Logistics specialist selection with intuitionistic fuzzy TOPSIS method

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Abstract: In a globally competitive environment, businesses, regardless of size, scale, the industry, have to develop a base on their human capital to ensure their survival, sustainable competitive advantage and superior performance. Therefore, this study aims to propose an approach to the personnel selection (PS) problem in a highly unstable industry as of logistics in an emerging market with a real case in a group decision-making environment where intuitionistic fuzzy (IF) TOPSIS method with a set of six criteria developed by a group thinking process by eight experts and evaluated by three managers in different level in a logistics business has been applied to six candidates to fulfil a vacant position of ‘Logistics Specialist’. It concludes that ‘communication/negotiation skills’, ‘analytical thinking’, ‘graduation’, ‘professional experience’, ‘teamwork’, ‘computer literacy’, and ‘fluency in foreign language(s)’ are the criteria to be employed as a ‘logistics specialist’ with respect to their relative weights. Based on such criteria, the candidates are ranked respectively and the most appropriate one is recommend to employ.

Keywords: personnel selection; logistics specialist; intuitionistic fuzzy; TOPSIS; MCDM.


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