

Warisan Maya – Malay Culture Digital Ecosystem

¹Khairul Azfar bin Adzahar, ²Mohd Fazil bin Jamaluddin, ³Mohd Shafiz bin Saharan, ⁴Mohd Zulkhairi bin Abdul Hamid, ⁵Etty Harniza bin Harun, ⁶PM Dr. Mahazir bin Ismail

^{1 2 3 4 5 6}UiTM Kedah

***Corresponding Author**

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.925ILEIID000027>

Received: 23 September 2025; Accepted: 30 September 2025; Published: 05 November 2025

ABSTRACT

This paper introduces WarisanMaya, a mobile application that integrates education, commerce, and cultural experiences into a unified digital platform. Designed as a cultural hub, WarisanMaya documents, celebrates, and disseminates Malay heritage in an engaging and accessible manner, offering a dynamic alternative to conventional repositories. Its uniqueness lies in interactive features that merge language learning with cultural knowledge acquisition. Central to the application is the Malay Dictionary and Translation Tool, enabling users to search words and phrases while learning cultural contexts and applications. Complementary features include a Cultural Map for guided exploration of heritage sites, an Arts and Tradition Gallery functioning as a virtual museum, and an Events Calendar that promotes experiential learning through real-time festival and workshop participation. Beyond education, WarisanMaya empowers artisans and small enterprises by connecting them to wider markets, promoting cultural sustainability and local economic resilience. The application directly contributes to several UN Sustainable Development Goals (SDG4, SDG8, SDG11, and SDG17), exemplifying how digital innovation can safeguard intangible heritage while advancing education and socio-economic development.

Keywords: Malay language and heritage, Digital learning platforms, Cultural preservation, Mobile application innovation, Experiential learning.

INTRODUCTION

In an era where digital technologies redefine human interaction and knowledge transfer, the preservation of cultural heritage faces both opportunities and challenges. Conventional repositories such as museums and archives remain invaluable, yet their accessibility is often limited by geography and static presentation. Younger generations, increasingly immersed in digital ecosystems, require platforms that are interactive, mobile, and adaptable to diverse learning preferences. Against this backdrop, WarisanMaya was conceptualised as a digital cultural ecosystem to safeguard, revitalise, and promote Malay language and heritage.

The application addresses two pressing needs: the need for authentic Malay language learning contexts and the urgency of cultural preservation amidst globalisation. It does so by integrating education, commerce, and cultural engagement within a single mobile platform, thereby fostering not only linguistic competence but also socio-cultural appreciation.

Problem Statement

The Malay language and its associated cultural expressions are facing gradual erosion, particularly among younger populations who are more engaged with global digital content than local traditions. While formal education introduces the Malay language, the learning process is often disconnected from authentic cultural experiences. Simultaneously, artisans, performers, and heritage custodians struggle to find sustainable platforms to showcase their craft, limiting both economic opportunities and cultural transmission.

Existing digital resources either focus narrowly on language or heritage, without offering a holistic, interactive, and market-linked solution. The challenge, therefore, lies in developing an innovative platform that simultaneously promotes language learning, enhances cultural knowledge, and sustains heritage-based economic activities.

Objectives

The primary objectives of WarisanMaya are:

1. To provide an integrated mobile platform for Malay language learning contextualised within cultural practices.
2. To document, preserve, and disseminate Malay heritage in interactive and engaging ways.
3. To connect artisans and small enterprises with wider markets, fostering economic resilience and cultural sustainability.
4. To contribute to national and international agendas on education, culture, and sustainable development through digital innovation.

PRODUCT DESCRIPTION & METHODOLOGY

WarisanMaya was designed as a mobile application combining education, cultural preservation, and commerce. Its development followed a design thinking approach, ensuring user-centred innovation through iterative phases of empathising, ideation, prototyping, and testing.

1. Malay Dictionary & Translation Tool: Offers word search with cultural context and practical usage examples.
2. Cultural Map: Provides guided exploration of heritage sites, enriched with historical and cultural narratives.
3. Arts & Tradition Gallery: A virtual museum showcasing performances, crafts, and rituals through multimedia.
4. Events Calendar: Real-time updates on festivals, workshops, and heritage activities with integrated booking functions.

The methodology involved needs assessment through surveys and focus groups, collaboration with cultural experts for content authenticity, agile-based technical development, and pilot testing with students and artisans.

Potential Findings and Commercialization

Educational Impact

Initial trials indicate that WarisanMaya enhances both structured and informal Malay language learning. By situating vocabulary within authentic cultural contexts, learners develop not only linguistic knowledge but also socio-cultural competence. This dual approach positions the app as a supplementary tool for formal education and as an independent resource for travellers, diasporic communities, and heritage enthusiasts.

Economic and Cultural Sustainability

The integration of commerce enables artisans and small cultural enterprises to reach wider audiences, creating new economic opportunities. By embedding cultural products and services within the platform, WarisanMaya positions itself as a catalyst for local economic resilience and cultural entrepreneurship.

Commercialisation Pathways

Commercial potential lies in partnerships with educational institutions, tourism agencies, and cultural organisations. Subscription-based access, premium content, and in-app purchases provide sustainable revenue models. Strategic collaborations with ministries and NGOs will enhance visibility, adoption, and long-term viability.

NOVELTY AND RECOMMENDATIONS

The novelty of WarisanMaya lies in its holistic integration of education, cultural preservation, and commerce within a single mobile application. Unlike existing platforms, it does not treat language and heritage as isolated domains but as interdependent components of identity and learning. The application advances a new paradigm of cultural digital ecosystems where knowledge, practice, and economy coalesce.

For future development, recommendations include:

1. Expanding multilingual support to reach global audiences.
2. Incorporating AI-driven personalization for adaptive learning.
3. Establishing collaborations with regional heritage custodians to expand cultural content.
4. Continuous engagement with user communities to ensure relevance and inclusivity.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge University Technology MARA (UiTM) Kedah for institutional support, cultural experts for their invaluable contributions, and artisans who generously shared their knowledge and craft. Special appreciation is extended to the development team and pilot testers whose feedback was critical in refining the application.

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