>	<b>2<sup>nd</sup></b>	<b>1<sup>st</sup></b>	<b>4<sup>th</sup></b>	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source:** Extract by the authors (2020)

## Discussion of Major Findings

**Relationship of integrated reporting with the quality of financial reporting:** The paper found that integrated reporting exhibited significant positive relationship with quality of financial reporting. The implication of this is that the result agreed with the *a-priori* expectation that integrated reporting had significant association with quality of financial reporting. This testifies that integrated reporting is significantly associated with improved quality of financial statements. The implication is that if a company disclose integrated reporting on its financial statements, it could be expected that stakeholders of such company would perceive that quality of such financial statements would be improved. Considering the magnitude of the relationship of IR with each of the qualitative characteristics, IR showed higher degree of association with fundamental qualitative characteristics than it showed with the enhancing quality of financial reporting.

**Relationship of capital components of integrated reporting with the quality of financial reporting:** The results of the association of each of the individual components of integrated reporting with the quality of financial statements revealed that disclosing information about each of the capital components of IR showed positive significant relationship with the quality of financial statements. This also agreed with the *a-priori* expectation. Of all the capital components, informing about the social responsibility capital exhibited highest degree of association with the quality of financial statements as a whole. Disclosing information on human capital on the financial statements gave the second highest degree, followed by natural capital as the third. The financial capital exhibited the fourth highest magnitude of association followed by manufactured CapitalLand intellectual capital exhibiting the least magnitude in the association with quality of financial reporting.

The results of the association of each of the capital components showed that each of the six capital components had significant positive association with the fundamental quality of financial statements. The social capital information also gave highest degree of association with fundamental quality of financial statements compared to association of other capital components.

Association of each of these capital components with the enhancing qualitative characteristics of financial reporting suggested that each of the capital components showed significant positive association with the enhancing qualitative characteristics of financial reporting. Information about the social responsibility capital was also found to give the highest degree of association with enhancing quality of financial statements compared to association of other capital components.

The ranking of association of each of the capital components suggested that on aggregation, information about social responsibility capital was perceived to be more associated with the quality of financial reporting than any other component of IR. This is followed by human capital as the second along with financial capital. Next on the ranking is the natural capital before intellectual capital as the fifth and manufactured capital as the sixth. The implication of these results is that stakeholders in financial reporting chain among listed companies in Nigeria revealed that social responsibility capital is usually perceived to be the most important of the six capital components, even before information about financial capital. This position is supported by proponents of IR claiming that information about non-financial capital is important.

### **Conclusion**

The study conclude from the findings that integrated reporting, measured with financial capital, manufactured capital, intellectual capital, social responsibility capital, human capital and natural capital, had significant positive association with the quality of financial reporting. Of these six capital components of integrated reporting, social responsibility capital had the highest degree of association even, with fundamental and enhancing qualitative characteristics.

### **Recommendations**

Arising from the findings from the study, this paper recommends that stakeholders especially management of listed companies in Nigeria should give necessary attention to the disclosure of integrated reporting in their financial statements

1. Regulators like Nigerian stock exchange, Central Bank of Nigeria, Security and Exchange commission should mandate listed companies in Nigeria to be disclosing integrated reporting, bringing out its six capital components.
2. Financial Reporting Council of Nigeria, as the gatekeeper in financial reporting, should ensure the compliance of Nigerian listed companies with the disclosure of integrated reporting capitals in their financial statements for better quality financial statements. .

## References

- Adams, C. A. (2015). The international integrated reporting council: A call to action, *Critical Perspectives on Accounting*, 27(1), 23-28.
- Al-Hajaya, K., Altarawneh, M. S. & Altarawneh, B. (2019). Intellectual capital disclosure by listed companies in Jordan: A comparative inter-sector analysis, *International Review of Management and Marketing*, 9(1), 109-116.
- Bambang, S., Kot., S., Adiati, A. K. & Nur, A. L. (2018). Sustainability reporting and value relevance of financial statements, *Journal of Sustainability Reporting*, 10(4), 2-1
- Barth, M. E. (2018). The future of financial reporting: Insights from research, *Journal of Accounting and Economics*, 54(1), 66-78
- Bhasin, M. L. (2017). Integrated Reporting: The future of corporate reporting, *International Journal of Management and Social Sciences Research (IJMSSR)*, 6(2), 17-31.
- Braam, G. S. & Beest, F. (2013). Financial reporting quality: A literature review, *International Journal of Business Management and Commerce*, 2(2), 1-14.
- Catalfo, P. & Wolf, I. (2015). Intangible disclosures in management commentary regulation in Germany and Italy: A semantic approach, *Journal of Intellectual Capital*, 17(1), 103-119.
- Cheung, E., Evans, E. , & Wright, S. (2010). An historical review of quality in financial reporting in Australia, *Pacific Accounting Review*, 14(5), 89-102.
- Downen, T. (2014). Defining and measuring financial reporting precision, *Journal of Theoretical Accounting Research*, 9(7), 21-57.
- Eccles, R. G. & Krzus, M. P. (2010). One report: Integrated reporting for a sustainable strategy Hoboken, John Wiley & Sons
- Efobi, U. & Okougbo, P. (2015). Timeliness of financial reporting in Nigeria. *South African Journal of Accounting Research*, 8(1), 65-77.
- Ezeagba, C. E. & Abiahu, M. C. (2018). Influence of professional ethics and standards in less developed countries: An assessment of professional accountants in Nigeria, *Journal of Economics, Business and Accounting*, 16(1), 1-9.
- Financial Accounting Standards Board, (2010). *Characteristics of useful financial information statement of financial accounting concepts No. 8.*
- Fenichel, E. P. & Hashida, Y. (2019). Choices and the value of natural capital, *Oxford Review of Economic Policy*, 3(1), 120-137.



- Gaynor, M. , Andrea, S. K. , Molly, M. , & Teri, L. Y. (2016). Understanding the relation between financial reporting quality and audit quality, *Auditing: A Journal of Practice and Theory*. 35 (4), 1-22.
- Hoque, M. E. (2017). Why companies should adopt integrated reporting?, *International Journal of Economics and Financial Issues*, 7(1), 241-248.
- International Accounting Standards Board (IASB) (2008). *Exposure draft on an improved conceptual framework for financial reporting: The objective of financial reporting and qualitative characteristics of decision-useful financial reporting information*, London: IASB.
- International Integrated Reporting Council (IIRC) (2011). *Discussion paper: Towards integrated reporting – Communicating value in the 21<sup>st</sup> century*.
- IIRC (2013). *The international integrated reporting framework*, Retrieved from <http://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THEINTERNATIONAL-IR-FRAMEWORK-2-1.pdf>.
- IIRC (2013a). Empirical study regarding the integrated reporting practices in Europe, *Audit Financiar*, 15 (148), 613-635.
- Joshi, P. L. (2018). Integrated reporting: Current Trends in financial reporting, *International Journal of Accounting Research*, 15 (4), 1-10
- Kyle, P., Roy, S. & Wilks, J. (2015). The earnings quality and information processing effects of accounting consistency. *The Accounting Review Journal*, 90(6), 2483-2514
- Mahboub, R. (2017). Main determinants of financial reporting quality in the Lebanese banking sector, *European Research Studies Journal*, 20 (4B), 706-726.
- Mbobu, M. E. & Ekpo, N. B. (2016). Operationalizing the qualitative characteristics of financial reporting, *International Journal of Finance and Accounting* 5 (4), 184-192.
- Nobes, C. W. & Stadler, C. (2015). The qualitative characteristics of financial information and managers accounting decisions: Evidence from IFRS Policy changes, *Accounting and Business Research*, 45(5), 1-30.
- Nwaobia, A. N. Kwarbai, J. D. & Ajibade, A. T. (2016). Financial reporting quality on investors decisions, *International Journal of Economics and Financial Research*, 2 (7), 140-147.
- Ogunnaike, O. O., Oyewunmi, A. E., & Famuwagun, O. E. (2016). Empirical appraisal of compensation and organizational commitment in education management, *Mediterranean Journal of Social Sciences*, 7(3), 296-301.

- Olayinka, E. O., Olojede, P. & Olaoye, O. (2017). Value relevance of accounting data in the pre and post IFRS era: Evidence from Nigeria, *International Journal of Finance and Accounting*, 6(3), 95-103.
- Olowokure, O. A., Tanko, M. & Nyor, T. (2016). Financial characteristics and financial reporting quality of listed money deposit banks in Nigeria, *Journal of International Financial Management and Accounting*, 15(2), 119-144.
- Okafor, R, G. (2012). Intangible relational capital and the success of entrepreneurial firms in Nigeria: A second look, *Journal of Economics and Sustainable Development*, 3 (4), 179-187.
- Robertson, F. (2015). What is Integrated Reporting and why does it matter? <https://www.icas.com/professional-resources/sustainability/practical-tools-and-links/integrated-reporting/what-is-integrated-reporting-why-it-matters>
- Salaudeen, Y. M., Ibikunle, J. & Chima, E. I. (2015). Unethical accounting practice and financial reporting quality: Evidence from Nigeria, *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(2), 143-150.
- Stubbs, W. & Higgins, C. (2014). Integrated reporting and internal mechanisms of change, *Accounting, Auditing and Accountability Journal*, 27(7), 201-225.
- Umoren, A. O. & Enang, E. R. (2015). IFRS adoption and value relevance of financial statement, *International Journal of Finance and Accounting*, 4(1), 1-7.