



## DESIGN OF PERFORMANCE MANAGEMENT SYSTEMS FOR MARINE TRANSPORTATION SYSTEM IN COMPANY X

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### Abstract

A company with multiple roles as a profit generator and public service provider has special characteristics. Considering that the numbers of Performance Management Systems (PMS) for managing this context are limited, this research aims to design a PMS that is appropriate with such unique characteristics. This research utilised the PMS framework developed by Irfani *et al.* as this framework is specifically designed for multiple-role companies. The framework was applied in a case company namely Company X. The development of the PMS consists of several steps, including analysing the suitability of the existing PMS, selecting the key performance indicators using statistical methods, and analysing the relationship among performance indicators using Decision Making Trial and Evaluation Laboratory Model (DEMATEL).

The research results indicated that the framework developed by Irfani *et al.* could be used to develop a PMS that is appropriate for multiple-role companies. Firstly, the framework could reveal that the existing PMS in Company X was not fully aligned with the organisation's strategy. The alignment analysis results showed that the existing PMS in Company X had not emphasised the infrastructure aspects of the marine transportation system, although the reliability aspect was emphasised in the organisational strategy. Besides, the framework could be used to identify that there were still several gaps and false alarms in the existing PMS. In addition, the framework was successfully used to select relevant key performance indicators in Company X. Lastly, the framework was used to model the relationships between several dimensions and performance measures in Company X.

The value of this study is that it provides stakeholders of multiple-role companies with a direction for assessing and designing the appropriate PMS that suits the characteristics of such companies. In addition, this study fills the theoretical gap by proposing the causal relationships between performance dimensions and measures in a marine transportation system. Such relationships have helped decision-makers in Company X to comprehensively analyse how the marine transportation system at Company X performs. However, this study only uses a single case study. To find out the generalizability of the PMS that has been proposed, this research can be replicated and furthered by applying the proposed PMS to other contexts.

**Keywords:** Performance Management System, Marine Transportation Performance, Multiple-Role Company.

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