# NEW SELECTION ALGORITHM FOR *MENGUBAH DESTINI ANAK BANGSA* (MDAB) STUDENTS

RESEARCH MANAGEMENT INSTITUTE (RMI)
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM, SELANGOR
MALAYSIA

BY:

ZAMALI HJ. TARMUDI
TAMMIE CHRISTY SAIBIN
NASRAH NAHARU
UNG LING LING

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## ACKNOWLEDGEMENTS

*In the name of ALLAH, Most Gracious, Most Merciful and Muhammad s.a.w. is a last prophet.*

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Thank you. *Wassalam.*

## ENHANCED RESEARCH TITLE AND OBJECTIVES

### Original Title as Proposed:

e-Selection System for *Mengubah Destini Anak Bangsa* (MDAB) Students

### Improved/Enhanced Title:

New Selection Algorithm for *Mengubah Destini Anak Bangsa* (MDAB) Students

### Original Objectives as Proposed:

i) To propose the intersection fuzzy goal and the constraints concept for MDAB students selection process.

ii) To design and developed the user friendly selection algorithm so that the tool can beneficial to UiTM for MDAB students selection purposes.

### Improved/Enhanced Objectives:

i) To propose the intersection fuzzy goal and the constraints concept for MDAB students selection process.

- To propose an algorithm as a framework to make an integrated decision well-suited with the UiTM context,
- Able to accommodate any number of criteria and sub-criteria.

ii) To design and developed the user friendly selection algorithm so that the tool can beneficial to UiTM for MDAB students selection purposes.

- To develop the sequence of steps and decision process algorithm to seek a compromising solution of MDAB selection process,
- To be capable of deriving decision clearly and the process can be traced back easily along the different stages.

iii) To ascertain the proposed algorithm complies with a case study of MDAB selection students that we have conducted at UiTM Sabah.

## ENHANCED EXECUTIVE SUMMARY

This research introduces a new algorithm to select students from low income family the so-called Mengubah Destini Anak Bangsa (MDAB) using fuzzy approach. It focuses on the refinement and modification of certain variables in selection process. The technique employs the intersection of fuzzy goals and constraints concept in judgmental process. The initial input was directly obtained based on the multi-person opinion and experiences. A numerical example which is related to Universiti Teknologi MARA (UiTM) MDAB students' selection was presented to demonstrate the applicability of the proposed method. It was found that the method has successfully helped in dealing with situations which are relevant to the concern of the university, thus can facilitate the DMs to make a decision in a simple and systematic manner. Finally, our new proposed algorithm and modification of the variables can derive more precise in terms of representing the actual situation.