Abstract

In Malaysia University hostel building maintenance, failure of the component to effective became a major contribution to the university losses and high maintenance cost. Therefore, there is a need to have an optimal maintenance strategy such as replacement, repair and inspection. Before any optimal maintenance strategy can be implemented failure distribution and the parameters of the hostel building component need to be identified. The main objective in this paper is to propose a best of parameter failure distribution for Then, Hostel building maintenance management. The Goodness of a Distribution Fit and Maximum Likelihood Estimator (MLE) techniques in identifying the failure distribution and the parameters of hostel building component. The approach proposed can improve maintenance engineers to use failure data as well as in maintenance optimisation analysis. The paper starts by introducing the application of MLE techniques to identify the best failure fit distribution and its parameters. It follows by numerical examples to determine whether the best fit failure distribution and its parameters are applicable to be applied in maintenance optimisation analysis. This is carried out by comparing the proposed approach with a case study.
- Shaomin and Derek Clemente Croome; "Reliability in whole life cycle of building system," Engineering Contraction and architecture management vol. 136-153. No 2,2006 @ Emerald Group Publishing limited.

Index Terms
Keywords
Maximum Likelihood Estimator  Goodness of a Distribution Fit and Best fit Failure Distribution