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Integration of Corporate Sustainability Valuation through Management Accounting System, Control, and Reporting System

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Abstract

Worldwide companies are struggling for sustainability issues and much has been written about "why" companies are facing this. Relatively less research has assessed the issue of particularly "how companies may overcome sustainability issues by integrating sustainability assessment process, management accounting system, management control system, and reporting system?" In an organization, corporate sustainability, requires consolidated system for measurement aspects and stainability issues management rather than limited applications. This paper reviews literatures that deal with corporate performance assessment (CPA), management accounting system (MAS), management control systems (MCS), and management reporting systems (MRS). Review shows that many concepts of CPA system, MAS, MCS, and MRS are utilized in several ways and dealt with in a focused way to achieve corporate sustainability. Based on review, this paper intends to propose a comprehensive framework by accounting system, control and reporting system with performance assessment to achieve corporate sustainability. The suggested framework is a new contribution to knowledge and literature by integrating separate concepts which will assist researchers and academicians for better understanding to achieve corporate sustainability.

Keywords: sustainability, accounting system, control system

Introduction

Most CEOs (93%) globally consider sustainability as an essential issue for the future prosperity of business as per Hayward et al. (2013) while the rest (38%) consider quantifying the worth of own sustainability initiatives accurately. Sustainability denotes a situation when companies aim to merge economic objectives with their work responsibility to effect human beings and eco-systems (Maas and Boons, 2010). Firms are facing challenges of constructing an advanced sustainability strategic plan, objectives and an effectual execution with the exploding demand in sustainability issues (Kleine & von Hauff, 2009; Crutzen & Herzig,

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2013). The existing literature has assessed the function of corporate sustainability management tools and established accounting and reporting systems as an essential support for corporate sustainability (Schaltegger & Wagner, 2006; Burritt & Schaltegger, 2010; Baker & Schaltegger, 2015). Yet, comparatively very few researches did the inquiry of "how companies can overcome sustainability issues by integrating performance assessment system, management accounting system (MAS), management control system (MCS), and management reporting system (MRS)?" Effective systems for measurement, management, and reporting of corporate sustainability need a balanced interplay between various actors and methods in the organization data collection, analysis, and communication. There is an existing gap in literature on the way of developing and implementing a more robust approach (Malmi and Brown, 2008). The objective of this paper is therefore to review those literature on organizational performance assessment system, MAC, MCS, and MRS.

The results of reviews showed the use of various MAC, MCS, MRS, and performance assessment systems in many ways and in a focused way to achieve corporate sustainability. Existing research deals with specific methods but only some papers investigated the proper integration and interaction of methods like accounting system, MCS, and MRS. This article relies on the review results to propose a robust/comprehensive framework that incorporates performance assessment system, MAC, MCS, and MRS; the new framework posits that each inter-connected concepts can support each other and proceed towards a more efficient corporate sustainability and better management. The next part of this paper is constructed as follows - the second part discussed the inter-relations between different concepts of corporate performance assessment system, MAC, MCS, and MRS; the third part analyzed the literature findings and described how to structure a well-coordinated combined technique; the fourth part suggests a comprehensive framework that integrates MAC, MCS, and MRS for firms' performance assessment & management. The paper concludes by describing the drawbacks of the study and stating the prospect of future research.

Perspectives of Corporate Performance Measurement Aspects and Management

The ground for the enhancement of corporate performance for firms' sustainability is to deliver necessary insight about the wanted and unwanted environmental and social effects, provide ideas of how those impacts can be managed, improved, as well as to obtain valid information of whether the enforced modifications have made the craved contributions to companies' sustainable development (Maas & Liket, 2011; Epstein & Buhovac, 2014). Yet, a major requirement for firm sustainability is to improve capacity to monitor and measure the added values (Maas & Boons, 2010). Corporate sustainability improvement is necessary for certain reasons - one is the public interest on firm's sustainable development, since firm's sustainability is nearly connected to transparency process, accountability and legitimacy (Gray, 2010). When improvements are earnestly chased, the strategical relevance to corporate sustainability transforms inevitably onto operational implemented activities, as well as improvements, performance measurement systems; sustainability managements become essential (Schaltegger & Burritt, 2010; Maas & Liket, 2011).

Employing of corporate MAS, MCS, and MRS tools requires knowledge to construct, examine and report information related to sustainability. Depending on this knowledge, a better information collection system and management systems needs to provide trustworthy and extensively appreciated information to be utilized as a ground of revelation. Therefore, to construct organizational transparency and to give support to management decision to improvement

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functionalities, implementation and coordination of information measurement system and management processes inside the company for sustainability is required. Depending on this principle measurement, this article focused on 4 major concepts (sustainability (performance) assessment system, sustainability MAS, sustainability MCS, and sustainability MRS) from the two perspectives of enforcing improved performance and transparency (Table 1).

	Transpare	encv Perfor	rmance improvement
Measurement Management & communication	Sustainability Assessment (based of Sustainability Report	1 0	Sustainability Management Accounting (based on strategic objectives) Sustainability Management Control (design and implement of formal and informal management control)

Table 1: "Sustainability measurement and management aspects from the perspectives of transparency approach and performance improvement approach"

2.1 The Transparency Approach

Considering corporate performance measurement and sustainability assessment process as a way of communicating the achieved transparency implies an outside-in strategy from the society level to the corporate management. Stakeholders rely on the measurement process to evaluate the impacts and problems of the company (Clarkson et al., 2011). The internal measurement derived from assessing necessity, serves reporting activities to ensure transparency standard regarding the company's environmental and social impacts. As per Schaltegger et al. (2006), the connection among assessment process and reporting is therefore heavily impacted by reporting demands, social expectations, and standards. The relation between corporate performance assessment and reporting is thus defined by the principle that creates financial accounting system and reporting as well to a large extent. Researchers (Walker and Wan, 2012; Margolish and Walsh, 2003) posited that when firms incorporate performance data with sustainability aspects but not with management decisions, this will not add to sustainable development but may not add value to the society.

2.2 2.2 The Performance Improvement Approach

In a company, corporate performance measurement system is considered earlier as the procedure of assembling, evaluating, and sharing performance related information to reinforce the company sustainability and improved management decisions (Schaltegger & Wagner, 2006; Burritt & Schaltegger, 2010). Sustainability (performance) data exploited in the means of external reporting purpose is found incomplete, untrustworthy or inaccurate (Schaltegger, 1998). Advanced research is required to develop an effective corporate performance measurement system all-inclusive of indicators (leading and lagging) for better understanding of priorities of the organization (Morioka and Carvalho, 2016). Schaltegger and Wagner (2006) discussed that the fundamental rationale among corporate performance assessment system and management approaches defined by internal management control approach in accordance with the inside-out perspective which deals with the business strategy and analyze the matters that are pertinent to effective execution of the strategy to win with the strategy.

Inter-Connections between Performance Measurement System and Management Approaches

This section discussed the four keys of performance measurement process and management methods (presented in Table 1) and the inter-connections between them according to the reviewed literature.

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3.1 Sustainability Assessment: Inter-Connection to Management Accounting, Control and Reporting

Corporate sustainability assessment perspective is progressively considered as an essential tool to assist in shifting to sustainability as well as reporting (Pope et al., 2004). If companies want to report own sustainability of performances and transformation towards targets, then, development must be examined (Ness et al., 2007). In contrast to the process of corporate performance assessment for decision-making, sustainability measurement is considered as a different approach primarily exploited for reporting purposes. It is a procedure through which information acquired from pre-selected indicators but focusing on central information is applicable to all leading marked audiences (Azzone et al., 1997). Indicators supply non-monetary information about past work impacts and performances, to deal with future-oriented issues, not especially applicable for management decisions. Non-monetary related information is essential for the development of transparency. According to the outsidein approach, the first phase of any corporate sustainability assessment is to build communication with the stakeholders, figure out the anticipations, deduce the measures of corporate performance and accounting approaches. The importance of corporate sustainability reporting has been emphasized by Gray and Milne, (2002) and the external reputation of a sustainable company through the implementation of sustainability accounting system to the decision-making process of management. Companies usually face troubles when they attempt to configure a good corporate sustainability reporting process, as they became baffled by various guidelines (Eccles et al., 2012).

3.2 Sustainability "Reporting: Inter-connection to Assessment System, Management Accounting System and Control"

Corporate sustainability reporting system, as per Hahn & Kühnen (2013) and Fifka (2013), has been developed tremendously over the last two decades. Social stakeholders, like investors, governments, media, and employees expect organizations to report the impact of their acts, including social and environmental impacts (Maas & Liket, 2011). García-Sánchez et al. (2013) noted that many regulations, initiatives, and guidelines express a necessity for corporate transparency for financial matters and for the environmental and social prospects of corporate behavior. Accordingly, an exploding number of companies are reporting about own sustainability performance (Schreck and Raithel, 2015). Companies provide sustainability performance report to stakeholders regarding non-market issues (Zadek & Merme, 2003; Isenmann & Lenz, 2001), with the intention of achieving corporate branding, corporate reputation, as well as credibility (Lindgreen & Swaen, 2010), to increase authenticity and a "license to operate" (Kolk, 2003), or to inspire workers to work with the issues of sustainability (Weil & Winter-Watson, 2002). Integrated reporting systems have emerged as a new system of assessing management practice to aid organizations realize how to construct worth and being capable to communicate effectually with external stakeholders. The advancement of integrated reporting system and how it may successfully be implemented remains challenging and contested; however, insightful experiences of integrated reporting from the early adopters have started to accumulate. Experts perceived the field to be segmented and believed that most firms presently have a poor perception regarding the integrated reporting and its business value (Perego et al. 2016).

Integrating corporate performance reports can create worth in fortifying the organization's identity and sustainability culture (Montecchia et al., 2016). The purpose of reporting is to increase the trustworthiness and transparency of its content and is getting much challenging in future. To protect authenticity, the sustainability reports is often examined and commented later by authentic stakeholders externally (O'Dwyer et al., 2011).

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Governments as a stakeholder, have high anticipations about the significant effects on performance reports that results in improved accountability and transparency and to internal changes ((Hahn & Kühnen, 2013; Adams & McNicholas, 2007). Corporate reporting system has potential value which is performance improvement-oriented if managers use own sustainability performance data willingly for the reporting purposes and internal capability improvement. Whenever corporate sustainability performance data get incorporated into company management decisions, that results in improvements in sustainability, the business, the society, the ecosystems and even it become a reference of innovation (Husted & Salazar, 2006; Porter & Kramer, 2006). The act of corporate sustainability reporting through collection, analysis of sustainability information and internal communication, may support organizational changes to enhance consciousness about internal legitimization, sustainability issues, and the interaction among internal decision makers (Schaltegger & Wagner, 2006; Bennett et al., 2013).

3.3 "Sustainability Management Accounting (SMA): Inter-connection to Management Control System, Assessment and Reporting"

Corporate SMA denotes the procedure of collecting, analyzing and sharing of information relevant to company performance and sustainability (Schaltegger and Burritt, 2010) that is required for corporate sustainability management and decision-making purposes (Valipour 2015; Bennett et al., 2013). In general, management accounting data is used for internal performance improvement. SMA utilizes various set of processes and measures to monitor, collect and create information, manage internal communication system and report to support decision-making which is opposite to sustainability reporting supported by sustainability assessment (Burritt et al., 2002). SMA focuses on common material or physical indicators of decision-making objectives (Hartmann et al., 2016). Some researchers can consider this method as to establish a clear inter-connection among MAC, assessment and reporting systems (Bebbington et al., 2007). However, some researchers (Johnson & Kaplan, 1991) think such inter-connection is unsafe because a firm's reporting demands can predominate management accounting system that is not adequately assessed by internal decisions and objectives. SMA involves collecting of monetary data from the same database and providing support to produce financial accounting data and reporting, as well as using the non-monetary data as they frequently present the monetary outcomes (Burritt et al., 2002; Schaltegger & Burritt, 2000). "Integrated Thinking and Integrated Reporting" as a recent trend attempts to induce the path of reasoning and inspiriting company managers in combining sustainability aspects in company's strategic plans, risk management systems, traditional management accounting system, control as well as reporting systems (Adams, 2015; Reverte, 2015).

3.4 "Sustainability Management Control (SMC): Inter-connection to Accounting, Assessment System and Reporting Aspects"

Corporate management control refers to the design, development, and utilization of controls by companies to ensure that the control of behaviors, decisions and actions of officials are concordant to the objectives and strategic plans of the organization. Management controls involves formal and informal controls (Malmi & Brown, 2008). The power to control is reasoned in the wide reach of them into management control system (MCS) as a complete set, instead of discussing the individual control systems. Corporate Management control hoped to employ a key responsibility to constructing and implementing the methods of sustainability strategy that are frequently assigned with a high capacity of supporting the corporate decision-making process (Crutzen & Herzig, 2013). In a firm, the integration phase of control systems portrays the responsibility of corporate control systems to support

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sustainability integration ideas in company strategic plan (George et al. 2016). SMC attempts to work in an iterative process to incessantly measure, manage and improve the interaction among business firms, society as well as environmental aspects (Bennett and James, 1998). SMC is primarily considered in the circumstance of supporting a firm's inner performance improvements that inter-connected with the SPM and management and SMA. SMC may serve a synthesizing role as well to integrate many instrumental and operational tools of management accounting aspects to the strategic context of management perspectives (Gunther et al., 2016). Yet, SMC may be connected to assessment as well and reporting process as it may gather information of reporting as well as control performance activities which are externally reported and investigated through external stakeholders. Various academic research emphasized the key responsibility of MCS and the controllers to construct the processes to implement corporate sustainability improvement programs (Schaltegger and Wagner, 2006; Crutzen and Herzig, 2012).

The discussion regarding corporate MAS, sustainability assessment, and control and reporting systems presents some partial inter-connections which have been assessed by some researchers. Literature review presents a comprehensive inter-connection among these key concepts of corporate sustainability management and information measurement systems; however, the framework to highlight these inter-connections is the interest of this research paper which was missing in literature review. Prior research studies on the association of MCS with other corporate information measurement and management systems such as MAS and reporting are still insufficient (Epstein and Buhovac, 2014).

Separate Concepts to Comprehensive Framework

The inter-connections among the various corporate sustainability measurement systems, MAS, control & reporting systems focused in literature review have presented three insights. The first one, there are numerous literatures available specifically about the above concepts, however, very few literatures analyzed the inter-connections between the concepts. The second one, huge confusion exists regarding the concepts (individually), their approaches and effects. Third one, few empirical studies are available examining the real firm practices; little research initiatives have been dedicated in assessing the integration and interaction between these concepts. The demand of an in-depth empirical analysis could be realized to know about the successful interaction among the concepts (Hartmann et al., 2015). Therefore, a further empirical investigation is needed to develop conceptual theories to inter-connect various concepts like information measurement and corporate management methods from corporate sustainability management perspectives.

4.1 A Comprehensive Framework of Integrating Sustainability Measurement System, Management and Reporting

The corporate MAS, sustainability assessment system, MCS, and MRS have been illustrated as distinct concepts in previous works as various concepts of corporate SPM and corporate management system, but now, it is seeming distinct to improve sustainability performance; first of all, the measurement of "internal corporate performance improvement and management of external transparency" aspects need to be connected, and, second, indicators need to be reasoned, connected and efficiently managed. Based on the reviewed literature, a framework is proposed in this paper to prove the inter-connections of four concepts by developing an integrated comprehensive approach (see Figure 1) using the concepts given in Table 2.



Table 2: Name of Concepts

Concept Titles & Focusing Points

Transparency Strategy (outside-in) Sustainability Assessment

Focusing on lagging indicators

Business Sustainability Strategy

Focusing Mission, Strategic plans & Objectives

Sustainability Management Accounting Strategy

Focusing on Data collection, Internal reporting for decision making Including leading and lagging indicators for Performance Improvement

> Sustainability Management Control Strategy Sustainability Reporting Strategy

> > Focusing on lagging indicators

Performance Improvement Strategy (inside-out)

Figure 1: Comprehensive Framework Integrating Concepts: Sustainability Assessment, Management Accounting, Control and Reporting.

lines: shows inside-out connection of "performance improvement strategy" lines: shows outside-in connection of "transparency strategy"

ines: Proposed "Integration and Inter-connection" of Sustainability assessment

System, Management Accounting System, Control and Reporting System

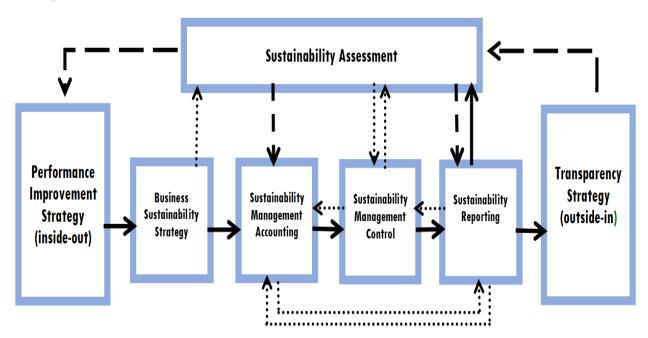


Figure 1: Comprehensive Framework Integrating Concepts: Sustainability Assessment, Management Accounting, Control and Reporting.

The comprehensive framework in Figure 1 shows the proposed inter-connection of concepts into an integrated approach; it connects the individual parts, focusing on the demand of external feedback. The framework may assist to consistently design and configure the measurement process, corporate performance management system and reporting of "corporate sustainability aspects in a comprehensive approach, through an inside-out perspective or outside-in perspective," or sequentially both perspectives, therefore employing the "twin track" method proposed by Burritt and Schaltegger, (2010).

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4.2 Construction of Framework from "Outside-In" Approach

Some researchers (Deloitte & CSR Netherlands, 2015) argued that external stakeholders demand has more impact on firm's corporate performance than internal demands. Engaging audiences is one of the important reasons to construct a distinct and quality corporate performance report (WBCSD, 2014). The WBCSD emphasized the value of the utilization of stakeholder's feedback for the development of reporting cycle to improve the sustainability performance and actual decision-making capability. Stakeholders may cater suggestions, advice, as well as evaluate the firm depend on its sustainability report. Developing an interconnected sustainability reporting approach by combining assessment system, and management accounting control, may be directed by the questions below:

"What type of information expected by various stakeholders and how to prepare and measure the information to ensure meaningful usage of information?"

"How to assess sustainability impact depends on stakeholder expectations?"

"What environmental and social aspects exposed and how they match with stakeholders benefit? (Sustainability assessment)?"

"How firms may communicate of how they deal with sustainability aspects? (Sustainability reporting)?"

"How firms may develop controls (accounting process and non-accounting process) to gather data for reporting purpose?"

How firms may come up with an effectual strategy to corporate sustainability which is well connected to the firm's core business?

Involvement of stakeholder requires to convince companies that stakeholder's feedback will have positive impact by integrating an information communication system based on sustainability reports with relevant and trustworthy information. Verification may be helpful for trustworthiness of report but are improbable to provide the assurance that the content of the report will be accepted by all stakeholders. The feedback portions can connect transparency aspects to performance improvement aspects utilizing the information of the four concepts which necessitates a good inter-connection of reporting processes to management accounting as well as communication process. Firms are utilizing sustainability reporting system in strategic ways that often integrate sustainability into the strategic priorities (Higgins and Coffey, 2016). In some cases, if firms inform and contend to some definite points, sustainability reporting may provide extra advantages if utilized as an input material for stakeholder's feedback. If the stakeholder's feedback is designed well, it will involve interactively to firms to establish newly developed methods that may introduce new paths of how farm's may contribute to business sustainability.

4.3 Constructing of Framework from "Inside-Out" Approach

The inside-out approaches focused on improvement of sustainability performances which followed reporting in the last step. Reporting usually depend on strategic plan of business sustainability and assessing the issues that are related to execution of the strategic plan in the company and get success with the strategy outcome. As a result, having an effective process of corporate sustainability measurement, MAS, and control system demands that

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company managers specify the targets and benchmarks of corporate sustainability performance perspectives. In such cases, the duty of the management is to determine the sustainability issues related to strategy, to control the system, to achieve the goals, as well as to report accomplishments and gaps of the company. The corporate sustainability reports is conferred to stakeholders who provide feedback upon the relevancy of information. Depending on this feedback, the information assessment and reporting systems can further be modified to ensure the indicators (leading and lagging) and issues (those that are key to business success and to stakeholders) are incorporated in the measurement process, MAS, control and reporting aspects. In this case, the measurement approach and management system will be at first motivated by the company's internal strategy. Constructing an integrated approach of corporate management accounting system and control process from the "inside-out" approach is interconnected to the assessment and reporting process and may be directed by the following questions:

What "environmental and social aspects companies susceptible to? (Initial sustainability assessment)?"

Which "issues strategically related to business and how to integrate them? (Constructing corporate sustainability strategy and relevant objectives)?"

How "can firms develop corporate accounting system to acquire (accounting based) information to manage the central aspects? (SMA and performance measurement)?"

How "can firms develop satisfactory controls (formal and informal) to assist corporate accomplishments of sustainability? (Sustainability management controls)?"

How "can firms communicate with stakeholders (internal and external) to ensure they get informed properly? (Sustainability reporting)?"

Stakeholder feedbacks can be integrated with performance improvement perspectives, with transparency perspectives through utilizing information of all four concepts. Though in reporting, emphasis is given usually on lagging indicators, however, to stakeholders, it maybe newsworthy to read out the company progress on indicators. Though the priority increased according to literature about the importance of stakeholder feedbacks to managerial systems, experiential evidence is still fragmented about stakeholder feedbacks (Ferri et al., 2016). Ferri et al. (2016) exposed the variations of stakeholder feedbacks utilized by firms in various institutional contexts and the findings suggested that corporate sustainability accounting system and reporting system cannot be considered as action by choice; they must be recognized as an essential managerial practice to construct a wide range of helpful information database to adjust to the sustainability performance system and managerial systems with institutional context.

Only information does not provide satisfactory transparency about sustainability goals in a company; reporting with information assists to achieve the goals through the process within specific time schedule and ensure improvement. Reporting from an inside-out approach provides clear explanation of achieving non-financial performances (Eccles and Saltzman, 2011) and consider future worth of sustainability performance of the company and as well as stakeholders aspects (Adams, 2015). Reports says that two thirds organizational investors globally want to conceive non-financial information for companies own future investment decisions (WBCSD, 2014). Investors give value to corporate sustainability management

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programs instead of infinite sustainability performance issues which is examined by assessment program conducted by rating agencies (McLaughin et al., 2015).

Companies need to deliver report to enable stakeholders realize the present status of the company, i.e. the performance, the processes to achieve this performance, as well as the factors internally affecting the results. Furthermore, companies need to report on significance of management, also illustrate how this system incorporated to business context (WBCSD, 2014). With this regard, Thijssens et al. (2016) suggested that sustainability reporting need to think of the process concerning corporate sustainability performance outcomes and the association of firm performance to business strategy, programs, as well as strategic objectives. If the reports content is clear with related issues, stakeholders may deliver advice, criticism as well as suggestions for further improvement. Organizations may employ this feedback to companies' managerial decision-making process to enhance sustainability performance. A good and comprehensive twin-track approach reflects a workable inter-connection among the inside-out as well as outside-in perspective that may assist in exchange of information among various internal actors and external stakeholders of a company which represents corporate sustainability improvements through an integrated inter-connected process (Baker & Schaltegger, 2015).

Conclusion

The proposed comprehensive framework may avail to new researchers to distinctly focus on constructing comprehensive approaches for corporate SPM, management, and reporting; it is not an issue whether the transparency may improve corporate performance through management decision support to be granted as a priority matter. The framework may assist company management realize better ways of incorporating four corporate sustainability assessment system concepts (sustainability MAC, and MCS, and MRS) to construct an integrated, comprehensive approach required for transparency in a company to stakeholders (internal and external), therefore connecting to essential actors who are responsible for assessing and managing the corporate sustainability performance. When a company wants to advance the level of corporate sustainability performance, effective management tools will be required by the internal company actors for adjustment with the company. Sometimes, a big number of firms declare high aspirations of sustainability and constructed broad sustainability reports, with particular accounting tools for company applications been assessed in single case study literatures. The role of specific actors and daily business processes in the company has been examined by accountants or by sustainability department; however, the interaction among various management levels, staffs, and departments so far did not receive much attention. Likewise, corporate management control systems have been assessed in regards to sustainability issues in a sharply focused manner, leaving the question of how the sustainability management control system has integrated with the range of management methods employed in a company. Even the reporting system of a company is the focusing point of a large number of academic literatures and has often been demonstrated in a sole manner without indicating connections of how the reported information was gathered, assembled, analyzed, and communicated to stakeholders.

In the traditional literatures of accounting and control and sustainability accounting system, various concepts have been outlined and utilized in several ways – usually as separate concepts or sometimes synonymous. Broad descriptions and differentiation discussed of how concepts outlined in various disciplines are thus necessary (Section 2.1). Depending on a twintrack approach, this paper proposed a comprehensive inter-connected framework of four

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concepts of sustainability information measurement system and management approaches. Many existing research primarily deals with other specific concepts in an isolated non-comprehensive manner while this paper manages the inter-connections of corporate sustainability assessment, reporting, accounting and management control in a comprehensive approach. Only a few literatures investigated the interaction of accounting, corporate management control system and reporting perspectives. As a first attempt, this paper provides a comprehensive framework to encourage more organized conceptual integration and interconnection between definite management processes, sustainability information measurement system, as well as management approaches. Forthcoming researches will be a challenge to conduct empirical investigation of how companies may collect, analyze, and utilize information practically and communicate internally the sustainability information, which tools companies will utilize to perform those tasks, how the operational processes among internal actors will be managed, and finally how various concepts like MCS, corporate sustainability accounting system, and communication and reporting systems work together.

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