



## **Integrated Reporting and Earnings Quality Among Listed Firms in East Africa**

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### **Abstract**

Despite numerous studies on earnings quality, companies have continued to report low-quality earnings. Earnings quality has continued to attract the interest of scholars, practitioners, and policymakers due to the stakeholder's interest in earnings and the ultimate survival of the firms. Although the study on the quality of earnings has been extensively researched, the results are inconclusive or have mixed findings. Thus, the interest of the study in integrated reporting (IR) and earnings quality in East Africa. The objective of the study was to examine the relationship between integrated reporting and earnings quality among the listed firms in East Africa. The study was guided by agency, stewardship, and signaling theories. The study adopted explanatory and longitudinal research designs with panel data to establish the causal relationship between the research variables. The target population comprised 117 firms listed on East African Securities Exchanges. The inclusion/exclusion criteria was adopted, drawing a sample of 78 firms for the study period of 2014–2021. Data was collected from the firms' audited annual reports and analysed using descriptive and inferential statistics. The findings demonstrate that integrated reporting and earnings quality have a positive relationship. As a result, at the 5% significance level ( $\beta = -0.011$ ;  $p < 0.05$ ), voluntary adoption of integrated reporting is related to higher earnings quality. The findings are useful for East African listed companies considering adopting and disseminating IR in their annual reports in the future, as well as understanding the value of IR in improving the quality of their earnings.

**Keywords:** Integrated reporting, Earnings quality, East Africa

## **1. Introduction**

For several years, quality earnings and accounting information disclosure continue to attract the attention of academicians, practitioners, and policymakers due to increased stakeholder interest in the value of earnings and the ultimate survival of firms (Elzahaby 2021; Rezaee, Dou & Zhang 2020; Beyer, Guttman & Marinovic 2019; Sulistiawan, & Rudiawarni 2019; Arniati, Puspita, Amin & Pirzada 2019). Companies have continued to disclose low-quality earnings despite countless studies on earnings quality (Chen & Komal 2018; Levitt 2000; Debnath 2017), which is evidence by failure of many firms (Enron, WorldCom, Health South, Tyco, Waste Management, Xerox, Subeam, Uchumi, Mumias Sugar, and Trust Bank, to mention but a few). Earnings are of high quality when they accurately reflect the company's current operational performance, are reliable predictors of future operating performance, and are an effective summary measures for assessing firm value (Kamarudin & Ismail 2014).

The quality of earnings is the most robust detail in the financial statement (Dichev, Graham, Harvey, & Rajgopal, 2013), since it affects the company, investments, and managerial staff decisions (Debnath, 2017; Levitt, 2000; Alhmoed, Shaari, & Al-Dhamari, 2020). Earnings have a big impact on the stock price, which affects the firm's value, and as a result, the figures are subject to potential manipulation.

When the earnings are high, they indicate an increase in the firm's value, and vice versa. Earnings manipulation has decreased investors' credibility in the accuracy of the information reported by publicly traded companies (Alhmoed et al., 2020; Saleem, Alifiah, & Tahir 2016; González, & Garca-Meca 2014). Voluntary or involuntary, firms will make inestimable operating and accounting choices, and therefore they must engage in some form of earnings manipulation, even if it is by default (Fatima, Haque, & Usman 2020; Ramírez-Orellana, Martnez-Romero, & Mario-Garrido 2017; Debnath 2017).

The world has witnessed a number of corporate failures among leading entities, arising from manipulated earnings. A case in point, Tyco International lost its market value of SD 100 billion, which exceeded the total loss incurred by Enron of USD 60 billion (Troy, Smith, & Domino 2011), after the CEOs were charged with unscrupulous practices to defraud investors and other stakeholders (Dechow & Schrand, 2004). In East Africa, companies like Uchumi, Trust Bank, Imperial Bank (Central Bank of Kenya, 2016), and Mumias in Kenya, NICOL in Tanzania, and Crane Bank in Uganda, among others, have had accounting scandals. The numerous studies that have been carried out are inconclusive or have produced mixed findings, and

have been carried out mainly in developed countries, with continuous occurrences of the same. Thus, providing the need to understand how integrated reporting predicts the quality of earnings.

Integrated reporting is the presentation of financial and non-financial information in one report. The continuous financial scandals have all increased the demand for integrated reporting by stakeholders. In part, companies have responded by increasing their financial and non-financial disclosures (integrated reporting) to demonstrate transparency and accountability to stakeholders (Omran, Ramdhony, Mooneepen, & Nursimloo, 2021; Camilleri, 2018). The accounting profession has critiqued the traditional financial reporting paradigm, stating that it does not offer stakeholders enough information to analyse the company's past and future performance (Flower, 2015). Integrated reporting is the most recent innovation in the world of corporate reporting, and it addresses the drawbacks of traditional financial reporting (IIRC, 2013). It is an important aspect of earnings quality that involves reporting both financial and non-financial information in a single report, nonetheless, it is more than a compilation of financial, environmental, social, and governance facts (Adams, 2015; IIRC 2013; Beneish, 2001; Shirabe & Nakano, 2019; Obeng, Ahmed, & Miglani, 2020), as noted in the signaling theory that signaling would help stakeholders better check the value of the company and then reach more benevolent conclusions (Whiting & Miller, 2008).

The concept of "integrated thinking," which is at the heart of integrated reporting (IR), drives organisations to consider how they may create value for themselves and society (Camilleri, 2018). Using integrated thinking, the corporation can examine how the many aspects of its operations link to or affect its use of capital (IIRC, 2013). This makes clear why corporations are compelled to voluntarily provide more information than is necessary by laws and regulations (Dayanandan, Donker, & Karahan, 2017), which is to look attractive in the market, that is, to appear positively in the market (Spence, 1973; Connelly, Certo, Ireland, & Reutzel 2011). IR has gained a lot of momentum recently, and the IIRC has received support from some of the world's most prestigious organisations (Barth, Cahan, Chen, & Venter, 2017; de Villiers, Rinaldi, & Unerman, 2014; Lee & Yeo, 2016). Despite this, no government, with the exception of South Africa, has made IR mandatory or even regulated. Adherence to the developing discipline of IR, according to advocates, would eliminate the flaws in traditional corporate reporting by delivering concise, holistic, and more detailed data. IR gives forward-looking information on how the organisation creates value using a variety of capitals (financial, material, human, intellectual, social, and natural), which is critical for

analysing the firm's long-term prospects (IIRC, 2013). Adopting IR lessens information asymmetry by improving the quality of information accessible to financial capital providers. Therefore, the study empirically examines if the introduction and implementation of integrated reporting affect the quality of earnings reported among listed firms in East Africa.

The remainder of the work is structured as follows: The second section of the paper examines the literature and develops the study hypotheses. The empirical models, sample, and descriptive statistics are described in Section 3. In Section 4, we present the outcomes of our empirical study, followed by our conclusions in Section 5.

## **2. Literature Review and Hypothesis Development**

Earnings quality is the ability of reported earnings to reflect the company's true earnings as well as the usefulness of reported earnings to predict future earnings. It is the consistency, tenacity, and lack of unpredictability in reported earnings (Menicucci, 2020; Bellovwy & Don, 2005; Gissel, Giacomino, & Akers, 2005). According to Dechow and Schrand (2004), analysts are likely to view earnings as of high quality when the figure perfectly echoes the company's present operating performance, is a respectable indicator of imminent operating performance, and is a virtue-based summary measure for assessing firm value. Inversely, while earnings management is high, earnings quality is low. Earnings quality is an indicator of financial reporting quality, consisting of discretionary and non-discretionary accruals (Francis LaFond, Olsson, & Schipper, 2004). The discretionary element is grounded in the process of financial reporting, while, in contrast, the non-discretionary component is determined by the environment and business model. High-quality earnings in a firm can exactly specify the current operating performance or the firm's value. Therefore, high-quality earnings are frequently denoted as sustainable earnings, while low-quality earnings occur when the earnings are managed. Managed earnings are a result of management's intentional meddling in the financial reporting process to further any personal interests (Palacios-Manzano, Gras-Gil, & Santos-Jaen, 2021).

According to Francis et al. (2008), firm disclosure decisions have an impact on earnings quality, and disclosure is a proxy for earnings quality, indicating that if a firm can show high disclosures in the form of integrated reporting, its earnings quality is also high. Earnings quality will be good for companies with a high level of transparency. Annual reporting is made easier by transparent information in IR, hence stating

a high level of earnings quality (Tjahjadi & Narsa, 2018). The company's full disclosure through IR demonstrates its transparency and reporting reliability. Firms that report IR have integrated, thorough, and comprehensive reports that reflect the true status of the company, which affects the firm's earnings quality. According to the stewardship theory, companies seek to safeguard their reputation for future generations. As a result, firms will make disclosures that are detailed and transparent to eliminate information asymmetry. Integrated reporting will improve business reporting transparency, eliminate information asymmetry, and lower the risk of reduced capital costs. Firms that adopt IR should also provide higher-quality earnings, i.e., earnings that accurately represent the company's current situation without being falsified or manipulated (Tjahjadi & Narsa, 2018).

Conflicting arguments exist about how integrated reporting practises and decisions affect earnings quality (Francis et al., 2008). Based on agency theory, the first argument suggests that, when different information exists between insiders and shareholders, shareholders have motives to request more information from firm management (Panda, & Leepsa, 2017; Verrecchia, 1990). In the context of this argument, Francis et al. (2008); Yeh Chen, and Wu (2014) say that the relationship between integrated reporting and earnings quality is substitutive or negative, wherein firms that integrate reporting (disclose more information) will have high-quality earnings because the information asymmetry in those firms is high between management and investors and vice versa. The other argument is that increasing information quality creates motives for managers to disclose more information (Verrecchia, 1990). According to this argument, Francis et al. (2008) said that the relationship between integrated reporting and earnings quality is complementary or positive, whereby firms that have integrated reporting have high-quality earnings because stakeholders will treat such information as more dependable. Therefore, examining the effect of IR on earning quality among listed firms in East Africa could be helpful to shareholders, policymakers, and managers as this affects the stock value of the firm. Based on the above, the following hypothesis was proposed:

**H0:** Integrated Reporting has no significant effect on earnings quality

### **3. Research Methodology**

#### **3.1. Sample and Data**

The sample covered all the listed firms in EA for the period 2014–2021. The sample was chosen based on inclusion and exclusion criteria, which required firms to have traded between 2014 and 2021 and have enough data to estimate discretionary accruals over that period. The data was carefully retrieved from the chosen firms' annual reports.

#### **3.2. Measurement of Variables**

##### **3.2.1. Dependent Variable**

Earnings management is the dependent variable. Drawing from previous literature, this study uses the kotheri model (2005), also called the performance-matched discretionary accruals model (PMDAM), to estimate discretionary accruals as a measure for the extent of earnings quality as adopted by Fagbemi, Osemene, and Agbaje (2020); Moardi, Salehi, Poursasan, and Molavi (2019).

$$DA_{it} = \frac{TAC_{it}}{TA_{it-1}} = \beta_0 + \beta_1 \times \frac{1}{TA_{it-1}} + \beta_2 \times \frac{\Delta SALES_{it} - \Delta REC_{it}}{TA_{it-1}} + \beta_3 \times \frac{PPE_{it}}{TA_{it}} + \beta_4 \times ROA_{it} + \varepsilon_{it}$$

Where:

TAt – total accruals, measured as the difference between net profit and operating cash flows from activities; At-1 - total assets at the end of year t-1;  $\Delta REV_t$  – the difference in operating revenues in year t and year t - 1;  $\Delta REC_t$  - the difference in net receivables in year t and year t-1; PPEt - property plant and equipment at the end of year t; ROAit is the return on asset.

##### **3.2.2. Independent Variables**

Integrated reporting was measured using the content elements in the International Integrated Reporting Framework, IIRC (2013). Similar to the approach used by Cooray, Senaratne, Gunarathne, Herath, and Samudrage (2020); Kilic & Kuzey (2018); Lee and Yeo (2016); Stent and Dowler (2015); Marx and Mohammadali-Haji (2014), a disclosure index was constructed by focusing on the content elements of the IIRC (2013) integrated reporting framework. The disclosure index included a total of 38 items with 74 scores as shown in Appendix Ia within eight categories, including "organizational overview and external

environment," "governance," "business model," "risks and opportunities," "strategy and resource allocation," "performance," "outlook," and "basis for preparation and presentation." Appendix Ib displays the compatibility of those items with the content element as needed by the IIRC (2013) integrated reporting framework with their scores.

Content analysis was utilised in this study to examine whether a sample corporation released information that was listed in the integrated reporting and disclosure index. In this respect, all narrative sections of the annual reports and stand-alone reports (i.e., the chairman's statement, the directors' report, the operating review, the discussion, and the analysis) were examined. Unlike the commonly used form of content analysis in which the existence or absence of each item is analysed with a non-weighted disclosure approach by many prior studies (Krippendorff 2018; Haji & Anifowose, 2017; Haji & Anifowose, 2016; Setia, Abhayawansa, Joshi, & Huynh 2015; Oliveira, Frias-Aceituno, Rodriguez-Ariza, & Garcia-Sanchez 2013; Garcia-Sanchez, Rodriguez-Ariza, & Frias-Aceituno, 2013). By assigning a score of 1 if the company disclosed a certain item at least once, and 0 otherwise, this study used a score whereby a firm received a score ranging from 0 to 74, depending upon the number of items disclosed (Cooray, et al. 2020); Kılıç & Kuzey (2018); Lee & Yeo 2016; Stent & Dowler, 2015). The integrated reporting scores (IRs) were calculated by dividing the items disclosed by the maximum number of items that a firm could disclose. The IRs were mathematically represented as follows:

measured as the difference between net profit and operating cash flows from activities;  $At-1$  - total assets at the end of year  $t-1$ ;  $\Delta REV_t$  - the difference in operating revenues in year  $t$  and year  $t-1$ ;  $\Delta REC_t$  - the difference in net receivables in year  $t$  and year  $t-1$ ;  $PPEt$  - property plant and equipment at the end of year  $t$ ; and  $ROA_{it}$  is the return on asset.

$$IRS = \frac{\sum_{i=1}^t IR_i}{t}$$

Where:  $IR_i = 1$  to 74 score; and  $t =$  the maximum number of integrated reporting disclosure items a firm could disclose like in this case they are 74 scores.

### 3.2.3. Control Variables

Company size (measured by the natural logarithm of total assets at the end of the period), leverage (calculated by the debt ratio, equal to total liabilities to total assets at the end of the period), and listing age (which is measured by the first listing year until 2021) were all employed as control variables in this study. The research model for this research is as follows:

$$EQ_{it} = \beta_0 + \beta_1 FLV_{it} + \beta_2 FA_{it} + \beta_3 FS_{it} + \beta_4 IR_{it} + \epsilon_{it}$$

Where: EQ- earnings quality, FLV is the firm leverage, FS - the firm size, FA is the firm age and IR.

## 4. Research Findings and Discussion

### 4.1. Descriptive Statistics

Table I presents descriptive statistics for the research variables over the nine years from 2014 to 2021. The mean earnings quality was -0.522. A similar figure was reported by Hashim and Devi (2008) among non-financial companies listed on Bursa Malaysia. The standard deviation of 0.751 shows high variability in earnings quality among listed firms in East Africa. The results further show that the average overall integrated reporting represents 46.61 percent of the examined checklist items, with a minimum of 5.000 and a maximum of 61.000. This indicates that East African companies are trying to improve disclosure on IR, even though integrated reporting is still a voluntary practice. However, the IR score is relatively low compared to the mean IR scores of 60.33 in the United Kingdom and 53.10 in South Africa (Wu & Zhou, 2022). Overall, the sample consists of relatively older firms (28.50 years) with high leverage (0.733). The average size is 7.512. The average firm age is 3.354.

**Table 1.** Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Earnings quality	619	-.522	.751	-3.739	2.447
Integrated reporting	619	46.611	10.17	5.000	61.00
Firm size	619	7.512	1.106	4.875	10.693
Leverage	619	.733	.597	.010	4.781
Firm age	619	3.354	2.688	0.000	9.580

Source: Authors, 2022



#### 4.2. Correlation Analysis

The study explores the relationship between integrated reporting and earning quality through a Pearson rank correlation. Table II presents the results. Integrated reporting, leverage, and firm age are negatively correlated with earning quality. However, the association between firm size and earnings quality is positive and significant. The correlation coefficients show no evidence of an unacceptable level of multicollinearity. The highest correlation coefficient is -0.4816 for firm age and earnings quality. In support of the pairwise correlation results, the study further evaluated the potential multicollinearity among the variables also using a variance inflator factor (VIF) analysis. Based on table III, VIFs vary from a low figure of 1.03 to a high value of 1.71. Therefore, multicollinearity does not represent a problem in the interpretation of the findings.

**Table 2.** Pairwise correlation matrix

	1	2	3	4	5
<b>1. Earnings quality</b>	1.0000				
<b>2. Integrated reporting</b>	-0.4065*	1.0000			
<b>3. Firm size</b>	0.1488*	0.1609*	1.0000		
<b>4. Leverage</b>	-0.1097*	0.1724*	0.0094	1.0000	
<b>5. Firm age</b>	-0.4816*	0.2116*	-0.3889*	-0.0213	1.0000

\*p<0.05

Source: Authors, 2022

#### 4.3. Regression Results

Table III presents the regression results of the study. The results of the Hausman test confirm the suitability of the fixed effect regression in testing the hypothesis. The R2 of 24.7% shows that the regression model can explain about 24.7% of the variance in the dependent variable. First, our results show a positive association between integrated reporting and earnings quality. Therefore, voluntary adoption of integrated reporting is significantly associated with higher earnings quality at the 5% significance level ( $\beta = -0.011$ ;  $q < 0.05$ ). The results are consistent with those of Obeng, et al., (2020). However, Pamungkas et al. (2020) reported no association between integrated reporting and earnings quality. Firms engaging in IR can effectively reduce information asymmetries between stakeholders and are less likely to engage in earnings manipulation. In addition, demanding comprehensive disclosure of financial and non-financial information can also be

considered an extra monitoring tool used by stakeholders to reduce opportunistic management behaviour associated with earnings manipulation.

Therefore, firms that actively engage their stakeholders in identifying material matters are likely to make more prudent decisions and present a "true and fair view" of their earnings through integrated reporting. In the same token, prior empirical studies provide support for an intuitively negative relationship between earnings management and integrated reporting (Hong & Andersen, 2011; Martínez-Ferrero, Gallego-Álvarez, & García-Sánchez, 2015; Scholtens & Kang, 2013). Secondly, the results highlight a positive impact of firm size on earnings quality; however, Obeng et al. (2020) found a negative relationship. Based on the findings, large firms are more likely to report low-quality earnings. Third, the results indicate a significantly negative association between firm leverage and earnings quality. Obeng et al. (2020) found no association between leverage and earnings quality. Finally, the results show that firm age had a negative and significant effect on earnings quality.

**Table 3.** Regression results

EQ	Random effect	Fixed effect	VIF
<b>Integrated reporting</b>	-.017(0.004) **	-.011(0.005) **	1.71
<b>Firm size</b>	.086(0.027) **	.152(0.048) **	1.28
<b>Leverage</b>	-.185(0.041) **	-.214(0.044) **	1.03
<b>Firm age</b>	-.112(0.019) **	-.142(0.034) **	1.31
<b>Constant</b>	.114(0.332) **	.333(0.438) **	
<b>R-squared</b>	0.291	.247	
<b>Observations</b>	610	610	
<b>No of groups</b>	79	79	
<b>Hausman Chi<sup>2</sup></b>	26.77		
<b>Prob&gt;chi2 =</b>	<b>0.0000</b>		
<b>**P&lt;0.05; standard errors in parentheses</b>			

Source: Authors, 2022

## **5. Conclusion, Limitations and Areas for Further Studies**

This study examines the effect of integrated reporting on earnings quality among listed firms in East Africa. Data over the period 2014–2021 is gathered from 79 company-year observations using content analysis. The current study relies on the disclosure index method and a checklist to assess the sample companies' annual reports. The complete IR content element disclosure index comprises 38 items with 74 scores and 8 main sub-categories ("organizational overview and external environment"; "governance"; "business model"); "risk and opportunities"; "strategy and resource allocation"; "performance"; "outlook"; and "basis for preparation and presentation"). Although IR is still a voluntary reporting practice, East African companies seem to be trying their best to improve disclosure on IR. The results of fixed effect regression show a statistically significant relationship between integrated reporting and earnings quality.

The findings are aligned with the signaling theory, which proposes that signaling could assist stakeholders in better assessing the company's worth and making more favourable decisions (Whiting & Miller, 2008). To eliminate information asymmetry, the stewardship theory will force companies to publish extensive and transparent disclosure reports. This is supported by the agency theory, which states that when insiders and shareholders have different information, shareholders will seek more information from management (Grossman & Hart, 1980; Verrecchia, 1990). As a result, integrated reporting will reduce information asymmetry, resulting in high-quality earnings reporting.

Therefore, the findings of this study have some important practical implications for several parties involved in the East African capital markets. First, the study is beneficial for financial market regulators and policymakers in that it provides a significant indication of the level and quality of IR disclosure and how firms interact in capital markets with IR practice. This may encourage them to adopt legislation, ultimately leading to greater adoption of IR initiatives and improving IR. Second, the results may potentially be valuable for East African listed firms contemplating adopting and disseminating IR in their annual reports in the future, given the importance of IR in improving the quality of their earnings. Third, the findings may also influence investors and shareholders by directing managers to implement IR disclosure strategies.

Like other empirical investigations, the findings of this study ought to be considered in light of their limitations. First, as is common for scores based on content analysis, the IR score may suffer from subjectivity. Second, the results may be valid only for integrated reports that are prepared in line with the

Framework. As a result, future research may consider examining and comparing whether alignment to different frameworks delivers comparable results. As a final disclaimer, the findings may not be generalizable to developing countries with a high level of IR disclosures. Besides, future studies may consider corporate governance dimensions such as audit committee expertise, which may moderate the link between IR and earnings quality.

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**Appendix 1a: Summarised Content Elements of Integrated Reporting**

Content Element	No. of Disclosed Items	Score
Organizational overview and external environment	7	16
Governance	7	12
Business model	5	10
Risk and opportunities	3	8
Strategy and resource allocation	4	6
Performance	6	13
Outlook	3	4
Basis of preparation and presentation	3	5
	<b>38</b>	<b>74</b>

**Appendix 1b: Detailed Content Elements of Integrated Reporting**

Content Element		Disclosure Item	Marking guidelines	Score
Organizational overview and external environment	1	Vision and mission	0= Not Disclosed; 1=Vision; 1=Mission	2
	2	Value, ethics and culture	0= Not disclosed; 1= general comments on the adherence to ethical values mentioned; 2= Code of conduct reference, list of values, etc., provided.	2
	3	Ownership and operating structure	0 = Not disclosed; 1 = Ownership and operating structure described	1
	4	Principal activities, markets, products, services	0 = No specifics on principal activities disclosed; 1= Activities/markets/products services listed	1
	5	Competitive landscape, market positioning, and positioning within the value chain	1 mark for each	3
	6	Key quantitative information	[Employees, revenues, locations and changes] 1 = 1-2 elements; 2 = 3-4 elements	2
	7	Significant factors affecting external environment and the organization's response	[Legal, commercial, social, environmental, political] maximum of 5 points, 1 for each context	5
		<b>Sub - Score</b>		
	1	Leadership structure, diversity, and skill set of those charged with governance	1 = Members of the BoD listed; 2 = Their experience and skills are listed as well	2
	2	Processes used to make strategic decisions and monitor culture including its attitude to risk and	0 = Not explained; 1 = Role of board/executive committee in making strategic decisions	



Governance		mechanisms for addressing integrity and ethical issues	explained; 1 = Role of risk management committee in monitoring the strategic direction explained.	2
	3	Actions taken to monitor and influence strategic direction and its approach to risk management	0 = No actions determinable; 1 = Actions taken to monitor the strategic direction is determinable; 2= Actions taken to manage risks is determinable	2
	4	Reflection of culture and ethical values in use of and effect on the capitals, relationship with key stakeholders	0 = No explanation of cultural values/ethics in the given context; 1 =Culture and values determinable from narrative; 2 = Culture and values reflect in the use of and effects on capitals/stakeholders	2
	5	Responsibility for promoting and enabling innovation by governance agents	0 = No disclosure; 1 = Responsibility for promoting innovation is mentioned	1
	6	Governance practices exceeds legal requirements	0 = No disclosure; 1 = Explanations provided.	1
	7	Compensation policies and plans	1 = Compensation policies and plans are determinable; 2 = Compensation policies and plans are linked to the value creation	2
			<b>Sub – Score</b>	
Business model	1	Diagrammatic presentation	0 = No diagram; 1 = Diagram provided	1
	2	Key elements of the business model	1 each for input, business activities, output and outcome.	4
	3	Narrative flow based on the business model	0 = No explanation provided; 1 = Good flow of explanation provided.	1
	4	Critical stakeholders' identification and other dependencies	0 = No stakeholder engagement described; 1 = Explicit stakeholder engagement described	1
	5	Connection to information covered in other content elements (e.g., strategy, risk, and opportunities and performance)	0 = No connection provided; 1 = 1–2 aspects described; 2 = 3–4 aspects described; 3 = more than 4 aspects described	3
		<b>Sub – Score</b>		<b>10</b>
	1	Key risks and opportunities	1 = Risks described; 1 = Opportunities described	2
	2	Assessment of the likelihood and impact	1 for each; explanation of the risk likelihood, explanation of the opportunity likelihood,	4

Risk and opportunities			magnitude of impact of risk and magnitude of impact of opportunity	
	3	Steps to mitigate/manage risk or create value from opportunity	1 = Steps to mitigate/manage risk provided; 1 = Steps to create value from opportunity provided	2
		<b>Sub – Score</b>		<b>8</b>
Strategy and resource allocation	1	Short, medium, long term strategic objectives	0 = No description provided; 1 = Strategic objectives stated without relevant time frame; 2 =Strategic objectives and their time frames are listed	2
	2	Strategies in place or plan to implement to achieve the objectives	0 = No specific description provided; 1 = Specific actions taken/planned are described	1
	3	Resource allocation plan to implement strategies	0 = No plan explained; 1 = Plan explained	1
	4	Measurement of achievements and target outcomes	0 = Not disclosed; 1 = Measurement of achievement of strategic objectives stated without relevant time frame disclosed; 2 = Measurement of achievement of strategic objectives with their time frames are listed.	2
		<b>Sub – Score</b>		<b>6</b>
Performance	1	KPIs that draws relationship between financial performance and performance regarding other capitals	0 = No mixed KPIs or equivalent disclosed; 1 = A mix of financial and other KPIs or equivalent disclosed; 2 = KPIs linking financial and other capitals disclosed.	2
	2	KRIs	0 = No key risk indicators described; 1 = KRIs or equivalent described.	1
	3	Explanation of KPIs and KRIs of significance, implications and methods and assumptions used in compiling them	1 = Explanation of significance of KPIs and KRIs; 1 = Implications of KPIs/KRIs; 1 = Methods and assumptions used in compiling them explained	3
	4	The organization’s effect on the capitals	0 = No consideration to the six capitals; 1 = Consideration of financial and manufactured capitals; 2 = All material capitals considered.	2
	5	State of key stakeholder relationships and how the organization has responded to key stakeholder needs and interests.	1 = Key stakeholder relationships stated; 1 = Identification of key stakeholder needs and interests provided; 1 = Organizational response to 3 key	3

			stakeholder needs and interests provided.	
	6	Comparison of past and present performance and current performance and target performance	0 = No comparison provided; 1 = Comparison of	2
		<b>Sub – Score</b>		<b>13</b>
Outlook	1	Management’s expectations about external environment	0 = No statement provided; 1 = Expectations described without timeframe; 2 = Expectations described with time frame	2
	2	Potential implications of these external expectations on the organization	0 = Not explained; 1 = Implications explained	1
	3	Organizational readiness in responding to the challenges and uncertainties	0 = Not explained; 1 = Readiness explained	1
		<b>Sub – Score</b>		<b>4</b>
Basis of preparation and presentation	1	Summary of materiality determination process—Material issues/determination, impact on creating/preserving value	0 = No discussion of material matters; 1 = Description of processes used to identify the material matters; 1 = Identification of the role of 2 key personnel in the identification and prioritization of material matters	2
	2	Reporting boundary and its determination	0 = No boundary disclosed; 1 = Boundary is determinable; 2 = Boundary determinable and the process explained	2
	3	Summary of significant frameworks and methods used to quantify or evaluate material matters	0 = No frameworks or method used 1 = Frameworks and methods used	2
		<b>Sub – Score</b>		<b>5</b>
<b>Total scores</b>				<b>74</b>