

**I-CHOOSE U: DEVELOPMENT OF DECISION SUPPORT SYSTEM  
USING SKYLINE TECHNIQUE (PREFERENCE QUERY  
TECHNIQUE): THE CASE OF CHOOSING MALAYSIAN HIGHER  
LEARNING INSTITUTIONS**

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SYSTEM USING SKYLINE TECHNIQUE (PREFERENCE  
QUERY TECHNIQUE): THE CASE OF CHOOSING  
MALAYSIAN HIGHER LEARNING INSTITUTIONS**

A project submitted to the Dean of Awang Had Salleh Graduate School in partial Fulfillment of the requirement for the degree of Master of Science (Information Technology)  
Universiti Utara Malaysia

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## **ABSTRACT**

This study focuses on Malaysian public universities marketing strategies which mainly used to attract international students who have the intention to enroll in higher learning institutions in Malaysia. The main objective of this study is to develop decision support system prototype (DSS) using preferences queries technique (skyline technique), in order to solve the issue of facing challenges that can be consequences of wrong selection of universities or colleges that had been made by students and may influence in their performance. This system aim to help international students to choose suitable college based on their criteria as well as to help them to make the right decision when they want to select one of the public universities in Malaysia. In this research; we used rapid application development (RAD) method. The DSS prototype (i-choose u) in this study constructed by using Java Server Pages (JSP) and MYSQL for database development, which are open sources software. The DSS prototype (i-choose u) suggests maximum five universities to international students that are most suitable to students based on student's criteria.

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***Omer Ibrahim Elkhder***

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# **CHAPTER ONE**

## **INTRODUCTION**

Selecting a higher learning institution (HLI) is a crucial decision that may shape the life and success of a student's career. There are many important criteria that have a strong influence on international students' decision-making process such as: quality of learning environment, customer focus, cost, facilities, socialization and location. A study concluded that customer focus and facilities are the main criteria used by respondents in their decisions (Padlee & Kamaruddin, 2010).

These factors should be considered by colleges to develop their marketing strategies in attracting foreign students to enroll at their institutions. It is also important for positioning strategy and strengthening HLI offerings to the foreign market (Padlee,S & Kamaruddin, 2010).

### **1.1 Background**

Malaysia is a fascinating and enchanting nation of different races, cultures and religions, co-existing in harmony in a tropical paradise in the heart of Southeast Asia. Malaysia comprises two distinct land areas, West Malaysia and East Malaysia. West Malaysia is a peninsula, flanked by the South China Sea on the east and the Straits of Malacca on the west, with Thailand as its northern neighbour and Singapore sitting at the south. West and East Malaysia cover a total land area of about 329,758 km<sup>2</sup> and are separated by approximately 40 miles of sea.

The contents of  
the thesis is for  
internal user  
only

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