

## **A MARKOVIAN STUDY OF MAINTENANCE PRACTICE IN A PRODUCTION FIRM**

**Igboanugo A.C.\* and Aigbe S.O.**

<sup>1</sup>Department of Production Engineering, University of Benin, Benin-City, Nigeria.

### **Abstract**

*The result of a stochastic study of current maintenance practice aimed at examining ways of reducing occurrence of equipment failure in a Lagos based soft drink bottling company is presented. The method proposed is illustrated by analyzing a classical set of maintenance related data obtained from the firm studied. The authors have shown the usefulness of the concept of transition probability matrix in maintenance planning.*

**Keywords:** Transition matrix, Absorbing state, Catastrophic Failure, Matrix Utilization Factors.

**\*Email (Corresponding Author):** dracigboanugo@yahoo.com.

**Telephone:** +2348033830934