Abstract—This study investigates the management accountant’s roles that link with the creation of corporate shared value to enable more effective decision-making and improve the information needs of stakeholders. A qualitative approach is employed to conduct a survey of 200 Thai companies providing annual reports in the Stock Exchange of Thailand. The results of the study reveal that environmental and social data incorporated in a corporate social responsibility (CSR) disclosure are based on the indicators of the Global Reporting Initiatives (GRI) at a statistically significant level of 0.01. Environmental and social indicators in CSR are associated with environmental and social data disclosed in the annual report to support stakeholders’ and the public’s interests that are addressed and show that a significant relationship between environmental and social CSR disclosures and the information in annual reports is statistically significant at the 0.01 level.

Keywords—Corporate social responsibility, creating shared value, management accountant’s roles, stock exchange of Thailand.

I. INTRODUCTION

In Thailand, CSR has become a growing in public awareness for decades in regards to the roles of a corporate entity in the development of society and the environment where companies operate. The evidence of growing concerns for CSR has been widely shown from reporting environmental and social performance indicators associated with eco-efficiency in the form of a triple bottom line reporting and GRI. Previous studies claim that Thai companies, however, have reported environmental and social data in a CSR disclosure against the backdrop of environmental and social issues affecting the Thai community in surrounding areas. Most companies in Thailand tend primarily to disclose the social issues while often ignoring environmental aspects. Environmental and social indicators appear inconsistency when incorporating in annual reports and CSR disclosures. Management accountants have limited roles in providing accounting information to support sustainability disclosures. As a result, companies are faced with several challenges, and therefore, the accounting and finance department has incorporated information technology systems into its working procedure to achieve the company performance, and be consistent with the financial and accounting management of the public sector by concentrating on timeliness, transparency, clarity and greater effectiveness [1]. To date, CSR in the Thai context, however, is known as a contribution to the competitiveness of sustainable companies from improving environmental and social performance along with reducing operational risks. An initial aim of CSR in the Thai context is to add shareholder value in the eyes of stakeholders and the market place. A company reports environmental and social performance in a sustainability report simply to create a positive image and reputation in the eyes of its stakeholders and the market place. However, companies pay less attention to the accurate disclose of environmental and social data in their CSR reports or financial statements. Management accountants should take environmental and social cost identification and measurement into account to ensure greater accuracy of environmental and social information in company reports. This can help firms to create corporate shared value when disclosing three areas of performance – economic, environmental and social in the eyes of stakeholders and the public. In addition, little is known about sustainability accounting concepts containing environmental and social accounting in the Thai context [2].

Sustainability accounting concepts in the Thai context appear to show less intention to capture and measure environmental and social data to disclose in a company’s reports, both internally and externally. Thus, this study explores the environmental and social performance indicators in the Thai context disclosed in CSR and annual reports; this is to see where accuracy and appropriateness of data are used to support the demands of the stakeholders and the public. Environmental and social data in a company’s reports needs to respond to the efficiency of accounting data, as well as meeting the requirements of GRI [3]. This, in turn, assists companies to become more socially and environmentally aware organizations, while creating a positive reputation as a ‘green producer’ in a global market. Thus, CSR reports provided on the companies’ websites (a sampling group) are targeted for an investigation. Legitimacy theory is considered appropriate to explain where environmental and social data accuracy should be disclosed in a CSR report. In relation to this, stakeholder theory examines the ethical and moral obligation of Thai companies to address the demands of stakeholders, and therefore, the reporting of more accurate and appropriate environmental and social performance indicators in the form of a CSR report in the Thai context [4].

Prateep Wajeetongratana (Asst. Prof. Dr.) is with Faculty of Management Science, Suan Sunandha Rajabhat University, and Bangkok, Thailand (phone: +6621601485; fax: +6621601491; e-mail: prateep.wa@ssru.ac.th).
II. LITERATURE REVIEW

A. Management Accountant’s Roles in Sustainability Accounting

Management accountants can play an important role in encouraging a company to report accurate environmental and social information in sustainability reporting and financial statements. Environmental and social accounting should be developed or designed as a business tool and mechanism, such as a conceptual model or framework, to support firms in achieving sustainability targets in capturing, identifying, and measuring environmental and social data using sustainability accounting concepts/practices [6].

1) Sustainability Accounting (SA)

SA is a key driver of explaining and determining a company’s reputation and positive image through corporate disclosure quality. It also refers to representing the process of data collection of environmental and social aspects to support the demands of a company’s stakeholders and enhance management decisions to ensure corporate sustainability is achieved. SA is a business tool that provides a sustainable company with a way to move towards the kinds of management decisions in relation to economic, environmental, and social sustainability. The claim that SA creates transparency in the full disclosure of the processes, procedures, and assumptions in a company’s disclosures and inclusiveness of the reporting that systematically engages the demands of stakeholders to enhance the quality of corporate sustainability announcements [5].

As a company moves towards imbedding sustainability into the very fabric of their operations, accounts and financial reporting systems are increasingly being required upon to prepare the environmental and social data in full, thus assuring the information available to make investment decisions and to allay stakeholders’ concerns. Subsequently, environmental, social and economic sustainability has become a dominant theme in mainstream corporate strategy and operations; management and external stakeholders make informed decisions regarding the positive impact of the company’s operations, including economic profitability, environmental friendliness and social well-being [5], using the environmental and social information in a sustainability report.

The studies in stakeholders, social responsibility, and performance: empirical evidence and theoretical perspectives examined SA in terms of physical and monetary measurements to improve financial management. [7] The suggestions emanating from these studies show the need for SA to include improvements in the quality of society, people, the environment, and natural capital—rather than just focusing on a company’s economic performance. It is highlighted that SA should incorporate improvements in social and environmental reporting in terms of external disclosures to meet shareholder expectations of sustainable organizations. SA also provides a company with the measurement of external (environmental and social) and internal (financial) costs, and full cost accounting is implemented to support internal and external disclosure such as sustainability reporting and CSR reporting. Likewise, SA deals with the practices, procedures, and methods that assist a company to record, analyze, and report the integration of social, environmental and economic facets of organizational activities into a corporate sustainability report. This approach helps support management decisions to improve corporate sustainability and reliability, including disclosure quality regarding stakeholders’ interests to add shareholder value in today’s turbulent and uncertain markets. Thus, users, such management accountants, need to understand the tools and/or accounting techniques that can be employed to measure and identify costs or expenditures to improve the environmental and social performance of firms. This can help a company to integrate non-financial information – environmental efficiency and social performance to the financial information in its annual reports [4].

B. Environmental Management Accounting (EMA)

EMA is a subset of environmental accounting EMA and environment financial accounting. Environmental accounting is a key concept of business decision-making in relation to environmental cost analysis when correctly allocating costs to products. Environmental accounting (EA) is considered appropriate to evaluate internal and external costs of the environment resulting from production and service processes; thus, meeting the concerns of stakeholders in incorporating environmental costs into financial reporting. As a result, EMA is designed as a business tool to not only manage the costs of environmental protection, but to provide financial reports for the business management of environmental performance as well [6].

EMA provides a company with a way to identify and measure environmental indicators within and external organizations to support significant concerns of external stakeholders (governments, shareholders, etc.). It aims to deal with cost identification and measurement of environmental transactions and other events that could have impacts on the financial position and/or financial performance of firms. Although there is no present obligation and/or legal obligation in identifying or measuring environmental factors under International Accounting Standard (IAS), companies are expected to take responsibility to reduce negative impacts on the environment, as well as providing environmental expenditures in companies’ disclosures. Environment management accounting provides companies with a way to provide better information of environmental costs to enhance both internal and external decision-making. In addition, financial disclosures of companies are also required to briefly report environmental factors, including the amount and the expected timing of any environmental expenditures and the amount of any expected recoupments.

In Thailand, environmental reporting is relevant to accounting performance disclosures along with a good environmental reporting policy that enables companies to effectively create the long-term profitability of ‘green’
organizations. However, as the measurement and identification of environmental costs are difficult and complex, companies have seemingly disclosed environmental information as little as possible. Environmental performance is reported to address the increased concerns of stakeholders and the public, while creating images of environment-friendly organizations in market place. It would be greater benefit to a company, if management accounts were able to provide environmental information with consistent standards for financial statements and sustainability reports such CSR disclosures. This would ensure environmental information accuracy when reporting in both financial statements and other sustainability disclosures [7].

C. Social Management Accounting (SMA)

SMA is a subset of social accounting – SMA and social financial accounting. As traditional management accounting has tended to ignore social and public interest, social accounting has been introduced to companies as an essential accountability tool, underpinned by concerns for improvements in the quality of employees, the community, and society as a whole.

The key element of social accounting is to provide social cost information to address the concerns of stakeholders and the public’s concerns, while conventional accounting has focused more on economic performance.

The consideration of social issues in accounting practices has been around for many decades, a situation that remains unchanged today where companies are required to be increasingly concerned about reducing negative impacts on society, employees and the environment. This requires companies to incorporate development in social performance into financial reports in the form of a CSR report. SMA is designed to help identify social information on a company’s social performance in the form of CSR reporting. By encompassing social accounting, companies are able to deliver greater accuracy in CSR reports, in order to address stakeholders’ interests in relation to the improvement of society as a whole. This is because stakeholder power has resulted in companies needing to consider social responsibility when selling large volumes of products to gain higher profits. They also believe that firms need to take more responsibility for their employees, society, and the environment. This results in companies most likely providing disclosures to create enhanced images of their organizations in providing accurate cost information for disclosure [9].

III. METHODOLOGY

The study applied mixed methods (quantitative and qualitative research approaches) to collect and analyze data using triangulation for credibility. The choice of method selection aims to avoid social bias, while building strong results from the study.

A. Data Collection and Procedures

This study employed purposive sampling methods to select 200 companies reporting environmental and social expenses in both annual reports and CSR disclosures. Thus, annual reports of a sample group provided by the Stock Exchange of Thailand will be surveyed as secondary data in a quantitative study.

A sampling group is selected from the companies that have provided environmental and social expenditures in annual reports made available online through the Stock Exchange of Thailand’s website. Listed companies, those reporting their environmental and social performance for creation of shared value, are expected to indicate their indicators in a survey. For management accountants, participants are selected based on their roles in providing environmental and social data to
support a company’s reports. Thus, their knowledge and skills in SA concepts/practices—EMA and SMA, are questioned [10].

The research conceptual framework is shown in Fig. 1.

B. Data Analysis

The quantitative data was examined to check missing values and outliers. If data appeared to be missing, it was imputed with the mean values from the rest of the responses. Normality is assumed for testing data using univariate outlier detection to screen outliers, in order to deal with significant skewness and kurtosis when data appears as positive or negative values in the distributions. A large number of missing values within a survey instrument were not included, while remaining missing values were not imputed—thus avoiding potential bias. In addition, outlier cases were not considered for inclusion in data analysis. On investigation, a large number of observations were classified into manageable groups while performing data reduction from an entire population. This helped ensure the data analysis of responses to H1, H2 and H3 are reliable and trustworthy. Correlation analysis is then applied to test H1, H2 and H3, as it is a measure of the statistical relationship between two comparable variances. For qualitative data, content analysis is applied to analyze the environmental and social performance provided in the annual reports of 50 companies to responses to the interview questions, which are classified into the same categories, thus allowing for the analyzing of similar words and phrases to support the results of the study [11].

IV. FINDINGS

The sampling group (200 companies) was selected from a total population of 1,250 companies in Thailand that post annual reports on the website of the Stock Exchange of Thailand. The quantitative results are shown below:

A. Quantitative Results

Companies operating the local and international environment were analyzed to investigate the environmental and social performance in their annual reports. Company sectors were analyzed in relation to the primary geography where they are based. One-hundred and sixty-five (n=165, 82.5%) and 35 companies internationally (n=35, 17.5%). This further examined companies disclosing environmental and social performance in their annual reports. The results of the descriptive analysis shows that n=65, 32.5% of constructions reported environmental and social performance to their stakeholders and public, follow by industrial product (n=54, 27.0%), technology (n=34, 17.0%), and agriculture and food product (n=30, 15%). Meanwhile, there was only 17 companies (n=17, 8.5%) of consumer products disclosing environmental and social performance in their annual reports to add shareholder value in the eyes of stakeholders and the public [12].

It can be seen that Thai companies operating in Industrial products, Consumer products, Construction, Agriculture and Food products, and Technology tended to report their environmental and social performance to add shareholder value in the eyes of stakeholder and the public.

<table>
<thead>
<tr>
<th>Operational Sector</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Locally</td>
<td>165</td>
<td>82.5%</td>
<td>82.5%</td>
<td>82.5%</td>
</tr>
<tr>
<td>Internationally</td>
<td>35</td>
<td>17.5%</td>
<td>17.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Company Sector</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Industrial product</td>
<td>54</td>
<td>27.0%</td>
<td>27.0%</td>
<td>27.0%</td>
</tr>
<tr>
<td>Consumer product</td>
<td>17</td>
<td>8.5%</td>
<td>8.5%</td>
<td>35.5%</td>
</tr>
<tr>
<td>Construction</td>
<td>65</td>
<td>32.5%</td>
<td>32.5%</td>
<td>68.0%</td>
</tr>
<tr>
<td>Agriculture and Food Product</td>
<td>30</td>
<td>15.0%</td>
<td>15.0%</td>
<td>83.0%</td>
</tr>
<tr>
<td>Technology</td>
<td>34</td>
<td>17.0%</td>
<td>17.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
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Correlation analysis was employed to evaluate the relationship between environmental and social performance in CSR disclosures and environmental and social performance required by the GRI.

Table III illustrates that there is a significant correlation between environmental performance reported in the CSR of Thai companies (a sampling group) and environmental indicators required by the GRI (p=0.000, at 0.01 alpha level). Likewise, social performance disclosed in the CSR of Thai companies is associated with social indicators required by the GRI (p=0.000, at 0.01 alpha level). This indicates that Thai companies reported their environmental and social performance based on the requirements of the GRI. Thus, H1 is supported [13].

The result is supported H2 that there is a significant correlation between environmental indicators reported in the CSR of Thai companies (a sampling group) and environmental indicators in their annual reports (p=0.000, at 0.01 alpha level). Likewise, social performance disclosed in the CSR of Thai companies is correlated with social data reported annually (p=0.000, at 0.01 alpha level). This indicates that Thai companies disclosed environmental and social data in the CSR disclosures fully related to the data identified in their annual reports to add shareholder value in the eye of stakeholder and public [14].
companies’ annual reports and CSR disclosures identified and a result, environmental and social indicators captured by concepts/practices for cost identification and measurement. As drive as collaborators with a company to employ SA incorporate environmental and social data in its reports, [15] accountants’ roles in encouraging a company to accurately their own sustainability transformation. Management transparency into environmental and social aspects to maintain ecosystem and social well-being partnerships and provide stakeholders’ and public’s demands. Companies establish associated with the data in annual reports to enhance environmental and social indicators in CSR are positively economic, social, and environment. In relation to this, development of firms in three aspects of performance – and efficiently to successfully attain the sustainable ensure that the company’s CSR is implemented continuously positively relevant to the indicators required by the GRI to the long term. Environmental and social data in CSR is building new levels of productivity and sustainable growth in This creates truly viable and competitive business to reflect the linkage between sustainability and financial success, thus building new levels of productivity and sustainable growth in the long term. Environmental and social data in CSR is positively relevant to the indicators required by the GRI to ensure that the company’s CSR is implemented continuously and efficiently to successfully attain the sustainable development of firms in three aspects of performance – economic, social, and environment. In relation to this, environmental and social indicators in CSR are positively associated with the data in annual reports to enhance stakeholders’ and public’s demands. Companies establish ecosystem and social well-being partnerships and provide transparency into environmental and social aspects to maintain their own sustainability transformation. Management accountants’ roles in encouraging a company to accurately incorporate environmental and social data in its reports, [15] drive as collaborators with a company to employ SA concepts/practices for cost identification and measurement. As a result, environmental and social indicators captured by current management accounting system are significantly associated with the indicators required by the SA concepts/practices. This provides a company with a way to report environmental and social performance in both mandatory and a variety of voluntary disclosure such CSR.

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