

**UNIVERSITI TEKNOLOGI MARA**

**A NEW CONCEPTUAL MODEL OF  
TECHNOLOGY USAGE FOR  
INDIGENOUS (TUF1): THE CASE OF  
THE ORANG ASLI IN PENINSULAR  
MALAYSIA**

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**PhD**

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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

It is theoretically acknowledged that Orang Asli in Malaysia is central to academic literature across two points. First, Orang Asli makes up a heterogeneous indigenous population. Second, Orang Asli communities are rendered as the earliest inhabitants of Peninsular Malaysia. As such, since Orang Asli communities operate in a different cultural environment, Orang Asli's identities take on a particular meaning. But the marginalisation of Orang Asli as underserved communities and national minorities suggests to modern, educated Malaysians that their Orang Asli brothers and sisters struggle to adopt ICT-sanctioned lifestyle. However, it is argued that outside observers who are not culturally attuned to Orang Asli communities' cognitive styles, attitudes, behaviour, norms, and cultures may find Orang Asli communities' laggard adoption of technology.

By drawing upon the successful realisation of indigenous communities-specific projects, for instance, e-Bario, the Indigenous Household (IHAM) model, the current Telecentre Program for Orang Asli (TPOA), and the struggles of e-Bedian, an investigation emphasising Orang Asli was launched. Specifically, the investigation attempted to formulate a viable model that linked Orang Asli communities with the use of existing technologies.

The adoption of The Exploratory Sequential Design was governed by three approaches: (1) Situational Analysis Study; (2) Requirement Analysis and Define Study that proposed the Technology Usage for Indigenous (TUfI) conceptual model, and (3) User Testing with a Prototype to verify the proposed conceptual model. The deployment of a prototype mobile health application, Eng Sihat, was used.

Two new constructs that strongly displayed significant correlation were presented as the outcomes of model verification: 1) Culturally -based Needs and Cultural Community-Value. Thus, the TUfI model may be pertinently linked to the System Development Life Cycle (SDLC) model. First, several strategies for carrying out cross-cultural research work concerning Orang Asli were presented from the methodological standpoints. Second, the investigation emphasising a model across Orang Asli communities linked TUfI model with Maslow's Hierarchy of Needs Theory. By focusing on the TUfI model, the national agenda may be bolstered; TUfI served as one of the fundamental components that enabled Shared Prosperity Visions (SPVs) 2030, the Malaysia initiative.

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