ACCOUNTANTS' ROLES IN SUSTAINABILITY ACCOUNTING AND REPORTING: THE PRELIMINARY FINDINGS

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Abstract

Sustainability accounting and reporting (SAR) involves the corporate disclosure and documentation of environmental, social, and economic factors to assess the performance of firms. The evolution of SAR concepts is a result of the increasing importance placed on corporate accountability and transparency, which, in turn, influence corporate decisions regarding the environment and society (Kwakye et al., 2018). This paper aims to explore accountants' managerial roles, which are informational, interpersonal, and decisional in ensuring the effectiveness of SAR. Even though accountants play a role in the firm's value creation, achieving sustainability-related development goals remains a persistent challenge and continues to be difficult to achieve. Conflicting disclosure frameworks and changes in corporate reporting methodologies, as well as addressing stakeholder demands for non-financial information are challenges faced by accountants in terms of environmental, social, and governance (ESG) reporting (Cohn, 2021). To achieve the aim of this paper, 69 accountants answered questionnaires and the Statistical Package for the Social Sciences (SPSS) was used to analyse the data. This paper finds that the decisional role has the highest mean score. This study recommends the extension of the current accountants' roles with the necessary expertise in sustainability.

Keywords: Accountants' Roles, Sustainability Accounting, Reporting

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1. INTRODUCTION

In the past two decades, sustainability accounting and reporting (SAR) have garnered substantial research attention within the field of accounting (Schaltegger & Zvezdov, 2013), and it is increasingly acknowledged that when evaluating organisations' performance the sustainable impact of organisations

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on the environment and society at large should be in considered (Tommasetti et al., 2020). According to Bursa Malaysia, sustainability is frequently associated with a variety of concepts, including the triple bottom line, corporate responsibility, sustainable development - economic, environmental, and social (EES), corporate social responsibility (CSR), and environmental, social, and governance (ESG). There are three main categories in sustainability – EES – with interconnections between all the items (Johari & Komathy, 2019). Accordingly, SAR relates to the procedure that measures and reports on an organisation's sustainability performance and holds internal and external stakeholders accountable for its social, environmental, and financial performance.

Environmental sustainability refers to the ability to protect and preserve the natural environment over time through the adoption of appropriate practices and policies. This is to meet present needs without compromising the availability of resources for future generations. For instance, organisations are responsible for managing aspects, such as energy and water consumption, emissions discharge, and biodiversity impact. Social sustainability focuses on the enhancement of people's and communities' well-being and emphasises the promotion of equity, human rights, access to education and healthcare, as well as the provision of decent work. Its overarching goal is to foster inclusive societies, mitigate inequality, and secure enduring well-being for all individuals while upholding social cohesion and justice, which may include the organisation's relationships with communities, employees, consumers, etc. Economic sustainability is an approach whereby economic activities are undertaken to preserve and promote long-term economic well-being. In practice, economic sustainability strives to establish a harmonious balance among economic growth, resource efficiency, social equity, and financial stability. These may include the organisation's procurement strategies or contributions to the community.

Sustainability issues around the world are increasing, as organisations are not exercising care in terms of sustainability for the planet, people, and profit. The throwaway culture of hardware waste and recyclables is a global significant businessrelated issue. Generally, every year recyclable hardware materials valued at about £40 billion are discarded. Customers toss away perfectly good products without hesitation to obtain the newest and most advanced technology. Experts predict that as the digital world grows, the annual quantity of waste produced worldwide will reach 51 million tons. Therefore, it is now evident that sustainability much more than just a concern for is the environment because ethical behaviour is now a crucial component of any plan for making products and services more ethical and sustainable in the long run. Richter (2021) listed five important concerns related to sustainability. The first relates to carbon emissions. By May 2021, the earth's atmosphere contained the most carbon ever measured — roughly 419 parts per million — and is considered the highest level recorded in modern history. The second issue pertains to the progress of the circular economy, which seeks to redefine economic growth by urging manufacturers to create products that are designed for reuse. The third and

fourth concerns are climate change and social justice. Importantly, sustainability and social justice are interconnected because when we extract from the Earth, we are also exploiting humans, and vice versa. In this case, it is crucial to rectify the harm caused by many years of abusive practices and ensure equitable access to resources for everyone. The last concern is implementing a comprehensive approach via holistic thinking that offers a comprehensive solution to the challenges we encounter.

The essence of sustainability consists of human activities that have an impact on people, society, the economy, and the environment in a given setting, and the commitment of organisations to meet present needs without compromising the ability to meet future generations' needs and to become fundamental to sustainability (Chowdhury & Nahar, 2017). According to Burritt and Schaltegger (2010), the root of SAR came from the traditional accounting practice, which involves internal organisational practices. It assists in management practices, specifically in terms of the organisation's financial performance. Accordingly, SAR is an external reporting element that also has to do with managing sustainability issues, sometimes known as sustainability management (Gray et al., 2014). Through sustainability practices, the organisation is not only expected to generate profit but also care and be responsible for all its activities and practices. This includes being accountable for any harmful or dangerous impact on society and the natural environment. Organisational sustainability practices are required to be measured, evaluated, and reported, and hence, fall naturally under an accountant's remit. Such an expectation denotes the expansion of accountants' roles and their unique position at the intersection of all sectors and departments, with the power and competence to establish guidelines, create models, and produce reporting data that establish the organisation's involvement and consistency in the implementation of sustainability.

The process of globalisation has heightened stakeholder expectations for corporate social and environmental initiatives (Ellerup Nielsen & Thomsen, 2018). This is supported by Tian et al. (2015), who determined that companies' behaviour will be influenced by pressure from both internal and external stakeholders. The company realises that social responsibility benefits the community and the company itself (Szczepańska-Woszczyna, 2015). Companies that neglect environmental friendliness and social responsibility often suffer from a negative public image. Therefore, the disclosure of social responsibility becomes crucial as it serves as a communication tool for companies to convey the ethical aspects of their business operations to stakeholders, and contribute to the cultivation of a positive corporate reputation in society (Solikhin et al., 2019). Hence, the disclosure of social responsibility emerges as a pivotal aspect and requires more attention, as ultimately, companies across various sectors share a common goal the preservation of their sustainability.

In a recent report from the International Federation of Accountants (IFAC), executive director Fayez Choudhury stated that the accounting profession is important and can directly or indirectly contribute to the attainment of these goals. Thus, through

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accountants' skills, experience, and competencies, they can offer a wide range of solutions to meet challenges of SAR. In leadership the and management, professional accountants undertake various roles, such as chief executive officer, chief financial officer, and chief operating officer, while operations they perform as management in accountants or performance analysts, which carry significant authority and influence in terms of the activities and decisions for creating and preserving business value over time (IFAC, 2015). They have the capability to develop models and generate information that pertains to the organisation's level of engagement and compliance with relevant sustainable principles (Sorina-Geanina et al., 2018). Thus, accountants have a variety of options to address the challenges associated with sustainable development (Association of Chartered Certified Accountants [ACCA], 2014). The magnitude of accountants' roles concerning corporate sustainability management and practices highlights the need to explore and review accountants' potential core managerial roles for the effectiveness of SAR. However, organisations continue to face problems with the implementation of SAR, where accountants play minimal roles. Alnafea (2014) argued that the obstacles concerning SAR depend on the scarcity and weakness of accountants' knowledge (Cohn, 2019). Chartered Institute of Management Accountants (CIMA) member companies have accountants who are more involved in sustainability, however, it is still at a low level. This is because the managing director highly involved in managing is sustainability (64%), whilst accountants' participation is only 4%. Given these issues, it is important to explore the sustainability-related roles of accountants (particularly, the managerial roles) in an organisation.

A need to investigate the roles of accountants, which include the managerial role, is crucial because it helps organisations present sustainable accounting and reporting in the best way. With the managerial roles, accountants' engagement in SAR will be promoted, and hence, enhance SAR practices. They must challenge themselves to shift from the traditional roles (such as measuring, evaluating, and communicating firm performance) into the new roles, among which, are managerial. Accountants in managerial roles can perform the role of developing new internal business reporting systems and introduce accounting innovations to aid decisionmaking processes. Therefore, it would be interesting to explore the managerial roles accountants may have in companies to adopt and implement SAR. Thus, this paper aims to explore the accountants' roles (including managerial roles) in relation to the effectiveness of SAR in Malaysia.

There is limited prior literature that examines the extent of the role of accountants in SAR (Ascani et al., 2021). Hence, this paper addresses the gap by clarifying and enriching their roles further. This is important because accountants not only participate in accounting innovations that support managerial decision-making processes but also help implement new forms of internal business reporting. Ascani et al. (2021) argued that the role of management accountants is not limited to adopting and implementing SAR in the organisation, but also involves decision-making. Willekes et al. (2022) also argued that the level of involvement of management accountants' is lower than that of non-accountants and that their involvement is more significant in promoting harmonisation of SAR. Their roles can be widened to embedding sustainability in corporate strategy and practices in the organisation.

This study also emphasises the understanding of how organisations are managing their sustainability impact by reducing their environmental and social footprint on the planet (Torelli, 2021). Therefore, communication of the sustainability impact may enhance awareness and achieve greater well-being for all stakeholders. It can also help managers take a broader path in terms of SAR. This paper is also important because accountants are not only participating in accounting innovations that will support managerial decision-making but also in implementing new forms of internal business reporting. This concurs with Andrian and Pangestu (2022), who found that companies should emphasise human rights and fair operating practices to enhance social responsibility disclosure, thereby increasing transparency in disclosing how costs are allocated towards social and environmental initiatives. This is also supported by Shahwan et al. (2023) who found that companies need to strive to fulfil the aspirations of all segments of society, and thereby foster heightened community trust in the company. This, in turn, is anticipated to positively impact the company's overall financial performance, particularly in terms of return on assets. Lawal et al. (2022) agreed that the management accounting system serves as an integral component of the organisational control system, which is important and plays a crucial role in furnishing information to aid managers control their activities and mitigate environmental uncertainty with the ultimate aim of achieving the organisational goals.

The remainder of the paper is organised as follows. Section 2 provides the literature review followed by Section 3 which explains how the empirical data were collected and analysed. Section 4 presents descriptive findings and discussion. Finally, Section 5 includes contributions to the current literature, acknowledgement of the study limitations, and areas for further research.

2. LITERATURE REVIEW

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2.1. Mintzberg's managerial roles

This paper is related to Mintzberg's (1973) managerial roles because it stresses the role of the accountant and the necessity for fully comprehending it before attempting to train and develop those who are responsible for its performance. Managers will determine any waste of resources and talents and identify useful resources in the organisations.

There are three types of managerial roles in Mintzberg's (1973) managerial theory. The first is interpersonal, which can be divided into three subroles: figurehead, leader, and liaison. Figurehead means a symbolic head who is obliged to perform several routine duties of a legal or social nature. The leader is in charge of staffing, training, and other related tasks, as well as inspiring and motivating their subordinates, while the liaison keeps a self-made network of informants and outside contacts who help with favours and information for the organisation. The three roles of liaison, leader, and figurehead, are all centred on interpersonal interactions. The manager can perform informally by taking on these roles, which directly translates into the performance of decision-making roles.

The second role is informational, which can be divided into three subcategory roles: monitor, disseminator, and spokesperson. The monitor serves as the organisation's central hub for both internal and external information by seeking out and receiving a wide range of specialised information, much of it current. This allows the monitor to develop a thorough understanding of the organisation and its surroundings. Disseminating all the information from outside sources or from subordinates to members of the organisation is the role of the disseminator. This is important because some the information is factual, while other of information requires interpretation and integration. spokesperson serves as an authority on the organisation's sector and disseminates information to the public on the organisation's plans, policies, actions, and results, and serves as an expert on the organisation's industry.

The third role is decisional, which can be divided into four subcategories: entrepreneur, disturbance handler, resources allocator, and negotiator. An entrepreneur looks for opportunities within the company and its environment plans the improvement projects that also bring benefits to change and oversees the planning of some projects. The role of the disturbance handler is that of preparing corrective action when the organisation faces important unanticipated disruptions. The resources allocator is in charge of allocating all organisational resources, which essentially involves approving or making all important decisions. The role of the negotiator is responsible for representing the organisation in important negotiations.

Mintzberg's managerial roles constitute part of this paper because this approach is broad and involves virtually everything that the managers do and how they do it. According to Mintzberg (1989), various factors are involved in performing the roles, and it is not just the individual capabilities that influence the implementation of a role. However, the organisation can also determine the need for a particular role, thereby addressing the common belief that it is predominantly a manager's skill set that determines success (McClaren et al., 2010). This is because competent managers are able to create action plans based on their job description and personal preferences and then adapt them to the particular circumstance. This is related to this study which is that accountants have the role of ensuring that the implementation of SAR relates to ethical judgment. This is also because to implement the best SAR, organisations require accountants to fulfil their crucial roles effectively.

Therefore, accountants' roles align with Mintzberg's (1973) managerial roles and act as leaders in ensuring the quality and transparency of information for the management team. Additionally, accountants possess certain skills, such as information processing skills, so that enable them to monitor project progress. This valuable information may contribute to the decision-making process.

2.2. Accountant and sustainability accounting and reporting

Nowadays, professional accountants play an increasingly crucial role in the activities of today's organisations. This is because they have a distinctive position at the crossroads of all departments that empowers them to set standards, create models, and generate reporting data, thereby establishing the organisation's commitment and involvement in the implementation of sustainability. According to a recent report published by the IFAC, executive director Fayez Choudhury discussed the significance of the accounting profession and how it can either directly or indirectly contribute to accomplishing these goals. Thus, accountants possess various options to tackle SAR challenges by leveraging their training and experience.

Since there is an increased demand for accountants to take a more active role in sustainable reporting, their involvement in financial reporting has become more prominent. With the significant debate on these issues, there is a push for accountants to take on a bigger role in this field due to the intense discussion surrounding the challenges that sustainability will present for managers in the future. Because businesses are placing more and more emphasis on sustainability reporting, Jamil (2018) found that lecturers generally agreed that accountants should be involved in this type of reporting.

One of the findings by Rahaman et al. (2023) is that 77.5% agreed with the notion of practising social accounting. However, some of them need to change the accountants' perceptions in response to SAP, especially in terms of the level of education and gender.

2.3. Managerial roles (interpersonal roles) of accountants and SAR

The first role is interpersonal roles, which encompass the authority and relationships between managers and employees, as well as between managers and other business participants. Interpersonal roles include the role of a leader that derives from the position of managers within the organisation and has a routine nature. They involve carrying out and performing a variety of ceremonial tasks that require the organisation to be adequately represented to other players in the market. This group offers leadership positions with the authority to influence workers and steer the company towards successful business outcomes. Other than that, the roles can create links to both internal and external stakeholders.

According to the Basel Institute on Governance (2022), professional accountants play an interpersonal role because they hold important positions in or serve as advisors to others. They provide information to organisations to encourage compliance by balancing the needs of all stakeholders, as well as the establishment of harmonised global standards for audit, ethics, and public sector accounting, which can assist organisations and governments in identifying and responding to financial crimes.

Meanwhile, because they possess technical expertise, people skills for inspiring other team members, general business knowledge, and

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a commitment to upholding ethical and professional standards, accountants also fulfil their role in providing crucial information (Jamshidinavid & Kamari, 2012). This role is aligned with the interpersonal roles that produce information for the organisations.

Chowdhury and Nahar (2017) also argued that as part of their job, professional accountants report and communicate financial and social data to stakeholders, and, through other forms of communication, they support the development, expansion, and operation of the mechanisms that make up the infrastructure of sustainability. This means that accountants fulfil their managerial role as a liaisons to communicate with the shareholders and other stakeholders.

According to Pereira et al. (2021), greater environmental sustainability information disclosure will enhance the conservative accounting practice, which is consistent with an organisation that has a higher level of CSR in that it will increase the transparency of the financial statements. The results indicate that environmental information disclosed through specific and voluntary reporting has a more significant impact on the degree of conditional conservatism. Managers play their roles in overseeing company activities by adopting a more conservative accounting approach to meet shareholders' expectations and disclose higher levels of environmental information.

The findings of Saraswati et al. (2021) indicate that accountants play a multifaceted role as creators, providers, keepers, and reporters of value in realising sustainability, particularly within the context of the oil palm industry in Indonesia. They are considered as a crucial element within the business components in that they formulate and embed values into the business strategy, and subsequently implement them throughout the business operations. They act as accountants who carry the responsibility of communicating the sustainability achievements of the businesses through the annual reports and/or sustainability reports. This serves as a measure of transparency and a demonstration of corporate accountability to both the public and the government.

2.4. Managerial roles (informational roles) of accountants and SAR

Informational roles are considered the second group of managerial roles. The primary responsibility of the manager in this group of roles is to gather as much data as possible through new channels of communication and to select data to create a database of pertinent data that will guarantee more effective management and proactive decisionmaking. They play the role of consistently monitoring and managing both the internal and external business environments. Additionally, they serve as an information provider and spokesperson.

In this managerial role, accountants are closely linked since they process information generated by organisations to create sustainability reports, covering aspects, such as pollution, global warming, and natural resources. This information is useful in determining activity costs and influencing financial performance. Therefore, engaging in sustainability reporting provides a chance for professional development in the accounting profession. This is because SAR requires an understanding of the complexity of social, economic, and environmental issues, which necessitates a long-term, future-oriented accounting approach due to its multidisciplinary character. According to Astawa et al. (2018), there is a need to cooperate with other professional groups, such as economic, social, and environmental scientists.

In the study by Okwuosa and Amaeshi (2018), approximately 85% of accountants agreed that they should actively participate in the formulation of social and environmental sustainability policies within their respective companies. This percentage can be viewed as a positive contribution to sustainability reporting. However, a contrasting perspective is evident, with 65% of accountants expressing disagreement regarding the notion that they should assist organisations in internalising all the costs of their externalities through sustainability reporting. Their perspective on sustainability does not align with the idea of corporations internalising the costs of all externalities.

2.5. Managerial roles (decisional roles) of accountants and SAR

This category of roles describes a manager's responsibility to utilise the acquired information in shaping business and strategic decisions. The subcategories for these roles include entrepreneur, resource allocator, problem-solving, and negotiator.

According to the American Institute of Certified Public Accountants (AICPA) and CIMA (2022), accountants are the trusted advisers who will help the organisation not only bring credibility to carbon accounting information, but also insight, influence, and impact. Furthermore, they will help the organisations support efficient and informed capital allocations in the transition to a lower-carbon economy. Other than that, they also help organisations make more informed decisions in building resilient structures for the future. Their roles are more than just collators of numbers as they engage in more storytelling around the nonfinancial impact of the business.

Ascani et al. (2021) argued that the role that management accountants play includes reporting and accounting for sustainability. If they are among the business partners, they should be able to offer the management team invaluable support. Thus, management accountants can support the adoption of sustainability-focused decision-making processes within businesses as well as the spread of SAR in the organisation.

The accounting profession holds immense significance in the corporate world. Stănescu (2018), opined that professional accountants are essential for organisations, as they play a unique role at the intersection of all divisions and areas of operations, particularly in the pursuit of sustainable development. They are no longer confined to mere bookkeeping and reporting activities and the role of accounting professionals has evolved, thereby extending their influence and reach.

Nowadays, most organisations implement sustainability and accountants play an important role in helping management to achieve a sustainable environment in the organisation because they are experts in evaluating and finding the right to achieve

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a sustainable environment. This is supported by Schaltegger and Zvezdov (2013) who contended that accountants know what knowledge is important for the good management of a business and provide critical support to management so that informed decisions can be made.

Accountants actively contribute to sustainability initiatives, leveraging their knowledge, skills, and experience, which provide them the opportunity to produce leading roles in the development of environmental and social accounting (Lewis, 2020). O'Dwyer and Unerman (2020) affirmed that accountants have started to play a pivotal role in explaining socio-environmental performance, organising environmental auditing, ensuring accountability, assessing environmental risks, and furnishing feedback for sustainability policies and performance. Their expertise positions them uniquely in these crucial aspects.

Another role that accountants provide in terms of sustainability involves urging companies to diligently integrate environmental data into their reports. They also function as collaborators, working with companies to implement sustainability accounting concepts and practices for the accurate identification and measurement of costs. As a result, Srinammuang and Petcharat (2018) found that sustainable companies gain a competitive edge through enhanced operational efficiency, distinctiveness in the market, and sustainable growth. This enables the establishment of a profitable, long-term, value-driven business that contributes positively to the environment, society, and the local community in which it operates.

According to Rahaman et al. (2023), accountants play a role in the decision-making functions that influence the sustainability strategies of their companies. This is due to their extensive professional expertise and proactive engagement in governance, risk management, business analysis, decision support, due diligence, anti-corruption activities, and ensuring corporate transparency. Therefore, it was concluded that accounting plays a significant role in sustainable development in Nigeria by assisting organisations in reconsidering their responsibilities arising from corporate sustainability.

3. RESEARCH METHODOLOGY

This study uses structured probability sampling techniques, which are stratified. Stratified sampling involves dividing the population into subpopulations that may differ in important ways, and, in this study, they are based on the type of industry. The sample for this study is 69 accountants or finance officers from various industries in Malaysia. The research objective of this paper is to explore the managerial roles of accountants towards SAR. To analyse the data, Statistical Package for the Social Sciences (SPSS) is used.

To address the research questions stated above, the research methodology comprised a survey that was distributed among accountants and finance officers in publicly listed companies in Malaysia. Before distributing the questionnaire, the questionnaires were reviewed by experts from industry and academicians. Then the questionnaires were distributed to the accountants from various types of industries including finance, consumer products and services, energy, health care, construction, plantations, property, public practice, technology, telecommunications, transportation, and utilities. Respondents were guaranteed that the information would be utilised exclusively for the purpose of this study and that the data collection process ensured their anonymity. The survey was distributed among the respondents in October 2022. The responses were collected through an online survey. In total, 69 responses were obtained from accountants and finance officers.

The decisional, interpersonal, and informational roles are designed to measure respondents' roles that accountants play in SAR practices. The items that measure this variable were based on studies by Saah (2017), Altamony et al. (2017), and Kumar (2015). Respondents were asked to indicate their agreement with three roles on a five-point Likert scale, ranging from 0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Very often, and 4 = Always.

4. RESEARCH RESULTS

4.1. Internal consistency of the overall types of managerial roles of accountants

The reliability of the questionnaire was analysed based on Cronbach's alpha coefficients. Table 1 shows Cronbach's alpha, which was used to determine the reliability of the items measured under each variable, all of which exceeded the minimum value of 0.60. The overall Cronbach's alpha value was 0.944, which also exceeded the minimum value of 0.60. Therefore, as all the variables provided a reliable measure of internal consistency, the instrument in this study is deemed reliable for further study.

 Table 1. Internal consistencies (reliability) of construct

<i>No</i> .	Construct	No. of items	Reliability
1	Application of managerial roles of accountants	29	0.944

4.2. Descriptive analysis

Descriptive analysis involving mean and standard deviation was conducted to determine the level of the overall category in the application of the managerial roles of accountants in publicly listed companies in Malaysia (informational roles, interpersonal roles, and decisional roles).

In this study, the respondents were evaluated on their responses across three different types of roles: decisional, interpersonal, and informational. The mean scores for each role were as follows: decisional roles received the highest average score at 4.25, followed by interpersonal roles scores at 4.21, and finally informational scores at 4.11. As the mean score for decisional roles is higher than that for the interpersonal and informational roles it signifies that accountants play an important part in making decisions related to SAR. For example, formulating and implementing strategies related to sustainability. This also suggests that accountants are actively engaged in making critical decisions that impact an organisation's sustainability practices.

In summary, a higher mean for decisional roles in the context of SAR underscores the critical role that accountants play in shaping the strategic direction of an organisation's sustainability practices through informed and impactful decision-making.

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Table 2. Descriptive analysis for the level of overall category in the application of the managerial roles of
accountants

Application of managerial roles of accountants	Mean	Standard deviation	Mean score interpretation
Informational roles	4.11	0.548	High
Interpersonal roles	4.21	0.504	High
Decisional roles	4.25	0.515	High

4.3. Discussion

A preliminary study was conducted to examine the role of accountants in the implementation of SAR in Malaysia. In order to acquire valid and reliable data, the test instrument underwent validity and reliability testing. The process of obtaining a valid instrument involved several steps, including designing instrument clues that encompass the variables to be studied, creating indicators as standard criteria, and formulating a questionnaire with a total of 29 questions. Once the instrument was fully prepared, experts were consulted who evaluated the formulated questions to determine whether they adequately represented the conditions they were intended to measure.

In the quantitative analysis of items through SPSS, at the end of the analysis, the reliability of the questionnaire was analysed based on Cronbach's alpha coefficients. Table 1 shows Cronbach's alpha, which was used to determine the reliability of measuring items under each variable to establish whether they exceeded the minimum value of 0.60. The overall Cronbach's alpha value was 0.944 which exceeded the minimum value of 0.60. Therefore, all the variables provided a reliable measure of internal consistency. Hence, the instrument in this study is deemed reliable for further study.

In order to discover various accountant's roles to ensure the effectiveness of SAR in Malavsia. the questionnaire was distributed to accountants from various categories of industry. Analysis of the results for the mean indicates that the role of accountants in Malaysian companies includes informational roles (4.11), interpersonal roles (4.21), and decisional roles (4.25). The results are shown in Table 2, which indicates that decisional roles have the highest mean score with 4.25 (Std. dev. = 0.515), followed by interpersonal roles (Mean = 4.21, Std. dev. = 0.504) and informational roles (Mean = 4.11, Std. dev. = 0.548). The results show that the level of informational roles, interpersonal roles, and decisional roles is at a high level.

The highest role of accountants towards the implementation of SAR is the decisional role. This confirms that accountants have a high role in decision-making, and the allocation of resources, and are good at problem-solving. It also confirms that they take corrective action when confronted with significant, unexpected problems, or crises and that they manage and allocate the organisation and divisional resources. Also, they have effective problem-solving skills when collaborating with other units and addressing misbehaviour within or outside the department.

Meanwhile, in terms of interpersonal roles, their high score creates a good working environment in which the department and staff work effectively. They maintain a network of contacts and information sources outside the accounting division, interact with personnel within the division to

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develop professional activities and duties, and cultivate positive interpersonal relationships with individuals both external to the accounting office and among the accounting staff. This result shows that accountants play their role in maintaining good relationships with the staff and have good networking abilities.

The third role is informational roles. The high score for this role pertains to seeking and receiving information to enhance or sustain an understanding of the institution and its environment; conducting regular monitoring of both internal and external environments to ensure the smooth functioning of accounting operations, and ensuring that staff are updated with information relevant to them. The results show that accountants must ensure they are receiving and sharing the information with the relevant parties and must monitor the operations to ensure that they are in good condition.

5. CONCLUSION

Nowadays companies make commendable efforts in reporting sustainability performance, which can assist decision-making, enhance communication, and promote understanding of a corporation's key sustainability issues. This should improve the comparability of the sustainability performance among companies, and hence, provide benefits from implementing sustainability in business corporations. For instance, there are environmental benefits, economic benefits encompassing the perspectives of maximising value and minimising cost, and finally, social benefits. Given the importance of the effective implementation of sustainability, this paper establishes a significant framework highlighting the role of accountants in ensuring the effectiveness of SAR implementation. This framework allows accountants to play their effective managerial roles whilst ensuring their best behaviour in implementing SAR in organisations. This framework can be utilised to proceed with empirical research and provide insightful knowledge. The results of this study may provide a potential approach to enhance excellent SAR practices in Malavsia as well as potential managerial roles to enhance more excellent SAR practices in Malaysia. It will also be relevant to accountants as it will help them find the best roles to perform their tasks to achieve sustainable development goals. This is because accountants in companies with substantial environmental or social impacts will be engaged in the measurement, recording, and interpretation of sustainability issues. This paper is important for future research as it provides a method for organisations to manage their sustainability implementation.

However, this study does have some limitations. Firstly, the accountants responding to the questionnaires were very slow, which caused a delay in analysing the data. Secondly, some accountants refused to respond to the questions because they mistakenly perceived that SAR was not relevant to the role of accountants.

Future research could explore further and deeper the expanded roles of accountants, particularly those equipped with the requisite expertise in sustainability. Therefore, it would also be interesting to examine how their effectiveness could be increased. Future research should be undertaken for an in-depth investigation into the nature and the characteristics of this role, the activities related to it, the possible obstacles accountants may face, and the competencies (technical and soft) that should be developed when performing this role. This paper may also have practical implications. For example, government bodies will design a new framework for accountants in sustainability practices. For educational institutions, this paper outlines fundamental roles that may be incorporated when teaching accounting courses. Meanwhile, accounting education has the potential to cultivate sustainability knowledge among future generations of accountants, thereby empowering and inspiring management accountants to actively participate in sustainability initiatives. This, in turn, may drive innovations by integrating sustainability into corporate management accounting and reporting systems.

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