



WITS BUSINESS SCHOOL
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RESEARCH REPORT (ABSTRACT)

**A diagnostic tool to identify new product introduction
model used by a manufacturing Organisation**

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ABSTRACT

The research report aims to develop and illustrate the validation of a diagnostic tool that will enable a manufacturing organisation to identify what new product introduction model they are using when introducing products into their manufacturing process.

Using the logistic regression analysis theory, a logistic regression equation was developed to predict the NPI model. A questionnaire was generated using the key characteristics of the two NPI models and the empirical data from the responses is used as the independent variables to the developed NPI logistic regression equation.

For illustrating the validation of the diagnostic tool, the output dependent variable from the equation was compared to the response the respondents' view on the type of model been used by their manufacturing organisation. In addition, a NCSS logistic regression equation was also compared to the developed NPI logistic regression model.

The developed questionnaire together with its corresponding logistic regression equation provides a validated diagnostic tool that can be used to identify what type of NPI model a manufacturing organisation is using to introduce new products into their process.