

**UNIVERSITI TEKNOLOGI MARA**

**TECHNICAL REPORT**

**GRAPHICAL REPRESENTATION OF CLOTHING STORE  
LOCATION AND ITS APPLICATION WITH POTENTIAL  
METHOD**

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## **ABSTRACT**

Multi-criteria Decision Making (MCDM) is widely used to solve decision problems by evaluating the pairwise comparison of alternative. MCDM is a procedure is making decisions which require several elements as input and the outcomes are weights assigned to each alternative. The Analytic Hierarchy Process (AHP) and Potential Method (PM) are two examples of tools in MCDM. PM uses a directed graph called preference as the basic structure generated by paired comparisons to obtain a value function on the set of alternatives. In this study, the PM is applied to the problem of the selection of store location for which the result is already obtained by AHP. The purpose is to illustrate the application of PM in decision making problem. The results are then compared and hence the ranking of alternatives obtained by both methods is similar. Therefore, PM is found to be comparable to AHP in solving real life problems involving multiple criteria.