

# Developing Individual Flexibility Analysis Insistence Outlining

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**Abstract:** *Manufacturing production refers to the methodology for most efficiently manufacturing products and goods for sale. To produce in the most efficient way possible, there are many variables that need to be considered. Many variables impact manufacturing production, such as the availability of raw materials, marketplace demand, labour costs, and inventory costs. Giving the clients the exact product with high quality is the biggest concern when it comes to the manufacturing process. There is a high probability of not meeting the expectations of clients after the production of the products. So before production, the client requirements need to be analysed and it should be checked whether they are possible or not, whether production can produce the products or not, and whether the budget to produce these products needs to be analysed too. This is why this project uses a machine-learning algorithm called logistic regression. Logistic regression estimates the probability of an event occurring, such as voting or not voting, based on a given dataset of independent variables. Since the outcome is a probability, the dependent variable is bounded between 0 and 1. This logistic regression algorithm helps in various ways in this project. After the production process, the products need to be checked for quality; if the quality meets the client's expectations, the products are sent to the client, or else the products are again sent to manufacturing to produce again, which also has to meet the client's expectations. Utilising the raw materials in an efficient way is a major key to efficient production. It should be done by assessing the client's requirements. This is basically done not to reject client requirements but to assess the impossible client requirements and convert them into a possible solution to the maximum extent possible, not to reject client requirements.*

**Keywords:** Logistic Regression, marketplace demand, Client expectations