Quantitative Risk Modelling

Every risk is associated with a value, it can be a numeric value, or it is categorized by severity i.e., low, medium and high. There are probability distributions for real life events. A deck of cards has uniform probability distribution because the likelihood of every card is the same meanwhile finding a faulty item by surveying is a geometric probability distribution.

Quantitative risk modelling uses a mathematical approach to find the likelihood (Probability) of a risk to be occurred. Bayes Theorem is used to find conditional probabilities when other probabilities are known in a system.

A picture containing text, font, receipt, screenshot

Description automatically generated

Multiple Criteria Decision Analysis (MCDA) is a process which contains various solutions for a problem considering multiple factors i.e., cost, time or labour etc. It can be divided into multiple categories such as: choice, sorting, ranking, description, elimination, design and elicitation.