

A REVIEW ON THE EFFECTS OF GREEN STRATEGY ON FIRMS' ENVIRONMENTAL PERFORMANCE

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ABSTRACT - Rapid growth in the economic sector in Malaysia gives a significant effect on the environment due to the increase in pollution, waste and rapid consumption of natural resources. With the emergence of the Sustainable Development Goals (SDGs), which were adopted by all United Nations member states in 2015, firms were urged to consider environmental issues in their business processes. Environmental Management Practices (EMP) then become a part of a sustainable approach to business strategy in addressing environmental issues and enhancing the firm's environmental performance. Based on the Department of Standards Malaysia in September 2020, there were only 1,586 (0.1%) firms in Malaysia accredited with ISO 14001, which incorporates EMP. This figure reflects the low level of implementation among companies in Malaysia about the importance of a well-organized environmental management system as a part of their green strategy. The implementation of green strategy and the effects on firms' environmental performance have been discussed among researchers. This paper was intended to review the findings related to the topic based on previous research articles. The reviews will add to a growing body of literature and will help firms' management decision-making process in order to implement a green strategy for their products or services.

Keywords: Green strategy, environmental performance, sustainable development

1. INTRODUCTION

As a result of emerging environmental problems and issues, the natural environment has become a critical issue for business organizations. Most of these problems are believed to be generated by business operations, such as sourcing, manufacturing and logistics [1]. The growing concern about the environment, as well as the growing demand for environmentally friendly societies and environmentally friendly products, is forcing business industry players to consider green and sustainable approaches to their business strategy [2]. Consequently, organizations are motivated to implement a proactive approach to preserve the environment from the effects of their business activities through the overutilization

of natural resources and waste production [3]. Thus, various strategies and initiatives has been implemented such as Environmental Management Practices (EMP) and Environmental Management System (EMS) as a part of corporate green strategy in enhancing firm's environmental performance. While ISO 14001 is an international environmental standard that identifies the requirements related to the EMS and as a method to determine the environmental performance of an organization. This paper consists of two part which the first part will review on greening on business strategy and second part will discussed on the effects of green strategies and initiatives on environmental performance from previous research paper.

2. GREENING BUSINESS STRATEGY

The term 'green' in business has been a great discussion among researchers since the early 1990s. According to business dictionary, green business is defined as a business functioning in a capacity where no negative impacts are made on the local or global environment, the community, or the economy. The 'greening' of business is set to persist as more companies become aware that preventing environmental destruction by producing environmentally friendly products and technologies is a green strategic plan for risk reduction and achieving long term profitable growth [4]. A green strategy also comprises forward-thinking policies for environmental responsibility and human rights. It involves applying environmental management principles to the entire set of activities that span the customer order cycle, including design, procurement, manufacturing, assembly, packaging, logistics, and distribution [5].

The 2030 United Nation Agenda for Sustainable Development in 2015 (including 17 Sustainable Development Goals) has rising momentum for green growth globally. Apart from that, sustainability is presently becoming a very important business strategy that has a significant impact on firms' environmental performance and competitiveness. In Asia, many firms that are greening their operations are motivated mainly by external pressures exerted by government policy or foreign investors and export markets, rather than by internal considerations [6]. A number of firms are adopting Environmental Management Systems by seeking certification for their environmental practices such as ISO 14001 and participating in green business networks. Both governments and the private sector are increasingly aware of the convergence between sustainable development and market priorities, as illustrated in Figure 1 regarding green business opportunities for the private sector. Companies that are contributing to

the advancement of sustainable development grab the opportunities that are increasingly leading to strategic market advantages and positions of long-term strength. In this regard, harnessing global business as a pressure for sustainable development represents one of the biggest opportunities in the post 2015 era and a necessity for a new set development goal to be implemented [7].

Figure 1. Green Business Opportunities for The Private Sector



Source: UNESCAP (2017)

3. EFFECTS OF GREEN STRATEGY ON ENVIRONMENTAL PERFORMANCE

In general terms, environmental performance means an indicator that indicates the level of environmental protection with some measures to be taken on environmental-related activities. The main objectives of environmental performance are to optimize the use of resources, energy consumption, hazardous materials, and release of residues. ISO 14001 is an international environmental standard that identifies the requirements related to an Environmental Management System (EMS). According to the International Standard Organization (ISO, 2016), Environmental Performance Evaluation (EPE) is a process to facilitate management decisions regarding an organization's environmental performance by

selecting indicators, collecting and analyzing data, assessing information against environmental performance criteria, reporting and communicating, and periodically reviewing and improving this process. This standard consists of a plan-do-check-act method that allows top management to gather reliable information on environmental performance for the decision-making process.

Table 1 below presents a summary of previous research on green strategies and the findings related to environmental performance. A study within multinational firms in Nigeria shows that environmental performance is strongly predicted by green strategy and mediated by product quality [8]. In addition, a study in Australian organizations reveals that organization with a great extent of environmental activity management have a high level of environmental performance [9]. A study among Australian manufacturing firms found a significant association between a motivated and prepared workforce on environmental performance, which is mediated by value-creating process management and innovation processes [10]. Moreover, a study of US manufacturing firms reveals that green supply chain management (GSCM) practices improve environmental and economic performance, which leads to a positive impact on operational performance [11]. A study of UK-based manufacturing firms also discloses that EMP fully mediates the relationship between marketing capability and environmental performance [12].

In the Malaysian context, a study conducted in large manufacturing firms reported that environmental strategies mediate the relationship between green innovation and environmental performance [13]. A study among HR managers in large manufacturing firms found that green intellectual capital is an intangible resource for organizations in achieving sustainable performance [14]. An interview with three companies indicates that adopted green initiatives benefit the environment, such as a reduction in emissions and adherence to environmental standards set by the government [15]. Furthermore, a study among Malaysian firms certified with ISO 14001 reveals that EMS certification impacts positively on environmental performance [16].

Table 1. Green Strategy and Environmental Performance

Sources	Green Strategy	Outcomes / Findings
Olayeni et al. (2021)	Green strategy, product quality	Financial performance and environmental performance
Rehman et al. (2021)	Green innovation strategies	Environmental strategies mediate the relationship between green innovation and environmental performance

Yusliza et al. (2020)	Green Intellectual Capital	Green intellectual capital as an intangible resource for organizations in achieving sustainable performance
Phan, Baird, & Su (2018)	Environmental Activity Management (EAM).	Great extend of EAM leads to high level of environmental performance
Yu & Ramanathan, (2016)	Environmental Management Practices (EMP)	Environmental performance
Kirsten et al. (2015)	Motivated and prepared workforce and environmental performance.	Significant associations between affective commitment, employee performance process and training and enhanced environmental performance
Green et al. (2012)	Green Supply Chain Management	Environmental performance, economic performance and organizational performance
Eltayeb & Zailani (2010)	Eco-design, green purchasing, reverse logistics, environmental collaboration	Environmental benefits
Ann, Zailani, & Wahid (2006)	Environmental Management System (EMS)	EMS certification positively impacts on environmental and economic performance

4. CONCLUSION

This paper provides a review of previous literature on green strategy and the effects on environmental performance. From previous studies, green strategy and initiatives have significant effects on the environmental performance of firms. However, most of the studies focused on manufacturing firms. Hence, the study should be expanded to include other industries that have an impact on the environment. Furthermore, the aspect of environmental performance can be further discussed in terms of monetary and non-monetary units. Different measurement models and contexts can be explored for further study on green strategy and environmental performance. Finally, this research will assist organizations in better understanding and implementing green strategies on their products or services in order to improve their environmental performance.

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