# **User Preference for Information Contained in the Environmental Reporting in Sri Lanka**

D.M.M.B. Dissanayake<sup>1\*</sup>, E.M.A.S.B. Ekanayake<sup>2</sup>

<sup>1</sup>Uzabase Inc., Access Towers II, 278/4, Union Place, Colombo 02, Sri Lanka.

<sup>2</sup>Department of Business Finance, Faculty of Management, University of Peradeniya,

Sri Lanka.

\*Corresponding author: maleesha.bashini@gmail.com

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#### **ABSTRACT**

As a response to the mounting public pressure for companies to be accountable for their environmental performance, they have increased the volume and the scope of their environmental reporting in the recent past. However, two interconnected problems have still been visible. First, there is no commonly accepted reporting framework for environmental reporting in Sri Lanka. Thus, companies tend to report on their own. Second, most of environmental reports appear to prepare without giving due attention on the users' needs. This study aims to investigate users' preferences which, if included in environmental reports, enrich the perceived decision usefulness. More specifically, it examines the user preferences on environment reporting of the companies listed in the Colombo Stock Exchange (CSE) in Sri Lanka. For this purpose, the study borrowed the conceptual framework for financial reporting developed by the International Accounting Standards Board that discusses two fundamental (i.e., relevance and faithful representation) and four enhancing (i.e., comparability, verifiability, timeliness, understandability) qualitative characteristics fulfilling the information needs of the users.

The study followed survey method and an online questionnaire has been created allowing the investors in the CSE to respond. 48 usable questionnaires were received. The descriptive and inferential statistics were used to analyze the responses of the users.

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The results show that the users who read environmental reports prefer quick and convenient reading techniques. Further, they do not read reports that are perceived to be irrelevant or faithfully not represented. Furthermore, the users need such reports to be shown in a balanced manner containing both positive and negative information, and to be provided with future oriented information identifying significant environmental issues and demonstrating top management's commitment for those issues.

It can be concluded that users prefer information that possesses two fundamental qualitative characteristics to be presented in a convenient, readily accessible and balanced manner. Companies shall recognize such users' preferences in future environmental reporting while policy makers and regulatory bodies shall ensure the decision usefulness of environmental reporting by put in place appropriate disclosure standards and regulations. The study, however, conducted with a smaller sample, limiting the generalizability of the findings. Future research may be conducted using a large sample and with more user groups.

**Keywords:** User preference, Environmental reporting, Qualitative characteristics, Financial reporting framework, Sri Lanka

## Introduction

As a response to the mounting public pressure for companies to be accountable for their environmental performance, they have increased the volume and scope of their environmental reporting (Jira & Toffel, 2013; Marquis & Toffel, 2014). Nevertheless, the number of environmental reports produced by companies appears to have increased without giving due regard to the users' needs (Laud & Schepers, 2009). De Villiers & Van Staden (2008) stated that given the lack of meaningful stakeholder engagement by companies, most appear to have undertaken on environmental reporting without enquiring the users' requirements. Hence, the stakeholders are not influenced by the content in the environmental reports to match their needs, and thus this approach is likely to damage the perceived relevance of the reports (Marquis & Toffel, 2014).

The purpose of Corporate Environment Reporting (CER), like any other form of reporting, is to provide information useful to a wide range of users for making decisions (GRI, 2013). However, it is doubtful on the ability of current environmental reporting practices to meet users' decision making needs. Questions can be raised whether the environmental information provided by companies meets users' needs or whether the companies even aware of the needs of users (Hwang, Khoo & Wong, 2013; Said, Sulaiman, Ahmad & Senik, 2013).

First, most companies' environmental performance measurement systems are incomplete and fallible, given their reliance on manual or simple spreadsheet software that cannot guarantee the accuracy and completeness of the reports produced (Ernst & Young, 2013). Moreover, there are visible disconnections between the environmental reporting practice and the actual environmental performance given that the companies with a poor environmental performances appear to report more positive and good performance records for legitimations purposes (Leavoy, 2010).

Second, most companies present their environmental reports in different formats and types, using a range of media including paper and electronic making it more difficult for readers to compare the reports. With the intention to cater for diverse stakeholder groups, many companies have expanded their reports by simply 'dumping' verbose, un-prioritized and meaningless information into them, an approach that has damaged the clarity of the reports (Morris & Chapman, 2010).

Third, various environmental reporting guidelines and frameworks have been introduced that do not go together with each other (KPMG, CFCGIA, GRI & UNEP, 2013) making it difficult to compare among companies. Additionally, despite the development of assurance standards and growing need of independent third party assurance of environmental reports, the assurance statements in environmental reports differentiate significantly with regard to the scope of operations, titles, objectives, description of the procedures employed and the conclusion (Furmann, Ott, Looks & Gunther, 2013).

Finally, even with the advancements in information technology that can enable a company to accommodate their environmental reports to suit the unique needs of different stakeholders, most companies have failed to employ their online capabilities to serve this purpose (Radley, Yeldar & GRI, 2011). For instance, KPMG (2011) found that although technological advancement have made more frequent reporting at a low cost possible, most companies have not used their online capabilities to produce more timely reports. Further, internet as a medium of environmental reporting and with the growth of CER, no efforts have been made to standardize online reporting practices (Laud & Schepers, 2009).

The aim of this study, therefore, is to understand the information preference of users in environmental reporting within the context of a developing country. More specifically, this study focuses on analyzing four research questions as follows:

RQ1: Do users read environmental reports?

RQ2: If not, why they do not read environmental reports?

RQ3: What are the techniques they use to read environmental reports?

RQ4: What are the qualitative characteristics they prefer in the environmental reports?

Findings of the study are expected to be useful for all the stakeholders, particularly the listed companies in Sri Lanka in reporting their environmental concerns in order to enhance the decision usefulness of the users. Moreover, the findings are expected to contribute to the existing literature on environmental reporting particularly in a developing country context. Although environmental reporting has attracted much attention in the recent years in the developed world there is a dearth of literature available in the developing countries including Sri Lanka.

The rest of the paper is structured as follows. The next section provides the theoretical basis for the study, identifies research gaps and develops expectations. The section that follows discusses the research method, population and sample, and the analytical methods adopted in the study. The analysis and the discussion are presented in the penultimate section. The final section provides the conclusions.

## **Theoretical Underpinnings**

Although a large number of the research has been conducted to examine the patterns of environmental reporting, only a few studies have carried out to identify the users' information needs (De Villiers & Van Staden, 2010). European Commission (2011) employs a questionnaire to determine users' need, where they found that financial stakeholders do not read or even need environmental reports. However, there are several studies which identified that financial stakeholders use environmental information in making investment decisions, confirming that they actually need such information (Chan & Milne, 1999; Rikhardsson & Holm, 2005). For instance, De Villiers and Van Staden (2010b) investigated the preferences of individual shareholders and found that 97 per cent of the respondents required companies to provide a description of their major environmental risks and impacts; 94 per cent required the disclosure of a company's environmental policy; 81 per cent required a disclosure of actual performance against environmental targets; 80 per cent required disclosure of environmental costs by category; 78 per cent required a disclosure of measurable targets based on environmental policy; and 75 per cent required an independent audit of environmental disclosures.

Nevertheless, De Villiers and Van Staden's (2010b) study focused only on individual shareholders thus ignoring the needs of the voiceless non-financial stakeholders. Moreover, this study did not examine whether the shareholders actually read environmental reports, how they read the reports, and those who did not read them, the reasons for not doing so. From the previous studies, it is evident that the Sri Lankan firms inadequately know about users' environmental information needs. In particular, there is a gap in understanding of whether users read environmental reports; how they read the reports; reasons for not reading reports; their preferences as to what an environmental report should contain; how the information should be reported; and where.

The main objective of accounting as well as environmental reporting with no exception is to provide information that is useful to users for making decisions

(FASB, 2010; IASB, 2010; GRI, 2013). Providing environmental information without knowing about the users' needs may question the usefulness of the information as users' needs could not be satisfied by doing so. Also, it does not worth the cost that is incurred in producing environmental information if the reports do not meet the users' information needs.

This study follows decision usefulness theory. Even though this theory was initially introduced for financial information the modern day external reporting has broadened its scope to other aspects of external reporting such as corporate governance reports, environmental reporting, CSR reporting, risk management reports and other non-financial reporting. This suggests that all these aspects of reporting should include decision useful characteristics. Hence, decision usefulness theory is adopted in this study to evaluate the decision usefulness of CER. The notion of decision usefulness theory demonstrates that the primary purpose of accounting is to provide information to allow informed judgments and decisions by users of the information (AAA, 1966). Other theories that are typically used in CER, such as legitimacy, stakeholder and accountability theories, do not take users' perspective into account (De Villiers and Van Staden, 2010b), and thus are inappropriate to examine the research questions set in this study. Those theories can only be used to explain, for example, why companies undertake environmental reporting rather than how environmental information could be decision useful.

According to the financial reporting framework, which is compatible with the notion of the decision-usefulness theory, accounting information must possess the two fundamental qualitative characteristics, namely relevance and faithful representation, in order to be useful them in decision making (FASB, 2010; FASB, 2008; IASB, 2010; IASB, 2008). This view therefore suggests that those who do not perceive accounting information to be either relevant or faithfully represented they will not read that information. The financial reporting framework also suggests that understandability, comparability, timeliness and verifiability are the characteristics that enhance the decision usefulness of accounting information (FASB, 2010; FASB, 2008; IASB, 2010; IASB, 2008). The

enhancing characteristics, on the other hand, either individually or collectively, cannot make disclosed information useful if the information is irrelevant or not faithfully represented. Thus, it is expected that users refer information which contains more fundamental characteristics than enhancing qualitative characteristics. Moreover, the decision-usefulness theory claims that users' perceptions of decision usefulness of accounting information are constrained by the cost, according to which the information can be useful and yet costly to access (AAA, 1966). The cost in accessing the accounting information does not necessarily mean the monetary expenses, but in the form of time required and the difficulties faced when accessing the information (FASB, 2008). This suggests that users are expected to prefer accessing accounting information in a fast and convenient manner.

Based on the review of literature and the notions of the decision usefulness theory, following expectations have been developed for interpreting the results of this study.

Expectation 1 – Users are expected to prefer accessing CER information in a fast and convenient way.

Expectation 2 – Users who do not perceive CER reports to be either relevant or faithfully represented will not read the reports.

Expectation 3 — Users are expected to prefer CER information that has more fundamental qualitative characteristics than enhancing qualitative characteristics.

#### Method

This study employed survey method to examine the users' view on environmental reporting. An online questionnaire has been designed to collect data, and was analyzed using both descriptive and inferential statistics. A similar approach has been used in the extant literature, for example, Solomon & Solomon (2006), KPMG & Sustainability (2008), European Commission (2011) and Miller (2012).

## **Population and sample**

The population consists of users of environmental reports produced by companies listed on the Colombo Stock Exchange (CSE). The questionnaires were distributed among a sample of 100 investors who have invested in top 30 listed companies in the CSE based on the market capitalization.

#### Data collection

The questionnaire consists of 9 closed-ended questions to maximize the response rate. The questions in this questionnaire were taken from a prior research carried out in South Africa by Kamala et al. (2016) with minor changes to some questions and to the format of the questionnaire in order to match with the Sri Lankan context. There are three sections in the questionnaire. The first section comprised of data concerning demographic characteristics such as age, gender, occupation, share market investment and experience in terms of number of years in the share market. This information was considered appropriate to verify the suitability of the respondents to participate in the survey. The second section dealt with questions involving whether environmental reports are read, what are the reading techniques used and the reasons why potential users may not have read the reports. The third section emphasized on users' preferences on the qualitative characteristics that should be included in the environmental reports. The e-mails that provide the link to the online questionnaire were sent out during October, 2017 with a deadline of one month for the completion and the submission of the questionnaire.

#### Data analysis

Analytical strategies have been employed, initially to obtain an overall idea about the respondents through their demographic characteristics. Then descriptive and inferential statistics were employed to analyze the responses of the users.

## **Findings and Discussion**

The analysis of data and discussion of the results of the survey are presented in the following sub-sections.

## Response rate and analysis of demographic characteristics

From the 100 respondents, only 48 questionnaires were able to use in the analysis, resulting a response rate of 48 per cent. This rate is on par with Tilt (1994) (46.8 per cent) while it conforms to Fowler's (1988) recommendations that a response rate should be at least 20 percent to provide reliable statistics about a population. Of the sample, 79 per cent were male whereas 21 per cent were female. All the respondents were above 25 years of old. Majority of the respondents were managers and senior officials (46.2 per cent) followed by professionals (28.8 per cent). Most of the respondents have 5 to 10 years' experience in the share market and have invested more than SLR. 0.5M in the share market.

## Whether users read environmental reports

Users were asked whether they have read an environmental report by way of a yes/no question. The responses for this question is reported in Table 1. As per Table 1, 67 per cent of the respondents expressed that they had read an environmental report, whereas 33 per cent expressed otherwise. According to a similar study done in South Africa, the results were found that 83 per cent of the respondents have read environmental reports while 17 per cent have not read a CER report, indicating a low CER usage in Sri Lanka (Kamala et al., 2016).

Table 1: Extent to which users had read environmental reports

Total number of	Percentage	Percentage	Binominal exact sig.
respondents	responding "yes"	responding "no"	(2-Tailed)
48	67%	33%	0.029*

<sup>\*</sup>Statistically significant difference (p<0.05) at 95% confidence level

## How users read environmental reports

To understand how users read environmental reports, the respondents were asked to indicate how often they use five reading techniques, i.e., scanning (to locate specific information); skimming (rapid reading of headings, topic sentence to get the main idea); exploratory reading (to get a fairly accurate picture of the entire report); study reading (to maximize understanding of the main ideas); and critical reading (questioning, analyzing, and evaluating the text). A five-point Likert scale was used with weightages of one for 'never', two for 'rarely', three for 'sometimes', four for 'often', and five for 'almost always'. Hence, the closer the mean was to five, the more often a reading technique was used by the users. For more clarity, the percentages of those who indicated that they had used the five reading techniques either often or almost always were added up together, and expresses as "percentage that used the technique often" in the third column of Table 2. Therefore, those who indicated that they had used a reading technique 'sometimes' or 'rarely' are reported as 'never'. Because having used the technique as the word 'sometimes' and 'rarely' suggest less frequent to almost non-usage of a technique. This approach is justified because it ensures that only those who frequently use a reading technique are reported as such, and it has also been used in prior studies (See De Villiers & Van Staden, 2010b).

Table 2: How often various reading techniques were employed

Number	Reading Technique	Percentage that used the technique	Users Mean n=32	Standard deviation
1	Scanning – (to locate specific information)	55%	3.59	0.867
2	Skimming – (rapid reading of headings, topics to get the main idea)	50%	3.47	1.167
3	Exploratory reading – (to get a fairly accurate picture of the entire report)	26%	2.83	1.262
4	Study reading - ( to maximize understanding of the main ideas)	12%	1.94	1.014
5	Critical reading – (Questioning, analyzing and evaluating the text)	3%	1.67	0.994

Scale: 1=never; 5=almost always

As shown in Table 2, most users (55 per cent) indicate that they used the scanning reading technique, followed by skimming (50 per cent), and then exploratory reading (26 per cent). The least used reading techniques were study reading (12 per cent) followed by critical reading (3 per cent). The standard deviation of critical reading and scanning is below 1 while this value is more than 1 for other reading techniques. The users' preference of scanning, skimming and exploratory reading as opposed to study reading and critical reading point out that users' preference to quick and convenient reading which suggests a need of summarized information such as what is contained in executive summaries, fact sheets of key indicators, tables, charts, graphs, scorecards, GRI index tables, dashboards and pictures. Similar to these findings, Kamala et al., (2016) have also witnessed the same results where scanning reading techniques (77 per cent), skimming (74 per cent) and exploratory reading (65 per cent) techniques were the most employed reading techniques while critical reading (43 per cent)

and study reading (34 per cent) were the least used reading techniques. These findings are also compatible with cost constraints as suggested in decision usefulness theory, and confirm the first expectation, i.e., users are expected to prefer accessing environmental information as fast and as conveniently as possible, as opposed to time-consuming and even inconvenient ways of doing so.

## Reasons why some users do not read environmental reports

The potential users who never had read an environmental report (hereafter referred to as non- readers) were asked to tick various statements, i.e., environmental reports are not relevant, environmental reports are not faithfully represented, environmental reports are not understandable, environmental reports are not comparable, in order to understand the reasons as to why they did not read any environmental report of a listed company. Figure 1 shows the percentage of the responses.

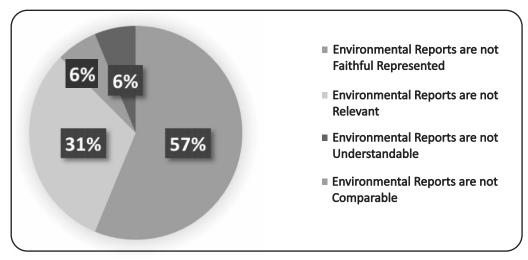


Figure 1: Reasons for why potential users do not read environmental reports

As Figure 1 shows, the most significant statement that could explain why nonreaders did not read environmental reports was that the reports were not believed to be faithfully represented. The second most identified reason was that the reports were not believed to be relevant. The least identified statements

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that could explain why environmental reports were not read were that neither they were perceived to be understandable nor comparable. The above findings are in consistent with expectation two, i.e., those who did not perceive accounting reports to be either relevant or faithfully represented will not read them. However according to prior literature (Kamala et al., 2016), users' perception that the environmental reports are not reliable and not verifiable were the most notable reasons for not reading environmental reports while the least significant reasons were the perception of CER are not relevant and are not comparable.

## Information which an environmental report should contain and how it should be presented

All the respondents were asked to rate the importance of 26 statements about what a company's environmental reports should do or be. A five-point Likert scale was used with weightage of one for 'not important at all', two for 'slightly important', three for 'fairly important', four for 'very important', and five for 'extremely important'. Hence, the closer the mean to five more important the statement was to the users. For more clarity, the percentages of those who perceived each of the 26 statements as either very important or extremely important were added up together, and reported as 'percentage that perceive statement to be important' in the fourth column of Table 4. Therefore, those who perceived the statements to be fairly important were reported as perceiving the statements not to be important, as the words 'fairly important' suggest neutrality in perception of the importance of the statements. This approach is justified to ensure that only those who perceived the statements to be important with certainty were reported as such, and it has also been used in prior studies (See De Villiers & Van Staden, 2010b).

As shown in Table 3, the top five statements perceived by respondents to be either "very important' or 'extremely important' relates to the fundamental qualitative characteristics of decision useful information, namely relevance and faithful representation. Out of the top ten statements ranked according to the percentage of respondents that perceived them either as 'very important' or

'extremely important', six statements relate to the fundamental (primary) qualitative characteristics while only four statements relate to the qualitative characteristics that enhance the decision-usefulness of environmental information. Out of the six statements, three relate to faithful representation while other three relate to relevance. Out of the four statements, three relates to comparability and the other relates to understandability.

Another interesting observation that can be made from Table 3 is that five bottom ranked statements relate to the qualitative characteristics that enhance the decision-usefulness of environmental information. The results of this section are consistent with a study done in South Africa in 2016 (Kamala et al., 2016), in which they have found that out of the total 28 questions, top six questions relates to fundamental qualitative characteristics while the bottom four out of five statements were related to enhancing qualitative characteristics in decision usefulness. The above results are compatible with the decision-usefulness theory's assertion contained in the financial reporting framework, i.e., relevance and reliability are the two fundamental qualities that make accounting information useful for decision-making (FASB, 2010; FASB, 2008; IASB, 2010; IASB, 2008). The results, therefore, confirm the third expectation, i.e., users are expected to prefer the environmental information that has more fundamental qualitative characteristics than enhancing qualitative characteristics.

Table 3: Users' and non-users' perceptions of what a company's environmental report should do/be

Number	Statement	Related qualitative characteristic	Percent that perceive statement to be important		Users and non- users Mean n=48	Standard deviation
1	and positive aspects in a	Faithful Representation	85%	1	4.19	0.891
2	Be specific and contain accurate information	Faithful Representation	81%	2	4.19	0.891
3	Identify and describe significant environmental issues	Relevance	79%	3	4.17	0.724
4	Provide future oriented information	Relevance	77%	4	4.13	0.761
5		Faithful Representation	77%	5	4.08	0.942
6	Compare quantitative outputs/impacts against best practice/industry standards	Comparability	73%	6	3.96	0.922
7	Provide quantitative/monetary disclosure of significant environmental impacts	Comparability	69%	7	3.9	0.778
8	Provide future targets	Comparability	69%	8	3.85	0.922
9	concerns	Relevance	65%	9	3.79	0.898
10	Allow for quick reading of key indicators	Understandability	65%	10	3.73	0.893
11		Faithful Representation	63%	11	3.73	0.792

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(environmental performance over time)  Adhere to well	Comparability		12	3.73	0.893
Adhere to well					15.055
		63%			
	Faithful Representation				
established international			13	3.69	0.854
reporting guidelines	Representation	63%			
Describe an					
organization's structures	Faithful		1.4	2.62	0.937
that deal with	Representation		14	5.03	0.937
environmental matters		60%			
Be produced at least	Timolinoss		1 5	2 5 7	1 072
annually	rimeimess	58%	13	3.32	1.072
Be produced on a real	Timeliness		16	3 52	0.899
time basis		56%		3.32	0.000
Be interactive with the	Understandahility		17	3 // 8	1.072
company	Officerstafficability	54%	17	5.40	1.072
	Verifiability	48%	18	3.42	0.71
management systems					
Include verification	Faithful Representation				
statement from an			19	3.42	0.895
independent party		48%			
	Faithful				
_ '	Representation		20	3.35	1
have been certified		100/			
The man and a 1 1 1 1		48%			
· ·	Faithful		2.1	2 25	1
l'	Representation	400/	21	3.35	1
		48%			
·					
	Understandability		22	3.35	0.956
		4.40/			
	organization's structures that deal with environmental matters Be produced at least annually Be produced on a real time basis Be interactive with the company  Describe the environment management systems  Include verification statement from an independent party Indicate whether environmental management systems have been certified  The reports should provide contacts to feedback Include interpretation and benchmarks of	organization's structures that deal with environmental matters  Be produced at least annually  Be produced on a real time basis  Be interactive with the company  Describe the environment management systems  Include verification statement from an independent party  Indicate whether environmental management systems have been certified  The reports should provide contacts to feedback  Include interpretation and benchmarks of environmental  Understandability  Faithful Representation  Faithful Representation  Faithful Representation  Understandability	organization's structures that deal with environmental matters  Be produced at least annually  Be produced on a real time basis  Be interactive with the company  Describe the environment management systems  Include verification statement from an independent party  Indicate whether environmental management systems have been certified  The reports should provide contacts to feedback  Include interpretation and benchmarks of environmental  Include interpretation and benchmarks of environmental	organization's structures that deal with environmental matters  Be produced at least annually  Be produced on a real time basis  Be interactive with the company  Describe the environment management systems  Include verification statement from an independent party  Indicate whether environmental management systems have been certified  Timeliness  56%  15  Timeliness  56%  16  Understandability  48%  18  Faithful Representation  Faithful Representation  Faithful Representation  48%  The reports should provide contacts to feedback  Include interpretation and benchmarks of environmental  Understandability  22  Understandability  22	organization's structures that deal with environmental matters  Be produced at least annually  Be produced on a real time basis  Be interactive with the company  Describe the environment management systems  Include verification statement from an independent party  Indicate whether environmental management systems have been certified  The reports should provide contacts to feedback  Include interpretation and benchmarks of environmental  Timeliness  15  3.52  Timeliness  56%  16  3.52  17  3.48  18  3.42  19  3.42  48%  The presentation  19  3.42  48%  The reports should provide contacts to feedback  Include interpretation and benchmarks of environmental  The reports should provide contacts to feedback  Include interpretation and benchmarks of environmental

23	Indicate whether internal auditing covered environmental systems/ procedures	Verifiability	42%	23	3.19	1.024
24	Enhances readability using multiple languages, pictures, charts and explanations	Understandability	40%	24	3.15	1.091
25	Enhances accessibility of information using navigation tools	Understandability	40%	25	3.1	1.115
26	Be readily accessible via multiple (printed hard copies and soft copies via internet)	Understandability	31%	26	3.04	1.031

Scale: 1=not important at all; 5=extremely important

### **Conclusion**

The purpose of this study was to examine the environmental information needs of the users of environmental reports. In order to achieve this aim, three expectations following the notions of the decision usefulness theory were developed and a survey was conducted to investigate users' needs. As per the results of this study, majority (67 per cent) of respondents had read environmental reports while only 33 per cent had not. In examining the ways in which environmental reports were read, the results showed that the most preferred reading techniques were scanning, skimming and exploratory reading, as against study reading and critical reading. The preference for these quick and convenient reading techniques suggests that the users need summarized information presented in a manner of executive summaries, fact sheets of key indicators, tables, charts, graphs, scorecards, GRI index tables, dashboards, and pictures. According to expectation one, the results confirm that users prefer accessing information in a fast and convenient manner as opposed to time consuming and inconvenient methods.

Examining the reasons as to why some potential users had not read environmental reports, the results of this study revealed that the most important reason was that the users perceive that the environmental reports were not faithfully represented. Since faithful representation is one of the fundamental qualitative characteristics that decision useful information must possess, the results of this study confirm expectation two, that is those who do not perceive accounting information to be either relevant or faithfully represented will not read the reports.

Considering the users' preferences as to which information should be comprised in environmental reports and what are the preferred qualitative characteristics should be included, the results of this study discovered that the top five most important environmental information attributes were all related to the two fundamental qualitative characteristics of decision useful information while the bottom five of the least important attributes were related to the enhancing characteristics of decision useful information. The above mentioned results confirm expectation three that users are expected to prefer the environmental information that has more fundamental characteristics than enhancing qualitative characteristics. These findings suggest that users need the environmental reports to contain both negative and positive aspects in a balanced manner, be specific and accurate providing future oriented information, to identify significant environmental issues, and to demonstrate how the top management's commitment for environmental issues.

In sum, given that relevance and faithful representation are the two fundamental qualitative characteristics that decision useful accounting information must possess, and as revealed in this study that users extremely need information that has these two qualitative characteristics, it can be concluded that users need decision useful environmental information provided in a convenient and readily accessible manner. Companies shall recognize such users' preferences in future environmental reporting while policy makers and regulatory bodies shall ensure the decision usefulness of environmental reporting by put in place appropriate disclosure standards and regulations. The study, however, conducted with a smaller sample, limiting the generalizability of the findings. Future research may be conducted using a large sample and with more user groups.

## References

- American Accounting Association. Committee to Prepare a Statement of Basic Accounting Theory. (1966). *A statement of basic accounting theory*. Sarasota, FL: American Accounting Association. Florida: (Evanston, 111).
- Chan, C.C.C. & Milne, M.J. (1999). Investor reactions to corporate environmental saints and sinners: An experimental analysis. *Accounting and business research*, 29(4), pp. 265-279.
- De Villiers, C. & Van Staden, C.J. (July 2008). *Environmental accountability: A shareholder requirement?* Paper presented at the accounting & finance association of Australia and New Zealand (AFAANZ) conference, Adelaide. Australia.
- De Villiers, C. & Van Staden, C.J. (2010A). Shareholders' requirements for corporate environmental disclosures: A cross country comparison. *British accounting review*, 429(4), pp. 227-240.
- De Villiers, C. & Van Staden, C.J. (2010B). Shareholders' corporate environmental disclosure need. *South African journal of economic and management sciences*, 13(4), pp. 436-445.
- Ernst & Young & Greenbiz. (2013). *Value of sustainability reporting*. [Online] Available from: <a href="http://www.ey.com/US/en/Services/Specialty-Services/Climate">http://www.ey.com/US/en/Services/Specialty-Services/Climate</a>[Accessed: September 2017].
- European Commission. (2011). The state of play in sustainability reporting in the European Union. [Online] Available from:

  <a href="http://www.ec.europa.eu/social/BlobServlet">http://www.ec.europa.eu/social/BlobServlet</a> [Accessed: August 2017].
- Financial Accounting Standards Board (FASB). (2010). *Conceptual framework:* Statement of financial accounting concepts No. 8. [Online] Available from: http://www.fasb.org/cs/Blob Server [Accessed: August 2017].

- Fowler, F.J. (1988). Survey research methods. Beverly Hills, California: Sage. Furmann, S., Ott, C. Looks, E., & Gunther, T.W. (2013). The contents of assurance statements of sustainability reports and information asymmetry. [Online]

  Available from: http://www.arw-suisse.ch/wp-content/uploads/2013/05/fuhrmann-etal1.pdf [Accessed: September 2017].
- Global Reporting Initiative (GRI). (2013). *G4 Guidelines Reporting principles and standard disclosures*. [Online] Available from:

  <a href="http://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and Standard-Disclosures.pdf">http://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and Standard-Disclosures.pdf</a> [Accessed: August 2017].
- Hwang, S.C., Khoo, T.A., & Wong, D.C. (2013). Perception of preparers and users on sustainability reporting in Singapore. *Journal of education and vocational research*, 4(6), pp. 174-183.
- International Accounting Standards Board (IASB). (2008). Exposure draft of an improved conceptual framework for financial reporting. [Online]

  Available from: <a href="http://www.iasb.org/NR/...00FD.../conceptual\_framework.">http://www.iasb.org/NR/...00FD.../conceptual\_framework.</a>
  pdf [Accessed: August 2017].
- International Accounting Standards Board (IASB). (2010). Conceptual framework for financial reporting 2010. [Online] Available from: <a href="http://www.ifrs.org/News/Press-Releases/.pdf">http://www.ifrs.org/News/Press-Releases/.pdf</a> [Accessed: August 2017].
- Jira, C.F., & Toffel, M.W. (2013). Engaging supply chains in climate change. Manufacturing and service operations management, 15(4), pp. 559-577.
- Kamala, P.N., Wingard, C., & Cronjé, C. (2016). Users' corporate environmental information needs. *South African journal of economic and management sciences*, 19 (4).
- KPMG & Sustainability. (2008). Count me in The readers' take on sustainability reporting. [Online] Available from:

  <a href="http://www.kpmg.com/GR/en/CountMeIn.pdf">http://www.kpmg.com/GR/en/CountMeIn.pdf</a> [Accessed: November 2017].

- KPMG, Centre for Corporate Governance in Africa (CFCGIA), Global Reporting Initiative (GRI) & United Nations Environmental Programme (UNEP). (2013). Carrots and sticks: Sustainability reporting policies worldwide today's best practice, tomorrow's trends.[Online] Available from: <a href="http://www.globalreporting.org">http://www.globalreporting.org</a> [Accessed: August 2017].
- KPMG. (2011). *International survey of corporate responsibility reporting 2011*. [Online] Available from: http://www.kpmg.com/global/en/issues/2011-survey.aspx [Accessed: September 2017].
- Laud, R.L., & Schepers, D.H. (2009). Beyond transparency: Information overload and a model for intelligibility. *Business and society review*, 114, pp. 365-91.
- Leavoy, P. (2010). *Does CSR reporting help the planet, or just help reporting?* [Online] Available from: <a href="http://www.greenbiz.com/blog/2010/09/30/does-csr-reporting">http://www.greenbiz.com/blog/2010/09/30/does-csr-reporting</a> [Accessed: August 2017].
- Marquis, C. & Toffel, M.W. (2014). Scrutiny, norms, and selective disclosure: A global study of green washing. ? [Online] Available from: <a href="http://www.hbs.edu/faculty/Pages">http://www.hbs.edu/faculty/Pages</a> [Accessed: August 2017].
- Miller, H. (2012). Investors don't read CSR reports. [Online] Available from: http://www.triplepundit.com/2012/10/bsrsustainability-business-trends [Accessed: August 2017].
- Morris and Chapman (2010) *Survey of best practices, trends and benchmarks in sustainability reporting*, Business & Society, Belgium.
- Radley Yeldar & Global Reporting Initiative (GRI). (2011). *Trends in online* sustainability reporting. [Online] Available from: <a href="http://www.globalreporting.org/">http://www.globalreporting.org/</a>[Accessed: September 2017].
- Rikhardsson, P. & Holm, C. (2005). Do as you say say as you do: Measuring the actual use of environmental information in investment decisions. [Online] Available from: http://www.hha.dk/afl/wp/man/ M\_2005\_02.pdf [Accessed: August 2017].

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- Said, R.M., Sulaiman, M., Ahmad, N.N. & Senik, R. (March 2013). *Environmental information usefulness: Bank officers' perceptions in Malaysia*. Paper presented at the 4th international conference on business and economic research, Bandung, Indonesia.
- Solomon, J.F. & Solomon, A. (2006). Private social, ethical and environmental disclosure. *Accounting, auditing & accountability journal,* 19(4), pp. 564-591.
- Tilt, C.A. (1994). The influence of external pressure groups on corporate social disclosure. *Accounting, auditing and accountability journal,* 7(4), pp. 47-72.

## **Guidelines for Authors**

#### A1. Peradeniya Management Review

Peradeniya Management Review (PMR) is a journal publishing contemporary work in the field of Management. Its main objective is to disseminate both theoretical and applied research articles, review articles and book reviews on Management, and Accounting and Finance among a wider academic community. Researchers attached to universities and research institutes in Sri Lanka and abroad are encouraged to use PMR as an outlet for their research work.

PMR shall evaluate the general significance of research considering theoretical and practical applications where relevant in the selection of articles for publication.

### A2. Copyright:

Articles submitted to the Journal should not have been published before in their current or substantially similar form, or be under consideration for publication with another journal. Authors must obtain permission to reproduce a part of a paper, book and all matter such as maps, diagrams, figures and photographs if they do not own the original products. Such letters of permission should be submitted to the Co-editors before publication.

The copyright of articles, review articles and book reviews published in PMR is reserved for the PMR. Authors shall obtain permission, in advance, from the Co-editors to reprint / reproduce the whole or a part of the paper published in PMR.

#### **A3. Reviewing Process:**

Each paper is reviewed initially by one of the Co-editors for the suitability of publication in PMR. If it is judged suitable for publication, it is then sent to two reviewers for a double blind peer review. Based on the recommendations of the reviewers, the Editorial Board of the Journal will decide whether the paper should be accepted as is, should be revised or rejected. The Editorial Board also reserves the right to copy edit the papers accepted for publication.

#### A4. Submission:

Articles are accepted for consideration on the understanding that they are not being submitted elsewhere. A copy of the article / paper should be sent to the <u>Co-editors, PMR, Faculty of Management, University of Peradeniya, Peradeniya 20400, Sri Lanka.</u> Alternatively, a softcopy of the paper (MS Word / PDF file) could be emailed to editorpmr@gmail.com.

Authors should provide the following information on a separate sheet. <u>Title</u> of the article / review paper / book review (not more than 10 words) and a brief autobiographical note of each author including <u>full name</u>, <u>affiliations</u>, <u>address for correspondence</u>, <u>telephone and fax numbers</u>, <u>e-mail addresses</u>, <u>and acknowledgement</u> (if any). In the case of multiple authors, one author should be identified as the corresponding author.

The article / paper, which will be sent to reviewers, should include the following: <u>Title of paper</u> (not more than 10 words), <u>Abstract</u> of up to 100 words, <u>Key words</u> up to 5-6 words, <u>text of the article / paper</u>, and a complete <u>list of references</u>. As a guide, articles should not normally be less than 4000 words and not more than 8000 words inclusive of footnotes but excluding references. Review articles and book reviews should not be more than 3000 words. The author(s) should not be identified anywhere in the article.

#### **A5. Structure of Papers:**

Authors may use the following structures in preparation of their papers with a view to publication in PMR. However, papers with alternative structures are also accepted.

## (i) Structure of Research Articles

Research articles may include the following sections: Introduction: This section will explain the background of the study, research questions, research gaps, research hypothesis if any, research objectives / aims, significance of the study and arrangement of the paper; Literature Review: This section should describe relevant theoretical and empirical literature related to the issue in concern. It is always advisable to review the most relevant and the most recent literature extensively in the paper; Methodology: This section describes data and analytical techniques used in the paper; Analysis / Discussion: This section presents results and evidence, analyzes results and evidence and makes deductions based on results and analysis; Conclusions: This section presents a summary of results and analysis, makes conclusions based on results and analyses and discusses policy implications; References: A list all references cited in the text is included in this section.

#### (ii) Structure of Review Articles

The main purpose of a review article is to examine the current state of the relevant publications on a given topic to initiate a discussion about research methodologies and the findings related to the topic under consideration. Review articles may include the following sections: Introduction and Background; The Body of the Paper; Conclusions and Future Direction, and Literature Cited.

#### (iii) Structure of Book Reviews

Book reviews may include the following sections: **Introduction** (what the review will say); **Background Information** (places the book in context and discusses criteria for judging the book); **Summary** (main points of the book); **Evaluation** (evaluate arguments in the book); **Conclusions**; and **References**.

#### A6. General Format

Articles / papers should be submitted double-spaced, one-side typescript, printed on good quality A4 paper. Microsoft Word is the preferred word processor. In the paper, the font should be Times New Roman, 12 size (bold and italic type can be used as necessary); The text should be ranged left and unjustified; Margins (top and bottom 1" and left and right 1.25"); Headings and paragraphs should be separated by two carriage returns; There should be only one space between words and only one space after any punctuation; Use standard international units of measurement wherever it applies; Numbers: adopt a rule that all numbers under 10 should be spelt out in letters. All numbers of 10 or more should be rendered in digits. If a number is used at the beginning of a sentence, it should be spelt-out in letters; Figures (charts, diagrams, drawings and photographic images) and Tables should be clear in quality, in black and white, numbered consecutively with Arabic numerals, and provided with the source; Abbreviations: The details of the abbreviation should be given when it appears first; Headings and subheadings: In dividing articles under headings, use all uppercase, initial uppercase and italic, respectively for main headings, and sub headings under a main heading; Notes: should be kept to a minimum and placed at the end of the text as Endnotes; References: must be in Harvard style and carefully checked for completeness, accuracy and consistency.

## A7. Reference Style in the Text

References should be indicated by giving the author's name and the year of publication (with page references where necessary) as given below: Summarize a book / article: Phillips (1999) suggests that ...; Direct quote from a book or a journal article: with one author, Adair (1988: 51) states that 'the centrepiece ...' or 'the centrepiece ...' (Adair, 1988: 51); with two authors, Harrow and Hatcher (1996: 69-70) insist that 'structure must be ... 'or 'structure must be ... ' (Harrow and Hatcher, 1996: 69-70); use this method up to three authors and if more than three authors use, Morris et al. (2000: 47) state that 'the debate of ... ' or 'The debate of ...' (Morris et al., 2000:47). Quoting another author(s): when quoting from another author to support an argument, use Eisenberg and Smith (in Bolton, 1986: 85) agree that 'it is hard ...', here Bolton in his 1986 publication has quoted Eisenberg's and Smith's research to prove a point. Paraphaze: By improving your posture you can improve how you communicate feelings of power and confidence (McCarthy and Hatcher, 1996: 111). Anonymous authors: replace the

author's surname with the title of the work in the brackets containing the reference, e.g. The flora and fauna of Britain 'has been transported ...' (Plants and Animals of Britain, 1942: 8). Newspaper and Magazine articles: Reference newspaper and magazine articles in the same way you would for other books and journals. If the author is anonymous, use the following method, The Guardian reported that twenty-nine inmates were participating in the programme ('Serving time', 1996: 21). Separate two references in a similar theme: use the semicolon to separate the two (Turabian, 1996: 56; Petelin and Durham, 1992:169). Many references from an author in the same year of publication: if use two or more references of the same author published in the same year, place a lower-case letter after the publication date, with 'a' for the first reference, and 'b' for the second, and so on, e.g. (Adam, 1978a:55, Adam, 1978b:10). Referencing from electronic sources: electronic sources, such as WWW pages, electronic databases and electronic journals, are cited in the text in much the same way as traditional print sources, with the exception of page numbers. If no publication date is available, and this might be the case for WWW pages, then where the date should go, insert (n.d.) which stands for 'no date'. If no author is listed for an electronic source, use the title of the publication in the same way as you would for any other anonymous source.

#### A8. Reference List

Harvard referencing system should be followed in creating the reference list. All references should be listed at the end of the article single-spaced, in alphabetical order first and then in chronological order and in the following form:

**For books**: Surname, initials (year), *title of book*, place of publication, publisher. e.g. Adair, J. (1988), *Effective time management: How to save time and spend it wisely*, London, Pan Books.

**For book chapters**: Surname, initials (year), "chapter title", in editor's surname, initials (Ed.), *title of book*, place of publication: publisher, pages. e.g. Calabrese, F.A. (2005), "The early pathways: theory to practice", in Stankosky, M. (Ed.), *Creating the discipline of knowledge management*, Now York, Elsevier, pp.15-20.

**For journal articles**: Surname, initials (year), "title of article", *journal name*, volume and number, pages. e.g. Gomes, O. (2010), "Consumer confidence, endogenous growth and endogenous cycles" *Journal of Economic Studies*, Vol. 37 No 4, pp. 377-404.

For working papers: Surname, initials (year), "title of article", working paper [number if available], institution or organization, place of organization, date. e.g. Moizer, P. (2003), "How published academic research can inform policy decisions: the case of mandatory rotation of audit appointments", Working Paper, Leeds University Business School, University of Leeds, Leeds, 28 March.

For published conference proceedings: Surname, initials (year of publication), "title of paper", in surname, initials (Ed.), *Title* of published proceedings which may include place and date(s) held, place of publication, publisher, pages. e.g. Jakkilink, R. (2007), "Information and Communication Technologies in Tourism" 2007 proceedings of International Conference in Ljubljana, Sloveniya 2007, Vienna, Springer-Verlag, pp. 12-32.

For unpublished conference proceedings: Surname, initials (year), "title of paper" paper presented at name of conference, place of conference, date of conference, available at: URL if freely available on the internet (accessed date). e.g. Aumueller, D. (2005), "Semantic authoring and retrieval with wiki", a paper presented at the European Semantic Web Conference, Heraklion Crete, 29 May-1 June, available at: <a href="http://dbs.unileipzig.de/file/aumueller05wiksar.pdf">http://dbs.unileipzig.de/file/aumueller05wiksar.pdf</a> (accessed 20 February 2007).

**For encyclopaedia entries with no author or editor**: title of encyclopaedia (year), "title of entry", volume, edition, title of encyclopaedia, publisher, place of publication, pages. e.g. Encyclopaedia Britannica (1926), "Psychology of culture contact", Vol 1, 13<sup>th</sup> ed., London and New York, Encyclopaedia Britannica, pp. 765-771. [for authored entries, please refer to book chapter guidelines above].

For newspaper articles (authored): surname, initials (year), "article title", newspaper, date, page. e.g. Smith, A. (2008), "Money for old rope", Daily News, 21 January, pp.1, 3-4. For news paper articles (un-authored): newspaper (year), "article title", date, page. e.g. Daily News (2010), "Small change", 20 April, p. 2.

For electronic sources: if available online the full URL should be supplied at the end of the reference, as well as the date when the resource was accessed. e.g. Castle, B. (2005), "Introduction to web services for remote portlets", available at: www.128.ibm.com/developerworks/library/ws-wsrp (accessed 12 November 2007).

## **A9. Final Submission:**

Once accepted for publication, the authors are required to send the final version of articles / papers in both MS Word and PDF formats as email attachments or on a CD-ROM. Final submission guidelines will be provided when an article / a review article / a book review is accepted for publication. The manuscript will be considered to be the definitive version of the article. The corresponding author must ensure that it is complete, grammatically correct and free from spelling or typographical errors.