Decision-making trial and evaluation laboratory

ABSTRACT

The aim of this study is introducing a technique to illuminate composite issue, aspects or system factors, the complicated problems need to be structured with graphical illustration and analyzed casual interdependence and influences throughout the organization. Decision-Making Trial and Evaluation Laboratory (DEMATEL) methodology is proposed to for researching and solving complex and intertwined problem groups because of its capability in verifying interdependence between variables and try to improve them by offering a specific chart to reflect interrelationships between variables. In this technique experts plays complementary and approval role in all steps and sections. , key factors will be clarified by using the direct-influenced matrix and then it specifies priorities of each factor. The end product of the DEMATEL process is a visual demonstration-the Impact-Relations Map (IRM)-by which respondents organize their own actions in the world. First In this study, DEMATEL methodology in explained and then kind of different problems which can be solved by DEMATEL, will discussed and finally the method of DEMATEL is detailed completely.

Keyword: Decision-Making Trial and Evaluation Laboratory (DEMATEL); MCDM; Hybrid model