
Sustainability Accounting and Reporting Conundrum: A Thematic Analysis Literature Review of the Challenges, Opportunities, and Implication to Stakeholders

Arnold V. Salcedo

School of Business and Accountancy, Holy Angel University
Angeles City, Philippines
asalcedo@hau.edu.ph

Abstract

This study examined the evolving landscape of Sustainability Accounting and Reporting (SAR), highlighting both its opportunities and persistent challenges. Using an exploratory descriptive qualitative approach and systematic thematic analysis literature review, the research reviewed one hundred four (104) sources—including journal articles, book chapters, and webinar transcripts—supplemented by interviews with Certified Public Accountants (CPAs) across sectors. The findings reveal that while SAR offers avenues for professional growth, enhanced business performance, and stakeholder engagement, its implementation is hindered by barriers such as lack of regulatory mechanisms, developing standardized accounting and reporting frameworks, and limited community support. Through the use of MAXQDA24’s creative coding, the study outlined subthemes presenting both deficiencies and strategic opportunities in Sustainability Accounting and Reporting (SAR). It underscores that while government bodies, investors, and standard-setting organizations emerge as the most influential stakeholders, management accountants are distinctly positioned to lead the advancement and implementation of SAR initiatives. The research further emphasizes the importance of stakeholder knowledge, professional skills development, institutional support and the role of assurance in fostering high-quality, relevant, and comprehensive sustainability accounting and reporting practices.

Keywords: *sustainability accounting and reporting, barriers, challenges, opportunities, sustainability*

INTRODUCTION

Over the past years, sustainability accounting and reporting (SAR) have become mandatory for several territories putting emphasis on compliance to environmental, social and governance (ESG) reporting requirements based on existing frameworks. ESG reports promote transparency into the organization’s ESG activities and gauges its sustainability performance so stakeholders (Worldfavor, n.d). To protect their interest, various stakeholders around the world are now taking a pivotal role on how organizations can comply with the sustainable development goals of the United Nations as they provide valuable inputs in assessing the organizations control system and environment by conducting analysis, providing reports and monitoring compliance (Kowo, 2024; Adams, 2014).

As more jurisdictions start to follow, it is now evident that there are increasing requisites for compliance. The European Union, United States, Canada, Switzerland, Brazil, New Zealand, Japan,

and Malaysia have undergone continued regulatory changes in terms of accounting and reporting (Silveria, 2024; Worldfavor, n.d).

The Philippines followed suit as by its adoption of the United Nations Sustainable Development Goals since 201, mandating a disclosure of sustainability activities for both financial and non-financial information four years later, particularly those by publicly listed companies under specified procedures are now being required (Securities and Exchange Commission, 2019). With the release of the Sustainability Reporting Guidelines for Publicly Listed Companies, government mandates the submission of sustainability reports under specified procedures (Securities and Exchange Commission, 2019). Now that the sustainability issue in the Philippines is compulsory particularly for publicly listed companies, it can be said that the nation is towards the path of sustainable development (Aifuwa, 2020). The SEC memo is likewise anchored on the Philippine Development Plan 2017-2022 that would allow companies to companies need to present specific non-financial information following a suggested template, or an annual report annexed with a standalone sustainability report (Villacorte & Antipala, 2021). SAR serves as a blueprint for social justice and equality, environmental conservation, and economic prosperity with various targets and indicators to be achieved by 2030 (Algo, 2020).

Along with the gaining momentum, SAR however, up to this day face both opportunities and challenges based on various literatures creating a plethora of insights and ideas, a clear conundrum. Likewise, this study presents a myriad of patterns that need to be identified and addressed to clearly create a pathway to reinforce understanding and compliance for SAR. Thus, this is written to examine on the current barriers and enablers of sustainability accounting and reporting, by examining various relevant literatures written from the past decades, providing a baseline for exploring implications to policy, practice and future research affecting various stakeholders.

In the Philippines, the impact of SAR can come across different sectors, namely: academe, commerce and industry, government, and public practice. Over the years, some public listed companies in the country have also been mandatorily required public disclosures, which have become increasingly important to shareholders, regulators, investors, and analysts. While incorporating sustainability, remains imperative, accounting and reporting are areas that be must introduced to various stakeholders, although it may still require local-recognition and acceptance with the intention to engage in SAR (Kwakye et al., 2018).

This research also hopes touch base with other professions in the community, affecting other stakeholders from various sectors not only the public practice but also the commerce & industry, academe, and the government in the promotion of sustainability accounting and reporting. This undertaking may also spark the interest of governmental accountancy bodies such as the Philippine Board of Accountancy and the Securities and Exchange Commission in developing and promoting sustainability accounting standards soon.

This study creates an impact by developing the potentials of academic institutions to act as key local players with the possible activities in which they could act as pillars to local sustainability initiatives (Leal Filho et al., 2019). Academicians may also adopt the results of this study to look how sustainability can be integrated in the current accountancy and business curricula creating waves of change on how business models are taught to students. This also emphasize on the crucial role of

academic institutions in the implementation of sustainability principles by setting mindset transformation and cultural change through the development of academic curricula (Žalėnienė & Pereira, 2021).

Review of Related Literature

Sustainability and Sustainability Accounting and Reporting

Sustainability follows the triple bottom line model and puts consideration on the environmental, social, and economic impacts within the organization and such impacts could either be positive or negative with the goal to maximize prosperity, planet, and people. In University of Alberta, the triple bottom line model is composed of:

“Environmental sustainability means ecological integrity is maintained, all of earth’s environmental systems are kept in balance while natural resources within them are consumed by humans at a rate where they can replenish themselves.

Economic sustainability is where human communities across the globe can maintain their independence and have access to the resources that they require, financial and other, to meet their needs. While economic systems are intact and activities are available to everyone, such as secure sources of livelihood.

And social sustainability pertains to the universal human rights and necessities are attainable by all people, who have access to enough resources to keep their families and communities healthy and secure. Healthy communities have just leaders who ensure personal, labor, and cultural rights are respected and all people are protected from discrimination”.

In Burritt and Schaltegger (2010), management decision making is said to be achieved through problem solving and score keeping, following a critical approach. It is an important through awareness raising, the development of sustainability accounting and reporting as a framework geared towards improving management decision making.

The management including the balancing of social, environmental, and economic sustainability is currently one of the most complex and very important challenges facing both private and public sector organizations nowadays. The need to introduce and understand the context for sustainability accounting and accountability to contribute to transforming societies and in further reducing the negative sustainability impact to our planet (Unerman et al., 2014).

Sustainability accounting allows organization to identify past and potential future environmental and social impacts and benefits aside from the historical and forecast financial outcomes from their activities. It helps organizations to formulate and implement strategic solutions to strengthen business performance and respond to the challenges of sustainability. The identification and analysis of and response to sustainability related risks and opportunities and to be used to give an account of an organization’s sustainability policies, practices, and impacts to range of third parties to whom the organization is responsible and accountable as this supports risk management (Hopwood & Unerman, 2010). In Adams and Larriaga-Gonzalez (2007), the lack of engaging research particularly coming from

participants tackling the social accounting agenda and capturing the fields of management, management accounting and critical accounting to link sustainability accounting to practice needs to be addressed. Further engaging organizations are needed to identify how accounting and management systems might reduce their negative sustainability impacts.

In Larrinaga-González & Perez-Chamorro (2008) sustainability accounting and accountability are also important for publicly held companies as this gives the opportunity to communicate sustainability information to stakeholders and explores whether distinctive and more progressive accountability in the public sector compared with private sector organizations. Possible distinct sustainability activities for public organizations are informal as well as formal reporting activity and coupled with real organizational strategies and operational activities.

In Ivan (2009) the conceptual framework on sustainability accounting and reporting can be analyzed using accounting model frameworks and Global Reporting Initiative (GRI) Guidelines. With the use of inductive approach, the qualitative aspects of the environmental indicators were used to assess the degree of relevance and reliability of each provision. The study also evaluated the usefulness of the Global Reporting Initiative among the identified respondents by presenting a formalized financial reporting process. Results have shown that data reliability hinders businesses to produce Global Reporting Initiative reports.

American Institute of Certified Public Accountants (2015) reported the type of sustainability reports accounting and audit firms it provides together with the following:

“Environment, Health and Safety (EHS) – Some entities have been reporting on their performance with respect to environment health and safety (EHS) matters for several years. EH&S reports cover such matters as employee health, on-the-job accident rates, emissions of certain pollutants, spills, volumes of waste generated and initiatives to reduce and minimize such incidents and releases.

Corporate Social Responsibility (CSR) - Corporate social responsibility reporting is similar in concept to HSE reporting but with a broadened emphasis on social matters such as ethical labor practices, training, education and diversity of work force and corporate philanthropic initiatives.

Sustainability Reports - As corporate reporting on environmental, social responsibility and economic performance has evolved and gained wider acceptance, the types of reports discussed above are increasingly being described as sustainability reports”.

In addition, companies are issuing corporate responsibility or sustainability reports to demonstrate their commitment to the environment or social issues, to their employees and the communities they serve. In addition, to promote transparency and solicit feedback on their performance in response to demands for information from a growing number of stakeholders including investors, customers, regulators, advocacy groups and non-governmental organizations (NGOs); as well as to demonstrate their efforts to build and maintain relationships with external parties such as the community and other

stakeholders. Simply to better manage and communicate risk, to enhance or protect client's reputation and to grow shareholder and brand value (American Institute of Certified Public Accountants, 2015).

Another question that can be asked among CPAs in public practice is their openness to the concept of true cost accounting, where in Gayeton (2014) accounting includes the cost of negative externalities and accounts for environmental, social, and economic costs. External costs in Gayeton (2014) are costs or benefits that are forgone by giving up an activity or transaction. True cost accounting also requires time, will power and support and identifies loopholes, losses and risks that will offset cost with benefits. True cost accounting also accounts for the true net income, after all true costs are considered.

Sustainability Accounting and Reporting Frameworks and Materiality

Accountants can enhance their roles by adopting sustainability practices, thereby contributing to value creation and improved corporate performance (Kasim et al., 2024). However, barriers such as a strong focus on financial priorities, specialization, and a perception of sustainability as peripheral hinder their involvement (Wenzig et al., 2023). Additionally, conflicting disclosure frameworks and the need for expertise in sustainability further complicate the landscape (Kasim et al., 2024; Villiers & Mähönen, 2017). The evolution of sustainability accounting is crucial for fostering a sustainable economy, yet the transition remains challenging due to entrenched practices and limited engagement from accountants (Uglava, 2024).

With the intention to guide publicly listed companies in assessing and managing non-financial performance encompassing the EESG or the economic, environmental, social and governance aspects of organizations and to monitor their progress towards the achievement of United Nations Sustainable Development Goals, as well as national policies and programs, such as AmBisyon Natin 2040, SEC Memo 4 series of 2019 released (Securities and Exchange Commission, 2019).

Global Reporting Initiative (2017), defines sustainability reporting as the measurement, disclosure and making internal and external stakeholders accountable for organizational performance towards sustainable development. Sustainable report is expected to provide a balanced and reasonable assertion of the sustainable performance of organization which maybe positive or negative. The sustainability reports are being disclosed based on the GRI Reporting Framework which depends on organization's commitment, strategic plans, and management strategies. The reports being used can be part of benchmarking and assessing performance on sustainability with respect to norms, codes, laws, performance standards and voluntary initiatives. Demonstration on how the organization is being affected by and effects regarding expectations on sustainable development is another use. Sustainable reports can also be used as a point for comparison for an organization's performance overtime.

On the other hand, the International Integrated Reporting Council (2022) promulgates the Integrated Reporting (IR) Framework which is composed of the combined elements emanating from six capitals, seven guiding principles, and eight content elements and are then integrated to determine how capital are utilized and formed through business models which information are later summarized through disclosed strategic risks and outlook.

Sustainability Accounting Standards Board (2018) from which the Sustainability Accounting Standards are formulated in reference to more than 77 specific industries standards and are rolled down to five

general sustainability theme which are the environment, human capital, innovation, leadership & governance, and social capital. While the Task Force on Climate-related Financial Disclosure (2022) focuses on setting reporting guidelines on climate-related risks, opportunities, and financial impacts and oversees issuing final recommendations on climate-related financial disclosures.

Though not required in SEC (2019), the Climate Disclosure Project (CDP) sets the global environmental disclosure system that can be used as guide for companies, cities, states and regions to mitigate the risks and take advantage of the opportunities on various issues such as climate change, water security and deforestation.

Common among the four (4) reporting frameworks is the principle of materiality that must be consistently followed. Further it provides the four reporting the frameworks that can be followed and further emphasized on the principle of materiality, that the relevant aspects or significant information on sustainability that could substantially influence the assessment and decisions of stakeholders must be included in the reported.

Role of Certified Public Accountants in Sustainability

Even professionals including Filipino certified public accountants (CPAs) are preparing to perform assurance work on sustainability reports for publicly listed corporations (PLCs) which are now mandated by the Securities and Exchange Commission (Business Mirror, 2021). As accountants in the public practice become proponents to sustainability accounting, only big accounting and audit firms have started producing biannual reports the follows global trends in sustainability accounting and reporting by providing different related service areas to clients such as audit, review, and management consulting (KPMG, 2015). These corporate social responsibility and sustainability reports together with new approaches to integrated reporting (Price-Water-House Coopers, 2015), specifically how to voluntarily report to investors more than the minimum required financial information, involving social and environmental. With the accountants being passionate to assist in implementing the required instructions for sustainability development practices particularly sustainability accounting and reporting (Chowdhury & Nahar, 2017), this study puts accountants in the limelight to practitioners of public accounting and audit firms in assessing the concepts of sustainability to be presented in company's non-financial performance reports are now at the forefront (Mangangey and Sadashev, 2010).

Due to the increasing competitive economic climate, tighter social and environmental regulations and the impact of climate change, leading organizations are in the pursuit of using every opportunity to embrace sustainable activities and in balancing the three dimensions of profits, people, and planet. And to increase stakeholder's confidence, sustainability information are now becoming a must, engaging Certified Public Accountants to provide assurance on sustainability information (American Institute of Certified Public Accountants, 2015). In Melancon (2017), Certified Public Accountants, together with business leaders, are said to have an obligation not only to think about profitability in the short term, but to consider a multi-stakeholder approach, which is equivalent to the sustainability of business, balancing the intersection among society, environment, and corporate world.

In the Institute of Chartered Accountants in England and Wales (2020), a challenge in sustainability accounting is that sustainability must be measured, reported and assured which is normally falls within the expertise of Certified Public Accountants. With good quality information that is reliable and

assured, the profession of Accountancy can provide feedback on performance that not only guides management in making decisions but is also vital to sustainable development.

The creation of standards in the Sustainability Accounting Standards Board [SASB] (2018), will enable businesses in the identification, management, and communication of financially-material sustainable information for investors. With seventy-seven (77) globally applicable industry specific standards set the financially material sustainability topics along with the activity metrics which will serve as the unit of measure to properly account for every business undertaking. The standards, likewise, provide the necessary guidelines and disclosure requirements. Professional accountants are expected to be involved in the implementation of energy efficiency and cost-saving measures, formulation and implementation of corporate responsibility activities, design of accounting information systems considering social costs and environmental costs and assurance of supply chain processes and procedures.

In the Philippines, Ernst & Young, Deloitte, KPMG and Price-Waterhouse-Coopers are the accounting and audit firms that offer sustainability services in the form of sustainability assurance (Calundan, 2013). These, however, are the big four accounting and audit firms offering to services to clients, whose target market is limited to specific areas.

The National Economic and Development Authority (NEDA) pushes companies and households in adopting sustainable approaches to consumption and adoption to properly account for social and environmental costs (Laforga, 2019). This is aligned with the plan of NEDA to institutionalize Natural Capital Accounting (NCA) to consider social and environmental costs in measuring gross domestic product.

Theoretical Underpinning

The interpretations of the data are based on the gathered literature. Such study is underpinned by an epistemological assumption of constructivism (Cheruiyot, 2021) which is based on the idea that people actively construct or make their own knowledge.

Research Questions

This study, therefore, aims to determine the primary themes and patterns from SAR literature from the past decades and to identify the underlying meanings and interpretations from these identified topics. The study will attempt to answer the following questions:

1. What are the emerging challenges and opportunities faced by SAR stakeholders?
2. How do the stakeholders construct meaning among these challenges and opportunities of SAR?
3. What are the other dominant topics surrounding SAR?
4. What possible frameworks can be developed from these interpretations of challenges and opportunities in SAR?

Research Framework

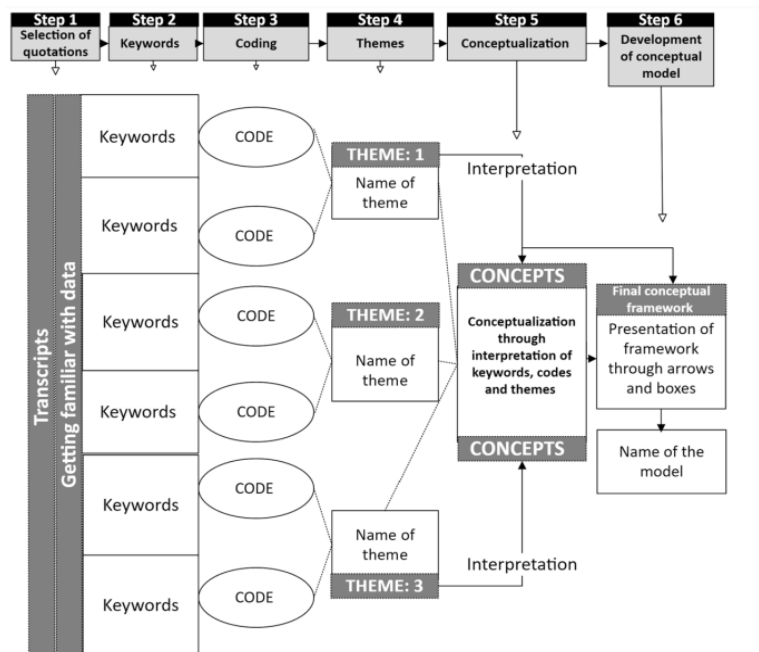


Figure 1. Research Framework

Note: The research framework of the study as depicted in Figure 1, a systematic thematic analysis process: A novel six-step process for conceptual model development in qualitative research was used (Naeem et al., 2023). This is a proposed structured six-step process developing the rigor and replicability of thematic analysis, facilitating the development of conceptual models from qualitative findings. This process is believed to be a versatile method among various research methodologies and was used to develop possible themes surrounding the opportunities and challenges in SAR.

METHOD

Research Design

This study is exploratory descriptive qualitative in nature since it involves a methodology used to explore topics that are not often studied, and to understand the perspectives of the people involved. This methodological approach also seeks to provide a comprehensive understanding of a phenomenon through the collection and analysis of qualitative data. This approach is characterized by its focus on describing experiences and perceptions without the constraints of a predefined theoretical framework (Hunter et al., 2019).

Sample and Setting

The study consists of one hundred four (104) gathered literature on SAR, eighty-one (81) of which are from published journals, nineteen (19) from books or chapter books and four (4) from transcripts of you tube webinars. The resulting themes are coded and are triangulated with independent interviews of three selected stakeholders of SAR.

Instruments

Only one interview instrument containing open ended questions was used to validate and to triangulate the results of the literature review which are made up of questions that will determine the current stakeholders, opportunities and barriers of SAR.

Data Collection

Google scholar and you tube was utilized to extract literatures and transcripts about SAR. The researcher also used MAXQDA24, is a tool to analyze and understand qualitative data into codes and categorize the data. This tool was also used to identify patterns and themes, and to create visual representations of the data (MAXQDA24, 2024).

Data Analysis

In Naeem et. al. (2023) and Dawadi (2020), thematic analysis process is described as systematic because of the structured sequential approach, in which each stage is designed to build a comprehension of data. An advantage of using this method is that it enhances the consistency and replicability of the findings by establishing clear connections, interpretation, and final conclusions. This systematic structured is a diligent approach while curbing the potential bias in data. The following are the steps of the thematic analysis process:

Step 1: Transcription, Familiarization with the Data, and Selection of Quotations

This is the initial phase of the thematic analysis process. It involves the transcription of data and familiarizing oneself with it. Researchers dive deep into the content to discern initial themes and important sections. They then select quotes that bring the data to life and aptly represent diverse viewpoints and patterns pertinent to the research objectives.

Step 2: Selection of Keywords

This phase involves close examination of the data, be it from interviews, focus groups, or visual content. Researchers identify recurring patterns, terms, or visual elements and designate them as keywords. These keywords encapsulate participants' experiences and perceptions and are directly derived from the data.

Step 3: Coding

In the third step, coding, short phrases or words, known as codes, are assigned to segments of data that capture the data's core message, significance, or theme. This step simplifies complex textual data by transforming it into a theoretical form and assists in identifying elements related to the research questions. Keywords play an essential role in coding as they form the backbone of the analysis and help to convert raw data into insightful, manageable units.

Step 4: Theme Development

Theme development involves organizing codes into meaningful groups to identify patterns and relationships, thereby offering insights into the research question. In this step, the researcher transitions from a detailed analysis of codes and categories to a more abstract interpretation by creating themes. These themes go beyond merely being recurring elements because they embody patterned meanings that link the research questions and data.

Step 5: Conceptualization Through Interpretation of Keywords, Codes, and Themes

This step, conceptualization, involves understanding and defining concepts emerging from the data. Researchers identify social patterns and refine them into definitions that align with their research. They utilize tools like diagrams or models to understand the relationships among these concepts. The quality of these definitions is assessed based on clarity, accuracy, reliability, applicability, and their contribution to theory and practice.

Step 6: Development of Conceptual Model

The final step in the thematic analysis is the development of a conceptual model. This process involves creating a unique representation of the data and it is often guided by existing theories. The model serves to answer the research questions and underscore the study’s contribution to knowledge. This step signifies the culmination of the analysis; it encapsulates all the findings and insights derived from the data.” (Naeem et. al., 2023).

Ethical Considerations

The authors of selected literature were acknowledged and properly cited and the interviewees from this study are not given any form of compensation and participants are free to answer with the questions provided. There are no foreseeable potential risks in any form to the participants as the data gathered shall be subjected to safekeeping and will be discarded once the retention policy for research documents have been met. Research study is not sponsored by any institution and was personally carried out. The voluntary consent of the participants are also obtained through the informed consent form, while the potential benefits and risks shall be borne by the sole author of the study. Likewise, there are no plans to develop commercial products out of study. The author also reserves its rights to withdraw and withhold data gathered from this research.

RESULTS AND DISCUSSION

Table 1. Code System and Summary of Codes – Sustainability Accounting and Reporting Challenges

Code System	6121
sustainability accounting and reporting	0
challenges	0
existing gap on	0
credibility gap	2
competent or qualified personnel	3
trust gap	1
international agreement	6
no rules	5
issues on	0
additional cost	7
expensive	13
availability of information	79
challenge on existing framework	5
confusion	20
measure	283
misinformation	2
vagueness	2
disagreement	9
different viewpoints	3
disconnection	5
ineffective implementation	1
absence of sanctions	9
inadequate accounting and mechanisms	27
policies consistency	125
sustainability disclosure	70
quality of information	8
accuracy	65
comparability	82
materiality	188
neutrality	8
reliability of information	3
resistance to change	17
superficial	8

Table 2. Code System and Summary of Codes – Sustainability Accounting and Reporting Challenges

Code System	Frequency
Code System	6121
sustainability accounting and reporting	0
challenges	0
lack of	0
regulation	160
lack of law lack of regulation or law	3
compliance	2
mechanisms	121
monitoring enforcement	84
penalties	17
political will	9
trust	2
resources	2
standardization	60
certification systems or processes	3
corporate accounting systems	3
harmonization	55
reporting practices	105
insufficient guidelines	2
accruals	3
sustainability performance factors	2
sustainability policies	15
time frame	8
unified approach	13
sustainable assurance	281
sustainability tool	4
understanding	5
education	2
experience	2
knowledge	12
long-term benefits (focus on short term)	35

Tables 1 and 2 provides the coding system and the summary of codes for the challenges in SAR. The words measure (f=283), sustainable assurance (f=281), materiality (f=188) & regulation (f=160) were the most common code challenges in SAR.

Table 3. Code System and Summary of Codes – Sustainability Accounting and Reporting Opportunities

Code System	Frequency
Code System	6121
sustainability accounting and reporting	0
opportunities	0
catalyst for change	9
creation of	0
curriculum	37
evaluation tools	1
rigid rules	3
talents for sustainability	48
theoretical foundation or conceptual foundation	20
development of skills	206
analytical skills	2
budgetary skills	1
communication skills	5
reporting expertise skills	3
risk assessment skills	1
sas accounting software	66
strategic planning	25
technical skills	3
improvement on	0
business performance	16
access to information	5
financial performance	112
increased profit or income	3
compliance	176
customer loyalty	7
economic growth and performance	243
reputation	95
involvement of stakeholders	65
salient stakeholders	0
accountants	14
accountants as experts	5
management accountants	28
clients	26
customers	188
government	459
local government	72
investors	338
management	32
other stakeholders	7
policy makers	14
regulators	70
standard setters	40
suppliers	54
sustainability experts	1
presence of information	0
environmental management accounting	113
future role of accountants	5
generational divide	7
investor demand	1
market demand	5
valuable information	7
direct or positive relationship with performance	21
articulate interests	1
carbon emission reduction	1
environmental performance	3
inverse or negative relationship with	10
board independence	1
value creation	1

Table 4. Code System and Summary of Codes – Sustainability Accounting and Reporting Opportunities

Code System	Frequency
Code System	6121
sustainability accounting and reporting	0
opportunities	0
promotes or serves as	0
confidence in information	15
cooperation collaboration	236
gauge	9
tool	145
decision making	50
requires strategies	520
requires	6
collaboration	217
business collaboration	1
critical analysis	20
legal basis	1
external assurance	18
independent audit independent assurance	7
more than attention	1
more than just traditional approaches	1
more time and digital skills	1
more understanding	1
validation	6
types of strategies	0
communication strategies	40
need more	2
clarity on sustainability	16
deeper comprehension	13
information	1
job responsibilities	1
sustainability tool	4
transformational adjustment	46
transformative strategies	1

Table 3 and 4 provides the coding system and the summary of codes for the opportunities in SAR. The words economic growth and performance (f=243), cooperation collaboration (f=236), and business collaboration strategies (f=217), were the most common code among the opportunities in SAR. As to the salient stakeholders in SAR, government (f=459), investors (f=338), customers (f=188) and environmental management accountants (f=113) are most mentioned among the literatures reviewed.

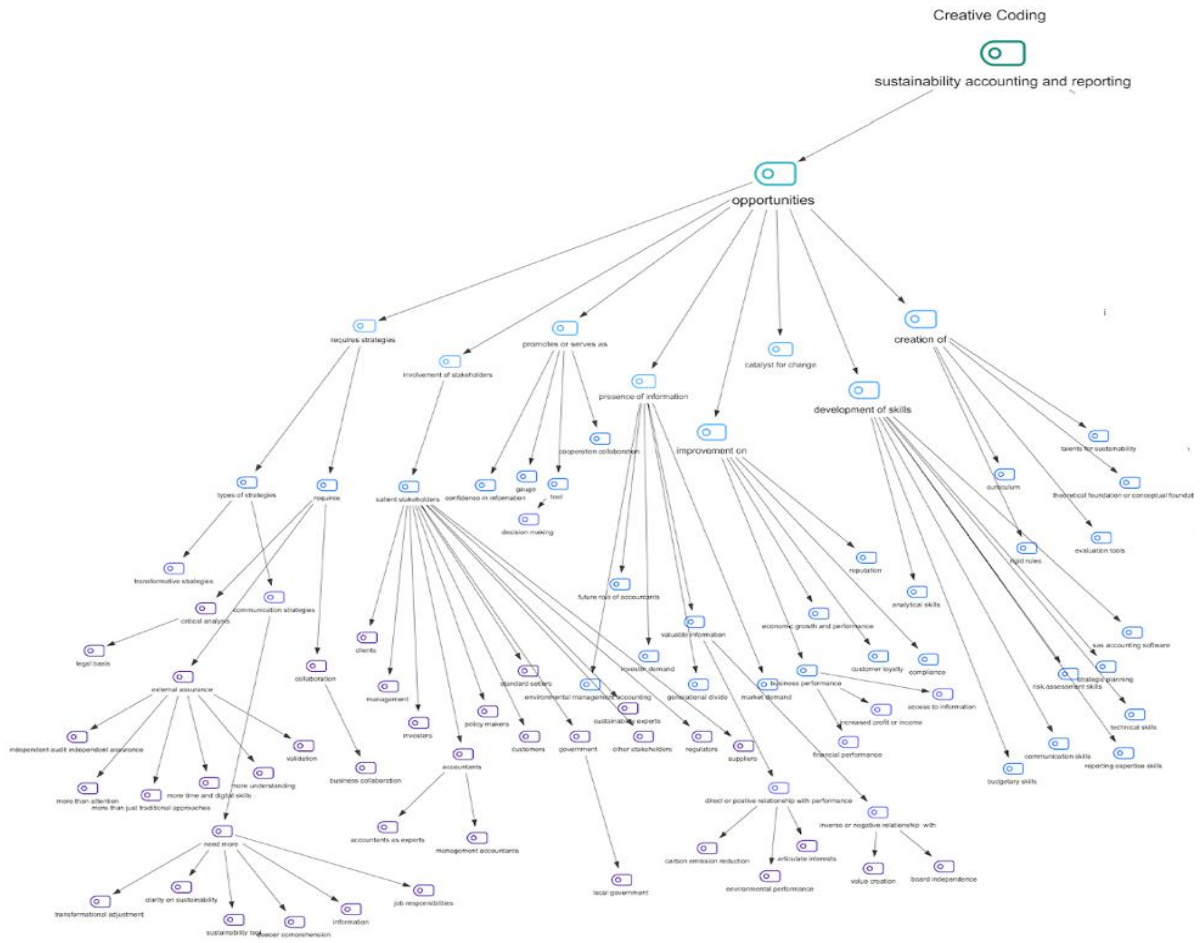


Figure 4. Creative Coding – Opportunities of SAR

Figures 2, 3 and 4 presented the creative coding for the study in which the basis for the coded themes emanated from. On one hand are the codes where the subthemes are developed. These sub-themes are the existing gaps, deficiency and issues on SAR with the corresponding codes to be specific. While the presence of strategies, stakeholders, information and opportunities to develop skills, together while serving as a catalyst for change or a venue for growth or improvement are seen as the subthemes for SAR.

Opportunities of Sustainability Accounting and Reporting

Table 5. Opportunities of Sustainability Accounting and Reporting

Opportunities	Authors
Catalyst for Change	Egan & Tweedie (2018)
	Dimitrov & Davey (2011)
	Dimcheva (2023)
	Ahmad et al. (2023)
	Wolters (2023)
	Uglava (2024)
	Zik-Rullahi & Jide (2023)
	Dimitropoulos (2024)
	Lodhia & Sharma (2019)
	Huston (2021)
	Ngwakwe (2012)
	Mohanty & Saha (2017)
	Christ et al. (2024)
Collaboration, cooperation or engagement among stakeholders	Schaltegger et al. (2006)
	Burritt & Schaltegger (2010)
	Young (2011)
	Einar et al. (2024)
	Dechow (2023)
	Mohanty & Saha (2017)
	Munoz et al. (2017)
	Shatila et al. (2024)
	Köse (n.d)
	Schaltegger (2004)
	Aydemir (2021)
	James (2015)
	Cherepanova (2017)
Rimmel (2020)	
Juusola & Srouji (2023)	
Development of Skills	Kasim et al. (2024)
	Bunget et al. (2024)
	Bakarich et al. (2023)
	Grujić & Vojinović (2024)
	Ionescu (2016)
	James (2017)
	Vanini & Bochert (2024)
	Wenzig et al. (2023)
	Szoka (2022)
	Gary et al. (2011)
Debnath (2017)	
Dumay (2019)	

Enhances confidence to company's information or promotes transparency	Songini & Pistoni (2012) Villiers & Maroun (2017) Petricică (2023) Jones & Ratnatunga (2012) Giang et al. (2022) Wagenhofer (2024) Khudair (2019) Paridhi & Ritika (2024) Homayoun et al. (2016) Shrivastava et al. (2022) Malinić & Vučković (2023) Jain & Tripathi (2022) Odintsova (2025) Olson (2010) Lee & Schaltegger (2018) Marinescu E. & Marinescu L. (2011) Rubino & Veltri (2020) Morley (2023) Rangkuti (2023)
Formulation of strategies	Ascani et al. (2021) Robert-Aurelian & Popa (2022) Dissanayake et al. (2021)
Room for Improvement or Innovation i.e., decision making, performance or practices	Salcedo & Sigua-Salcedo (2018) Asonitou (2021) Ricci & Geron (2023) Halim & Irawan (1998) Dumitru et al. (2023) Nugroho & Permata (2023) Bunget et al. (2024) Villiers & Mähönen (2015) Firmansyah (2024) García-Piña Rosete & Hernandez Barros (2024) James (2015) Arora et al. (2021) Zuhri (2022) Mansour & Spățariu (2023) Ionescu & Andronie (n.d) Mnatsakanyan & Gasparyan (2023) Schaltegger (2017) Moore & Poznanski (2015) Vallišová et al. (2018) Abou Taleb et al. (2011)

Leitonienė et al. (2024)
 Williams (2012)
 Sjäfjel & Richardson (2015)
 Tommasetti et al. (2020)

By being able to identify the level of knowledge in sustainability accounting and reporting among stakeholders, may lead to an increased awareness with the possible roles that are unlocked. Professional accountants may use their skills in aggregating financial data into meaningful information, aid in the cost analysis of environmental decisions becoming more involved with assurance to corporate social responsibility report (School of Accounting BINUS, 2021). Likewise, this could be an added professional service for CPAs.

Involving various stakeholders in sustainability may be considered a little complex given that various groups require different types of information (Koskela, 2022). But another possible benefit derived from considering stakeholder groups in sustainability accounting and reporting aside from identifying their interests is improved engagement in the reporting process. Determining the level of knowledge of these stakeholders may possibly add inputs on how reports can be of relevant, of high-quality and comprehensive and how CPAs can upgrade their skills through trainings, seminars, conferences, or fora on sustainability.

Obtaining the inputs from professional accountants in the public and practice sector analyzes, along with the private sector particularly that that of the management accountants can impact accounting & audit firm and private firms in the implementation of sustainability accounting and reporting through guidelines and policies.

Table 6. Barriers in the Implementation of Sustainability Accounting and Reporting

Challenges	Authors
Additional Costs	James (2015) Abou Taleb et al. (2011) Jain & Tripathi (2022) Dissanayake et al. (2021)
Conflicts, disagreeing viewpoints or resistance to change	Mohanty & Saha (2017) Christ et al. (2024) Burritt & Schaltegger (2010) Villiers & Maroun (2017) Bakarich et al. (2023) Ahmad et al. (2023) Robert-Aurelian & Popa (2022) Vallišová et al. (2018) Leitonienė et al. (2024) Sjäfjel & Richardson (2015) Tommasetti et al. (2020) Gould (2011) O'Donovan (2001)

	Rubino & Veltri (2020)
	Huston (2021)
	Szóka (2022)
	Ozili (2022)
	Dimcheva (2023)
Confusion on or lack of frameworks	Ionescu & Andronie (2023)
	Homayoun et al. (2016)
	Odintsova (2025)
	Lee & Schaltegger (2018)
	Kasim et al. (2024)
Credibility or trust gap	Paridhi & Ritika (2024)
	Dumay (2019)
Disagreeing viewpoints or resistance to change	Salcedo & Sigua-Salcedo (2018)
	Lodhia & Sharma (2019)
Ineffective implementation in practice	Songini & Pistoni (2012)
	Schaltegger (2017)

Challenges	Authors
	James (2015)
	Abou Taleb et al. (2011)
	Jain & Tripathi (2022)
	Dissanayake et al. (2021)
	Mohanty & Saha (2017)
Additional Costs	Christ et al. (2024)
	Burritt & Schaltegger (2010)
	De Villiers & Maroun (2017)
	Bakarich et al. (2023)
	Ahmad et al. (2023)
	Robert-Aurelian & Popa (2022)
	Vallišová et al. (2018)
	Leitonienė et al. (2024)
Conflicts, disagreeing viewpoints or resistance to change	Sjárfel & Richardson (2015)
	Tommasetti et al. (2020)
	Gould (2011)
	O'Donovan (2001)
	Rubino & Veltri (2020)
	Huston (2021)
Confusion on or lack of frameworks	Szóka (2022)
	Ozili (2022)

	Dimcheva (2023)
	Ionescu & Andronie (n.d)
	Homayoun et al. (2016)
	Odintsova (2019)
	Lee & Schaltegger (2018)
	Kasim et al. (2024)
	Paridhi & Ritika (2024)
	Dumay (2019)
Disagreeing viewpoints or resistance to change	Salcedo & Sigua-Salcedo (2018)
	Lodhia & Sharma (2019)
Ineffective implementation in practice	Songini & Pistoni (2012)
	Schaltegger (2017)
	Jones & Ratnatunga (2012)
	Schaltegger (2004)
Lack of available information	Aydemir (2021)
	Uglava (2024)
	Ascani et al. (2021)
	Dimitrov & Davey (2011)
	Asonitou (2021)
	Ricci & Geron (2023)
	Giang et al. (2022)
	Einar et al. (2024)
	Bunget et al. (2024)
	Khudair (2019)
	Grujić & Vojinović (2024)
	Firmansyah (2024)
	Shatila et al. (2024)
	Williams (2012)
Lack of knowledge, education or training	Shrivastava et al. (2022)
	Jain & Tripathi (2022)
	Okwuosa (2020)
	Zafar et al. (2024)
	Dissanayake et al. (2021)
	Wenzig et al. (2023)
	Salcedo & Sigua-Salcedo (2018)
	Zik-Rullahi & Jide (2023)
	Dimitropoulos (2024)
	Ngwakwe (2012)
	Gary et al. (2011)
	Debnath (2017)
	Schaltegger et al. (2006)

	Young (2011)
	Petricică (2023)
	Halim & Irawan (1998)
	Dechow (2023)
	Dumitru et al. (2023)
	Nugroho & Permata (2023)
	Bunget et al. (2024)
	Wagenhofer (2024)
	Firmansyah (2024)
	García-Piña Rosete & Hernandez
	Barros (2024)
Lack of regulation, resources, measures, standardization or assurance	Mohanty & Saha (n.d)
	Arora et al. (2021)
	Munoz et al. (2017)
	Zuhri (2022)
	Mansour & Spătaru (2023)
	Köse (n.d)
	Üçoğlu (2022)
	Mnatsakanyan & Gasparyan (2023)
Quality of information	Egan & Tweedie (2018)

Uncertainty in the current practice is still present due to the possible barriers to sustainability accounting and reporting (Dissanayake et al., 2021) creating a gap as to whether public accounting and auditing firms are open in incorporating to their services, these concepts of sustainability accounting and reporting. In Chowhudry and Nahar (2017), the implementation of sustainability accounting most especially among businesses becomes a challenge because of lack of sufficient guidelines for sustainable development. Another issue for sustainability accounting and reporting is community support and approval, where the gamut of stakeholders must be consulted first with the new ideas of sustainability being introduced (Beattie, 2021). This gives rise to the need to reorient the evolving concepts of sustainability, particularly sustainability accounting and reporting to the accounting firms since one of the initial steps in launching sustainability programs is promoting awareness in the public.

In response to this mandate, Filipino certified public accountants (CPAs) are preparing to perform assurance work on sustainability reports for publicly listed corporations (PLCs) which are now mandated by the Securities and Exchange Commission (Business Mirror, 2021). As accountants in the public practice become proponents to sustainability accounting, only big accounting and audit firms have started producing biannual reports the follows global trends in sustainability accounting and reporting by providing different related service areas to clients such as audit, review, and management consulting (KPMG, 2015). These corporate social responsibility and sustainability reports together with new approaches to integrated reporting (PWC, 2015), specifically how to voluntarily report to investors more than the minimum required financial information, involving social and environmental information have become common.

Conclusion and Recommendation

The rise of SAR literature since 1998, have provided significant insights with the opportunities and challenges creating a conundrum to such concept. Using exploratory descriptive qualitative and systematic thematic analysis design, this study reviewed one hundred four (104) gathered literature on SAR, eighty-one (81) of which are from published journals, nineteen (19) from chapter books and four (4) from transcripts of you tube webinars, with the findings validated from short interviews of Certified Public Accountants from each sector, revealed that sustainability assurance, measurement on existing frameworks, materiality on quality of information, standardization of reporting practices, lack of regulation in terms of mechanisms; and policies consistency in terms of application are the top challenges in SAR. While skills development and improvement on business and financial performance are seen as opportunities in undertaking SAR, the government, investors and standard setters are seen as the most salient stakeholders; placing the management accountants at the forefront in the implementation of SAR.

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