# UNIVERSITI TEKNOLOGI MARA

# THE ADOPTION OF INTERACTIVE KIOSK IN THE NATIONAL MUSIC MUSEUM OF MALAYSIA: AN EXTENSION OF DESIGN FACTORS IN THE TECHNOLOGY ACCEPTANCE MODEL

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Thesis submitted in fulfillment
of the requirements for the degree of
**Doctor of Philosophy**
**(Design and Built Environment)**

**Faculty of Architecture, Planning and Surveying**

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# AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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# ABSTRACT

Since museums shifted their role from a passive exhibition to an active learning environment, many types of interactive kiosks were implemented as a supportive learning tool in many museums. However, several studies have found that interactive kiosk adoption in the museum setting is relatively low because of numerous factors, including user beliefs and design issues. Based on the multi-level selection, the interactive kiosk in the National Music Museum of Malaysia was selected for the single case study of this explanatory research. This research aimed to propose a structural model of determinant factors to explain and predict the interactive kiosk adoption in the museum by identifying the determinant factors and examine the relationship between the identified determinant factors towards the usage intention. A quantitative analysis using Partial Least Square-Structural Equation Modelling procedure has been employed on $n$=277 samples with two major assessments: outer and inner model assessments. The outer model assessment indicated seven group factors that potentially influence the interactive kiosk adoption in the museum: perceived usefulness, perceived ease of use, system support, user interface design, navigation, accessibility, and comfortability. The relationship-test was found that perceived usefulness, user interface design, and navigation positively has a direct effect on the usage intention. While perceived ease of use affects the usage intention via perceived usefulness. The other four factors did not significantly affect usage intention with some possible explanations. Based on the empirical data evidence, this research proposed a structural model capable of explaining and predicting the interactive kiosk adoption in the museum. Additional information is provided along with the proposed model as a basic guideline for other museums. The research findings are applicable to the museum authority, technology provider, or design practitioner to enhance the interactive kiosk adoption in the future.

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