EXPLORING THE DETERMINANTS OF MALAYSIA’S BIOMASS INDUSTRY PERFORMANCE: A SYSTEMATIC REVIEW

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ABSTRACT

Malaysia's biomass industry has a great potential to contribute to the national circular economy that offers a new stream of wealth creation to the nation. Nevertheless, there appears to be a scarcity of research that dwells into the organizational performance in the biomass industry. Therefore, the present study examined the impact of organizational culture, innovation resources, and human resources on organizational performance. The pivotal contribution of this study is to highlight how these factors/resources influence organizational performance. This study delves into organizational performance in the biomass industry through dynamic capabilities theory and resource-based view (RBV) theory.

Keywords: Human Resource Management, Organizational Innovation, Organizational Culture, Organizational Performance, Resource-Based View

RESEARCH HIGHLIGHTS

1. Malaysia's biomass industry required a strategic allocation of resources to lower their operation costs (avoid wastages) and increase profit margin.

2. The organizational performance depends on the innovation of human and production resources (the R&D process) to achieve higher productivity and competency.

3. Organizational culture is the source of the competitive advantage of an organization that enables other resources to operate efficiently.

GRAPHICAL ABSTRACT

![Diagram](image)

Fig. 1. Proposed Research Framework

Research Objectives

This study aims to provide a systematic review of the issues and a detailed examination of the determinants related to organizational performance in Malaysia's biomass industry.
**Results**

According to Barney (1991), the resource-based view (RBV) theory delineates the internal resources that are valuable, rare, difficult to simulate, and substitutable to help an organization to grab the opportunities and retaliate against threats in the competitive environment. However, RBV theory has been criticized for not revealing how and which type of resources can help the organization achieve a competitive advantage and improve its performance in the long run (Miles, 2012).

Grounded on dynamic capabilities theory, Araújo et al. (2018) found that an organization can rearrange its most significant capabilities and processes innovatively in the interest of penetrating a new market, responding to environmental and market changes. (Miles, 2012). In the context of the biomass industry, they need to consider the cost and potential benefits gained before making any significant changes, constantly review its human resource management, organizational innovation, organizational culture to raise its performance.

In this competitive era, organizations struggle to achieve better organizational performance and respond proactively to unpredictable changes. Top-performing biomass organizations can earn higher financial returns and aid brand recognition in public. The desired performance can be attained when the organization can determine the driving factors and vital resources (Al-Dhaafri & Alosani, 2020).

**Findings**

HRM deals with workforce planning, recruitment, selection, training, performance appraisal, wage structure, employees' morale and compensation, compliance to the labor regulation and informal negotiation with trade unions (Ali et al., 2018). Effective HRM includes the ability to identify any changes in the organization, external environment and respond positively to the changing needs of an organization (Hasan et al., 2019; Li et al., 2015).

Organizational innovation is the innovation activities that look into new working methods, organization structure, and management style that can improve efficiency and lead to an organization’s long-term competitive advantage (Alves et al., 2018). Since organizational innovation is associated with the changes to manage business operations (YuSheng & Ibrahim, 2020), it requires collaboration from all functional departments to implement organizational innovation effectively (Soomro et al., 2020) in the biomass industry.

Interestingly, strong organizational culture is the vital predictor of superior organizational performance (Samad et al., 2018). The organizational culture that emphasizes the mission, consistent working procedure, and adaptive to external changes has a positive association with organizational performance (Kwarteng & Aveh, 2018). Open culture stimulates cooperation, sharing knowledge and experiences among employees, leading to more creative and innovative offerings (Lita et al., 2020).
References


**Author's Biography**

**Lee Heng Wei** is a business school graduate from Universiti Sains Malaysia (USM) in 2009. He obtained the USM Fellowship Award in 2010 and completed his Master and PhD degrees in Technology Management in 2013 and 2018, respectively. Besides, he teaches courses mainly in marketing, business analytics, research and consultancy methods, and statistics. He used to provide professional training in digital marketing and business analytics. Apart from teaching, he is an avid researcher, especially in technology management and marketing. He has collaborated with renowned companies from various disciplines through multiple research and consultancy projects.

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