

**UNIVERSITI TEKNOLOGI MARA**

**EVALUATION OF HOTEL WEBSITE AND DIGITAL  
SERVICE PROVIDERS USING FUZZY TOPSIS**

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**BACHELOR OF SCIENCE (Hons.)  
MANAGEMENT MATHEMATICS**

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AND DIGITAL SERVICE  
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## **SUPERVISOR'S APPROVAL**

### **EVALUATION OF HOTEL WEBSITE AND DIGITAL SERVICE PROVIDERS USING FUZZY TOPSIS**

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This report was prepared under the direction of supervisor, Madam Nuridawati Binti Baharom. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Science (Hons.) Management Mathematics.

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## **ABSTRACT**

The fact that there are numerous digital service providers, and that the hotel website must compete with them is mostly due to the advancement in technology. Online reservation systems can improve a business's financial success, according to researchers in the field of hospitality management. Hotels can be booked via the hotel website and various digital service providers such as Traveloka, Trivago, Agoda, Trip.com, Booking.com, and Hotels Combined. The ways that these websites promote themselves, the services they provide, and the prices they charge are different. On the other hand, some websites still do not have criteria in place to draw in more visitors. The purpose of this study is to determine the weightage of websites criteria, evaluate and identify the best alternative among the hotel website and digital service providers. A case study is presented, where three alternatives; a hotel website and two digital service provider firms which are Website X and Website Y are evaluated based on nine criteria. The Fuzzy Techniques for Order Preference by Similarity to Ideal Solution (Fuzzy TOPSIS) was applied in this study. By employing this method, fuzzy evaluation criterion weights were first determined, and alternatives were ranked using the generated fuzzy weights. As a result, the hotel website was ranked the highest compared to other two digital service providers.

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