Linear Programming: Optimization of Noise and Vibration Model in Passenger Car Cabin


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**Abstract**. Car cabin interior acoustical is one of the factors which may influence the flexibility of the driving. Basically the amount of discomfort depends to magnitude, frequency, direction and also the duration of exposed vibration in the cabin. Generally the vibration is caused by two main sources: engine transmission and interaction between tyre and road surface. The noise which produced by the car system can cause hearing impairment, hypertension, annoyance and sometimes can decrease the driving focus which may cause an accident. There are studies have been carried out to measure the annoyance level of cabin interior acoustical by defining particular index [16]. In this study the effects of vibration to noise in passenger car cabin were investigated. Vehicle acoustical comfort index (VACI) was used to evaluate the noise annoyance level and vibration dose value (VDV) was used to evaluate the vibration level. By using the changes trend of noise and vibration level depending to engine speeds, optimization model was proposed to optimize the vibration level in the passenger car cabin.

**Keyword**: Vibration; Sound Quality; Vehicle Acoustical Comfort Index (VACI); Vibration Dose Value (VDV)

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Study of Socio-Technical For Implementation of Knowledge Management System

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**Abstract**. Focus of this study to explain the importance of socio-technical aspects in the design and implementation of Knowledge Management Systems (KMS). This study was motivated by many failures in the KMS implementation and lack of research in the associated fields between the studies of socio-techno with KMS. The purpose of this study was to find factors in the socio and technical implementation of KMS in a state-owned company. The research method applied in the study is using an interpretative approach by conducting interviews, document review, focus group discussion (FGD) directly to end users. By knowing the Socio-Technical aspects, results of the study expected to be able to provide input for planning and to increase the success of knowledge management system implementation.

**Keyword**: Socio tehcnical; Stated owned company; knowledge management system (KMS)
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