

EXPLORATORY RESEARCH ON THE ROLE OF INTEGRATED THINKING AND REPORTING IN PROMOTING SUSTAINABLE DEVELOPMENT: A QUALITATIVE CASE STUDY

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Abstract. Purpose: *This paper aims to investigate the role of integrated thinking and reporting (ITR) in promoting sustainable development (SD) through a qualitative case study. The primary aim of the research is to identify the key factors that contribute to or prevent the effectiveness of ITR practices in driving SD. Additionally, the study explores the influence of regulatory and institutional frameworks surrounding sustainability reporting on the adoption and effectiveness of these practices.*

Design/methodology/approach: *The research method employed in this study is a qualitative case study. The case study approach is a suitable method for exploring complex phenomena within real-life contexts, providing an in-depth understanding of the research questions. The research data are to be collected through semi-structured interviews with key stakeholders, including senior executives, sustainability managers and document analysis.*

Preliminary Findings: *Through the interviews with key stakeholders and document analysis, the study highlights the importance of a sustainability strategy, organizational culture, leadership commitment, stakeholders' engagement, trainings on sustainability concept, reporting frameworks and integrated thinking will contribute to ITR adoption. The research also reveals the challenges that companies face when implementing these practices, particularly navigating regulatory and institutional frameworks.*

Conclusion: *Based on the preliminary research findings, the study shows that ITR practices have the potential to enhance sustainability performance, but their effectiveness is contingent on the presence of an enabling environment. Overall, the study highlights the importance of a forward-looking reporting approach that considers a range of non-financial factors, such as social and environmental impacts, in addition to financial performance, in driving sustainable development*

Keywords: *Integrated thinking, reporting, sustainable development, qualitative case study, and regulatory frameworks*

JEL Codes: Q01, Q56, M14

Introduction

The concept of sustainable development (SD) has been capturing attention worldwide as a crucial agenda for businesses to address. Therefore, the adoption of sustainable practices in the day-to-day operations of companies has become increasingly critical to address the pressing matters of climate change, resource depletion, and social inequality.

One way to reach SD is through integrated thinking and reporting (ITR). Integrated thinking involves considering the interconnectedness of a company's economic, social, and environmental impacts in decision-making processes. Integrated reporting, on the other hand, is a communication

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tool that provides a holistic view of a company's value creation over time, incorporating its strategy, governance, performance, and prospects in a concise, clear, and comparable manner.

As noted by (Adams, et al., 2016), "ITR is emerging as an approach that can help organizations better understand and communicate how they create value over time, including their impact on the environment, society, and the economy." This approach aims to promote more comprehensive and forward-looking reporting that considers a range of non-financial factors, such as social and environmental impacts, in addition to financial performance.

Furthermore, the regulatory and institutional frameworks surrounding sustainability reporting can also pose challenges for companies seeking to adopt and implement integrated thinking and reporting practices. As noted by (Schaltegger, et al., 2011) "The lack of harmonization and standardization in sustainability reporting creates challenges for companies in terms of comparability, credibility, and usability of information." This raises important questions about how companies can navigate these challenges to promote sustainable development.

As resulted from the literature review section, ITR are essential tools for promoting SD at the company level. However, despite the numerous benefits associated with these practices, their adoption remains limited among companies, particularly in developing countries. To address this issue, this research aims to identify the barriers to the adoption of ITR and provide recommendations for overcoming them.

To achieve these objectives, a qualitative research method is employed. The qualitative component of the study case involves in-depth interviews with senior executives and sustainability professionals from companies operating in the selected sectors.

To guide the design and implementation of this research method, a conceptual framework will be developed in the last Chapter of this research based on the existing literature on SD, ITR and their relationship with the company level.

Therefore, the purpose of this research is to explore the following research questions:

1. What are the key factors that contribute to or prevent the ITR adoption?
2. How does the ITR practices implementation will affect company's sustainability?
3. To what extent institutional pressure affect the decision to adopt ITR approach?
4. How can companies navigate these challenges to promote sustainable development?

The research questions aim to investigate the factors that influence the use of ITR as a tool for SD, with a focus on how these factors impact the ability of organizations to achieve their sustainability objectives. The study is limited to the selected organization within industry(metallurgy), allowing for a more focused and detailed analysis. By addressing these issues, the research is providing insights into the challenges and opportunities of sustainable development through ITR and help identify best practices for organizations seeking to adopt this approach.

Literature review

ITR are an emerging concept that seeks to integrate financial and non-financial information in organizational decision-making processes. This literature review provides an overview of the relevant literature on ITR, SD and the relationship between the two.

ITR have been gaining importance in recent years as organizations are expected to consider their environmental, social, and governance (ESG) impacts when making decisions. According to (Eccles, et al., 2013), integrated thinking is "the embedding of comprehensive ESG considerations in the day-to-day decision-making processes of a company." Integrated reporting, on the other hand, seeks to provide stakeholders with a more holistic view of an organization's performance by including information on ESG factors in their financial reporting ((GRI), 2013). According to (Tiron Tudor, 2017), integrated reporting seeks to provide a more comprehensive view of an organization's performance, including its sustainability impacts. According to (Dumay, et al., 2017), integrated thinking can facilitate the identification of opportunities for value creation through

sustainable practices and contribute to the integration of sustainability into organizational strategy and decision-making.

Nevertheless, SD has been a widely discussed concept since the Brundtland report (WCED, 1987), which defined it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs. According to (Elkington, 1994) SD is based on three pillars: economic, social, and environmental sustainability.

Several studies have explored the relationship between ITR and SD. For instance, (Hahn, et al., 2013) argue that integrated reporting can help organizations identify opportunities to create value through sustainable practices, which can contribute to sustainable development. Similarly, (Schaltegger, et al., 2011) suggest that integrated reporting can facilitate the integration of sustainability into an organization's strategy and decision-making.

However, there are also challenges associated with the implementation of ITR in practice. For instance, (Lozano, et al., 2015) highlight the need for organizations to develop new skills and capabilities to effectively integrate ESG factors into their decision-making processes. They also argue that there is a lack of understanding of how ITR can contribute to sustainable development.

Moreover, (García-Sánchez, et al., 2022) emphasize the importance of stakeholder engagement in the implementation of ITR. They suggest that stakeholder engagement can facilitate the identification of sustainability risks and opportunities and can help organizations develop a more comprehensive understanding of their sustainability impacts. They also argue that integrated reporting can provide a platform for engaging stakeholders and communicating sustainability information in a transparent and meaningful way.

In conclusion, this literature review has provided an overview of the key concepts of ITR, SD and their relationship. The case study presented in this paper contributes to the growing body of literature on the role of ITR in promoting sustainable development. Further research is needed to explore the potential benefits and challenges of ITR in different organizational contexts.

Methodology

To address the first research question, the methodology involve collecting and analyzing data from a company activating in metallurgy industry that is evaluating the possibility to implement ITR practices, and evaluating the current reporting practices with the proposed framework.

The selected company is a subsidiary of a Multinational Group leading supplier of tubes and related services for the world's energy industry and certain other industrial applications, with its registered head office in Romania and is a joint stock company. The Company's main business activity, according to the NACE code 2420, is the production of steel tubes, pipes, hollow profiles and fittings. The company carries out these production activities in its three manufacturing units located Romania. The entity is the leading Romanian producer of small diameter seamless steel tubes used in the mechanical, automotive, oil & gas, chemical, petrochemical and power industries.

For its operations in Romania, the enterprise has a vertical integration of its processes with two fully integrated industrial facilities (Steel and Pipe). In today's context it is important to mention that the steel is produced in electric arc furnaces, the "cleanest" technology available in the steel industry worldwide, reason why the company is a recycler at heart, using scrap iron as raw material. The need to implement a circular model, arose as a result of the production method used, whereby the decrease in direct CO₂ emissions can only be achieved by making electricity consumption more efficient. Company's aim is to find alternative materials that triggers generating and sustaining the energy needed to melt scrap iron and reducing electricity consumption.

The organisation was chosen due to the complex field of activity and the set of actions implemented in the direction of sustainable development and sustainability reporting with the aim of producing integrated reports.

The data collection methods used in the study include in-depth interviews with senior executives and sustainability professionals from the organization, as well as document analysis of sustainability reports and other relevant materials.

The semi-structured interviews will be conducted with 20 participants, including senior executives, Accounting and finance managers, Communication manager, Supply chain managers, HR managers, Operation managers, Environment and Health and Safety, Purchasing manager and IT managers to gain insights into their perceptions and experiences of ITR practices. The company has in place an internal function of Institutional relation Senior Manager which coordinates the institutional relationships.

Interviews with key stakeholders, such as company executives, and sustainability professionals, are used to gain insights into how these frameworks are perceived and implemented in practice, and the challenges and opportunities they present for companies seeking to promote SD through ITR practices.

The interviews are to be conducted in the time period 30.02.2023 to 30.06.2023, where 25% of the interviews are scheduled to be conducted face-to-face and the rest of them due to different location circumstances were by Teams. As of today, 10 interviews were conducted. The interviews were centred around a set of main questions(10-15 questions depending on the area) , allowing for follow-up questions when necessary. The questions were open-ended to facilitate the respondent to elaborate according to their own perspective and perception. The questions initially clarified the following for each participant:

- their role within the organization and their prior roles.
- their role in the promotion of sustainability inside the organization, incorporation of integrated thinking in their operational processes and reporting internally and externally.

The analysis of interview data plays a crucial role in qualitative research, allowing researchers to derive meaningful insights and interpretations from the collected information. In this study, the interview data were analyzed using RStudio, a powerful integrated development environment for the R programming language, which offers various tools and packages specifically designed for coding and interpretation tasks.

All interviews were recorded to facilitate transcription and ensure accuracy in capturing the participants' statements. Out of 10 interviews conducted, all were conducted in English. The data from the interview transcriptions were then coded. The interview data, consisting of transcripts of audio recordings(Teams), were organized and imported into RStudio. The data were stored in a suitable format, such as a data frame, to facilitate further analysis.

List of the interviewees

Area	No. of interviewees	Indicative job descriptions	CODE	Interviewed
Energy	1	Head of Energy	HE	x
Sustainability	1	Head of Sustainability	HS	x
IT	1	IT Regional Senior Director	IT	x
Operation	2	Steel Shop Senior Director	SS	
Administration&Finance	1	Controller	CO	x
Administration&Finance	2	Accounting&Reporting Manager	ACM	x
Administration&Finance	1	Tax Manager	TM	x
Communication	1	Communication Manager	CM	
Commercial	1	Senior Manager	CSM	
Commercial	1	Commercial Senior Director	CSD	
Health&Safety	1	Health&Safety Senior Manager	HSE	
Environment	1	Environment Manager	EM/SM	x
Supply Chain	2	Supply Chain Senior Director/Sr.Manager	SCM	
Purchasing	1	Purchasing Director	PD	
Human Resource	2	Human Resources Director/Sr Mnager	HR	
CEO	1	President	CEO	

The document analysis was based on the examination of a set of secondary sources (Annual reports, Half- year reports, Sustainability reports, website information including press releases), from 2020 to 2022, analyzed in depth through the technique of content analysis

- The Sustainability report is performed at group level and is publicly available, the annual reports, annual report on form 20-F, press releases are available on the group's web site.
- Concerning the company study case, the document analysis involves a review of various company documents, including Financial statements annual report including the non-financial declaration, internal environment and health and safety reports, human resources policies and procedures in order to understand the company's sustainability practices, reporting, and governance structures.

The data collected will be analyzed using a content analysis approach, which involved coding the data and identifying themes and patterns that emerged from the data. The analysis aimed to identify the key factors that contribute to or prevent the effectiveness of ITR practices in promoting sustainable development and explore the influence of regulatory and institutional frameworks on the adoption and effectiveness of these practices.

Results

In this section, we present the preliminary findings from our qualitative case study that aimed to explore the role of Integrated Thinking and Reporting (ITR) in promoting sustainable development. The research questions guided our investigation into the key factors influencing ITR adoption, the impact of ITR practices on company sustainability, the influence of institutional pressure on ITR adoption, and strategies for navigating challenges to promote sustainable development.

Research Question 1: What are the key factors that contribute to or prevent the ITR adoption?

The analysis of interview data and documentary sources revealed several key factors influencing the adoption of ITR practices. These factors include: organizational culture, leadership commitment, stakeholder engagement, availability of resources, and awareness of the benefits of ITR in driving sustainable development.

Conversely, barriers such as limited awareness, resistance to change, culture, education, information technology systems, regulatory barriers and siloed organization structure and lack of integration across departments are factors that prevent adoption of ITR.

RQ 2: How does the ITR practices implementation affect company sustainability?

The findings demonstrated that the implementation of ITR practices positively impacted company sustainability. It enabled a more comprehensive understanding of sustainability issues, facilitated the identification and management of environmental and social risks, and improved the integration of sustainability into business strategies. Promoting a comprehensive understanding of sustainability, aligning sustainability with strategic objectives, fostering stakeholder engagement, improving risk management ,driving innovation and operational efficiency will have an affect company's sustainability.

RQ 3: To what extent does institutional pressure affect the decision to adopt the ITR approach?

The preliminary findings reveals that institutional pressure exerted a significant influence on the decision to adopt ITR practices. Regulatory requirements, industry standards, and stakeholder expectations played a crucial role in driving companies towards the adoption of ITR. Governments and regulatory bodies may mandate sustainability reporting or require companies to disclose specific environmental, social, and governance (ESG) information. Organizations that perceived

sustainability reporting as a means to maintain legitimacy and respond to external pressures are more inclined to adopt ITR practices.

The group had engaged with international sustainability reporting initiatives, such as the *Global Reporting Initiative (GRI)* and is based on the guidelines established by Worldsteel, the UN Global Compact, the *Sustainability Accounting Standards Board (SASB)* and the recommendations of the *Task Force on Climate-Related Financial Disclosures (TCFD)* to align its reporting with international standards. The case study company follows the group's engagements.

RQ 4: How can companies navigate these challenges to promote sustainable development?

The findings highlighted several strategies for companies to navigate challenges and promote sustainable development through ITR practices. These strategies included fostering a culture of sustainability, engaging with stakeholders, aligning ITR with strategic objectives, investing in training and capacity building, and leveraging technology to enhance data collection and reporting processes. Companies that demonstrated flexibility, adaptability, and proactive engagement with sustainability challenges were more successful in promoting sustainable development through ITR.

In summary, the results of this qualitative case study shed light on the key factors influencing ITR adoption, the impact of ITR practices on company sustainability, the role of institutional pressure, and strategies for navigating challenges. These findings provide valuable insights for organizations seeking to embrace ITR as a pathway towards promoting sustainable development and achieving long-term success.

Conclusion

This qualitative case study aims to explore the role of Integrated Thinking and Reporting (ITR) in promoting sustainable development. Through the analysis of interview data, documentary sources, and in-depth exploration of four research questions, valuable insights have been gained regarding the key factors contributing to or preventing ITR adoption, the impact of ITR practices on company sustainability, the influence of institutional pressure on ITR adoption, and strategies for navigating challenges to promote sustainable development.

In conclusion, the study underscores the importance of adopting ITR as a pathway towards sustainable development, emphasizing the need for organizational commitment, stakeholder engagement, and aligning sustainability with core business strategies. These findings can guide organizations in effectively implementing ITR practices and driving sustainable development in their operations.

However, it is important to acknowledge certain limitations that may impact the generalizability and interpretation of the findings. These limitations include:

- **Sample size and selection:** The study focused on a specific company, which may limit the transferability of the findings to other industries or contexts. The small sample size of participants may also limit the representativeness of the findings.
- **Self-reported data:** The study relied on self-reported data obtained through interviews and documentary sources. There is a possibility of response bias, where participants may provide socially desirable answers or omit certain information, leading to potential inaccuracies or incomplete understanding of the phenomenon.
- **Time constraints:** The research was conducted within a specific time frame, which may have limited the depth of data collection and analysis. A longer research period could have allowed for more comprehensive data gathering and a more nuanced understanding of the research questions.
- **External validity:** The findings of this study may not be generalizable to all organizations or industries due to contextual factors, variations in organizational culture, and different

regulatory frameworks. It is important to consider the specific context in which the study was conducted when applying the findings to other settings.

Despite these limitations, this qualitative case study provides valuable insights and contributes to the existing knowledge on the role of ITR in promoting sustainable development in Romania. It offers a foundation for further research and exploration in this area and encourages future studies to address these limitations to enhance the robustness and applicability of findings.

Further research and exploration are encouraged to enhance our understanding of the complexities surrounding ITR and its implications for sustainable development.

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