Embedding quantitative techniques into the standard operating procedure for the hiring of part-time student workers at EDC-UUM

ABSTRACT

Apart from offering full-time jobs to deserving local residents, the Executive Development Centre (EDC) of University Utara Malaysia provides part-time employment opportunities to their undergraduate students, particularly the students from the tourism and hospitality programme. The students are hired through short interview sessions. Based on the complaints, the EDC management realised that the outcomes from the interviews did not help in selecting the most appropriate candidates to fill in the vacancies. Therefore, this study aimed to propose an alternate procedure that combines two quantitative techniques (i.e. the simple scaling method and the 0-1 integer linear programming model) in ensuring the management will hire and assign the right positions to candidates with better justifications. This study has identified six students for the part-time jobs available in Semester 2, Session 2018/2019. Three 0-1 integer linear programming models with different objective functions were formulated and solved with the aid of LINGO Version 12. Each model derived a different set of results. Hence, the management could make their final decision by referring to the results from the model in accordance with the objective. The contributions of the study and future applications are discussed in the conclusion section.