Evolution of the Effectiveness of Locomotive Schedule Record System in Sri Lanka

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Abstract. Sri Lanka railways are the main transport entity in Sri Lanka that operate the number of daily travels through Sri Lanka such as public transportation and freight transportation. To pull these trains locomotives should be maintained well. These locomotives are assigned to various types of schedules to maintain their performance. These maintenance records should be inserted into the locomotive schedule record system for various purposes of the management of the Sri Lanka railways such as inventory management, budget planning, and decisions on new rolling stocks. Sri Lankan railways have a traditional record system that uses a file system with manual methods of inserting, retrieving information. In the government sector of Sri Lanka, usage of Information technology has been increased for main operations of the institutes but when analyzing in the railway sectors, it has a poor impact on information technology. The research intended to analyze the effectiveness of the current locomotive schedule record system and give recommendations for more smart, secure, and convenient services to increase the effectiveness of the system. In this study, major drawbacks of the current system are analyzed to find the best solutions to adhere to these drawbacks. The methodology used to conduct this research is a qualitative and quantitative-based survey, interviews, and experiments. This research focuses to enhance the user-friendliness of a system and minimize the main drawbacks of the current system.

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