

Universiti Teknologi MARA

**Determination of Important Criteria in
Measuring the Performance of Non-
Academic Staff by using Fuzzy Analytical
Hierarchy Process (FAHP)**

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**Report submitted in fulfillment of the requirements for
Bachelor of Science (Hons.) Management Mathematics
Faculty of Computer and Mathematical Sciences**

June 2019

STUDENT'S DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Evaluating employee performance is an important process in order to improve employee self-esteem, to identify employee for reward and to identify who should have additional training. The management have the responsibilities to identify which criteria are significant when come to evaluate employee performance. This study is focused on non-academic staff in Universiti Teknologi MARA (UiTM) Perlis Branch. The main objective of this study is to determine the important criteria in measuring the performance of non-academic staff. Through this study, non-academic staffs will aware which criteria are important and used in performance appraisal. However, multiple conflict criteria, uncertainty and vagueness of the experts' opinion are the three major obstacles in identifying the important criteria. Therefore Fuzzy Analytical Hierarchy Process (FAHP) which uses both qualitative and quantitative decision making approaches is used to solve this problem. The FAHP method adopted here uses Triangular Fuzzy Number (TFN). FAHP has been improved to deal with the subjectiveness and impression in the pair-wise comparison process. This study revealed the application of FAHP in determines the important criteria and sub-criteria in measuring the performance of non-academic staff in UiTM Perlis Branch. The data used for this study were collected and converted to a pair wise comparison for both criteria and sub-criteria by using triangular fuzzy number (TFN). The result of this study is evaluated by using EXCEL spreadsheet, showed that the most preferable and influencing criteria and sub-criteria in measuring the performance of non-academic staff are quality of work and communication respectively. Finally, this study can be implemented to other multiple criteria decision making problems such as supplier selection.

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