UNIVERSITI TEKNOLOGI MARA

# AN INTEGRATED FUZZY AHP-DEMATEL APPROACH TO EVALUATE DETERMINANTS OF STUDENT ENTREPRENEURSHIP

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# ABSTRACT

Student entrepreneurship plays an important role in developing entrepreneurial skills and promoting self-employment among university students. However, various determinants influence the success of student entrepreneurship and require systematic evaluation. Therefore, this study aims to identify, evaluate and analyse the determinants affecting student entrepreneurship. Using an integrated Fuzzy AHP-DEMATEL approach, six factors are identified, namely time management, financial resources, competition, customer behaviour, operational challenges, and entrepreneurial skills. Expert judgments are obtained from student entrepreneurs and experienced lecturers through guided interview sessions with structured questionnaires. The Fuzzy Analytic Hierarchy Process (Fuzzy AHP) method is applied to determine the relative importance of each factor by calculating the weights and checking the consistency of expert judgments. Subsequently, the Fuzzy Decision-Making Trial and Evaluation Laboratory (Fuzzy DEMATEL) method is used to analyse the causal relationships among the factors and to classify them into cause-and-effect groups. The integration of these methods enables a systematic evaluation of priority and interrelationships among the factors influencing student entrepreneurship. The findings revealed that Financial Resources was the most important determinant influencing student entrepreneurship based on the Fuzzy AHP analysis. Meanwhile, the Fuzzy DEMATEL analysis identified Entrepreneurial Skills and Operational Challenges as the cause factors, while Time Management, Financial Resources, Competition, and Customer Behaviour were classified as effect factors. However, these findings also are expected to assist students, educators and university administrators in identifying critical factors that require emphasis to enhance the success of student entrepreneurship.