Modeling and Statistical Analysis of a Soap Production Mix in Bejoy Manufacturing Industry, Anambra State, Nigeria

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Abstract : The research work is based on the statistical analysis of the processing data. The essence is to analyze the data statistically and to generate a design model for the production mix of soap manufacturing products in Bejoy manufacturing company Nkpologwu, Aguata Local Government Area, Anambra state, Nigeria. The statistical analysis shows the statistical analysis and the correlation of the data. T test, Partial correlation and bi-variate correlation were used to understand what the data portrays. The design model developed was used to model the data production yield and the correlation of the variables show that the R2 is 98.7%. However, the results confirm that the data is fit for further analysis and modeling. This was proved by the correlation and the R-squared.

Keywords : General Linear Model, correlation, variables, pearson, significance, T-test, soap, production mix and statistic
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