

Unravelling Internal Organisational Factors Influencing Environmental Disclosure Practices of an Award-Winning Company

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Abstract

Purpose: To examine the environmental information disclosed in annual reports and to analyse the influence of internal organisational factors on the voluntary environmental disclosure (VED) practices of an award-winning company.

Design/methodology/approach: This research involved a case analysis of an award-winning company, with data drawn from semi-structured interviews and a review of the company's annual reports spanning over a period of 25 years.

Findings: The quality of disclosure increased over the 25-year period. Moreover, the reporting structure and process, as well as attitudes and views of key players concerning aspects of VED provide insight into the justification of the quality of VED.

Research limitations/implications: This study only examined one case study, hence, the findings cannot be generalised. Moreover, it only focused on annual reports, which is insufficient for fully explaining a company's VED practices. However, this study provides a starting point for future investigations regarding the introduction to accounting standards in environmental reporting to encourage better VED.

Practical implications: A better understanding of the quality of VED and the relationship between internal organisational factors and VED practices has an implication on designing policies by policy makers, which enhances firm transparency and accountability.

Originality/value: This takes a longitudinal approach to voluntary disclosure of environmental information and provides in-depth insights into internal organisational factors that influence VED practices, which is an issue that has had limited coverage in previous literature, by extending previous studies using both quantitative and qualitative approaches and focusing on an award-winning company.

Keywords: Case Study, Environmental Disclosure, Internal Organisational Factors, Issue Life Cycle Theory, Reporting Process

Introduction

In the era of unparalleled innovation and technological change, the so-called Fourth Industrial Revolution, the market has an interest in non-financial data with the growing concerns of global warming. This growing interest has resulted in the development of VED, which is believed to play a vital role as a tool in response to global warming and depleting resources (Lehman,

2017) as well as to induce firms to voluntarily strive for higher eco-efficiency (Bang et al., 2019). The steady growth of VED is accompanied by increasing criticism on the variation in the nature and quality of VED amongst companies. The issue of non-comparable disclosure among companies limits information users from having a full understanding of the overall VED practices, which could lead to erroneous decision-making (Liu & Liu, 2021). The different degrees of VED by companies is generally thought to result from a constellation of internal and external contextual factors (Adams, 2002; Bebbington et al., 2009; Mata et al., 2018).

Undoubtedly, an impressive volume of research has sought to understand the external factors that drive corporate decisions towards reporting environmental information. Adams (2002) stated that corporate characteristics (firm size, industry, profitability, etc.) and general contextual factors (the social, political, and economic context) have been identified as being significant to managers' decisions to voluntarily report information. While research has been primarily concerned with these two factors, these factors alone cannot fully explain VED practices. Adams (2002) and Howard-Grenville et al. (2008) contend that internal organisational factors do influence organisational actions from various aspects and are relevant when analysing voluntary disclosure. Relative to external factors that influence VED practice, internal organisational factors that influence VED practices have been understudied in the literature on voluntary corporate behaviour (Biswas & O'Grady, 2016; Fallan, 2015).

In order to address these significant issues, this study aims to examine the company's VED practices and explore internal organisational factors that influence VED. Limitations acknowledged in earlier researches that exclusively adopted the quantitative approach, such as the inability to examine the quality of disclosures seem to indicate that a qualitative approach is justifiable. The present study extended prior work by examining VED practices and internal organisational factors that shape the VED practices of an award-winning company in Malaysia by using quantitative and qualitative research approaches. Findings of this study contribute to a better understanding of how reporting structure and process as well as key corporate players' attitudes and perceptions can drive VED from which policy implications can be drawn to highlight ways to encourage better VED in Malaysia.

The paper proceeds with the next section presenting the pertinent literature, followed by the description of the sample, method employed as well as the results of the analysis. The final section presents the discussion and conclusions

Literature Review

Adams (2002) claims that the reporting structure and process as well as attitudes and views of key players regarding the aspects of VED play an important role in shaping disclosure practices. Nevertheless, research has tended to address these two areas separately. The internal factors that influence VED practices mentioned in the literature are the company's chairperson (Campbell, 2000), presence of a corporate social reporting and environmental committee (Kitsikopoulos et al., 2018; Rankin et al., 2011; Peters & Romi, 2012), implementation of internal organisational systems (Faisal & Achmad, 2014; Herschovis et al., 2009; Rankin et al., 2011) and use of GRI reporting guidelines (Belkhir et al., 2017; Rankin et al., 2011; Zahid et al., 2019).

VED by companies can be justified by investigating and understanding the manager's values and motives, which influence the perceptions, attitudes and decisions to disclose environmental information as well as the level and quality of VED. Husillos et al. (2011) suggested that managers' proactive attitudes play a significant role in triple bottom line (TBL) reporting. Papagiannakis and Lioukas (2012) and Thoradeniya et al. (2015) reported a positive association between a manager's environmental attitude and level of environmental responsiveness. Additionally, Thoradeniya et al. (2015) found that the intention to engage in sustainability

reporting is influenced not only by managers' attitudes, but their credence regarding stakeholder's pressure, and their capability to control sustainability reporting.

Previous studies have identified a manager's personal values as an important factor in a company's commitment to environmentally responsible behaviours. Papagiannakis and Lioukas (2012) found that a manager's personal values indirectly influence the level of environmental responsiveness. Jang et al. (2017) reported that the role of top management's values evolves around environmental commitment. Husillos et al. (2011) discovered that the core values of organisations and managers seem to play a significant role in TBL reporting and discharge their corporate accountability to strengthen the social contract with stakeholders. Luque-Vílchez et al. (2019) confirmed the significant role of pro-environmental managers' personal values when enhancing the quality of environmental disclosure. Fallan (2015) found that the adoption rate of environmental reporting and differences in the nature of the information disclosed are positively impacted by decision-makers' perceptions. In Malaysia, Jaffar and Buniamin (2004) reported that "perception about managers' awareness of environmental issues" and "managers' perceptions about the community's awareness of environmental issues" are insignificant when explaining the company's decision to disclose environmental information.

In contrast to the above-cited studies, Belkhir et al. (2017), Hsueh (2019), Rankin et al. (2011), and Zahid et al. (2019) focused solely on some key internal factors that influence a company's decision to proactively disclose environmental and carbon-related information as well as the extent of that reporting. Belkhir et al. (2017), Rankin et al. (2011) and Zahid et al. (2019) stated that the use of GRI reporting guidelines do influence the extent of reporting, while Hsueh (2019) found that the existence of senior management positions dedicated to sustainability, so-called "policy supporters", and the adoption of environmental, social and governance principles, are positively correlated with the intensity of participating in voluntary carbon reporting.

In recognising the significance of the reporting structure and process as well as attitudes and views of key players to aspects of VED, Adams (2002) provided an extensive discussion of both factors by analysing social and ethical reporting practices of seven large chemical and pharmaceutical multinational companies in the UK and Germany. The findings demonstrate that both factors are likely to have a direct influence on the extensiveness, quality, quantity, and completeness of the reporting. In particular, the extent and involvement of the communication or public relations department was found to essentially contribute to the reporting style as well as the issues reported. Nevertheless, the extent to which stakeholder's engagement influences reporting practices is not clear. The author suggests that stakeholder dialogue could lead to a more inclusive, complete and comprehensive reporting. Attitudes of key corporate players involved in the VED process were also found to have an influence on decision-making, which leads to social and ethical reporting. According to Adams (2002), a key corporate player's intention, such as to boost the corporate image and enhance its credibility in the eyes of stakeholders, perception about bad news and concern about public reaction to certain issues being disclosed, are the main predictors of social and ethical reporting behaviour.

Following Adams (2002), a series of studies attempted to examine the influence of reporting structure and process as well as attitudes and views of key corporate players on the aspects of VED. Similar to Adams (2002), Bebbington et al. (2009) found that the driver of sustainable development reporting is the combination of institutionalisation of environmental awareness and also the institutionalisation process itself. Using a questionnaire survey, Yusoff and Darus (2012) found that Malaysian companies are increasingly acknowledging the importance of enhancing their corporate image and discharging their corporate accountability, which leads to

the company engaging in VED practices. As for stakeholder engagement, companies assume that the government is the primary audience for VED, followed by shareholders and employees, whereas suppliers are ranked last. Given its focus on the government, the result implies that the main driver for engaging in VED is the compliance with existing regulations and guidelines. Feedback cards, advisory committees, consultations, external verifications and dialogues with stakeholders are the mechanisms used for stakeholder engagement. Finally, companies were asked about future plans for VED. The study found that majority of respondents intended to proceed with their current VED practices and preferred to use stand-alone and annual reports to disclose environmental information.

In a study on environmental reporting in the Finnish water sector, Vinnari and Laine (2013) found that the appointment of a new communication manager, collaboration with consultants, as well as a strong-willed management and the extent of their involvement, such as COE or CFO, improves public relations regarding the initiation of environmental reporting. Vinnari and Laine (2013) also investigated the motive for VED and the reasons behind the reduction in environmental information. Gaining politicians' and regulators' trust was found to be a factor that encourages managers to prepare VED. Respondents did not perceive environmental reporting as assisting the decision-making process, but rather as data repositories. Lack of connection to management control systems was found to be one of the reasons for the decreasing level of disclosure of environmental issues.

Dobbs and van Staden (2016) provided evidence that community concerns and shareholder rights motivate companies to disclose environmental information. In terms of reporting structure and process, the researchers concluded that highly formalised internal systems were not frequently used by the company. Furthermore, external assurance of CSR reporting was rarely embedded in the reporting process and level of stakeholder engagement was low. Indeed, the findings provide evidence of a lack of commitment towards a comprehensive VED and accepting responsibility towards a range of stakeholders.

Based on a series of interviews with sustainability managers attached to South African companies, Kitsikopoulos et al. (2018) reported that managers' understanding of the importance of environmental issues and well-aligned internal processes have a positive impact on VED practices. An in-depth analysis shows that companies report environmental problems in accordance with JSE requirements and aim to comply with regulatory norms. Most companies have a sustainability committee in place and opt for an internal verification system to maintain the report's integrity.

Method

This study used the case study method to gain insight into internal organisational factors that influence VED practices by an award-winning company in Malaysia. Adams (2002) highlighted that case study research is useful for assessing the internal factors that underpin social and environmental practices. This company was chosen because it is recognised for its leadership in environmental reporting practices as it had received numerous Environmental Reporting Awards in various categories, including The National Annual Corporate Report Award, the Best Malaysian Sustainability Reporting Award and the Prime Minister's Hibiscus Award. These achievements prove that the company is conscious of environmental issues and committed to providing and communicating environmental information. Hence, it is believed that this company's VED practices could provide valuable insight into a case-study investigation of VED practices in Malaysia.

The investigation of VED quality is primarily based on the analysis of firms' annual reports from 1995 to 2019. This period was chosen due to various developments in environmental regulations and awareness in Malaysia that occurred during this period. The year 1995 was

selected as the starting point as it was the year in which environmental issues were gaining public visibility (Buhr & Freedman, 2001) and has ushered in an era in which the environmental movement has drawn attention at a global level (Gamble et al., 1996). Meanwhile, the year 2019 was the year for which the most recent annual reports were available. The quality of VED is measured using the disclosure score. This study adopted and replicated the checklist for items developed and revised by Alrazi et al. (2009). The disclosure index contained 100 items (Table 1), which were used to analyse the company's annual reports and examine the quality of VED. The study used unweighted score to reduce any elements of subjectivity inherent in a weighted and/or polychotomous scoring system (Owusu-Ansah, 1998). All items are treated as equally important and 1 point will be awarded for each item with the maximum point of 100. The disclosure index for the company is then expressed as a percentage.

The semi-structured interviews were carried to obtain information on the internal organisational factors that influence VED of the company. The questions were designed primarily based on a prior study by Adams (2002). This present study also included some additional questions based on prior research (Wilmschurst & Frost, 2000; Solomon & Lewis, 2002, Al-Khater & Naser, 2003; Nik Ahmad & Sulaiman, 2004, Tan & Abdul Rahman, 2005). The interview questions were separated into two parts, with the first part related to reporting process aspects. Themes in this part are organisational constituencies involved in the decision-making process, stakeholder involvement, verification of environmental reports, and the extent to which the company refers to guidelines on environmental reporting. The second part concerned the attitudes and views of key corporate players regarding VED. The themes in this part are drivers of VED, and perceived costs of VED. The comprehensiveness of the structured interview questions was tested through a pilot test involving academicians before the actual interview was conducted.

Respondents in this study were General Managers and staff of the Corporate Affairs Department, Manager of Health, Safety, Security and Environment Department as well as the Senior Advisor, Media and Communication. These respondents were selected because they were expected to possess a broad perspective of company operations, such as environmental issues, responsibility for decisions on VED implementation and providing environmental information for the company's annual report. The interviews each lasted around one hour and were conducted in the interviewees' workplace. All interviews were tape-recorded and transcribed.

Findings on the Quality of VED

Table 1 provides descriptive findings of yearly total disclosure scores for VED. The results of the study reveal that the average of disclosure score is 21.5 percent, suggesting that the quality of VED is relatively low. The findings indicate that at the beginning of the period of analysis, the company made minimal VED in their annual reports and noticeably, the disclosure score began to increase from 1% in 1995 to 57% in 2019. A substantial increase in the disclosure score was observed between 1999 and 2000 (133.33%), and from 2001 to 2002 (72.73%). The high percentage of increase could be attributed to the introduction of The Malaysian Financial Reporting Standards (MFRS 101) - Presentation of Financial Statements, Malaysian Code on Corporate Governance (MCCG), National Annual Corporate Report Awards (NACRA) in 2000 and ACCA Malaysia Environmental Reporting Awards (MERA) in 2002. Nevertheless, no environmental information was found in the company's 1997 annual report and the total disclosure score had decreased from 2008 to 2010. The decrease in the disclosure score could be attributed to the Asian financial crisis in 1997 and the global financial crisis in 2008. This is consistent with the findings of Kuasirikun and Sherer (2004), who found that the amount of environmental information disclosed appears to decline as a country experiences an economic

recession. Kenny (2019) also provided evidence of difficulties in maintaining support for action on environmental issues during periods of serious economic difficulties.

In the early stage of the study period (1995-1999), environmental issues were the top management's main concern. The company started to reinforce its environmental value by highlighting environmental concerns in its mission statement. It also accepted some sort of environmental responsibility to justify its existence in the society and began to integrate environmental concerns into its environmental policy. There was a shift in organisational behaviour from mere lip service to real and tangible actions. The company established a specific department responsible for environmental management and began to adopt environmental management systems. The company also began to report on targets and achievements, environmental impacts, performance data and compliance/non-compliance data. It included comparative performance data over the years, revealed the number of complaints received from stakeholders as well as information associated with remedial or preventive actions. In addition, it also started to engage with stakeholders, and proactive stakeholder engagement and dialogues were conducted with various stakeholder groups, including regulatory bodies, community groups and non-governmental organisations (NGOs). At this stage, the company positioned itself as a leader in the area by winning numerous premier environmental awards.

This study found that the company disclosed little financial information about research and development (R&D), third party statements and financial data. According to Kothari et al. (2002), a company limits the disclosure of such information due to the unique and risky nature of R&D activities, which enhances information asymmetry. In line with this argument, the company merely provided one item out of five items in the R&D category. Similarly, for the third party statement category, the existence of this information merely appeared in the 2018 and 2019 annual reports. Absence of third-party statements questions the reliability of the environmental information (Alrazi et al., 2009). With regard to financial data, the company did not prepare a separate environmental financial statement and did not practice environmental full-cost accounting. According to Laine et al. (2017) and Senn and Giordano-Spring (2020), lower level of dissemination of financial data, such as environmental expenditure and environmental liability, may be due to difficulties experienced by the firm when estimating and elaborating on these figures. This might be the case in this company. It merely reported on environmental expenses related to a fine imposed by the Department of Environment (DOE) over housekeeping items found during an environmental audit.

Findings of this study support the issue lifecycle theory, in which the company responded to environmental issues in a predictable manner characterised by predictable stages. The company's reaction to environmental issues went through a three-phase trajectory, namely the policy, learning and commitment phases (Nasi et al., 1997). At the early stage, environmental issues emerged as matters of concern to the top management and the company formulated a general policy to deal with environmental issues (Phase 1: Policy), followed by the responsibility to implement the company's environmental policy (Phase 2: Learning), while the company's responsiveness was integrated into ongoing business decisions (Phase 3: Commitment). Overall, the evolution of the company's environmental disclosure inclined towards greater transparency and is moving towards creating environmental reporting benchmarks.

Table 1 Total Environmental Disclosure Score from 1995 to 2019

Year	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
No of items	3	8	11	5	9	3	16	5	7	8	9	8	2	6	100
1995	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1996	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1999	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
2000	0	1	2	1	1	1	1	0	0	0	0	0	0	0	7
2001	0	2	2	1	1	1	1	0	0	0	0	0	2	1	11
2002	2	2	3	1	1	1	2	0	0	1	0	3	2	1	19
2003	2	2	3	1	1	1	3	0	0	1	0	3	2	2	21
2004	2	2	3	1	1	1	3	0	0	1	0	3	2	2	21
2005	2	3	3	1	1	1	3	0	0	3	0	3	2	2	24
2006	2	3	2	1	1	2	3	0	0	3	0	4	2	2	25
2007	2	3	2	1	1	2	4	0	0	3	0	4	2	2	26
2008	2	3	2	1	1	2	4	0	0	2	0	4	0	2	23
2009	3	4	2	1	1	0	1	0	0	1	0	4	0	2	19
2010	2	4	2	1	1	1	2	0	0	1	0	4	0	2	20
2011	2	2	3	2	2	1	6	0	0	1	0	3	0	2	24
2012	2	3	3	1	3	1	4	0	0	1	0	3	1	3	25
2013	2	4	3	1	3	1	4	0	0	1	0	2	2	3	26
2014	1	4	3	1	3	1	4	0	0	3	0	2	2	3	27
2015	2	4	3	2	3	1	4	0	0	3	0	4	0	3	29
2016	2	3	7	2	4	1	6	0	0	5	0	2	1	3	36
2017	2	3	8	4	4	1	6	0	0	5	0	2	1	4	40
2018	2	4	8	4	4	2	6	1	1	6	1	5	1	4	49
2019	3	6	9	4	6	2	6	1	1	6	0	6	1	6	57
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	3	6	9	4	6	2	6	1	1	6	1	6	2	6	57
Mean	1.5	2.7	3	1.3	1.7	1	2.9	0.1	0.1	1.9	0.04	2.44	0.92	1.96	21.5
Std Dev	1.0	1.3	2.5	1.3	1.6	0.7	2.1	0.3	0.3	1.9	0.2	1.8	0.9	1.5	14.5

Note. A= Corporate Context; B= Corporate Commitment; C= Environmental Policy; D= Target and Achievement; E= Environmental Management System; F= Environmental Impacts; G= Performance Data; H= Research and Development; I= Third Party Statement; J= Compliance/Non-compliance; K= Financial Data; L= Stakeholder Engagement; M= Awards; N= Report Design.

Findings on the Reporting Process Aspect

Organisational Constituencies Involved in the Decision-Making Process

This study broadly categorised three areas of the decision-making process concerning VED, which are those making VED-related decisions in the company, number of people involved in the VED process, and the department responsible for the environmental report. Interviews revealed that more than one person was involved in the VED decision. Those involved were General Managers and staff of the Corporate Affairs Department, Manager of Health, Safety, Security and Environment Department as well as the Senior Advisor, Media and Communication. The interviews revealed that the Corporate Affairs Department and the Quality Health, Safety, Security & Environment Department are responsible for producing the environmental report. This finding is consistent with several other studies (Adams, 2002, Campbell, 2000, Kitsikopoulos et al., 2018, Rankin et al., 2011, and Hsueh, 2019), whereby different persons and departments have different roles in the production of the environmental report, including the issues presented or the layout, style, presentation as well as the items included. For example, the Chairman is concerned about the environment, as mentioned in the

company's mission statement. Conversely, the General Manager of Corporate Affairs is concerned with report design, such as the appropriateness of the graphics and the disclosure of environmental information in a separate section. The layout of a corporate report, therefore, plays a crucial role in the quality of information disclosed.

Stakeholder Involvement

Previous literature indicates that one-way dissemination of information to stakeholders is a relatively weak and ineffective form of engagement (Mahmoudian et al., 2020). This study investigated a stakeholder's involvement in VED through transformational engagement, which involves two-way communication. The structured questions were designed with a focus on examining approaches taken by the company to provide environmental-related information to stakeholders as well as the approaches taken by stakeholders to provide feedback to the company. In advancing the investigation, this study requested the respondents to identify stakeholders who are considered as key audience of environmental reports. According to Smith et al. (2005), the manner in which the role of stakeholders is defined by society will affect the extent and quality of corporate social disclosure in annual reports. Notably, the company considered media, business partners, customers, government agencies and regulators, NGOs, suppliers, local community, and employees as key audiences of environmental reports and suggested that stakeholders are interested in a company's environmental report. This finding implies that the company recognises all stakeholders as important entities and have influence on the company's' environmental reporting practices.

Having defined the key audience of an environmental report, the company then enquired about the media used in VED. This step aimed to gain an understanding of initiatives taken by the company to communicate environmental information to various stakeholder groups. This finding is consistent with that by Yusoff and Darus (2012), who found that various reporting media are used by a company to communicate environmental information to stakeholders inside and outside the company, including intranet, team meetings, email communications, company staff newspapers, general newspapers, brochures about specific issues, television and radio advertising, press conference, as well as letters to non-government groups and the government. The use of diverse reporting media implies that the company seriously considers the needs of different stakeholders. According to Campbell et al. (2003), the media used to communicate environmental information is dependent on the stakeholders that the company particularly wishes to communicate with. For example, if a company wishes to promote its environmental credentials directly to society rather than through pressure groups, the company might use media besides their annual reports. When a company assumes that targeted stakeholders are less likely to read the annual reports, then the internet is possibly the most powerful means of providing targeted information to specific shareholders since the company's website has the potential to reach a much wider and environmentally-concerned audience than annual reports (Campbell et al., 2003). Given the need to provide environmental information to stakeholders, the company engaged stakeholder participation through meetings, such as annual meetings or meetings on environmental issues. In line with Adams (2002), stakeholders also provide feedback to the company during public meetings, through use-tear reply cards in the environmental report and phone or e-mail. Furthermore, similar to findings by Yusoff and Darus (2012), the company also conducted stakeholder dialogues and face-to-face meetings with various stakeholder groups, including regulatory bodies, government agencies, community groups and NGOs. Participation in such meetings and dialogues enables the company to obtain feedback on certain environmental issues. For example,

We conduct regular meetings and dialogues with local non-governmental organizations (NGOs) interested in our activities and those who share common interests and concerns with the company. In this way, we are able to share our experience and at the same time obtain their views and feedback (2005 Annual Report: 46).

Regular engagements with the communities through an open forum are organised yearly to allow for two-way communications (2013 Annual Report: 21).

The company believes that there are various ways by which stakeholders can influence the company's VED practices, including exerting pressure on the company to be environmentally responsible and provide feedback to the company on VED-related matters. In addition, different stakeholders tend to influence a company's VED practice in different ways. For example, the government provides grants to support green initiatives, and the media is likely to report on sensitive issues faced by the company. Such influences, to a certain extent, may affect the quality of environmental reporting.

Verification of Environmental Reports

The company used two environmental report formats, namely a hard copy and the web report. Respondents highlighted that the company's environmental report has been verified, however, the company did not provide a summary version of the environmental report to its internal and external users. Two aspects of the verification of environmental reports were put forth to the respondents. One is regarding who should verify the report. In this respect the company takes into consideration environmental consultants not affiliated to a particular industrial association or government, stakeholders, including NGOs, and social audits, who should verify the reports. Similarly, Baalouch et al. (2019) found that verification of environmental reports by external auditors (including the above-mentioned verifiers) may have an effect on the reliability of the quantitative and qualitative information disclosed. Similar with Adams (2002), the respondent did not use large accounting firms to verify the reports since the interviewees felt that if the company uses their financial auditors, it would affect their perceived independence. Second, this study looked more closely at the respondents' opinions on the benefits of verified environmental reports. According to O'Dwyer and Owen (2005) and Radhouane et al. (2020), respondents believed that verification of environmental reports can provide numerous benefits, including demonstration of accuracy, reliability and credibility of the reports, which ensures true accountability.

The Extent to Which the Company Refers to Guidelines on Environmental Reporting

The last aspect of the internal structure and the environmental reporting process is the extent to which the company refers to guidelines on environmental reporting. Some studies (Belkhir et al. 2017, Rankin et al. 2011, and Zahid et al. 2019) have revealed that the use of GRI, an internationally accepted reporting guideline, does influence the extent of reporting. Instead of referring to GRI, the company referred to guidelines provided by the parent company when preparing the environmental report. In addition, the company also examined other companies' environmental reports as a benchmark and helped the company to prepare better environmental reports. By referring to this guideline as well as other company's environmental reports, the company is able to determine what should be included in VED and how information should be presented. In addition, it leads companies to be more transparent about the extent of their compliance with environmental laws and regulations (Association of Chartered Certified Accountants (ACCA), 2003).

Findings on attitudes and views of key corporate players on VED aspects***Drivers of VED***

Respondents were asked about the possible motivational factors behind environmental reporting and to identify the factors that inspire them to disclose environmental information. Similar to findings by Solomon and Lewis (2002) and Yusoff and Darus (2012), respondents mentioned the need for transparency and accountability, reinforcement of company values and desires to accept some sort of environmental responsibility to justify their existence in society and company ethics as the main motivating factor to engage in VED. For example, the company recognised that oil or product spills damage the environment and endanger their employees and neighbouring communities. To exercise their accountability and transparency, the company began to report information on compliance and non-compliance since 2002.

Similar to findings by Jaffar and Buniamin (2004) and Yusoff and Darus, (2012), this study found that respondents were motivated to engage in VED in order to improve the company's corporate image. Besides, respondents pointed out that the motivation for CED is to inform or anticipate future legislation. As with Nik Ahmad and Sulaiman (2004), the findings also revealed that the pressure of stakeholders is not a major contributory factor that motivates the company to engage in VED.

Perceived Benefits of Environmental Reporting

As with DEFRA (2001) and Tan and Abdul Rahman (2005), the respondents believed that VED can be of great help in efforts to gain competitive advantage and improve the company's image. Additionally, respondents generally agreed that the benefits of VED not only help companies in discovering opportunities to overcome internal problems and improve overall performance but also increase employee satisfaction and boost employee morale. Moreover, respondents believed that avoiding criticism, encouraging investment, improving efficiency and identifying areas for potential cost reduction are benefits of VED.

Perceived Costs of Environmental Reporting

Respondents agreed that the main cost of environmental reporting is the cost related to time and human resources (staff). The cost of environmental reporting is also associated with the publication and distribution of environmental reports. Adams (2002) found that British companies considered the production of the Health, Safety and Environment (HSE) report, which cost approximately £175,000 (RM973,194), as one of the main costs of environmental reporting. Furthermore, the cost of environmental reports is associated with the appointment of an external verifier as well as employing specialist staff or internal auditors. DEFRA (2001) also agreed that appointment of verifiers is among the main costs incurred when providing VED. In Malaysia, Saleh et al. (2011) affirmed that voluntary disclosure prepared by firms involved high costs.

Perceived Bad News

An analysis of previous studies shows that companies are resistant to disclose bad or negative news about the company because companies are concerned about competitors' reaction to such information (Ashfaq & Rui, 2019; Nik Ahmad & Sulaiman, 2004). In fact, the percentage of bad news is quite low in the case of developed countries (Hackston & Milne, 1996). Findings of this current study support Adams (2002), which found that respondents might regard the reported information as bad news. Respondents opined that it is a company's moral obligation to disclose bad news and fulfil the company's accountability to stakeholders. There is a consensus among respondents that disclosing bad news will enhance corporate credibility and image. It was found that the company's annual report that conveys bad news is the exercise of

their moral obligation. After the bad news is delivered, the company will take mitigation efforts to alleviate the effects of the bad news, which then enhances corporate credibility and image as an environmentally responsible firm. For example,

In July 2003, the Company reported an accident regarding a minor overflow at the refinery's interceptors during heavy rain. Remedial action was immediately and successfully undertaken by relevant Company personnel to contain the weathered hydrocarbon. Relevant local authorities (the Department of Environment, the Local District Council and Community Leaders) were alerted on the incident and were kept informed throughout the recovery exercise (2003 Annual Report: 36).

Three API Tier 2 LOPC incidents were recorded in 2019. Two of these were hydrocarbon leaks and one was a fire, which was initiated by sparks from a pump motor bearing failure. All were mitigated in a timely manner by our operations and emergency response teams. Investigations on these incidents have been completed and learnings have been adopted, in particular on the areas of corrosion management, inspection plan and maintenance. It is to be noted that there were no injuries nor significant asset damage as a result of these incidences (2019 Annual Report: 32).

View on Future Environmental Reporting

The respondents were asked about possible future involvement in the reporting of environmental information. Echoing Adams's (2002) study, the findings reveal that the respondents needed to consider the reported issue and continue to verify environmental reports. Adams (2002) found that British interviewees increased emphasis on verification of reports, meanwhile, German interviewees were concerned with the reported issue. In addition, the respondents had a different view on who were the auditors that should verify the environmental report. This is because different assurers of information influence the quality of assurance on environmental reports (Casey & Grenier, 2015) and believability of management's environmental report (Sheldon & Jenkins, 2020).

Discussion and Conclusion

The purpose of this study is to examine the quality of the VED and explore and analyse the influence of internal organisational factors on VED. In particular, this study aimed to provide insight into how the reporting process as well as the attitudes and views of key corporate players influenced VED practices of an award-winning company. The findings indicate that despite of the disclosure score began to increase from 1995 to 2019, nevertheless the quality of VED is relatively low and has not been satisfactory to mean internationally standard practice. This study concludes that, to a certain extent, reporting structure and process have an effect on the extent and nature of a company's VED. In particular, the extent of stakeholder involvement has the greatest influence in shaping a company's environmental report. Moreover, the involvement of different persons and departments with a diverse focus on the environmental report influences the reported issues, layout, style, presentation as well as items included in the report. Furthermore, the extent to which a company refers to environmental reporting guidelines and other company's environmental report as a benchmark help the company to prepare better environmental reports and increase comparability. The company's decision to verify environmental reports helps the company to ensure the accuracy and reliability of the disclosed information. Regarding the influence of attitudes and views of key corporate players on VED practices, this study documented the motivation for providing VED, perceived

benefits, and costs associated with VED practices, as well as positive attitudes towards bad news that provides insights into the justification of the quality of VED. In particular, their views and attitudes do influence the quality of the target and achievement, performance data, environmental impact and compliance/non-compliance information.

This study contributes to the corpus of knowledge on VED in two ways. First, the study provides a first-hand view of the VED of an award-winning company in Malaysia. In this sense, the results provide valuable insight into a case-study of VED practices in Malaysia. Second, unlike existing literature on VED, this study focuses on a less emphasised set of internal organisational factors that influence VED practices of an award-winning company. In this regard, this study contributes to an understanding of how reporting structure and process as well as key corporate players' attitudes and perceptions drive VED. This contribution particularly responds to a call by Adams (2002) and Mata et al. (2018). This study also contributes to policy makers, such as the Malaysian Accounting Standards Board (MASB). A case-study investigation of VED practices carried out an award-winning company is a starting point for future investigations regarding the introduction to accounting standards in environmental reporting to encourage better VED, which then help close the sustainable development goals (SDGs) data gap parallel with efforts to achieve the SDGs by 2030 (Bertazzi & Finlay, 2020).

Despite this study's novelty, it has some limitations. First, it serves as an exploratory investigation of a single company in Malaysia. Hence, the results may reduce the generalisability of the findings, but provide interesting insights in the Malaysian context. This study can be developed further by an in-depth analysis of other internal organisational factors that influence the extent and nature of VED using mixed methods, such as interviewing more informants who are directly involved with the report producing process and expanding the volume of study samples to enable the generalisation of findings to Malaysian companies. Second, this study looked only at the company's annual corporate reports. There are other sources that can be used to measure VED practices, such as sustainability reports and disclosures found on corporate websites. Third, future research should focus on inter-organisational environmental practices, such as green supply chain management and its influence on a company's environmental reporting and practice.

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References

- Association of Chartered Certified Accountants (ACCA) (2003). Laws and regulations. <https://www.accaglobal.com/pk/en/student/exam-support-resources/fundamentals-exams-study-resources/f8/technical-articles/laws-and-regulations.html>
- Adams, C. (2002). Internal organisational factors influencing corporate social and ethical reporting: Beyond current theorizing. *Accounting, Auditing & Accountability Journal*, 15(2), 223-250. <https://doi.org/10.1108/09513570210418905>
- Al-Khater, K., & Naser, K. (2003). Users' perceptions of corporate social responsibility and accountability: evidence from an emerging economy. *Managerial Auditing Journal*, 18(6/7), 538-548. <https://doi.org/10.1108/02686900310482678>
- Alrazi, B., Sulaiman, M., & Nik Ahmad, N. (2009). A longitudinal examination of environmental reporting practices in Malaysia. *Gadjah Mada International Journal of Business*, 11(1), 37-72.

- Ashfaq, K., & Rui, Z. (2019). Revisiting the relationship between corporate governance and corporate social and environmental disclosure practices in Pakistan. *Social Responsibility Journal*, 15(1), 90-19. <https://doi.org/10.1108/srj-01-2017-0001>.
- Baalouch, F., Ayadi, S. D., & Hussainey, K. (2019). A study of the determinants of environmental disclosure quality: evidence from French listed companies. *Journal of Management and Governance*, 23(4), 939-971. <https://doi.org/10.1007/s10997-019-09474-0>
- Bang, Y. Y., Lee, D. S., & Lim, S. R. (2019). Analysis of corporate CO2 and energy cost efficiency: The role of performance indicators and effective environmental reporting. *Energy Policy*, 133, 110897. <https://doi.org/10.1016/j.enpol.2019.110897>
- Bebbington, J., Higgins, C., & Frame, B. (2009). Initiating sustainable development reporting: Evidence from New Zealand. *Accounting, Auditing & Accountability Journal*, 22(4), 588-625. <https://doi.org/10.1108/09513570910955452>
- Belkhir, L., Bernard, S., & Abdelgadir, S. (2017). Does GRI reporting impact environmental sustainability? A cross-industry analysis of CO₂ emissions performance between GRI-reporting and non-reporting companies. *Management of Environmental Quality: An International Journal*, 28(2), 138–155. <https://doi.org/10.1108/meq-10-2015-0191>
- Bertazzi, P. & Finlay, H. (2020). Corporate environmental reporting could help close the SDG data gap. <https://sdg.iisd.org/commentary/guest-articles/corporate-environmental-reporting-could-help-close-the-sdg-data-gap/>
- Biswas, S., & O’Grady, W. (2016). Using external environmental reporting to embed sustainability into organisational practices. *Accounting Research Journal*, 29(2), 218-235. <https://doi.org/10.1108/ARJ-04-2015-0063>
- Buhr, N., & Freedman, M. (2001). Culture, Institutional Factors and Differences in Environmental Disclosure Between Canada and the United States. *Critical Perspectives on Accounting*, 12(3), 293–322. <https://doi.org/10.1006/cpac.2000.0435>
- Campbell, D. J. (2000, March). Legitimacy theory or managerial reality construction? Corporate social disclosure in Marks and Spencer Plc corporate reports, 1969–1997. *Accounting forum*, 24(1), 80-100. <https://doi.org/10.1111/1467-6303.00030>
- Campbell, D., Craven, B., & Shrives, P. (2003). Voluntary social reporting in three FTSE sectors: a comment on perception and legitimacy. *Accounting, Auditing & Accountability Journal*, 16(4), 558-581. <https://doi.org/10.1108/09513570310492308>
- Casey, R.J. and Grenier, J.H. (2015). Understanding and contributing to the enigma of corporate social responsibility (CSR) assurance in the United States. *Auditing: A Journal of Practice and Theory*, 34(1), 97-130. <https://doi.org/10.2139/ssrn.2172519>
- Department for Environment, Food and Rural Affairs (DEFRA) (2001). Environmental Reporting. General Guidelines. London. DEFAR Publication. www.defra.gov.uk
- Dobbs, S., & van Staden, C. (2016). Motivations for corporate social and environmental reporting: New Zealand evidence. *Sustainability Accounting, Management and Policy Journal*, 7(3), 449–472. <https://doi.org/10.1108/sampj-08-2015-0070>
- Faisal, F. & Achmad, T. (2014). Internal contextual factors influencing the extent of environmental disclosure. *International Journal Managerial and Financial Accounting*, 6(4), 357-374. <https://doi.org/10.1504/IJMFA.2014.066404>
- Fallan, E. (2015). Explaining the variation in adoption rates of the information content of environmental disclosure. *Journal of Accounting & Organizational Change*, 11(2), 247–268. <https://doi.org/10.1108/jaoc-11-2012-0106>
- Gamble, G. O., Hsu, K., Jackson, C., & Tollerson, C. D. (1996). Environmental disclosures in annual reports: An international perspective. *The International Journal of Accounting*, 31(3), 293–331. doi:10.1016/s0020-7063(96)90022-9

- Hackston, D. & Milne, M.J. (1996). Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77-108. <https://doi.org/10.1108/09513579610109987>
- Herschovis, M.S., Herremans, I.M., & Warsame, H. (2009). The role of internal processes in the sustainability performance and disclosure relationship. The Canadian Academic Accounting Association (CAAA) Annual Conference.
- Howard-Grenville, J., Nash, J., & Coglianese, C. (2008). Constructing the license to operate: Internal factors and their influence on corporate environmental decisions. *Law & Policy*, 30(1), 73-107. doi:10.1111/j.1467-9930.2008.00270.x
- Hsueh, L. (2019). Opening up the firm: What explains participation and effort in voluntary carbon disclosure by global businesses? An analysis of internal firm factors and dynamics. *Business Strategy and the Environment*, 28, 1302-1322. <https://doi.org/10.1002/bse.2317>
- Husillos, J., González, C. L., & Gil, M. J. Á. (2011). The emergence of triple bottom line reporting in Spain. *Spanish Journal of Finance and Accounting / Revista Española de Financiación y Contabilidad*, 40(150), 195–219. <https://doi.org/10.1080/02102412.2011.10779701>
- Jaffar, R. & Buniamin, S. (2004). Environmental reporting in Malaysia: Perspective of the management. *Malaysian Accounting Review Journal*, 3(1), 43-59. <https://doi.org/10.24191/mar.v3i1.519>
- Jang, Y. J., Zheng, T., & Bosselman, R. (2017). Top managers' environmental values, leadership, and stakeholder engagement in promoting environmental sustainability in the restaurant industry. *International Journal of Hospitality Management*, 63, 101-111. <http://dx.doi.org/10.1016/j.ijhm.2017.03.005>
- Kenny, J. (2019). Economic conditions and support for the prioritisation of environmental protection during the Great Recession. *Environmental Politics*, 1–22. <https://doi.org/10.1080/09644016.2019.1680074>
- Kitsikopoulos, C., Schwaibold, U., & Taylor, D. (2018). Limited progress in sustainable development: Factors influencing the environmental management and reporting of South African JSE-listed companies. *Business Strategy and the Environment*, 27(8), 1295-1301. <https://doi.org/10.1002/bse.2176>
- Kothari, S. P., Laguerre, T. E., & Leone, A. J. (2002). Capitalization versus expensing: Evidence on the uncertainty of future earnings from capital expenditures versus R&D outlays. *Review of Accounting Studies*, 7(4), 355–382. <https://doi.org/10.1023/A:1020764227390>
- Kuasirikun, N. & Sherer, M. (2004). Corporate social accounting disclosure in Thailand. *Accounting, Auditing & Accountability Journal*, 17(4), 629-660. <https://doi.org/10.1108/09513570410554588>
- Laine, M., Järvinen, J. T., Hyvönen, T., & Kantola, H. (2017). Ambiguity of financial environmental information. *Accounting, Auditing & Accountability Journal*, 30(3), 593-619. <https://doi.org/10.1108/AAAJ-02-2015-1961>
- Lehman, G., (2017). The language of environmental and social accounting research: the expression of beauty and truth. *Critical Perspectives on Accounting*, 44, 30–41. <https://doi.org/10.1016/j.cpa.2016.11.005>
- Liu, Z., & Liu, M. (2021). Quality evaluation of enterprise environmental accounting information disclosure based on projection pursuit model. *Journal of Cleaner Production*, 279, 1-10. <https://doi.org/10.1016/j.jclepro.2020.123679>
- Luque-Vílchez, M., Mesa-Pérez, E., Husillos, H. & Larrinaga, C. (2019). The influence of pro-environmental managers' personal values on environmental disclosure. The mediating

- role of the environmental organizational structure. *Sustainability Accounting, Management and Policy Journal*, 1(1), 41-61. <https://doi.org/10.1108/SAMPJ-01-2018-0016>
- Mahmoudian, F., Lu, J., Yu, D., Nazari, J. A., & Herremans, I. M. (2020). Inter- and intra-organizational stakeholder arrangements in carbon management accounting. *The British Accounting Review*, 100933. <https://doi.org/10.1016/j.bar.2020.100933>
- Mata, C., Fialho, A., & Eugénio, T. (2018). A decade of environmental accounting reporting: What we know? *Journal of Cleaner Production*, 198, 1198-1209. <https://doi.org/10.1016/j.jclepro.2018.07.087>
- Nasi, J., Nasi, S., Philips, N & Zyglidopoulos, S. (1997). The evolution of corporate social responsiveness -an exploratory study of Finnish and Canadian forestry companies. *Business and Society*, 36(3), 296-321. <https://doi.org/10.1177/000765039703600305>
- Nik Ahmad, N.N. & Sulaiman, M. (2004). Environmental disclosures in Malaysian annual reports: a legitimacy theory perspective. *International Journal of Commerce and Management*, 14(1), 44-59. <https://doi.org/10.1108/10569210480000173>
- O'Dwyer, B., & Owen, D. L. (2005). Assurance statement practice in environmental, social and sustainability reporting: a critical evaluation. *The British Accounting Review*, 37(2), 205-229. <https://doi.org/10.1016/j.bar.2005.01.005>
- Owusu-Ansah, S. (1998). The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe. *The International Journal of Accounting*, 33(5), 605-631. [https://doi.org/10.1016/S0020-7063\(98\)90015-2](https://doi.org/10.1016/S0020-7063(98)90015-2)
- Papagiannakis, G., & Lioukas, S. (2012). Values, attitudes and perceptions of managers as predictors of corporate environmental responsiveness. *Journal of Environmental Management*, 100, 41-51. <https://doi.org/10.1016/j.jenvman.2012.01.023>
- Peters, G. F., & Romi, A. M. (2012). The effect of corporate governance on voluntary risk disclosures: Evidence from greenhouse gas emission reporting. [http://www. Business. Utah. Edu/Sites/Default/Files/Documents/School-of-Accounting/Ghg_Disclosure_and_Corp_Gov_20120202. Pdf.](http://www.Business.Utah.Edu/Sites/Default/Files/Documents/School-of-Accounting/Ghg_Disclosure_and_Corp_Gov_20120202.Pdf)
- Radhouane, I., Nekhili, M., Nagati, H. & Paché, G. (2020). Is voluntary external assurance relevant for the valuation of environmental reporting by firms in environmentally sensitive industries? *Sustainability Accounting, Management and Policy Journal*, 11(1), 65-98. <https://doi.org/10.1108/SAMPJ-06-2018-0158>
- Rankin, M., Windsor, C., & Wahyuni, D. (2011). An investigation of voluntary corporate greenhouse gas emissions reporting in a market governance system: Australian evidence. *Accounting, Auditing & Accountability Journal*, 24(8), 1037-1070. <https://doi.org/10.1108/10290011111169849>
- Saleh, M., Zulkifli, N. & Muhamad, R. (2011). Looking for evidence of the relationship between corporate social responsibility and corporate financial performance in an emerging market. *Asia-Pacific Journal of Business Administration*, 3(2), 165-190. <https://doi.org/10.1108/17574321111169849>
- Senn, J. & Giordano-Spring, S. (2020). The limits of environmental accounting disclosure: enforcement of regulations, standards and interpretative strategies. *Accounting, Auditing & Accountability Journal*, 33(6), 1367-1393. <https://doi.org/10.1108/AAAJ-04-2018-3461>
- Sheldon, M. D., & Jenkins, J. G. (2020). The influence of firm performance and (level of) assurance on the believability of management's environmental report. *Accounting, Auditing & Accountability Journal*, 33(3), 501-528. <https://doi.org/10.1108/AAAJ-11-2018-3726>

- Smith, M., Yahya, K., & Amiruddin, A. M. (2007). Environmental disclosure and performance reporting in Malaysia. *Asian Review of Accounting*.
<https://doi.org/10.1108/13217340710823387>
- Solomon, A., & Lewis, L. (2002). Incentives and disincentives for corporate environmental disclosure. *Business strategy and the environment*, 11(3), 154-169.
<https://doi.org/10.1002/bse.328>
- Tan, A. L. & Abdul Rahman, Z. (2005). Corporate social reporting practices of Islamic business organization and perception of Muslim accountant: evidence from Malaysia. Unpublished Master Thesis, University of Malaya, Kuala Lumpur.
- Thoradeniya, P., Lee, J., Tan, R. & Ferreira, A. (2015). Sustainability reporting and the theory of planned behaviour. *Accounting, Auditing & Accountability Journal*, 28(7), 1099-1137.
<https://doi.org/10.1108/AAAJ-08-2013-1449>
- Van der Laan Smith, J., Adhikari, A., & Tondkar, R. H. (2005). Exploring differences in social disclosures internationally: A stakeholder perspective. *Journal of accounting and public policy*, 24(2), 123-151. <https://doi.org/10.1016/j.jaccpubpol.2004.12.007>
- Vinnari, E. & Laine, M. (2013). Just a passing fad? The diffusion and decline of environmental reporting in the Finnish Water Sector. *Social and Environmental Accountability Journal*, 36(1), 95-97. <https://doi.org/10.1108/AAAJ-04-2012-01002>
- Wilmshurst, T. D., & Frost, G. R. (2000). Corporate environmental reporting. *Accounting, Auditing & Accountability Journal*, 13(1), 10-26.
<https://doi.org/10.1108/09513570010316126>
- Yusoff, H. & Darus, F. (2012). Environmental reporting practices in Malaysia: is it a mechanism for corporate accountability and stakeholder engagement. *Malaysian Accounting Review*, 11(2), 1-23. <https://doi.org/10.24191/mar.v11i2.209>
- Zahid, M., Rahman, H. U., Muneer, S., Butt, B. Z., Isah-Chikaji, A., & Memon, M. A. (2019). Nexus between government initiatives, integrated strategies, internal factors and corporate sustainability practices in Malaysia. *Journal of Cleaner Production*, 241, 1-8.
<https://doi.org/10.1016/j.jclepro.2019.118329>