# Determinants of Integrated Reporting Stakeholders' Relevance in Namibian Market

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The usefulness of integrated reports has recently become debated in practice and academia. However, little attention has been paid to the drivers of stakeholders' relevance to integrated reports. This study obtained 98 observations from key stakeholders in the Namibian market to analyze the phenomenon using structural equation modeling. The findings revealed that the importance of integrated reporting characteristics, quality satisfaction, and integrated reporting component are the major drivers of integrated reporting stakeholders' relevance in the Namibian market. The study has implications for enhancing the content of IR, as the decision usefulness of the reports depends on these factors.

Keywords: integrated reporting, stakeholders' relevance, Namibian market, structural equation modelling

# **INTRODUCTION**

The need to ensure the relevance of financial information to firm stakeholders gives rise to the concept of integrated reporting. Integrated reports, such as other accounting information, are prepared to meet the informational needs of users (Dandago & Hassan, 2013). These informational needs have increased in recent years beyond financial information, particularly after the collapse of large organizations such as Enron and World-com that signaled the financial crises of 2008 (Zicari, 2014), demanding that companies provide more sustainability information beyond the traditional annual integrated reporting. As a result, an increasing number of companies have developed sustainability reports in the form of corporate social responsibility (CSR), which is separate from accounting information (Ernst &Young, 2014). These reports provided information that was different but complementary to the financial information intended to meet the growing demand from users, on which they could rely to determine the sustainability of companies (Ernst &Young, 2014, Zicari, 2014).

According to Williams and Ravenscroft (2015), choosing among information and alternative ways to present the selected information has been a guiding principle in annual integrated reporting policy-making and related academic research for more than four decades. When selecting among information and

alternative ways to present the selected information, companies choose the reporting technique that produces the information that is most useful for economic decision-making by certain designated users, normally critical stakeholders. Furthermore, the most important characteristic that distinguishes valuable information is its contribution to more accurate forecasting of future economic conditions (Williams & Ravenscroft, 2015). As a result, Baumgartner (2014) argues that users are confronted with many reports, some of which contradict each other; therefore, there is a need to develop a report that can meet users' desired varied informational needs. Other researchers, such as Mcnally et al. (2017) and Melloni et al. (2017), agreed that integrated reports could provide the desired informational needs of users for decision-making.

The launch of the International Integrated Reporting Committee (IIRC) was a commendable and welcome step that guided the creation of the International Integrated Reporting Framework in December 2013. This was to make corporate reporting more rounded, more indicative of the true difficulties organizations face, and ultimately more beneficial to investors (Slack & Campbell, 2016). According to Mio (2016) the framework represents an "inclusive, market-led approach" to improving the quality of information available to financial capital providers (such as the equity markets) to "enable a more efficient and productive allocation of capital" (IIRC, 2013c) and improving analyst investment assessments (IIRC, 2013). A more current statement by the IIRC (2015) affirms that integrated reports provide investors with more relevant information to decisions over the longer term'."

These integrated reports have promoted how companies understand sustainability, provide a medium on which companies can demonstrate accountability, and promote transparency (Higgins & Coffey, 2016). Reports provide readers with information on which they make economic decisions (Cohen et al., 2015; Krzus, 2011; Van Der Lugt & Adams, 2018). However, debates range as to whether any single report can meet the varied informational needs of users (Zicari, 2014; Flower, 2015; Baboukardos & Rimmel, 2016) and whether those reports are used for decision making by users (Velte & Stawinoga, 2016; Ahmed Haji & Anifowose, 2016). However, the degree to which integrated reports have aided users in decision making remains a matter of debate. Atkins and Maroun (2015) advocate for "additional study of users' perspectives and perceptions of integrated reporting's decision usefulness." This is supported by Slack & Tsalavoutas (2018) observation that "even if businesses offer integrated reports, we know very little about whether stakeholders utilize the reports to influence their decision-making." Similarly, Rowbottom & Locke (2016) advocate for study on the "usage and perceived utility of integrated reports by capital providers."

While the literature debates the relevance of integrated reporting to stakeholders, no clarity has been made regarding what determines the report's relevance to stakeholders. As a result, this study investigates the determinants of integrated reporting usefulness for users of reports using evidence from the Namibia market. To the best of our knowledge, the use of annual integrated reports for decision making in Namibia has never been empirically examined. Namibia is a relatively small emerging market with about 2.5 million inhabitants, with a relatively undeveloped capital market dominated by subsidiaries of South African firms. Consequently, its capital market exhibits unique characteristics and challenges compared to much more developed capital markets. One of the main challenges is that the capital market is predominantly composed of foreign companies, with Namibian-registered entities as subsidiaries. Therefore, these companies tend to prepare reports based on their foreign capital market requirements and submit generic reports to the NSX for compliance. Due to the limited information on the qualitative criteria used to evaluate the effectiveness of integrated reports prepared in Namibia for decision making remain limited arising from lack of studies in Namibia, we applied structural equation modelling (SEM) to analysis the structured questionnaire administered to 98 key stakeholders/users of integrated report in the country. The findings revealed that integrated reporting relevance to stakeholders is determined by a range of factors, including reporting characteristics, quality of reporting, and reporting components.

This study makes both scholarly and practice/policy-relevant contributions, which are important. First, we provide a direct contribution to the growing body of academic research in this field by providing proof of the decision utility of IR criteria based on the experiences of Namibian users. Second, it proposes a model of the drivers of decision-useful integrated reports, which may assist preparers in producing much-desired decision-useful integrated reports. Third, the current study emphasises the need for and decision usefulness

of IR to users and their perspectives on information disclosure, which are reflected in the findings. This raises questions about the long-term viability of IR, which is important in practice. In the following section, the review of relevant literature in section 2, materials and methods in section 3, and section 4 covers results and discussions, while we summarise and conclude in section 5.

# **GOVERNING LITERATURE - THEORETICAL REVIEW**

Theoretically, accounting reporting should be explained using the accounting theory. However, accounting theory researchers generally agree that no single theory can best explain the basis of accounting principles and models (Coetsee, 2010; Inanga & Schneider, 2005; Davis, Menon & Morgan, 1982; Watts & Zimmerman, 1979). Consequently, Integrated reporting would have to be explained using several theories based on assumptions usually taken for granted but which exert influence in real-world practices (Davis, Menon & Morgan, 1982). This can best be illustrated by the way the IIRC was formed to address the current global challenges of climate change and global warming facing companies' challenges (Ernst & Young, 2014a; IIRC, 2013, 2013; Kılıç & Kuzey, 2018). These challenges require companies to be more transparent and accountable to demonstrate sustainability (Baumgartner, 2014; Burritt & Schaltegger, 2010). The issuance of the IIRC integrated reporting framework (IRF) aimed to integrate various informational reports for various purposes into one report that could provide all the desired information by users in one report (Mertins et al., 2012). The results show that integrated reports have become too bulky as companies combine various reports, such as employee reports, annual integrated reports, and CSR. Consequently, several researchers have argued that the primary objective of the IIRC to provide a concise report on which stakeholders could rely on all their informational needs faces serious challenges (Adams, 2015; Dumay et al., 2016, 2017b; Flower, 2015) and consequently, the usefulness of integrated reports remains limited. Contrary to this school of thought, other researchers find evidence that suggests some extent to which organizations have benefited from integrated reporting (Al-Htaybat & von Alberti-Alhtaybat, 2018; Alzarouni et al., 2011; Asif et al., 2013; Baumgartner, 2014; Kamala, 2014; Slack & Tsalavoutas, 2018).

There is, however, a general concession among practitioners and academics that the integrated reporting framework offers a model that could provide value creation information for a company over time, which is more balanced as it combines financial and sustainability information, making it more useful for stakeholders (IIRC, 2013; 2011; Cheng et al., 2014). As result, the framework has received widespread support from regulators, governments, and a wide cross section of stakeholders (Humphrey et al., 2017). This is mainly because integrated reports provide more decision information in a linked manner beyond the traditional annual integrated report and standalone corporate reports, such as sustainability and corporate social responsibility. From the agency's theory point of view, the owners of an organisation are more likely to expect more responsibility from executives who have more experience and awareness about the company. This is because management is most inclined to expose the details they deem beneficial. Shareholders will then request assurance services for the details revealed (de Villiers & Van Staden, 2010) to enable them to depend on the information for decision-making.

Stakeholders are defined as users of both the financial and non-financial information contained in integrated reports (Stubbs & Higgins, 2018). In Namibia, these stakeholders include shareholders, customers, suppliers, investors, capital providers, employees, and regulators. These stakeholder groups are frequently mentioned in the integrated reports of companies. The researchers added an additional category of academics involved in the research as another group that used the information in the reports.

Perego et al. (2016) analysed the view of corporate report preparers from a sense-making viewpoint and found that despite the progress achieved in IRR, it is still not well known by users due to various challenges, including failing to fully understand the informational requirements of users. Similarly, Chaidali and Jones (2017) and Flower (2015) found a lack of confidence in the IIRC and its system because of the questionable nature of its's Council structure and composition. According to Flower (2015), the Integrated reports preparers expressed reservations regarding the real advantages of IR, primarily due to the lack of

widely accepted and consistent guidelines in the IIRC process, which culminated in high preparation costs, varying contents, different durations of the reports, different formats, and presentation of the reports.

Stubbs and Higgins (2014) reviewed the mechanism of institutionalization of IRR through formal interviews and found that early adoption organizations had to change their business policies, organizational culture, and management processes to reconcile themselves with the values of the IRR process to improve the application of IRR in their companies and to provide decision-useful information. In addition, Beck et al. (2017) conclude that businesses are driven by a crisis of trust in consumer faith to implement IRR that can produce trusted information that could be used in decision-making. In doing so, they tend to justify their actions and legitimize their social operations by preparing detailed integrated reports. Similarly, Lodhia (2015) investigated the introduction of IRR in an Australian customer-owned bank and concluded that businesses require ethical management to provide trustworthy, decision-useful information.

Previous research has looked at the views of owners and prospective buyers on the use of accounting information for decision making, specifically integrated reports. Through an exploratory analysis, Atkins and Maroun (2015) found that IR is engulfed by several obstacles that restrict the useful decision of information provided through integrated reports and concluded that these obstacles undermine the development of an integrated thought method capable of producing useful decision information. Based on interviews with SA Investment Group experts on SA's annual integrated reports, their research concluded that despite some deficiencies relative to the traditional annual reports, integrated reports are regarded favourably and provide better information that could aid users in decision making. On the other hand, Hsiao & Kelly (2017) found data from 16 Taiwanese investment analysts that investors rely more on private knowledge than on voluntary disclosures of sustainability like those in IRE. They concluded that Taiwanese investors were unsure about the ability of IRE to provide important decision-making information for investment and that investors had limited knowledge regarding the IIRC framework and its ability to generate the required useful decision information. Slack and Tsalavoutas (2018) find similar sentiments for the restricted utility of IRE in an analysis of portfolio managers and stock analysts. These results are further verified by Abhayawansa et al. (2018), who found that IR is of marginal importance and usefulness to sellside analysts because of the limited knowledge and format used.

Higgins et al. (2018) found support for voluntary approaches to non-annual integrated reporting by examining the views of other stakeholders and researching the expectations of non-financial information users in Australia for regulatory or voluntary approaches to IR. They concluded that IR was likely to become the reporting standard over time. They also find that investors support mandatory IR because they feel that it will increase the standard of transparency through more meaningful disclosures. Furthermore, James (2015) finds evidence of perception from US accounting students that sustainability reporting is more beneficial to large than smaller businesses and advocates reporting various performance metrics to mitigate these factors. James (2015) concludes that IR implementation increases reporting consistency by offering detailed knowledge that is useful for long-term decision-making purposes. In a similar study in Indonesia and emerging markets, Dumay et al. (2017) concluded that the capability of IR to provide decision-useful information remains limited due to factors such as inadequate legislation, inadequate internal processes, and doubts about the benefits of value creation and integrated though that constitute significant barriers to IRR growth. However, there remains significant potential through which IR could fulfill the potential to provide decision-useful information to various users, and research could accelerate the process.

Despite the general admission of the challenges faced with IR, there are no mincing words in the literature about its relevance to stakeholders. What is unclear, however, is what the ingredients of IR make it relevant despite the challenges, which is the focus of this study from the perspective of users in the Namibian context.

### **Empirical Review and Hypothesis Development**

The quality of accounting information can only be determined by the extent to which users of information use information in decision-making. Accounting for information or reports on decision usefulness is not easily determined. The quality of accounting information is subjective and based on individual user views, which may be context-specific. This ensuing methodological ambiguity has led to

the development of different measuring techniques to assess and evaluate accounting reporting quality (Healy & Palepu, 2001; Verrecchia, 2001). Traditionally, accounting research has focused on capital markets, earnings management, and earnings quality (Amir & Serafeim, 2018; Michelon et al., 2015).

These methods evaluate the decision usefulness of annual integrated reports and other accounting information by comparing accounting -and market-based characteristics. The reliability of the quality of measurements is a major benefit of these approaches. Accounting data from annual reports and stock markets can be used to evaluate and duplicate quality proxies (Healy & Wahlen, 1999). These approaches have significant flaws because they offer only partial and indirect measures of decision usefulness. In addition, non-financial data are omitted to prevent complete evaluation (Dhaliwal et al., 2012; Haji & Anifowose, 2016; Healy & Wahlen, 1999;). Challenges in implementing these techniques may decrease their validity. When evaluating earnings management, it is difficult to differentiate between discretionary and non-discretionary accruals (Dechow et al., 2010; Healy & Wahlen, 1999), 2010). The stock market may not be as efficient as value relevance models suggest (Higgins & Coffey, 2016; Slack & Campbell, 2016). As a result, stock prices may not always properly reflect company value or respond quickly to unanticipated corporate disclosures (Amir & Serafeim, 2018; Dumay et al., 2016;).

Quality assessment techniques for particular financial and nonfinancial information components in annual reports are also available. Some examples of this kind of research include studies examining the relationship between the usefulness of annual integrated reporting information and value addition to stakeholders (Slack & Campbell, 2016; Slack & Tsalavoutas, 2018; Van Der Lugt & Adams, 2018). Obviously, such techniques do not provide a complete evaluation of annual integrated reporting quality or accounting information.

Finally, several studies have attempted to concurrently evaluate the quality of various aspects of reporting information, encompassing both financial and non-financial information in annual integrated reports. For example, Liu et al. (2019) and Owen (2013). While such research has demonstrated that qualitative features may be operationalised, the measurements employed are based on frameworks earlier than the latest conceptual framework for financial reporting (CF) (IASB, 2010), which may result in discrepancies with the latest CF issued in 2018. In addition, Liu et al. (2019) lacked empirical applicability because it is largely a compliance measurement. The operational definitions employed are inadequate and concentrate only on annual integrated reports' guiding principles and content elements.

Understanding, verifiability, comparability, and timeliness are regarded as less essential than the basic qualities of relevance and faithfulness. Even so, it is critical to incorporate all qualitative characteristics of decision-useful information into the analysis for a complete picture. To operationalise the determinants, this study sought to identify the drivers of usefulness from the readers' perspective of integrated reports. Determining the quality of accounting information may be complex and confusing because there is no universally accepted base of measurement. However, the use and usefulness depend on the extent to which the information provided in the integrated reports meets the user's requirements for decision-making. The study identifies relevance based on what drives users to seek and use information for decision making. Previous studies have used stakeholder value relevance to determine the quality of accounting information (Cortesi & Vena, 2019; Lev, 2018; Owen, 2013). These studies have argued that quality is determined by the extent to which the information is relevant for decision-making, and hence the hypothesis.

### Integrated Reporting Quality Satisfaction and Stakeholders' Relevance

As discussed above, financial reporting is based on the conceptual framework for financial reporting which identifies various qualitative characteristics for decision-making (IASB, 2018). This framework is currently being expanded through integrated reporting to provide decision-useful nonfinancial information for stakeholders. The framework identifies six qualitative characteristics, categorized as either fundamental or enhancing. These characteristics make financial information useful, hence quality for decision-making, and have been used by various previous studies, such as Camilleri (2018) and Willis (2003), as a basis for determining accounting information quality. Therefore, this study hypothesizes that user satisfaction derived from such qualitative characteristics of integrated reporting influences user relevance. In other words,

### H11: IR quality satisfaction determines its stakeholder's relevance in the Namibian market.

### Integrated Reporting Component Importance and Stakeholders' Relevance

The use and usefulness of accounting information depend on the extent to which users read and apply information for decision-making. According to Kamala (2014), users of accounting information demand reports that meet their information requirements. Kamala (2014) argues that, as a result, users will read only information that addresses their informational requirements for decision-making. The quality of integrated reports can therefore be measured on the extent to which users perceive the various sections or components of the reports; for example, the statement of cash flow may be more desired than the statement of equity or employee reports changes. As such, the hypothesis

*H2*<sub>1</sub>: *IR* component importance and reading sources determine the relevance of stakeholders in the Namibian market.

### Integrated Reporting Characteristics and Stakeholders' Relevance

Other researchers, such as Dhaliwal et al. (2012), have used firms' reporting characteristics to measure accounting information quality. These researchers have argued that companies that provide a higher level of disclosure in their reports accord users with more desired information than those that provide minimal disclosure. Further, the nature of companies may determine the level of disclosure; for example, companies involved in the extraction industry (an environmentally sensitive industry) may provide more information in their integrated reports to justify their actions than those in the retail industry (Adams & Frost, 2008; Truant et al., 2017).

H31: IR characteristics determines its stakeholder's relevance in the Namibian market.

## **METHOD AND MATERIALS**

A positivist research design was adopted for which a quantitative research approach was utilised to explore the determinants of integrated reporting stakeholders' relevance within the Namibia market. The cross-sectional survey instrument is based on the six qualitative characteristics of decision-useful accounting information to provide a complete and intricate quality evaluation of annual integrated reports for decision usefulness, based on both basic and augmenting qualitative qualities. The instrument (questionnaire) is developed and experimentally tested in this study in line with the conceptual framework for annual integrated reporting (IASB, 2010).

A multi-stage sampling technique was used in this study. The essence was to first determine the listed companies to be sampled in the study, followed by the various stakeholders within the selected companies that were surveyed. The purposive sampling method was used to select 24 companies representing all the various sectors from a total population of 43 listed companies as of 31 December 2019. The choice facilitated good judgment in the data collection and data sources to elicit quality data that aided the understanding of the theoretical framework. (Etikan, 2016). The sample of 24 companies represents 56% of the Namibian-listed companies, accounting for 71% of the listed companies' total revenues and over 80% of domiciled listed businesses. From the selected companies, purposive random sampling assisted in selecting five stakeholders from each company to provide their views through a self-administered questionnaire. This was based on convenience sampling that ensured three external and two internal users of integrated reporting for each of the chosen 24 companies in the sample, as shown in table 1.

Sector Name	Number of companies	Sampled Companies
Financial services	12	6
Mining	7	4
Banks	4	2
Real estate	3	2
Insurance	4	3
Manufacturing, Oil and Gas	4	2
General retailers/industrial, food and support services	9	5
Totals	43	24

# TABLE 1SAMPLING OF COMPANIES BY SECTOR

In addition, the sampling method was adopted because the population of users of Namibian integrated reports is not well-defined or known. However, the adopted method was considered broad enough to receive input on the majority, if not all, of all perceptions. Overall, the sample size of 120 was considered appropriate for this study. The sampling technique for the participant was deliberate because of the qualities and integrated reporting knowledge possessed by the selected participants.

The survey questionnaire was distributed to users of integrated reports of the selected companies, customers, employees, regulators, suppliers, external auditors, academics, investors, and other stakeholders who are reported as audiences of those reports. The questionnaire was either emailed to them or delivered to their workplace in a hard copy. 120 questionnaires were distributed to identify individuals who were spoken to by phone to obtain consent. Alternative respondents from the same category were sought as replacements where the initially identified person did not wish to be involved in the study. An additional 10 questionnaires were distributed to academics who were identified as being involved in various companies' studies. The second group of academics was not involved in pilot testing of the instrument, and their responses were included in the analysis.

# TABLE 2 USERS CATEGORY

User Category	No of respondents issued with questionnaire	No successfully completed questionnaires
Academics	10	6
Investors	24	11
External auditors	24	11
Employees	48	40
Regulators	24	16
Customers/suppliers	24	14
Total	130	98

The 120 questionnaires were distributed to the identified users of each of the 24 companies, as follows:

Category	Type of respondent	Number
Employees	Accountant/internal auditor/sustainability officer	2
External Auditor	Assistant/Senior/Manager	1
Investor	Investment officers/analysts	1
Customer/Supplier	Accountants/procurement officers/	1
Total		5

The above categories were selected because of their knowledge of IR and willingness to take part in studies based on their knowledge and skills regarding integrated reporting issues. In addition, the limited numbers allowed for selecting only key persons with relevant insights into the integrated reporting processes. However, those responsible for the actual preparation of the reports were excluded. The pilot's draft instrument was shared among academics with significant research expertise to guarantee reliability. Their feedback helped us refine the tool before sharing it with ten senior accounting students to verify that it was clear and effective. The pilot findings were not included in the data. The quality metrics of the developed instrument were adopted from a previous study by Kamala (2014) to ensure construct validity.

Data collected were analyzed quantitatively using covariance-based structural equation modeling (SEM) in AMOS 27. The essence was to capture the multivariate measures of the integrated reporting users' relevance determinants in a single model while still being able to test the fitness of the data to the hypotheses proposed in this study. SEM has become an increasingly popular quantitative data analysis method that measures direct and indirect relationships in the social sciences (Civelek, 2018).

Ethical clearance was obtained for the study, and all confidential information was treated within the ambit of the South African Private Information Act.

## **RESULTS AND DISCUSSIONS**

#### **Data Exploration**

We conducted an exploratory factor analysis on the latent constructs of the determinants of integrated reporting stakeholders' relevance (IRSR) to determine which sufficiently explains variations latent constructs. We relied on Pearson and Mundform (2010) and de Winter, Dodou, and Wieringa (2009) to implement a sample size of 98, given that the arguments in the literature favour a minimum of 200 sample size requirements for factor analysis. We used the maximum likelihood for factor extraction with Promax rotation and Kappa set at 4 for model optimization. Aligning with most criteria used in the literature (ref), we further considered eigenvalues greater than 1, and suppression of small coefficients at less than 1. From Table 2, the EFA results indicate that five factors were extracted with an Eigne value of 2.004 which was < 1. The extracted factors explained 53.43% of the variations which were considered sufficient given the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy higher than 0.5 (0.669) and a statistically significant Bartlett sphericity test (<0.001). The KMO results confirmed that the items were adequately correlated and suitable for factor analysis. Cronbach's alpha for the factors is within 0.808<x<0.892, demonstrating the internal consistencies of the items within the latent constructs.

# TABLE 2FACTOR LOADINGS

Indicators	loadin
Integrated reporting characteristics (Cronbach's Alpha = 0.869)	0.50
Be interactive	0.59
Demonstrate top management commitment to integrated performance	0.39
Include organisational structure that deal with integrated matters	0.72
Enhance readability using multiple languages, pictures, charts, explanations	0.71
Enhance accessibility of information using navigation tools	0.81
Demonstrate the integration of Integrated issues into business processes	0.72
Indicate whether the Integrated management systems have been certified	0.80
Indicate whether internal auditing is extended to Integrated systems	0.49
Be produced on a real time basis	0.54
Integrated reporting stakeholders' relevance (Cronbach's Alpha = 0.847)	
Identify and address key stakeholders and their concerns and challenges	0.79
Identify and describe key relevant issues (significant aspects)	0.80
Be specific and contain accurate information	0.81
Include an assurance statement from an independent third party	0.55
Provide quantitative/monetary disclosure of significant outputs/impacts	0.67
Compare quantitative outputs/impacts against best practice/industry standards	0.57
Skimming (rapid reading of headings, topic sentence to get the main idea)	0.50
Printed annual reports (Integrated Annual reports)	0.56
Integrated reporting quality satisfaction (Cronbach's Alpha = 0.878)	
Understandable	0.67
Timely	0.72
Verifiable	0.65
Reliability	0.62
Understandability	0.66
Timeliness	0.76
verifiability	0.73
Integrated reporting component importance (Cronbach's Alpha = 0.808)	
Companies' websites PDF format of sustainability reports	0.63
Comprehensive statement of financial position (Balance sheet)	0.43
Comprehensive statement of income and expenditure (Income statement)	0.52
Statement of cash flows	0.81
Integrated report	0.61
Corporate governance report	0.58
Employee report	0.63
Community engagement report	0.48
Environmental Report	0.34
Integrated reporting reading source (Cronbach's Alpha = 0.892)	
Companies' websites HTML format of annual report (Integrated annual reports)	0.99
Companies' websites HTML form	0.78

# **Descriptive Statistics**

Having successfully grouped the data through the EFA and determined the reliability, a further step to testing the preceding hypothesis is to have an overview of the data with the summary statistics in Table 2. The standard deviation of the items lies within 0.547 < x < 1.194, indicating that no item has a standard

deviation <0.50, denoting that the items were sufficiently engaged by the respondents and substantiating the reliability scores in Table 2. This finding is further supported by the mean values of the items that are substantially greater than the median values, except for the HPSSR. In most cases, the mean values are closer to the maximum values than the minimum, providing evidence to show that respondents not only engaged with the items but also provided more positive responses. We have no concerns about the normality of the data at this stage based on the skewness and kurtosis results, which are both within the range of +/-2.

	Ν	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
scc	98	4.22	0.697	2	5	0.244	0.483
sa	98	4.27	0.767	2	5	0.244	0.483
bi	98	3.45	0.898	1	5	0.244	0.483
cip	98	4.05	0.830	1	5	0.244	0.483
scai	98	4.33	0.729	2	5	0.244	0.483
asi	98	3.84	0.769	1	5	0.244	0.483
ioim	98	3.71	0.799	1	5	0.244	0.483
qmd	98	4.03	0.831	2	5	0.244	0.483
cqo	98	3.88	0.816	2	5	0.244	0.483
mlp	98	3.47	0.888	1	5	0.244	0.483
aint	98	3.31	0.866	1	5	0.244	0.483
ibs	98	3.80	0.824	1	5	0.244	0.483
msc	98	3.66	0.885	1	5	0.244	0.483
ais	98	3.67	0.917	1	5	0.244	0.483
rtb	98	3.33	1.072	1	5	0.244	0.483
skim	98	3.74	1.048	1	5	0.244	0.483
par	98	3.46	1.194	1	5	0.244	0.483
ppssr	98	3.49	1.058	1	5	0.244	0.483
unde	98	3.99	0.547	2	5	0.244	0.483
time	98	3.69	0.752	1	5	0.244	0.483
veri	98	3.60	0.783	2	5	0.244	0.483
sreli	98	3.70	0.692	1	5	0.244	0.483
sunde	98	3.68	0.768	1	5	0.244	0.483
stime	98	3.50	0.828	1	5	0.244	0.483
sveri	98	3.37	0.913	1	5	0.244	0.483
bsh	98	3.86	0.897	1	5	0.244	0.483
inst	98	3.99	0.925	1	5	0.244	0.483
scf	98	3.95	1.039	1	5	0.244	0.483
itrp	98	3.88	0.987	1	5	0.244	0.483
cgr	98	3.94	0.906	1	5	0.244	0.483

TABLE 3SUMMARY STATISTICS

empr	98	3.80	0.963	1	5	0.244	0.483
coer	98	3.89	1.054	1	5	0.244	0.483
envr	98	3.88	0.865	1	5	0.244	0.483
hpar	98	3.00	0.995	1	5	0.244	0.483
hpssr	98	2.82	0.923	1	5	0.244	0.483
ValidN (listwise)	98						

## **Reliability and Validity**

For further reliability and validity tests necessary for structural equation modeling, confirmatory factor analysis (CFA) was performed, and the results are shown in Tables 4 and 5 and Appendix 1. CFA permits the theoretical relationship among the factors to be established while ensuring convergence and discriminant validity. In addition to the reliability measures of Cronbach alpha reported in Table 2, the composite reliability in Table confirmed the internal consistencies of the items in the factors with all above the threshold (Shaari, Hasan, Mohamed, & Sabri, 2013). The average variance extracted (AVE) ranged from 0.506 to 0.940 for the factor constructs. AVE measures the convergence validity of the factor constructs, which reflects internal consistencies explaining the extent to which the observed elements are correlated. The discriminant validity measures showed that the factors were not correlated, as they were not highly correlated.

TABLE 4RELIABILITY AND VALIDITY

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	CR	AVE	MSV	MaxR(H)	irc	irsr	irqs	irci	irrs
irc	0.876	0.506	0.135	0.892	0.711				
irsr	0.863	0.514	0.141	0.871	0.367**	0.717			
irqs	0.878	0.512	0.117	0.897	0.336*	0.343**	0.715		
irci	0.877	0.528	0.141	0.781	0.223†	0.375**	0.325*	0.727	
irrs	0.967	0.940	0.112	1.656	0.196†	0.139	0.041	0.335*	0.97

A set of global fitness indices is shown in Table 5 to assess the model fitness to the data collected (Byrne, 2016). Two measures were employed in the literature: absolute and comparative. From the absolute measure, we selected the standardized root mean square residual (SRMR) as the most acceptable measure that quantifies between the predicted and observed models. The SRMR for the model is 0.086 which is considered acceptable given the threshold of 0.08 (Hu and Bentler, 1999). In terms of the comparative measures, we considered the comparative fit index (CFI), which was 0.907 for this study's model. CFI measures the degree to which our model fits better than a null model. An index of CFI > 0.90 is considered test (CMIN/DF), which is the chi-squared ( $\chi$ 2) value divided by the number of degrees of freedom (df), to measure the overall fitness of the model. The result was 1.511, which falls within the required expectation of  $\chi$ 2/df  $\leq$  3 for overall model fit consideration (see (Byrne, 2016; Hu & Bentler, 1999)). A theoretical model was then used to fit the proposed model.

Measure	Estimate	Threshold	Interpretation
CMIN	373.247	_	_
DF	247	_	_
CMIN/DF	1.511	Between 1 and 3	Excellent
CFI	0.907	>0.95	Acceptable
SRMR	0.086	<0.08	Acceptable
RMSEA	0.073	<0.06	Acceptable

# TABLE 5 MODEL FIT MEASURES

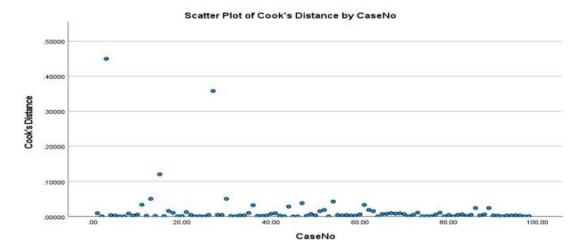
# **Structural Model**

This study used structural equation modelling (SEM) to test the proposed hypothesis. The hypothesis is related to the determinants of integrated reporting stakeholders' relevance within the financial reporting frameworks in Namibia. According to Kline (2012), the critical assumptions of SEM are causality, directionality, association, and normality. The causality-implied variable may impact another variable, while directionality assumes that the direction of causality is known. The association assumption suggests that there must be a measurable relationship between the cause-and-effect variables. It is worth mentioning that SEM analysis embeds certain statistical techniques [e.g., such as asymptotic distribution-free (ADF)] to ensure dataset normality (Kumar & Kumar, 2015). The results in Tables 6 and 1 help to analyze some of these assumptions to determine the applicability of SEM in analyzing the hypothesis tested in this study. We examined the variable inflation factors (VIF) in Table 6 for all predictors on the dependent variable IRSR and observed no VIFs greater than two, which is far less than the threshold of 10. Likewise, we conducted Cook's distance analysis in Figure 1 to determine if any (multivariate) influential outliers existed. In no case was we observed a Cook's distance greater than 1. Most cases were far fewer than 0.500.

# TABLE 6 MULTICOLLINEARITY

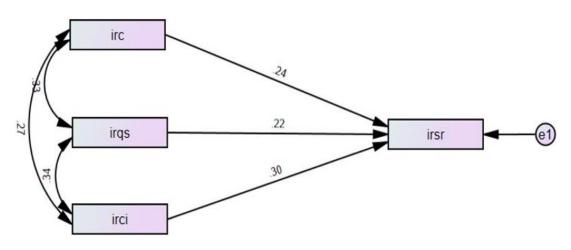
Model		Unstand co		Standardized coef.			Colline Statist	•
	-	В	Std. Error	Beta	t.	sig.	Tolerance	VIF
1	(Constant)	-5.19E- 16	0.048		0	1		
	irqs	0.469	0.201	0.219	2.331	0.022	0.82	1.219
	irc	0.283	0.109	0.238	2.588	0.011	0.862	1.16
	irci	0.311	0.094	0.304	3.303	0.001	0.856	1.168

# FIGURE 1 OUTLIERS AND INFLUENTIAL



We encountered a few inadmissible solutions for SEM analysis in the iterative processes. The initial results suggested that the integrated reporting reading sources were expunged from the structural model, as the outcome was unreliable for analysis and decision making. We were left with four of the five factors extracted to test the hypotheses of the factors that determine the relevance of integrated reporting to stakeholders in the Namibian market. The resulting structural model is shown in Figure 2. Table 7 presents the standard regression weights that were estimated to determine the effects, as described by each regression path in Figure 2 which were tested for statistical significance at  $\alpha$ =0.05. We generated imputed data for the factors; integrated reporting characteristics (IRC), integrated reporting stakeholders' relevance (IRSR), integrated reporting quality satisfaction (IRQS), and integrated reporting component importance (IRCI) based on their respective indicators in Table 2.





Hypothesis 1 predicts that IRC significantly determines the relevance of integrated reporting to stakeholders in the Namibian market. The regression coefficient,  $\beta = 0.238$  at a P-value < 0.05, indicates that reporting characteristics significantly impact the relevance of reporting to stakeholders. The results show that changes in reporting characteristics increase the relevance of reporting by 23.8%, suggesting that the subhypothesis holds true. With Hypothesis 2, reporting satisfaction predicted reporting relevance at

P < 0.05, with regression coefficient  $\beta = 0.219$ . The hypothesis also holds true, as the result suggests that a change in reporting quality will cause a 21.9% increase in the relevance of IR to stakeholders of integrated reporting in the Namibian market. This result aligns with the quality characteristics of the financial reporting conceptual framework. Finally, Hypothesis 3 showed that IRCI predicts reporting relevance to stakeholders, suggesting that what is included in financial reports determines its relevance to stakeholders. This result aligns with the conceptual framework of financial reporting, which describes its elements and composition of a financial report. At a < 5% significance level, the composition of the integrated report determines its relevance to stakeholders by 30.4% in the Namibian market.

	SIANDARDIZED REGRESSION WEIGHIS				
Predictor	Outcome	Std Beta			
irc	irsr	.238 **			
iras	irsr	.219 *			

irsr

**TABLE 7** DECIDECTION WEICHTE

\* p < 0.050 \*\* p < 0.010 \*\*\* p < 0.001

irci

This study explores the determinants of stakeholders' IR relevance in the Namibian market. The data showed that the questionnaire employed in this study is a reliable method for assessing the decision usefulness of annual integrated reports. Decision usefulness evaluation is resilient to various weightings of both fundamental and enhanced qualitative characteristics. To assess the reliability and consistency of the questionnaire, we used Cronbach's alpha values greater than 0.7.

It was evidenced from the literature that notwithstanding the various limitations of integrated reporting (Perego et al., 2016; Chaidali & Jones, 2017 and Flower, 2015), it is found to be of important to stakeholders in understanding non-financial information that is invaluable for economic decisions about firms' reporting (Cheng et al., 2014). What remains lacking in the literature is why IR is relevant for stakeholders. Using the Namibian market data analysed above, this study identifies three main factors that determine the value relevance of IR to stakeholders. These results provide evidence that IR characteristics determine the relevance of IR to stakeholders. Characteristics in this respect include borders on the structure of the reports, use of multiple languages and charts, among others, to enhance the readability and accessibility of the reports, including information production in real-time. Earlier studies linked reporting quality to reporting characteristics (see Dhaliwal et al., 2012) providing insight into the importance of IR characteristics in determining their relevance to report users. Normally, businesses with less ambiguity in their reporting are more likely to enjoy users' patronage; therefore, it is theoretically sound to find that reporting characteristics determine the stakeholders' relevance of integrated reporting, providing consistency for the three objectives of this study.

Regarding quality satisfaction as a determinant of IR stakeholders' satisfaction, the results found a direct and positive relationship, satisfying the first hypothesis of this study. This was drawn from the conceptual framework of financial reporting, identifying reporting qualitative characteristics for users' decision making (see IASB, 2018), and the extant study of Camilleri (2018) and Willis (2003) on the usefulness of reporting qualitative characteristics for decision making. Therefore, it follows that IR with timely, verifiable, and understandable information, among others, is endeared to users and hence determines their relevance. The importance of enhancing qualitative reporting characteristics as encapsulated in the international reporting framework cannot be overemphasised for even much more complex reporting such as IR. The other determinants found in the study that influence stakeholders' relevance of IR are the content and elements of the IR itself. This emphasises the extent to which reports meet user information needs. Kamala (2014) documented that users are only attracted to reading reports that address their information requirements.

Overall, the study's key findings revealed that integrated reporting relevance to stakeholders is determined by a range of factors, including reporting characteristics and reporting quality to reporting

.304 \*\*\*

components. Given the strength of impact and significance, integrated reporting components were revealed to be the most important determinant of reporting relevance to stakeholders in the market. Furthermore, all factors considered exhibited positive and direct relationships to explain the relevance of integrated reporting to stakeholders.

# SUMMARY AND CONCLUSION

This study aimed to explore the factors that determine the relevance of integrated reporting to stakeholders using Namibian data. The reviewed literature underscores IR's relevance and decision usefulness, despite its numerous outlined issues yet to consider the determinants of its relevance to users. Structural equation modeling was employed to analyse the quantitative data collected from key stakeholders in various sectors of the Namibian markets. These findings prove that IR characteristics, quality, and content are the main determinants of its relevance to stakeholders. Thus, such factors are required for the continuous relevance of IR in the corporate governance reporting space amidst the different challenges of IR enumerated in the literature. The study acknowledges the limitations of sample size and country-level studies for generalization. Notwithstanding, the study provides implications for enhancing IR for corporate reporting for stakeholders' imperatives and improving firms' value, including attracting more quality investors with the right information.

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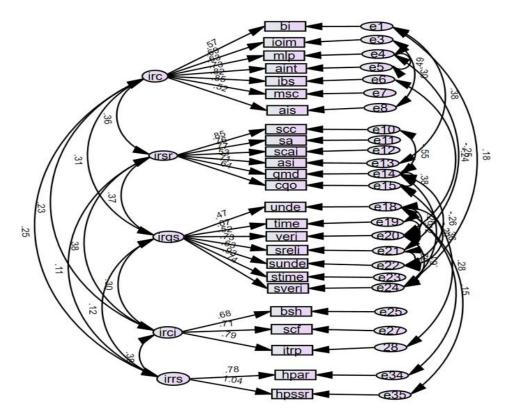
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# **APPENDIX 1: CONFIRMATORY FACTOR ESTIMATES**



Company	Symbol	Sector
Investec	IVD	Financial Services
Letshego Holdings (Namibia) Limited	LHN	Financial Services
ANIREP	ANE	Financial Services
Astoria Investments	ARO	Financial Services
Bravura Holdings	CMB	Financial Services
Firstrand	FST	Financial Services
Old Mutual Limited	OMM	Financial Services
Namibia Asset Management	NAM	Financial Services
PSG Konsult	KFS	Financial Services
Stimulus Investments	SILP	Financial Services
Trevo Capital	TRVP	Financial Services
Trustco Group Holdings	TUC	Financial Services
<b>D</b>	DUU	
Barloworld	BWL	Support Services
 Bidvest Namibia	BVN	General Industrials
Agra Limited	AGR	Food Producers
Clover Industries	CLN	Food Producers
 Nictus Holdings	NHL	General Retailers
 Oceana Group	OCS	Food Producers
Shoprite Holdings	SRH	Food & Drug Retailers
Truworths International	TRW	General Retailers
Mediclinic International	MEP	Health Care Equipment & Services
Celsius Resources Limited	CER	Mining
Deep Yellow	DYL	Mining
B2Gold Corporation	B2G	Mining
Bannerman Resources	BMN	Mining
Anglo American Plc	ANM	Mining
Paladin Energy	PDN	Mining
Marenica Energy	WAM	Mining
 Eco (Atlantic) Oil & Gas	EOG	Oil & Gas Producers
African Oxygen	AOX	Chemicals
Namibia Breweries	NBS	Beverages
Forsys Metals Corporation	FSY	Industrial Metals & Mining

# APPENDIX 2: NSX LISTED COMPANIES AS AT 31 DEC 2019

Company	Symbol	Sector
Capricorn Investment Group	CGP	Banks
FNB Namibia Holdings	FNB	Banks
Nedbank Group	NBKNA	Banks
Standard Bank Group	SNB	Banks
Tadvest	TAD	Real Estate Investment & Services
Oryx Properties	ORY	Real Estate Investment Trusts
Vukile Property Fund	VKN	Real Estate Investment Trusts
Old Mutual Plc	OLM	Insurance
MMI Holdings	MIM	Insurance
Sanlam	SLA	Insurance
Santam	SNM	Insurance