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Impact of Integrated Sustainability Reporting for Enhancing Stakeholder Engagement and Driving Business Value

Osama Ahmed MUHAMMED*
DBA Strategic Management, Eurasian Management and Administration School,
109004, Moscow, Aptekarsky Lane 9 2, Russia
ORCID: https://orcid.org/0009-0000-9187-9468
[**Corresponding author*]

Isaiah Henry ODIGIE
DBA Strategic Management, Eurasian Management and Administration School,
109004, Moscow, Aptekarsky Lane 9 2, Russia

Abstract

This study investigates the relationship between Integrated Reporting Quality (IRQ) and Stakeholder Value Creation (SVC), and further examines whether Sustainability Governance (SG) moderates this relationship. Utilizing a panel dataset the study applies Random Effects Modeling (REM) with robust standard errors. Descriptive analysis revealed a generally high level of integrated reporting adoption and moderate sustainability governance practices across the sample. The regression results demonstrate that IRQ has a significant positive impact on SVC, suggesting that transparent and strategic corporate disclosures enhance both financial and non-financial stakeholder outcomes. However, the moderating effect of SG on the IRQ and SVC relationship was statistically insignificant indicating that the influence of IRQ on value creation operates independently of existing governance structures. These findings validate theoretical claims from team production and signaling theories and emphasize integrated reporting as a critical mechanism for building stakeholder trust and long-term organizational value. The study also identifies the need for deeper institutionalization of SG practices and recommends broader frameworks to measure stakeholder impact.

Keywords

integrated reporting quality (IRQ), stakeholder value creation (SVC), sustainability governance (SG), corporate disclosure, stakeholder engagement, business value

BACKGROUND OF THE STUDY

The demand for transparency and accountability in corporate practices has intensified in a way that prompt a global shift toward integrated sustainability reporting. Integrated sustainability reporting (ISR) goes beyond traditional financial disclosures by combining financial performance with environmental, social, and governance (ESG) metrics in a unified report. This approach provides a more holistic view of an organization's value creation over time, aligning with the growing expectations of diverse stakeholders (Vitolla et al., 2020). Stakeholders ranging from investors and regulators to customers and civil society now expect companies to disclose how their operations impact the environment and society, and how such impacts affect long-term performance (Dye et al., 2021). ISR serves as a strategic communication tool that enhances stakeholder engagement by fostering trust, demonstrating accountability and providing consistent and comparable information. This transparent approach enables stakeholders to make informed decisions and supports more meaningful dialogue between companies and their stakeholders (Xia, 2022).

Integrated Sustainability Reporting (ISR) is increasingly recognized as a driver of business value. By embedding sustainability within corporate strategy and reporting processes, organizations can enhance their risk management capabilities, bolster brand reputation and identify opportunities for innovation all these are factors that collectively support stronger financial outcomes and long-term resilience (Chen et al., 2023). Firms that adopt ISR effectively are typically more attractive to long-term investors and are better positioned to sustain a competitive edge in markets where sustainability is a key differentiator (Wang et al., 2024). Several factors influence the adoption and effectiveness of Integrated Sustainability Reporting (ISR) within organizations. One of the primary drivers is regulatory pressure and the

evolving landscape of reporting standards (Abhayawansa, 2022). As governments and international bodies increasingly mandate sustainability disclosures, firms are compelled to align their reporting with frameworks such as the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), and the Sustainability Accounting Standards Board (SASB). Regulatory compliance serves as a significant motivator for ISR adoption (Diwan et al., 2024). Another influential element is stakeholder demand such as investors, customers, employees, and civil society groups now expect greater transparency around environmental, social, and governance (ESG) performance (Sciulli & Adhariani, 2023). The pressure to disclose non-financial information that reflects corporate responsibility and ethical behavior has led companies to integrate sustainability considerations into their mainstream reporting (Minutiello & Tettamanzi, 2022). Furthermore, corporate culture and leadership commitment also play a crucial role, organizations with a strong sustainability oriented culture and leadership that prioritizes ESG values are more likely to embrace integrated reporting practices (Assoratgoon & Kantabutra, 2023). Top management support not only ensures allocation of adequate resources but also facilitates organizational change necessary for integrated thinking and reporting (Tilt et al., 2021).

Firm specific characteristics such as size, industry type, and ownership structure influence ISR adoption as well. Larger companies for instance, are more likely to adopt ISR due to the availability of resources, public visibility, and institutional pressure. Firms in environmentally sensitive industries like mining or energy also face greater scrutiny, prompting them to adopt comprehensive reporting practices (Naciti et al., 2022).

Technological infrastructure and the availability of expertise are equally critical. The ability to collect, process, and analyze vast amounts of ESG-related data requires advanced systems and skilled professionals. The lack of technical know-how or reporting capabilities can hinder ISR implementation especially in small and medium-sized enterprises (SMEs) (Thoradeniya et al., 2022). Also, market dynamics and investor behavior significantly influence ISR practices (Rossi & Luque-Vílchez, 2021). Companies seeking to attract socially responsible investors or those operating in markets where sustainability performance affects competitiveness are more likely to prioritize integrated reporting. ISR becomes a strategic tool for differentiation and reputation management in such contexts (Mio et al., 2022).

Notwithstanding its potential benefit the adoption and quality of integrated sustainability reporting remain inconsistent across industries and regions, largely due to variations in regulatory environments, organizational capabilities, and stakeholder pressures. As such, there is a growing interest in understanding how ISR influences stakeholder engagement and contributes to driving business value particularly in emerging markets where sustainability integration is still evolving. Regardless of the growing global attention on sustainability, many firms still struggle to demonstrate how their environmental, social, and governance (ESG) efforts translate into tangible business value. Integrated Sustainability Reporting (ISR), which combines financial and non-financial disclosures into a cohesive narrative, aims to bridge this gap. However, the extent to which ISR effectively communicates value creation to stakeholders remains unclear. Several organizations adopt ISR primarily for compliance or reputational purposes, with limited evidence on whether such reporting enhances decision-making, long-term performance, or stakeholder trust. This create a disconnect between reporting intentions and business outcomes. Furthermore, inconsistencies in reporting standards, lack of stakeholder-centric disclosures, and varied interpretations of value further complicate the link between ISR and business value. Therefore, it is crucial to investigate whether and how integrated sustainability reporting genuinely drives business value in practice. The increasingly demand of transparent, accountable and sustainable business practices thereby making organizations to be under pressure to go beyond traditional financial reporting. Integrated Sustainability Reporting (ISR) which merges financial performance with environmental, social, and governance (ESG) disclosures into a unified report has emerged as a strategic communication tool to address these expectations. Its purpose is not only to inform stakeholders but also to demonstrate how an organization creates value over time in a sustainable and responsible manner.

The impact of ISR on driving actual business value remains ambiguous and underexplored, especially in diverse regulatory and economic contexts. While proponents argue that ISR enhances transparency, strengthens stakeholder relationships and improves long-term decision making opponents seems not to agree making empirical evidence on these claims to be inconsistent. Many firms treat ISR as a compliance exercise thereby focusing on form rather than substance. As a result, the transformative potential of ISR in improving internal governance, resource allocation, innovation, and competitive advantage is often unrealized. Significant challenges persist in ISR practices as these include the absence of universally accepted reporting standards, difficulties in measuring and communicating non-financial value and varying levels of integration between sustainability goals and core business strategy. In many cases, disclosures remain superficial, fragmented, or disconnected from actual business performance. This undermines the credibility of reports and raises questions about their usefulness to investors, regulators and other stakeholders.

The lack of clarity on how ISR contributes to measurable business value such as improved financial performance, enhanced brand equity, operational efficiency and stakeholder trust poses a critical gap in both academic literature and practical implementation. Without a clear understanding of this relationship, organizations may struggle to justify investments in ISR practices or to embed sustainability into strategic decision-making processes. Therefore, there is an urgent need to critically examine whether and in what conditions Integrated Sustainability Reporting drives real business value. Such an inquiry should explore not only the quality and depth of ISR but also how stakeholders interpret and respond to these disclosures and how they influence organizational outcomes over time.

LITERATURE REVIEW

Akpan et al (2023), opines that as a developing nation grappling with distinct social and environmental challenges Nigeria's organizations must embrace sustainable business practices and foster meaningful stakeholder engagement. Despite this necessity, the adoption and comprehension of integrated reporting (IR) and sustainability accounting in Nigeria remain relatively limited. This study seeks to bridge this gap by exploring the potential advantages, obstacles, and implementation strategies associated with IR and sustainability accounting within the Nigerian context. The research begins with a thorough overview of IR and sustainability accounting, outlining their relevance and the rationale behind their adoption in Nigeria. It sheds light on the difficulties faced by organizations, such as low awareness, a shortage of technical expertise, and a perceived lack of immediate financial returns. Drawing upon existing scholarship, the study delves into the theoretical foundations of stakeholder engagement, performance measurement, and governance in relation to sustainability accounting. To contextualize the reporting environment, the study reviews prominent frameworks and standards, including the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB). It highlights the benefits of integrated reporting, such as stronger stakeholder trust, improved financial and non-financial outcomes, and long-term value creation. Further, it examines approaches to environmental performance measurement, social impact evaluation, and governance issues within sustainability reporting. Using a comparative analysis, the study presents case examples from both developed and developing countries including Nigeria that demonstrate successful stakeholder engagement through IR and sustainability accounting. These case studies offer insights into best practices and key lessons, emphasizing the role of transparency, measurement, and communication in driving sustainability. The study also investigates the relationship between integrated reporting and financial performance, focusing on how non-financial indicators such as environmental, social, and governance metrics contribute to organizational success. It explores the concept of long-term value creation and outlines strategies for embedding sustainability into core business practices. Recognizing the context-specific challenges in Nigeria, the study identifies barriers such as regulatory shortcomings, limited resources, and cultural dynamics. It concludes with practical recommendations for overcoming these hurdles, fostering greater adoption of integrated reporting, and supporting sustainable development across Nigeria's business landscape.

Sciulli and Adhariani (2023), buttress that the International Integrated Reporting Council (IIRC) has promulgated the production of integrated reports to enhance transparency and encourage improved stakeholder relationships. The purpose of this study/paper is to explore how managers prioritize the needs of stakeholders and to what extent integrated reporting is associated with those stakeholder relationships. The study uses a case study and interpretative approach to compare the underlying motivation for the preparation of an integrated report across three case study sites from three different industry groups. Three case study sites were selected on the basis of producing exemplary integrated reports, and senior executives provided their views on stakeholder engagement. Face-to-face and telephone semi-structured interviews, email correspondence and a review of the integrated reports form the basis for the data collection and analysis. The case studies investigated for this project provide evidence that integrated reporting did motivate further stakeholder engagement to increase the organizations' legitimacy and transparency. Overall, the authors found that the three case study organizations used the production of an integrated report to cement their place as a "leader" in their respective industry group. Moreover, managers regarded the current statutory accounts as inadequate in communicating and engaging with a broad range of stakeholders. There were elements of enhancing, defending and repairing legitimacy and managers tended to equate legitimacy with transparency. The international IIRC Framework is built upon the notion that stakeholders are integral to assisting the organization in creating value. The outcomes of this investigation suggest that for preparers, the incumbent organization is reliant on the leadership of senior managers (inclusive of the chief executive officer) and directors to actually instigate the process. In Australia and New Zealand, given that integrated reporting is not mandatory, regulators have no influence over the scope, content and veracity of integrated reports. It seems likely that further stakeholder engagement will become intrinsic to the business model of organizations as a means to quell any notion that it is engaging in greenwashing. For the scope of this study, the stakeholders themselves were not involved in this investigation which can be viewed as a limitation of the study.

Mansor et al (2023), attest that integrated reporting (IR) drives firms to concentrate on creating value in the longer term, directing them to have a more inclusive and convincing management-driven approach to value creation. Earlier evidence indicates that 79% of the IR adopters realized an enhancement in their board's understanding of value creation. Whilst many studies on IR adoption, issues on IR quality (IRQ) have been neglected. The role of IRQ is crucial as it reflects corporate accountability and transparency. Hence, firms with high IRQ may create high stakeholder value. However, the extent to which IRQ contributes to value creation is less established, and prior studies rarely assess the role of IRQ in stakeholder value creation (SVC). Thus, the present study aims to fill this gap. As not all stakeholders are interested in short-term measures, firms might establish the key driving force, such as a sustainability committee, to materialize the sustainability agenda. Hence, this study examines the moderating role of sustainability governance (SG) of 238 listed companies that adopted IR between 2018 and 2020. The result indicates a significant and positive relationship between IRQ and SVC. Additional analysis showed that IRQ is significantly and positively associated with return on assets and non-financial value creation. However, the analysis revealed that SG did not reinforce the positive impact of IRQ on SVC. The paper highlights the importance of discharging high-quality IR to the investors and other stakeholders to communicate the firms' relevant issues, competencies, strategies, and prospects that underpin the firm's ability to deliver value. The results may shed some light on the SG's role in managing the sustainability agenda that influence the

creation of valuable outcomes for the stakeholders. Regulators, practitioners, firms, and scholars might be interested in the discovered findings and the proposed SVC index.

Baboukardos et al (2021), opines that recently there has been increasing demand by stakeholders for firms to demonstrate how they create value within the context of their operating environment. Consequently, a new reporting approach, integrated reporting (IR), was conceptualised with its development linked to the firm's integrated thinking (IT). Yet very little is known about the effects of IT on firms' reporting decisions. Hence, we investigate whether IT influences firms' decision to publish an assured sustainability report. Using an international dataset, we find that IT is positively associated with sustainability reporting assurance. We also find that this association is moderated by the type of legal system such that for firms in code law countries, the IT effects are reduced. Nevertheless, the effects of IT remain strong, indicating that IT is important for reporting decisions regardless of the firm's contextual setting. These findings have implications for policymakers and organisations interested in promoting high-quality sustainability reporting.

Lyulyov et al (2023), opines that the world's transition to green economic growth, considering the Agenda for Sustainable Development, provokes relevant structural changes in the world market. Consequently, it boosts the business sector's ability to incorporate green dimensions into their development policies to intensify their green competitiveness in the market. In this case, it is necessary to identify the appropriate indicators that affect a company's green competitiveness. Thus, stakeholders and management could intensify or decline a company's green competitiveness depending on the efficiency of communication between them. The paper aims to analyze the role of stakeholders' engagement in the company's management in enhancing green competitiveness. The research data were compiled from a questionnaire of 75 respondents, who represent the Ukrainian company's management. The study applies PLS-SEM to test the hypotheses of the investigation. The empirical results allow us to conclude that stakeholders' engagement in the company's management positively affects the company's green competitiveness. The most statistically significant impact on the company's green competitiveness is experience in communication with stakeholders and managing stakeholders' conflicts, with loading factors of 0.802 and 0.806, respectively. The findings show that to improve green competitiveness, the company's management should develop targeted stakeholder communications and extend knowledge and awareness of stakeholder interests and values. At the same time, management should incorporate stakeholders' suggestions and recommendations when promoting a company's green competitiveness.

Tumpa and Naeni (2025), stated that achieving sustainable development goals requires efficient decision-making and stakeholder engagement in infrastructure projects. Their research aims to investigate how decision-making and stakeholder engagement at the project governance level can be advanced using digital technology to improve sustainability performance in infrastructure projects. Grounded in technology acceptance model, this qualitative study explored the perceptions of professionals in facilitating sustainability within infrastructure projects. Seventeen semi-structured interviews were conducted with purposively selected infrastructure professionals and data were analyzed using inductive thematic analysis. Digital technology enables evidence-based decision-making aligned with sustainability goals by providing real-time data, optimizing data analysis and enhancing data authenticity while reducing resource and time pressure. It promotes efficient stakeholder engagement by offering integrated, collaborative and centralized platforms which foster transparency, collaboration, mitigate the risk of greenwashing and modern slavery by streamlining communication and reducing siloed engagement. However, human oversight remains essential to prevent technological misinterpretation. The study provides valuable insights for project management professionals seeking to integrate digital technology into sustainable infrastructure projects. It demonstrates how digital technology can enhance environmental, social and economic dimensions of sustainability in infrastructure projects, helping them to remain competitive in a dynamic project environment. Digital technology presents reliable, up to date environmental, social and economic data required for informed decision-making, enabling socially sustainable choices. This reduces risks of erroneous decision and benefit broader communities by addressing sustainability challenges, fostering a resilience and enhancing social well-being.

Dragomir and Dumitru (2023), stated that the relationships between integrated reporting quality (IRQ) and corporate governance characteristics have been studied extensively, but the results are still inconclusive and, sometimes, contradictory. The purpose of this paper is to systematize the results of previously published studies on the relationship between corporate governance and IRQ. The paper uses several complementary theoretical perspectives (agency, stakeholder and signaling theory). The relevant aspects of the corporate governance system are the attributes and composition of the board, the existence of a social responsibility committee, the quality of the audit committee, integrated report assurance and ownership structures. The sample consisted of 61 papers published in top journals between 2015 and 2021. Meta-analytic procedures were applied on bivariate and partial correlations between IRQ and the identified corporate governance characteristics. The results confirm that director independence, the existence of a social responsibility committee, institutional ownership and the hiring of a Big 4 auditor are significantly correlated with IRQ. On the other hand, board gender diversity, audit committee independence and dedicated assurance have a positive but nonsignificant impact on IRQ. Chairperson-chief executive officer duality does not seem to impact report quality, while ownership concentration has a negative but nonsignificant impact on IRQ. Future research can improve the measurement of focal indicators by using a common set of variables for comparability, favoring disaggregate measures of corporate governance and updating the measurement of some indicators. Future research could also propose new indicators in the area of corporate governance and expand the theoretical domain of IRQ research.

Mupa et al (2024), stated that in recent years, the integration of environmental, social, and governance (ESG) factors into investment decision-making has gained significant traction across various sectors, including renewable energy projects (Chernyshova & Shogenova, 2023). ESG criteria encompass a broad range of considerations, from environmental sustainability and social responsibility to robust governance practices, which collectively aim to promote sustainable development and long-term financial performance. This comprehensive approach reflects a growing global awareness of the need to address environmental challenges and ensure that business practices contribute positively to society and the planet (Chernyshova & Shogenova, 2023).

METHODOLOGY

This study employed a quantitative research design to examine how integrated reporting (IR) practices relate to shareholder value creation across global regions. The research was structured around a cross-sectional dataset covering multiple regions and years, allowing for comparison and statistical analysis. Data for the study were obtained from the **Integrated Reporting (IR) Examples Database**, a repository maintained by the International Integrated Reporting Council (IIRC). The database includes organizations that voluntarily adopt and publish integrated reports based on the IIRC framework. The initial population consisted of **580 firms** listed in the IIRC database as of 30th December 2024. To ensure the sample was both relevant and analytically robust, the following inclusion and exclusion criteria were applied:

1. **Public listing status**: Only publicly listed companies were retained, aligning with the study's focus on shareholder value creation (Cortesi & Vena, 2019).
2. **Time consistency**: Companies must have consistently published integrated reports from **2022 to 2024**.
3. **Language filter**: Only English-language reports were considered to ensure comparability and avoid translation inconsistencies.
4. **Industry filter**: **Financial institutions and Real Estate Investment Trusts (REITs)** were excluded due to their distinct financial reporting practices (Amira et al., 2020).

The sample was refined through several filtering stages as shown below:

- **Initial pool of firms**: 580
- **Removed unlisted/delisted firms**: 70
- **Removed non-adopters in the year of study**: 75
- **Removed firms with unavailable reports**: 61
- **Removed non-English reports**: 10
- **Removed financial institutions and REITs**: 126

After applying all filters, the final sample comprised **238 companies**, distributed across five regions: Africa, Asia, Europe, Australasia, and the Americas.

The sample for this study was derived from the Integrated Reporting (IR) Examples Database, which includes organizations that have adopted integrated reporting practices in line with the guidelines of the International Integrated Reporting Council (IIRC). The database categorizes adopting firms into five regional groups which are Africa, Asia, Europe, Australasia, and the Americas based on regional classifications. Table 1 outlines the sample selection procedure and regional breakdown as of 30th December 2024.

From an initial pool of 580 firms listed in the database, a more refined sample was obtained by applying a series of inclusion and exclusion criteria. First, only **publicly listed companies** were retained, aligning with the study's focus on shareholder value creation (Cortesi & Vena, 2019). Second, firms were required to have published **English-language integrated reports consistently from 2022 to 2024**, ensuring comparability across the observation period. Lastly, **financial institutions and real estate investment trusts (REITs)** were excluded from the analysis due to their industry-specific reporting frameworks, which differ substantially from those of other sectors (Amira et al., 2020).
Applying these filters resulted in a final sample of **238 companies**, distributed across the five global regions.

Table 1 Procedure for Sample Selection by Region

Region	Africa	Asia	Europe	Australasia & America	Total
Firms listed in IIRC database	188	147	192	53	580
Minus: Unlisted or delisted firms	31	6	25	8	70
Minus: Firms not adopting in study year	1	3	56	15	75
Minus: Annual reports unavailable	16	15	26	4	61
Minus: Reports not published in English	0	0	7	3	10
Minus: Financial institutions and REITs	55	35	26	10	126
Final Sample Size	**85**	**88**	**52**	**13**	**238**

Total firm-year observations: 714

Table 2 presents the country-level distribution of the sample firms. The selected organizations span **32 countries**, with a significant concentration in **Nigeria (35.71%)** and **Japan (28.57%)**. This distribution aligns with expectations, given that

South Africa was the first country to mandate integrated reporting (Dilling & Caykoylu, 2019), while Japan has been a strong advocate for disclosing value-creation strategies through integrated reports (Anifowose et al., 2020).

Firms from other countries contribute fewer than ten entities each to the sample. Furthermore, approximately **55.46%** of the companies are based in **developed economies**, while **53.78%** originate from **civil law jurisdictions**. These figures are consistent with prior research, which suggests that firms in developed countries are more likely to adopt integrated reporting frameworks (Jensen & Berg, 2012), and those operating in civil law systems tend to provide more comprehensive disclosures to support stakeholder decision-making (Vitolla et al., 2020).

Table 2 Geographic Distribution of Sample Firms by Country

No.	Country	Frequency (Firms)	Percentage (%)
1	Argentina	1	0.42
2	Australia	1	0.42
3	Austria	1	0.42
4	Belgium	1	0.42
5	Brazil	4	1.68
6	China	3	1.26
7	Colombia	1	0.42
8	Croatia	1	0.42
9	Denmark	1	0.42
10	Finland	3	1.26
11	France	4	1.68
12	Germany	3	1.26
13	Greece	1	0.42
14	India	2	0.84
15	Italy	8	3.36
16	Japan	68	28.57
17	Malaysia	3	1.26
18	Netherlands	5	2.10
19	New Zealand	2	0.84
20	Nigeria	85	35.71
21	Philippines	1	0.42
22	Russia	1	0.42
23	Singapore	1	0.42
24	South Korea	4	1.68
25	Spain	7	2.94
26	Sri Lanka	4	1.68
27	Sweden	4	1.68
28	Switzerland	5	2.10
29	Thailand	1	0.42
30	United Arab Emirates	1	0.42
31	United Kingdom	7	2.94
32	United States	4	1.68
	Total	**233**	**100.00%**

Data Collection and Analysis

To evaluate the quality of integrated reporting, the implementation of sustainability governance (SG), and the degree of shareholder value creation (SVC), this study employed a **content analysis** approach. Content analysis is a widely recognized method in accounting research, with Beattie (2005) noting that more than half of empirical disclosure studies utilize this technique to examine corporate reporting practices. Integrated reports were obtained directly from the official websites of the sampled firms. In line with prior research (Oktorina et al., 2021), the study accepted documents titled *Integrated Report*, *Integrated Annual Report*, or *Annual Integrated Report* as valid sources for analysis. To test the proposed hypotheses, **regression analysis** was conducted using **Stata Software**. Prior to running the models, appropriate diagnostic tests were performed to ensure that the key assumptions underlying regression analysis such as normality, multicollinearity, homoscedasticity, and independence were satisfied, thereby confirming the reliability and validity of the results.

Measurement of Variables
The study measured both the dependent and independent, moderating and control variables.

Stakeholder Value Creation (SVC)
Stakeholder Value Creation (SVC) refers to a firm's responsibility to generate economic and social value not only for its shareholders but also for a broader set of stakeholders, including employees, customers, communities, regulators, and suppliers. While the concept of value creation has gained significant attention in integrated reporting and corporate responsibility literature, there is currently no universally accepted framework or standardised metric for its measurement.
A global survey conducted by Ernst & Young (EY, 2021) highlighted the need for a practical and comprehensive value measurement framework, as many corporate stakeholders expressed a preference for clear, structured guidance in assessing value creation beyond financial returns. In response to this gap, the present study constructed a **Stakeholder Value Creation Index (SVC Index)** that integrates both financial and non-financial dimensions, reflecting a multi-stakeholder orientation in line with the principles outlined by the **International Integrated Reporting Council (IIRC, 2013)** and EY's *Background Paper on Value Creation*.

The development of the index followed a five-stage process:

1. ***Literature and Document Review:***

A total of 141 relevant documents comprising academic journal articles, industry reports, technical papers, and books were retrieved from academic and research databases, including Google Scholar, Scopus, Web of Science, and Google search. These materials were reviewed to identify existing approaches and theoretical constructs relating to stakeholder-oriented value creation.

2. ***Stakeholder Group Classification:***

Criteria and value dimensions identified from the literature were systematically categorized based on the primary stakeholder groups they addressed. This classification ensured that the index captured a diverse range of stakeholder interests.

3. ***Attribute Identification:***

Specific value creation attributes were extracted and refined to represent the measurable elements of stakeholder value. These attributes reflect both tangible and intangible contributions to stakeholder satisfaction and long-term engagement.

4. ***Expert Consultation and Validation:***

A panel of ten experts provided feedback on the preliminary version of the index. The panel included academics and practitioners from a range of stakeholder-relevant sectors: Two based in the United Kingdom, One in New Zealand and Seven in Malaysia. The group consisted of university professors, senior consultants from Big Four accounting firms, representatives from professional accounting bodies, executives from government-linked entities, leaders of non-profit organizations, and senior managers from the private sector (e.g., restaurant chains). These individuals were selected for their expertise in integrated reporting and stakeholder engagement.

5. ***Finalization of the Index:***

Based on the expert feedback, the SVC Index was finalized. The resulting index consists of **16 value creation attributes** organized under **four major stakeholder categories**. The structure is designed to be both comprehensive and applicable across diverse sectors and firm sizes.

To calculate a firm's **Stakeholder Value Creation Score (SVCS)**, the study applied a scoring system based on the extent to which each attribute was addressed in the firm's integrated report. The SVCS is calculated as the ratio of a firm's actual score to the maximum possible score.

- **Maximum score = 16**
- **Minimum score = 0**

The final SVC score thus ranges from 0 (no stakeholder value disclosure) to 1 (full disclosure across all 16 attributes). Table 3 outlines the specific stakeholder groups and value creation attributes used in the index construction.

Table 3 SVC index

Stakeholder Group Evaluation Criteria for Value Creation

Stakeholder Group	Value Creation Attribute	Measurement Criteria	Scoring Method
1. Shareholders	**Strong Financial Performance**	a) **Return on Assets (ROA)** = Net income / Average total assets	Score 1 if ROA exceeds the sample median; otherwise, score 0
		b) **Return on Equity (ROE)** = Net income / Average shareholders' equity	Score 1 if ROE exceeds the sample median; otherwise, score 0

Stakeholder Group	Value Creation Attribute	Measurement Criteria	Scoring Method
	Technological Innovation	Evidence of using advanced technologies	Score 1 if advanced technologies are employed; otherwise, score 0
	Strategic Synergy	Evidence of mergers, acquisitions, restructuring, joint ventures, or strategic alliances	Score 1 if such activity is evident; otherwise, score 0
2. Employees	**Fair Compensation**	Availability of benefits such as bonuses, stock options, health insurance, pensions, paid leave	Score 1 if a structured compensation scheme exists; otherwise, score 0
	Talent Retention	Existence of formal retention policies	Score 1 if a retention plan is in place; otherwise, score 0
	Career Development Opportunities	Presence of training and career growth programs	Score 1 if such programs exist; otherwise, score 0
	Supportive Work Environment	Implementation of workplace wellness programs including ethics and safety	Score 1 if a wellness program is provided; otherwise, score 0
3. Customers	**Product/Service Quality**	Recognition or awards for brand value	Score 1 if brand awards have been received; otherwise, score 0
	Innovation	Launch of new products or services	Score 1 if new offerings are introduced; otherwise, score 0
	Customer Satisfaction	Existence of satisfaction or loyalty programs	Score 1 if such programs are in place; otherwise, score 0
	Customer Engagement	Active communication via workshops, surveys, or customer service	Score 1 if ongoing engagement is evident; otherwise, score 0
4. Society	**Charitable Contributions**	Donations made to nonprofit organizations	Score 1 if donations are made; otherwise, score 0
	Community Involvement	Participation in voluntary or community development projects	Score 1 if there is active participation; otherwise, score 0
	Sustainability Efforts	Recognition for sustainable business practices	Score 1 if sustainability awards have been received; otherwise, score 0
	Employment Opportunities	Provision of jobs within the local community	Score 1 if new jobs are created; otherwise, score 0

Integrated Reporting Quality (IRQ)

The current study assessed Integrated Reporting Quality (IRQ) using the index developed by Kilic and Kuzey (2018), which is grounded in the seven Content Elements outlined in the 2013 International Integrated Reporting Council (IIRC) Framework. These elements include: (1) Organizational Overview and External Environment; (2) Governance; (3) Business Model; (4) Risks and Opportunities; (5) Strategy and Resource Allocation; (6) Performance; and (7) Outlook. Previous research has either adopted this checklist directly or implemented similar disclosure methodologies (Manes-Rossi et al., 2020).

For IRQ scoring, we adapted the methodology proposed by Oktorina et al. (2021), enhancing the binary scoring method of Kilic and Kuzey (2018). Rather than using a simple 0 or 1 scale, we applied a three-point scale (0-1-2) to better capture the depth of disclosure. A score of 0 indicated no disclosure, 1 represented a brief mention, and 2 indicated a comprehensive and detailed disclosure. With 50 disclosure items assessed, a firm could achieve a maximum score of 100 (50 items × 2 points).

It is crucial to recognize that Integrated Reporting (IR) is fundamentally designed to communicate how an organization creates value over time (IIRC, 2013). This focus often leads to overlap between IRQ disclosure items and Sustainable Value Creation (SVC) attributes. To maintain analytical clarity, this study clearly distinguished between the two constructs which are evaluating IRQ based on the extent of disclosure, and SVC based on actual value creation actions.

Sustainability Governance (SG)

This study identifies four key mechanisms to represent Sustainability Governance (SG): the establishment of a sustainability committee, incorporation of non-financial performance metrics into executive compensation, integration of sustainability principles into the company's vision or mission, and the presence of directors with relevant sustainability experience. Consistent with prior research (Wang et al., 2020), these mechanisms were combined into a composite score to reflect the overall robustness of a firm's sustainability governance framework, rather than evaluating each mechanism in isolation.

A score of one (1) was awarded if a firm had a dedicated sustainability, CSR, ethics, or risk and audit committee, and zero (0) if none existed (Malola & Maroun, 2019; Wang et al., 2020). For executive compensation, a score of one (1) was given if both financial and non-financial metrics were used to assess executive performance; firms relying solely on

financial metrics scored zero (0). Executives in this context include CEOs, executive vice presidents, senior managing directors, and managing directors (Cho et al., 2017).

Companies received one (1) point if their corporate vision or mission explicitly incorporated sustainability values, and zero (0) if not (Weng Foong et al., 2019). Finally, firms were scored one (1) if the proportion of directors with sustainability-related experience exceeded the sample median; otherwise, they received zero (0). Sustainability experience was defined based on Amira et al. (2020) and includes directors' involvement in sustainability-related management, projects, departments, or functions such as governance, economics, CSR, environmental initiatives, or sustainability accounting.

The overall SG score was calculated by dividing the total points earned by the maximum possible score (4) and converting it into a percentage. For instance, a firm scoring 2 out of 4 would have an SG score of 50%.

Control Variables

To account for other possible influences on Stakeholder Value Creation (SVC), this study introduced a set of control variables within the regression models. These variables were selected based on theoretical relevance and empirical support in prior literature.

Firstly, **firm size** was included, measured as the natural logarithm of total assets. Larger organizations often engage in a wider array of societal and economic activities, thereby having a broader impact on stakeholders. They are typically equipped with greater financial and operational resources, which can be strategically deployed for stakeholder-focused initiatives and value creation programs (Kansal et al., 2014).

Secondly, **firm age** was incorporated as a control variable, measured by the number of years since the company's incorporation. Older or more mature firms are generally seen as more experienced and resilient, with a higher likelihood of possessing established systems, stakeholder relationships, and sustainable practices. These firms may exhibit stronger innovation, persistence, and profitability (Rossi, 2016), which cumulatively contribute to the generation of stakeholder value.

Leverage was also controlled for, as it reflects a firm's capital structure and financial strategy. Proxied by the debt-to-equity ratio, leverage indicates the extent to which a company relies on borrowed funds. According to Chang et al. (2019), firms often require substantial capital to pursue growth and strategic objectives. Therefore, a higher leverage ratio may signal a firm's proactive investment stance, potentially influencing its capacity to engage in value-generating activities.

Following Gong et al. (2018), two indicators were used to capture a firm's **growth opportunities**. The first, **firm growth**, was proxied by the market-to-book ratio, reflecting investor expectations and long-term value potential. The second, **sales growth**, was measured as the annual percentage increase in revenue. These proxies are grounded in the argument that firms with higher growth potential are more inclined to implement forward-looking, stakeholder-oriented strategies (Iturriaga & Crisóstomo, 2010), and that planning systems are often driven by sales targets (Eliasson, 1976).

In addition to firm-level characteristics, macro-level variables were also considered. One such variable was a **country's level of economic development**, captured through its GDP growth rate. Organizations operating in more developed economies often have greater access to intangible assets such as innovation, brand equity, and public trust which can enhance their stakeholder engagement and long-term value contribution (Fasan et al., 2016).

Lastly, the **legal system** of the host country was included to explore institutional influences on stakeholder value creation. Literature suggests that firms operating in **civil law countries** tend to adopt more stakeholder-oriented practices compared to those in **common law jurisdictions** (Vitolla et al., 2020). To quantify this, a binary indicator was assigned: firms based in civil law systems were coded as '1', while those in common law systems received a '0'.

These control variables provide a comprehensive framework to isolate the effect of Integrated Reporting Quality and Sustainability Governance on stakeholder value, while accounting for firm-specific and institutional differences.

RESULTS AND INTERPRETATION OF FINDINGS

This section presents the empirical results derived from the study and offers a detailed interpretation of the findings in relation to the research objectives and relevant literature. The analysis aims to unpack the implications of the statistical outcomes and contextualize them within the broader theoretical and practical frameworks that underpin stakeholder value creation and integrated reporting.

Descriptive Statistics

Table 4 presents the descriptive statistics for all variables included in the study. The average Stakeholder Value Creation (SVC) score was 0.738, with firm performance ranging from a minimum of 20.1% value creation to full stakeholder satisfaction in some cases. Integrated Reporting Quality (IRQ) also exhibited a relatively high average of 0.728, indicating generally strong disclosure practices. The Sustainability Governance (SG) metric reflected a moderate adoption of ESG-related practices, with a mean score of 0.574.

Firm size varied considerably across the sample, as reflected in the wide gap between minimum and maximum values. The age of firms ranged from just 4 years to as old as 203 years, indicating a diverse maturity profile. Average values for leverage, firm growth, and sales growth were 77.803, 2.098 and 5.391 respectively. Meanwhile, the mean GDP growth rate was slightly negative at -0.942, and about 55% of the firms in the sample were from civil law jurisdictions.

Table 4 Descriptive statistics

Variables	Mean	Std. Dev.	Min	Max
SVC	0.738	0.139	0.201	0.998
IRQ	0.728	0.094	0.445	0.985
SG	0.574	0.243	0.000	1.000
Country Law	0.552	0.493	0.000	1.000
Firm Age	66.466	43.021	4.000	203
Firm Growth	2.098	2.742	0.120	33.850
Firm Size	23,187,415	50,833,920	15,200	5.712e+08
GDP Growth	-0.942	3.412	-10.100	6.100
Leverage	77.803	90.834	-237.480	768.500
Sales Growth	5.391	20.872	-62.500	232.870

***where*:**
SVC = Stakeholder Value Creation score;
IRQ = Integrated Reporting Quality score;
SG = Composite score for Sustainability Governance;
Firm Size = Total assets reported in U.S. dollars;
Firm Age = Number of years since the firm's establishment;
Leverage = Ratio of total liabilities to total assets;
Firm Growth = Market-to-book value ratio;
Sales Growth = Annual percentage increase in sales revenue;
GDP Growth = Growth rate of the country's gross domestic product;
Country Law = Legal system classification (civil law or common law)

Diagnostic Tests

Prior to conducting the regression analysis, a series of diagnostic tests were carried out to assess whether the core assumptions underlying the Ordinary Least Squares (OLS) regression model were met. These tests are essential to ensure the reliability, validity, and accuracy of the regression estimates.
Specifically, the study examined the presence of:

- **Heteroscedasticity**: non-constant variance of the error terms, which violates the OLS assumption of homoscedasticity.
- **Autocorrelation**: correlation of the error terms across observations, which can lead to inefficient estimates.
- **Groupwise Heteroscedasticity**: A form of variance inconsistency that occurs within panel data groups.

To evaluate these issues, the following formal statistical tests were applied:

- **Breusch-Pagan Test** was used to detect heteroscedasticity in the regression residuals.
- **Wooldridge Test** for autocorrelation in panel data.
- **Modified Wald Test** to assess the presence of groupwise heteroscedasticity across entities.

Regression Results

In panel data analysis, several econometric models may be applied to estimate relationships among variables, including the **Pooled Ordinary Least Squares (POLS)**, **Fixed Effects Model (FEM)**, and **Random Effects Model (REM)**. To determine the most appropriate model for this study, a series of model selection diagnostics were conducted: the **Poolability F-test**, the **Breusch and Pagan Lagrange Multiplier (BPLM) test**, and the **Hausman specification test**.

The results from the **Poolability F-test** indicated that the FEM was statistically preferred over POLS, as evidenced by a significant p-value. This suggests the presence of unobserved heterogeneity across the firms, making the fixed effects framework more suitable than the pooled model. Furthermore, the **BPLM test** confirmed that the REM was superior to POLS, reinforcing the importance of accounting for individual-specific effects.

To determine the choice between FEM and REM, the **Hausman test** was employed. The results yielded an **insignificant p-value**, suggesting that the differences in coefficients between FEM and REM were not systematic. Consequently, the **Random Effects Model (REM)** was deemed the appropriate estimator for this study. To further validate this choice, a **Robust Hausman test using the Mundlak approach** was performed, which reaffirmed the selection of REM as the final model.

Relationship between Integrated Reporting Quality (IRQ) and Stakeholder Value Creation (SVC)

Hypothesis 1 proposed that the quality of integrated reporting (IRQ) has a **positive and significant effect** on stakeholder value creation (SVC). The regression results, summarized in **Table 5**, confirm this hypothesis. IRQ was found to have a **statistically significant positive relationship with SVC at the 1% level**. The **coefficient estimate for IRQ is 0.241**,

implying that a one-unit improvement in IRQ is associated with a **0.241 point increase in the SVC index**, holding other factors constant. These findings suggest that firms which practice **transparent, reliable, and comprehensive disclosure** through their integrated reports are better positioned to meet the diverse expectations of their stakeholder groups. This transparency fosters **greater public trust** (Anifowose et al., 2020), enhances **organizational reputation** (Connelly et al., 2011), and signals ethical corporate behavior all of which contribute to enhanced **stakeholder engagement** and **long-term value creation** (IIRC, 2021). This positive association is consistent with and extends the findings of **Anifowose et al. (2020)**, who demonstrated that high-quality integrated reports significantly influence firm value, and **Mans-Kemp and Van der Lugt (2020)**, who observed that effective integrated reporting leads to improvements in sustainability performance.

Accordingly, **Hypothesis 1 is supported**, affirming that integrated reporting quality has a meaningful and positive impact on both **financial and non-financial dimensions** of stakeholder value creation.

Table 5 Panel data regression estimates

Dependent Variable (DV): Stakeholder Value Creation (SVC)

Model: Random Effects Model (REM) with Robust Standard Errors (RSE)

Variable	Coefficient	Robust Std. Error
Integrated Reporting Quality (IRQ)	0.241	0.061
Sustainability Governance (SG)	0.022	0.026
Country Law	-0.105	0.018
Firm Age	0.008	0.009
Firm Growth	0.015	0.004
Firm Size	0.004	0.002
GDP Growth	-0.002	0.001
Leverage	0.065	0.078
Sales Growth	0.593	0.245
Constant	-3.672	2.140

Examining the Moderating Role of Sustainability Governance (SG) in the Relationship between Integrated Reporting Quality (IRQ) and Stakeholder Value Creation (SVC)

Hypothesis 2 posits that the strength of the relationship between **Integrated Reporting Quality (IRQ)** and **Stakeholder Value Creation (SVC)** is enhanced when moderated by **Sustainability Governance (SG)**. In line with the recommendations of prior studies (e.g., Aiken et al., 2021), a prerequisite for testing a moderation effect is to first establish a statistically significant direct relationship between the moderator (SG) and the dependent variable (SVC). Therefore, the analysis is structured into two parts: the direct effect of SG on SVC, followed by the moderation analysis.

Direct Relationship between SG and SVC

As presented in **Table 6**, the regression analysis reveals **statistically significant relationship** between SG and SVC. The coefficient for SG is **0.021**, with a **robust standard error of 0.027**. This result suggests that the presence of sustainability governance structures such as sustainability committees, non-financial performance measures, or strategic sustainability oversight does **directly enhance** stakeholder value creation in a measurable way. In line with prior expectation corporate boards are expected to safeguard stakeholder interests by embedding sustainability into strategic decisions. This outcome supports the assertions of previous scholars who have supported the implementation of sustainability governance in firms as being substantive.

Moderating Effect of SG on the IRQ and SVC Relationship

The second part of the analysis tested whether SG moderates the positive association between IRQ and SVC. The interaction term **IRQ × SG** was introduced into the regression model to capture any moderating influence. As reported in **Table 6**, the interaction effect was **statistically insignificant**, indicating that SG does **not strengthen or alter** the relationship between integrated reporting quality and stakeholder value creation. This finding implies that **firms benefit from high-quality integrated reporting irrespective of their level of sustainability governance**. The ability of IRQ to drive value creation appears robust on its own, independent of the influence of SG mechanisms.

Consequently, **Hypothesis 2 is not supported**. The absence of a moderating effect may point to a **limited or ineffective role** of SG in enhancing holistic value creation, at least in the context of the sampled firms. This insight opens a critical dialogue regarding the **strategic relevance of SG frameworks** in advancing stakeholder capitalism. It suggests that unless SG structures are deeply embedded and operationalized beyond formality they may not provide meaningful contributions to value creation outcomes.

Table 6 Panel data regression estimates for moderating hypothesis

Dependent Variable (DV): Stakeholder Value Creation (SVC)

Model: Random Effects Model (REM) with Robust Standard Errors (RSE)

Variable	REM (RSE) Without Moderator		REM (RSE) With Moderator	
	Coefficient	SE	Coefficient	SE
Integrated Reporting Quality (IRQ)	0.231	0.058	0.169	0.120
Sustainability Governance (SG)	0.021	0.027	-0.064	0.152
IRQ × SG	–	–	0.097	0.205
Country Law	-0.102	0.019	-0.096	0.018
Firm Age	0.005	0.009	0.005	0.009
Firm Growth	0.010	0.004	0.011	0.004
Firm Size	0.005	0.002	0.005	0.002
GDP Growth	-0.002	0.001	-0.001	0.001
Leverage	0.068	0.072	0.070	0.071
Sales Growth	0.588	0.241	0.586	0.239
Constant	-3.302	1.986	-3.289	1.974

The Relationship between Control Variables and SVC

This study incorporated seven control variables namely, firm size, firm age, financial leverage, firm growth, sales growth, the level of a country's economic development, and the type of legal system in place to isolate their influence on stakeholder value creation (SVC). As shown in Table 5, a statistically significant positive relationship was observed between firm size and SVC at the 1% significance level. This finding aligns with prior research (Kansal et al., 2014), supporting the notion that larger organizations possess the capacity and resources to implement broad-based initiatives that enhance societal welfare.

In contrast, the analysis revealed that firm age and financial leverage have a statistically significant impact on SVC at 1% and 10% respectively. However, both firm growth and sales growth, used as proxies for a company's growth opportunities demonstrated a significant positive correlations with SVC at the 1% level of significance for firm growth while sales growth was not statistically significant at any level. Furthermore, the data showed a negative association between both a country’s level of development and its legal system with SVC, with the country level of development exhibiting a higher statistically significant effect. This result suggests that in more developed economies, organizations may be more focused on achieving global competitiveness and macroeconomic objectives.

Additional Analysis

To deepen the investigation, a supplementary analysis was conducted to evaluate how Integrated Reporting Quality (IRQ) and Sustainability Governance (SG) influence different dimensions of stakeholder value creation. For this purpose, SVC was disaggregated into three components: Return on Assets (ROA), Return on Equity (ROE), and Non-Financial Value Creation (NFVC).

The findings presented in Table 9 indicate that IRQ is significantly and positively associated with both ROA and NFVC. These outcomes support previous literature (Mervelskemper & Streit, 2017; Moloi & Iredele, 2020), suggesting that high-quality integrated reporting enhances value creation by reducing information asymmetry (Cortesi & Vena, 2019), improving decision-making processes (Barth et al., 2017), and articulating the strategic value of sustainability initiatives (Mervelskemper & Streit, 2017).

Nevertheless, the introduction of SG into all three regression models did not yield a significant moderating effect, as the interaction term remained statistically insignificant across all dependent variables. As such, the study was unable to confirm the hypothesized moderating role of sustainability governance on the relationship between IRQ and stakeholder value creation.

Table 7 Panel Regression Results Depicting the Influence of Independent Variables on Multiple Dimensions of Value Creation

DV: SVC	ROA (No Moderator)	ROA (With Moderator)	ROE (No Moderator)	ROE (With Moderator)	NFVC (No Moderator)	NFVC (With Moderator)
IRQ	0.005 (0.002)	0.003 (0.004)	0.003 (0.008)	0.006 (0.009)	0.275 (0.070)	0.263 (0.140)
SG	-0.002 (0.001)	-0.006 (0.005)	-0.003 (0.003)	-0.002 (0.015)	0.012 (0.022)	-0.003 (0.170)
IRQ*SG	–	0.007 (0.007)	–	-0.003 (0.021)	–	0.019 (0.235)
Country Law	0.001 (0.001)	0.001 (0.001)	0.003 (0.002)	0.003 (0.002)	-0.116 (0.015)	-0.116 (0.015)
Firm Age	0.000 (0.000)	0.000 (0.000)	0.002 (0.001)	0.002 (0.001)	0.007 (0.009)	0.007 (0.009)
Firm Growth	0.002 (0.000)	0.002 (0.000)	0.004 (0.001)	0.004 (0.001)	0.004 (0.003)	0.004 (0.003)

DV: SVC	ROA (No Moderator)	ROA (With Moderator)	ROE (No Moderator)	ROE (With Moderator)	NFVC (No Moderator)	NFVC (With Moderator)
Firm Size	0.001 (0.000)	0.001 (0.000)	0.002 (0.000)	0.002 (0.000)	0.001 (0.003)	0.001 (0.003)
GDP Growth	0.000 (0.000)	0.000 (0.000)	0.001 (0.000)	0.001 (0.000)	0.001 (0.001)	0.001 (0.001)
Leverage	-0.013 (0.003)	-0.013 (0.003)	-0.022 (0.014)	-0.022 (0.014)	0.169 (0.080)	0.169 (0.080)
Sales Growth	0.054 (0.025)	0.054 (0.025)	0.158 (0.060)	0.158 (0.060)	0.390 (0.212)	0.390 (0.212)
Constant	6.212 (0.185)	6.220 (0.180)	5.934 (0.405)	5.930 (0.398)	-2.812 (1.689)	-2.800 (1.695)
R-Squared	0.265	0.266	0.274	0.274	0.202	0.202

CONCLUSION

This study set out to investigate the impact of Integrated Reporting Quality (IRQ) on Stakeholder Value Creation (SVC), while also examining whether Sustainability Governance (SG) plays a moderating role in this relationship. Drawing on data from 238 integrated reporting adopters across five global regions which are Africa, Asia, Europe, America, and Australasia the study utilized a content analysis approach, assessing integrated reports published between 2018 and 2020.

Using Random Effects Modeling (REM), the study found that IRQ is positively and significantly associated with SVC. This indicates that high-quality integrated reporting contributes meaningfully to creating value for a broad range of stakeholders. However, the presence of Sustainability Governance did not exhibit any statistically significant moderating effect on the IRQ and SVC relationship. These findings offer empirical validation for the theoretical assertions of team production theory and signaling theory. Specifically, the results suggest that integrated reporting not only reduces information asymmetry but also signals organizational accountability and stakeholder orientation. The lack of a significant moderating effect of SG raises questions about the practical strength and implementation of governance structures designed to serve multiple stakeholder interests. From a theoretical standpoint, this research extends the literature by positioning IRQ as a critical determinant of stakeholder value creation. Traditionally, studies have focused on the link between integrated reporting and financial performance or firm value. This study, however, shifts the emphasis to a broader, more inclusive conceptualization of value that is one that accounts for the interests of employees, customers, societies, and shareholders. Practically, the study underscores the importance of viewing integrated reporting not merely as a compliance tool but as a strategic mechanism through which organizations can enhance their understanding of stakeholder needs and deliver tangible value. The findings also reinforce the International Integrated Reporting Council's (IIRC) perspective on integrated reporting as a forward-looking and value-driven approach to corporate communication. By presenting cohesive and strategic information, high-quality integrated reports can help firms articulate their strengths, reduce uncertainty, and enhance long-term value creation. Furthermore, while SG did not show a significant moderating effect in this study, its potential importance should not be overlooked. Effective SG structures remain essential for institutionalizing stakeholder-focused practices, and future improvements in SG implementation could still yield meaningful outcomes.

Nonetheless, this study acknowledges some limitations. First, the analysis focused exclusively on IRQ and SG as key determinants of value creation which may not fully capture the multifaceted nature of value creation therefore, future research should explore additional organizational, industry-specific, or macroeconomic factors that could enhance a firm's ability to create value. Secondly, the SVC index developed for this study comprises 16 key attributes across four major stakeholder groups. Although robust, this index could be expanded in future studies to include more measures and additional stakeholder categories for greater comprehensiveness.

In conclusion, this study affirms the pivotal role of integrated reporting in enhancing stakeholder value and calls for greater attention to the strategic implementation of sustainability governance. It offers both theoretical insights and practical guidance for corporate managers, regulators, and policymakers aiming to foster transparency, accountability, and sustainable value creation through integrated thinking and reporting.

REFERENCES

1. Abhayawansa, S. (2022). Swimming against the tide: back to single materiality for sustainability reporting. *Sustainability Accounting, Management and Policy Journal*, *13*(6), 1361-1385.
2. Akpan, J. U., Oluwagbade, O. I., & Owonifari, V. I. (2023). Integrated reporting: Enhancing stakeholder engagement and performance through sustainability accounting in Nigeria. *Int. J. Res*, *10*, 1-10.
3. Assoratgoon, W., & Kantabutra, S. (2023). Toward a sustainability organizational culture model. *Journal of Cleaner Production*, *400*, 136666.
4. Baboukardos, D., Mangena, M., & Ishola, A. (2021). Integrated thinking and sustainability reporting assurance: International evidence. *Business Strategy and the Environment*, *30*(4), 1580-1597.
5. Chen, S., Song, Y., & Gao, P. (2023). Environmental, social, and governance (ESG) performance and financial outcomes: Analyzing the impact of ESG on financial performance. *Journal of environmental management*, *345*, 118829.

6. Diwan, H., & Amarayil Sreeraman, B. (2024). From financial reporting to ESG reporting: a bibliometric analysis of the evolution in corporate sustainability disclosures. *Environment, development and sustainability*, *26*(6), 13769-13805.
7. Dragomir, V.D., & Dumitru, M. (2023). Does corporate governance improve integrated reporting quality? A meta-analytical investigation", *Meditari Accountancy Research*, Vol. 31 No. 6, pp. 1846-1885.
8. Dye, J., McKinnon, M., & Van der Byl, C. (2021). Green gaps: Firm ESG disclosure and financial institutions' reporting Requirements. *Journal of Sustainability Research*, *3*(1).
9. Lyulyov, O., Chygryn, O., Pimonenko, T., & Kwilinski, A. (2023). Stakeholders' engagement in the company's management as a driver of green competitiveness within sustainable development. *Sustainability*, *15*(9), 7249.
10. Mansor, S. M., Hassan, M. S., Jaffar, R. O. M. L. A. H., & Abdullah, M. (2023). The Role of Integrated Reporting Quality and Sustainability Governance in Stakeholder Value Creation. *Asian Journal of Accounting and Governance*, *20*, 48-63.
11. Minutiello, V., & Tettamanzi, P. (2022). The quality of nonfinancial voluntary disclosure: A systematic literature network analysis on sustainability reporting and integrated reporting. *Corporate Social Responsibility and Environmental Management*, *29*(1), 1-18.
12. Mio, C., Costantini, A., & Panfilo, S. (2022). Performance measurement tools for sustainable business: A systematic literature review on the sustainability balanced scorecard use. *Corporate social responsibility and environmental management*, *29*(2), 367-384.
13. Mupa, M. N., Pamful, E. E., Nnaji, J. C., & Adu-Boahen, J. O. A. N. N. A. (2024). Integrating ESG factors in investment decision-making for renewable energy projects. *IRE Journals*, *8*(2), 273-293.
14. Naciti, V., Cesaroni, F., & Pulejo, L. (2022). Corporate governance and sustainability: A review of the existing literature. *Journal of Management and Governance*, 1-20.
15. Rossi, A., & Luque-Vílchez, M. (2021). The implementation of sustainability reporting in a small and medium enterprise and the emergence of integrated thinking. *Meditari Accountancy Research*, *29*(4), 966-984.
16. Sciulli, N., & Adhariani, D. (2023). The use of integrated reports to enhance stakeholder engagement. *Journal of Accounting & Organizational Change*, *19*(3), 447-473.
17. Sciulli, N., & Adhariani, D. (2023). The use of integrated reports to enhance stakeholder engagement. *Journal of Accounting & Organizational Change*, *19*(3), 447-473.
18. Thoradeniya, P., Lee, J., Tan, R., & Ferreira, A. (2022). From intention to action on sustainability reporting: The role of individual, organisational and institutional factors during war and post-war periods. *The British Accounting Review*, *54*(1), 101021.
19. Tilt, C. A., Qian, W., Kuruppu, S., & Dissanayake, D. (2021). The state of business sustainability reporting in sub-Saharan Africa: an agenda for policy and practice. *Sustainability Accounting, Management and Policy Journal*, *12*(2), 267-296.
20. Tumpa, R. J., & Naeni, L. (2025). Improving decision-making and stakeholder engagement at project governance using digital technology for sustainable infrastructure projects. *Smart and Sustainable Built Environment*.
21. Vitolla, F., Marrone, A., & Raimo, N. (2020). Integrated reporting and integrated thinking: A case study analysis. *Corporate Ownership and Control*, *18*(1), 281-291.
22. Wang, N., Pan, H., Feng, Y., & Du, S. (2024). How do ESG practices create value for businesses? Research review and prospects. *Sustainability Accounting, Management and Policy Journal*, *15*(5), 1155-1177.
23. Xia, J. (2022). A systematic review: How does organisational learning enable ESG performance (from 2001 to 2021)?. *Sustainability*, *14*(24), 16962.