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MANAGERIAL DECISION MAKING USING BEST WORST METHOD WITH MULTI-VALUED NEUTROSOPHIC APPROACH

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ABSTRACT. The subject of intrinsic and extrinsic factors constitute to the elements of decision making process characterized by the influence of multi bench mark, diverse consents of the experts on different aspects-at managerial level. Decision makers strive hard to construct consensus in formulating decisions by minimizing the complexity in the process of decision making by applying various approaches of decision making. The efficiency of the decision making methods depends on the time and cost efficiency. In the research area of decision making, best worst method is being explored presently and this method is modified with the integration of various kinds of fuzzy numbers and single valued neutrosophic fuzzy number is one such instance. The efficacy of best worst method with single valued neutrosophic fuzzy number has motivated us to extend the same decision making method with multi valued neutrosophic fuzzy number. It is proposed to formulate a decision making model using best worst method with multi valued neutrosophic approach and to present a comparative analysis of single and multi-valued neutrosophic fuzzy number. The formulated model is validated with real life application and it will certainly benefit the decision makers in framing optimal decisions.

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