

**UNIVERSITI TEKNOLOGI MARA**

**PASSENGER BEHAVIOURAL  
INTENTION TO USE SELF-  
SERVICE CHECK-IN (SSCI)  
KIOSKS AT KL INTERNATIONAL  
AIRPORT (KLIA)**

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## ABSTRACT

The self-service check-in (SSCI) KLIA kiosk is a platform that is governed by an airline's application interface for passenger check-in and the printing of boarding passes. Today's travelling passengers have the strong desire that they be a co-producer of the check-in process and they want to do it quickly. Passengers' behavioural intentions vary towards the use of the SSCI KLIA kiosks. Thus, a complete understanding of the factors influencing passengers' behavioural intentions when using SSCI KLIA kiosks in different contexts was deemed necessary. This study focused on examining the external factors that were thought to directly affect behavioural intention to use SSCI KLIA kiosks, namely, perceived control, perceived convenience and perceived speed. The Technology Acceptance Model (TAM) has been the theory that is most widely used to explain an individual's acceptance of information technology (IT) and information systems (IS). This quantitative study has extended the TAM in the context of SSCI KLIA kiosks. This research focuses on the model development and it empirically validates the conceptual framework of a SSCI KLIA kiosk Behavioural Intention Model using the structural equation model (SEM). Hence, the differences in this study were evaluated to understand the modifications that were made to this model. A non-probability sampling design and specifically purposive sampling, was applied in this study. Empirical data from 320 valid respondents was collected through a personally assisted survey using a 37-item structured questionnaire. The questionnaires were distributed to non-users of SSCI KLIA kiosks in the international boarding lounge of KLIA; the passengers were flying with airlines which were subscribers to the SSCI KLIA kiosk services. Except for perceived convenience, the results revealed that perceived control and perceived speed were significant factors contributing to behavioural intention to use SSCI KLIA kiosks. Some passengers may have special requirements in terms of their convenience, particularly those who want to travel as a first, or business, class passenger, carry pieces of luggage and have connections with different flights. In this context, convenience relates to the situational dimensions that aid passengers in the initiation and completion of the check-in process. The findings of this research were consistent with those of previous research which also found that behavioural intention was positively influenced by perceived ease of use and perceived usefulness. This research provides insights for Malaysia Airports Holdings Berhad (MAHB) in further enhancing its facilities and strategies. A new operating model of SSCI KLIA kiosks through robotic automation and digitisation of industrial processes as well as technology related strategies towards understanding passengers' perceptions of the kiosks are some considerations for the airport authority.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Preamble**

This chapter provides the background, problem statement, gaps in this study, research objectives and questions that need to be answered, followed by the scope and limitations, as well as the significance of the study. The need to study the Self-Service Check-In (SSCI) KLIA kiosks was deemed important for Malaysia Airports Holdings Berhad (MAHB) to support the agenda of the International Air Travel Association, (IATA) Simplifying the Business (StB), in order to achieve Vision 2020. The main objective of this research is to examine the factors influencing passenger behavioural intention to use SSCI KLIA kiosks by non-users, for those passengers who were on flights with airlines which were subscribed to SSCI KLIA kiosks services in the international boarding lounge in KLIA.

### **1.2 Malaysia Airports Holdings Berhad and Self Service Technology**

Malaysia Airports (Sepang) Sdn. Bhd. is a subsidiary of MAHB and is responsible for managing and operating KL International Airport (KLIA). MAHB is committed to providing a world-class service to passengers and has devised programmes that are designed for service quality (MAHB, 2014). There is a growing need for KLIA to constantly increase the efficiency of its infrastructure and to reduce operational costs, by providing a flexible framework for its stakeholders as well as to deliver their services in a coordinated way. Hence, KLIA must be seen to be fronting the technology supporting the airlines and passengers. The services must be seen to be equal for all airlines. Amongst the pressures of terminal operation in KLIA is the number of check-in counters needed. This is because the function of check-in versus counter depends on the average speed of passengers' flow through check-in points and the average time taken to serve a passenger, especially during peak hours. Processing check-in at counters takes a longer time for a passenger who has luggage or baggage to check-in and check-in time depends on the passenger's destination and the volume of traffic.

KLIA faces the challenges of providing passenger friendly experience (as