



Environmental Management Accounting Model in the Hotel Industry



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Article history:

Submitted: 09 July 2023

Revised: 18 August 2023

Accepted: 27 September 2023

Keywords:

economic performance;
environmental management
accounting model;
hotel industry;
tourism industry;

Abstract

The impact of tourism industry activities can cause various environmental problems that are detrimental to various parties. This is a social burden, which must be taken seriously. Environmental Management Accounting is a concept that helps companies contain business impacts in the form of monetary units. The application of Environmental Management Accounting helps companies deal with environmental problems by recording all production activities to be reported in the company's environmental cost report. However, until now no standard requires full environmental accounting disclosure. The research methodology uses case studies. This research aims to develop a model in the form of an accounting policy that contains the concept; emphasizes relationship patterns and clarifies environmental management accounting practices in the hotel industry. Data analysis was carried out using the Miles and Huberman model. The research results show that environmental management accounting is still considered necessary because it does not affect the business climate. In addition, the relationship between a company's environmental performance presented in the company's accountability report and its financial or economic performance is still doubtful.

International research journal of management, IT and social sciences © 2023.

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1 Introduction

Environmental responsibility is no longer a new issue. So far there have been several issues that have become the focus of environmental responsibility, including the hotel industry. The hotel industry is a commercially managed business that uses all of its buildings and facilities to provide services to tourists. With the construction of hotels and facilities to meet guest needs, of course, there will be use of natural resources and the environment where the hotel is built. Every time a change occurs to the land surface, it will have an impact of both small and large intensity in the form of pressure on the surrounding environment in the form of waste from business results, excessive use of resources, or changes in land function. In connection with the existence of the accommodation industry, many parties hope that the accommodation industry will start developing sustainable and environmentally friendly businesses. If this is ignored, there will be a possibility of increasingly severe natural damage.

All parties began to contribute ideas related to environmental preservation. One of them is accounting which plays a role in environmental preservation efforts, namely related to voluntary disclosure in financial reports related to environmental costs (Setyaningtyas & Andono, 2013). Although to date no standard requires full disclosure of environmental accounting except as regulated by the FASB (capitalization, expensing, or contingency liability), it is hoped that from this research a guide to the environmental management accounting model will be formed that can bridge the interests of the company and its stakeholders. The importance of carrying out this research is motivated by; first, dissatisfaction with conventional accounting practices, both in terms of attention to environmental and social issues that arise along with the development of the application of accounting techniques or the development of theories underlying conventional accounting practices (Gray et al., 1996). Second, research in the field of environmental accounting is based on discussions regarding whether accounting can play a role in environmental issues. Maunders & Burritt (1991), criticize that the role of accounting in environmental problems is not very clear. Third, specifically in Indonesia, policies related to environmental accounting have not yet explicitly regulated this issue.

It is hoped that this research can provide direction for companies in reporting their environmental accounting policies to the public. This research was designed as an exploration and the results of this analysis then positioned the company in the green company matrix and then an environmental management accounting policy model was created based on these conditions (Adnyana, 2020; Ariffin, 2016; Artani, 2019; Crewell, 1994; Zou et al., 2019).

2 Materials and Methods

Data collection techniques

This data source is divided into two, namely primary data sources and secondary data sources. In this research, researchers used primary data to complete the required research data in the form of in-depth interviews and observations. This research used participant observation. Researchers are directly involved in observing what the data source/informant does. The atmosphere in interview data collection is natural and the researcher does not appear to be conducting research. This research uses an in-depth interview method with three stages. The first stage, interviews with informants regarding their position in the company aims to obtain a deeper understanding and answers, so that the results of the informant's answers are obtained for subsequent analysis. In the second stage, interviews were conducted with introductory questions to the informants aimed at obtaining explanations and information on the entire process of providing credit to customers provided by the company. In the third stage, the results of the informant interviews were then recorded and compiled into interview transcripts (Creswell, 2009; Gray et al., 1995; Hansen & Mowen, 2009; Ikhsan, 2009; Jasch, 2003).

Data analysis

Interview transcripts were analyzed using the Miles and Huberman Model interactive data analysis. This model is carried out in three analysis steps, including data reduction, data presentation, and drawing conclusions. Data reduction is assisted by data coding. In the first stage, open coding, each response, expression, and behavior shown by the informant were grouped into several categories. In the second stage of axial coding, categories are grouped based on four components of environmental cost analysis including recognition, measurement, presentation, and disclosure of environmental costs. The third step is the selective coding stage, looking for relationships between themes. Some

themes can be excluded at this stage if they do not fit the structure established in the study or have a weak evidence base. Themes that have the same relationship are grouped based on the conceptual similarity of the components.

3 Results and Discussions

Internal and external factors allow the use of EMA

Research findings are discussed according to the research themes that emerge in this study. These questions are designed to identify Environmental Management Accounting used by the hospitality sector for environmental cost optimization. For each hotel, a group interview was conducted with the hotel management team (hence each table only has 3 columns representing responses from the management teams of hotels A & B.

Table 1
Interview question

Objective	Interview Question
To identify internal and external factors influencing the use of EMA by the hospitality sector	Does the hotel have an environmental reporting form? If yes, what is reported? Does the hotel track any of its major environmental costs (either physical or monetary)? If yes, what is it and how is it categorized? On what basis are major environmental costs tracked and recorded? Does the hotel issue internal reports on environmental performance? If yes, at what level is environmental performance assessed and what is the purpose of publishing this report? If not, why not (e.g. not mandatory, not normal practice in hotels, or not cost-effective)? Are there barriers, either technical or political, to providing internal reports on environmental performance?

Based on the results of interviews, it shows that there are inconsistencies in the way environmental reporting is carried out. Hotel B management agrees that the hotel issues internal reports on environmental performance in all departments and there are no obstacles to providing such reports. On the other hand, hotel A disagrees that the hotel issues an internal report on environmental performance arguing that there is no reason for it to issue such a report. The statements of Informant A and Informant B show that environmental management accounting is still at the entity concept and proprietary concept level, making it difficult to realize the implementation of environmental accounting. Environmental accounting is still not considered necessary because it does not affect the business climate. Apart from that, the relationship between the company's environmental performance presented in the company's accountability report and its financial or economic performance is still doubtful (Holjevac, 2003; Martínez-Ros & Orfila-Sintes, 2009; Sharma & Khanna, 2016).

Identifying environmental costs will be complex because these costs are often hidden in overhead costs. When this can be identified, it can be managed and become a source of company profit in the future (Jovanović & Janković, 2012). Hotel informants A and B stated that environmental costs were tracked using financial and physical information per department. Waste costs are a major cost that many hotel Bs track. As indicated in the discussion above, environmental reporting can be considered a necessity to demonstrate a hotel's environmental responsibility. However, it should be noted that the environmental information disclosed is not completely comparable between all hotels. This makes it difficult to quantify the data used (Christ & Burritt, 2013; Gunarathne & Lee, 2021; Pereira-Moliner et al., 2012). The informants' responses indicate that the development of environmental management accounting is still limited (immited progress). The application of environmental management accounting is not spread evenly, including elements of the objective agreement, measurement methodology, and reporting framework that is still not generally accepted.

Informant B stated that hotel management had no obstacles in providing environmental reporting. However, this is different from informant A statement that technical skills are a potential barrier. In addition, the benefits of reporting environmental costs are felt below the efforts expended by the company, meaning that if the benefits of preparing

environmental cost reports are greater than the costs incurred, then the company will voluntarily detail environmental costs in a special report (Mokhtar et al., 2016; Hanif et al., 2023; Nieves & Segarra-Ciprés, 2015; Amerta et al., 2018).

Environmental management accounting system adopted by the hotel industry

The Hotel Environmental Management Accounting produces outputs using inputs and various processes necessary to meet certain goals.



Figure 1. Environmental management accounting model in the hotel industry

The input in question is entering hotel management's internal and external data relating to the hotel's environmental management policies. Furthermore, hotel management must group activities based on three aspects of environmental management in hotels, including (1) environmental management activities that are voluntary, (2) environmental management activities that involve guests as customers in implementing environmental management efforts; and (3) environmental management activities that focus on pollution prevention efforts and/or organizational aspects of environmental management. At the process stage, activities include hotel management analyzing environmental management activities that generate costs and activities that generate income, analyzing what conventional cost accounting methods are used, on what basis environmental costs are allocated to the hotel, and analyzing costs and income for environmental management activities that occur (cost & benefit analysis). Next, the output stage includes preparing a special report in the form of a hotel environmental performance report (Saleh & Jawabreh, 2020; Zulaikhah & Kristiani, 2020; Yin, 1994; Vejzagić et al., 2018).

4 Conclusion

The environmental cost allocation process is currently a challenge in the hotel industry due to a lack of understanding regarding environmental costs. This can be a barrier to the effective implementation of environmental management accounting tools. Understanding the nature and relevance of environmental accounting depends on the practitioner's professional perspective and functional orientation. Conceptually, the development of environmental accounting is faced with various complex problems. In general, the problems of developing environmental management accounting can be categorized into three groups, namely (1) difficult to apply in the hotel industry (2) development of environmental management accounting is still limited (limited progress), (3) efficient market. Regarding several limitations of this research related to the methodology and substance aspects of the study, it is recommended that future researchers use a research design that combines quantitative and qualitative research (mixed method) so that researchers can obtain objective research results.

Conflict of interest statement

The authors declared that they have no competing interests.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

Acknowledgments

We are grateful to two anonymous reviewers for their valuable comments on the earlier version of this paper.

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