

The Preference Ranking Organization Method for Enrichment of Evaluations is a sophisticated multi-criteria decision-making technique. It was developed by Jean-Pierre Brans and Bertrand Mareschal in the 1980s. The method utilizes preference and indifference thresholds to handle the varying sensitivity of criteria. It calculates positive and negative outranking flows for each alternative, representing the degree to which an alternative is preferred over others and vice versa. These flows are then used to determine a net outranking flow, which ranks the alternatives.

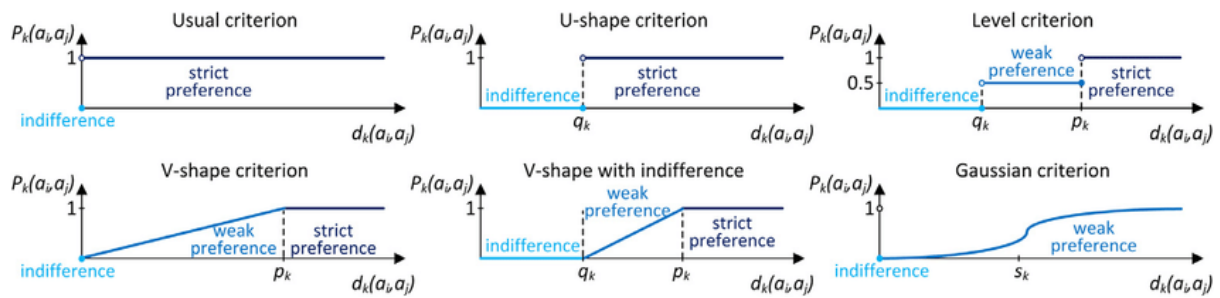


Fig 3.5 Promethee Process Diagram

3.6 REMOVING OUTLIERS

The next step after assembling the dataset is to remove the outliers and to furnish the data for processing for Multi-criteria Decision-Making algorithms. Fields such as id, Name, Address and Website which hold no importance or relevance in the result and process of evaluating the ranking of the alternatives are removed.

3.7 PLOTTING SENSITIVITY GRAPH

Finally, we plot a sensitivity graph for each criterion. The graph shows the sensitivity of alternatives rankings upon changing the weights of the criteria. This helps to choose the optimal algorithm for selecting the alternative.