Computational Approach for Roles selection via integrated Multi Criteria Decision Making

Yau'Mee Hayati Hj Mohamed Yusof^{1,2 a)}, Ruzaini Abdullah Arshah^{1,b)} and Awanis Romli^{1, c)}

Author Affiliations

¹Faculty of Computing, Universiti Malaysia Pahang, 26600, Pekan, Pahang, Malaysia ²Faculty of Bussiness Management, Universiti Teknologi Mara Cawangan Terengganu, 23000, Dungun, Terengganu, Malaysia

a) Corresponding author : <u>yaume555@uitm.edu.my</u>

^{b)} ruzaini@ump.edu.my

) awanis@ump.edu.my

Abstract.

Certain attributes and behaviors are required in order to qualify as an Academic Leader or Academic Manager. However, there is a scarcity of study on how to develop and prevent the loss of these talents and features among outstanding academicians. Due to a lack of this training, there will be vacancies for Academic Administrator posts that will go unfilled. As a result, during the Talent Development Intervention programme, an effective model for assessing awareness, abilities, and experience among future academics is required. The purpose of this paper is to compare and integrate the combination result of six (6) Multi-criteria Decision-Making methods using Simple Additive Weightage (SAW), Weight Product Method (WPM), TOPSIS (Technique for Order Preference by Similarity to Ideal Solution), ELECTRE (Elimination and Choice Expressing Reality), CFPR (Consistent Fuzzy Preference Relations) based on proposed model of Multi Criteria Tacit Knowledge Acquisition. Four (4) main criteria and seven (7) sub criteria are utilized to choose the best candidate for academic administrator posts in one set of empirical studies based on the suggested model. The discovery demonstrates that most procedures yield the same outcomes except for SAW technique. Keywords—Multi Criteria Tacit Knowledge Acquisition Framework, Simple Additive Weightage (SAW), Weight Product Method (WPM), TOPSIS (Technique for Order Preference by Similarity to Ideal Solution), ELECTRE (Elimination and Choice Expressing Reality), CFPR (Consistent Fuzzy Preference Relations) based on proposed model of Multi Criteria Tacit Knowledge (SAW), Weight Product Method (WPM), TOPSIS (Technique for SAW technique. Keywords—Multi Criteria Tacit Knowledge Acquisition Framework, Simple Additive Weightage (SAW), Weight Product Method (WPM), TOPSIS (Technique for Order Preference by Similarity to Ideal Solution), ELECTRE (Elimination and Choice Expressing Reality) , CFPR (Consistent Fuzzy Preference Relations)

INTRODUCTION

The process of identifying persons with the qualifications needed to do a job well is known as HEI academic staff selection. According to (Matoskova *et al.*, 2013; Khalid, 2019), academics who are chosen throughout the selection process are likely analysed and evaluated based on specified criteria such as qualification, experience, and research activities. However, proof of a lack of tacit expertise in the assessment that academicians have built in their institution during the process of joining any talent development intervention based on which the selection is made has been