

UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

INTERVAL LINEAR PROGRAMMING FOR
MARKETING COST OF ADVERTISING ALLOCATION

P12S18

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ABSTRACT

A market allotment choice is identified with the selection of media viability, media spending plan and more particularly when publicizing is required in a market. More often than not in genuine basic leadership, issues identified with promoting, objectives, imperatives and the results of activities are questionable. In this report, it explores the issue of decision of reasonable media choices and allotment of the accessible promoting spending plan among them. This report discussed the linear programming problem with interval coefficients in the objective function. The objective is to employ an interval linear programming method in advertising optimization problems to minimize the cost of advertising and getting the optimum duration of advertising. In order to solve it, we use satisfaction function approach for interval problem of the objective function and used mathematical program Python to get the optimal solution. Sensitivity analysis of the proposed decision model was performed in order to verify its validity and flexibility. In addition, this report also shows the comparison between several media option that is the average duration of advertising, the longest duration of advertising, shortest duration of advertising and also the average frequency of advertising. It can be concluded that different types of media give a different types of services provided to their potential customers and the choices are in the hand of the customers that fit with their interests.