

ORIGINAL

Improving village tourism marketing through the implementation of smart digital platforms: An Applied study in Indonesia

Mejorando el marketing del turismo rural mediante la implementación de plataformas digitales inteligentes: Un estudio aplicado en Indonesia

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ABSTRACT

Introduction: village tourism has the potential to enhance the local economy, preserve cultural heritage, and ensure sustainability. However, several tourism villages in Indonesia suffer from a lack of visibility, poor marketing strategies, and Low digital presence. Hence, this study aimed to design an innovative, website-based digital tourism village platform to promote marketing, facilitate visitor access, and empower local communities.

Method: based on the ADDIE model (Analyze, Design, Develop, Implement, and Evaluate), this study adopted a research and development approach that involved validation from tourism and digital specialists. Eight administrators and 48 users participated in the platform testing. Key variables included platform feasibility, which was assessed in terms of functionality, usability, reliability, maintainability, user satisfaction, and data analytics, all of which were described quantitatively alongside the ISO 9126 standards.

Result: validation by experts confirmed that the platform was categorised as “very feasible” in terms of effectiveness, usability, and overall maintenance. User responses rated the platform “very good” on all metrics, including ease of use, design, and the relevance of visualisation context. Despite some concerns regarding rural infrastructural limitations, the platform enhanced marketing, facilitated interactions, and streamlined visitor experience customisation.

Conclusion: the smart digital platform successfully overcame barriers in marketing village tourism by providing culturally relevant, engaging, and easy-to-use features. It enhances local brand equity, expands market reach, and fosters sustainable tourism. For other uses, there is a need to constantly tailor infrastructure, the level of digitisation, and socio-economic conditions. This aids in the holistic development of tourism by advancing technology-based community self-reliance.

Keywords: Village Tourism; Smart Digital Platform; Website-Based Marketing; Community Empowerment; Sustainable Tourism; User Satisfaction.

RESUMEN

Introducción: el turismo rural tiene el potencial de fortalecer la economía local, preservar el patrimonio cultural y garantizar la sostenibilidad. Sin embargo, varias aldeas turísticas en Indonesia enfrentan una falta

de visibilidad, estrategias de marketing ineficaces y una escasa presencia digital. Por ello, este estudio tuvo como objetivo diseñar una plataforma turística digital innovadora basada en sitios web para promover el marketing, facilitar el acceso de los visitantes y empoderar a las comunidades locales.

Método: basado en el modelo ADDIE (Analizar, Diseñar, Desarrollar, Implementar y Evaluar), este estudio adoptó un enfoque de investigación y desarrollo que incluyó la validación por parte de especialistas en turismo y en tecnología digital. Ocho administradores y 48 usuarios participaron en las pruebas de la plataforma. Las variables clave incluyeron la viabilidad de la plataforma, la cual se evaluó en términos de funcionalidad, usabilidad, fiabilidad, mantenibilidad, satisfacción del usuario y análisis de datos, todo lo cual se describió cuantitativamente de acuerdo con los estándares ISO 9126.

Resultados: la validación de expertos confirmó que la plataforma fue categorizada como “muy viable” en términos de efectividad, usabilidad y mantenimiento general. Las respuestas de los usuarios calificaron la plataforma como “muy buena” en todos los indicadores, incluyendo facilidad de uso, diseño y relevancia del contexto visual. A pesar de ciertas limitaciones relacionadas con la infraestructura rural, la plataforma mejoró el marketing, facilitó la interacción y permitió personalizar la experiencia de los visitantes.

Conclusiones: la plataforma digital inteligente logró superar las barreras en la promoción del turismo rural al ofrecer funciones culturalmente relevantes, atractivas y fáciles de usar. Mejora el posicionamiento de marca local, amplía el alcance del mercado y fomenta un turismo sostenible. Para futuras aplicaciones, es necesario adaptar continuamente la infraestructura, el nivel de digitalización y las condiciones socioeconómicas. Esto contribuye al desarrollo holístico del turismo mediante el fortalecimiento de la autosuficiencia comunitaria basada en la tecnología.

Palabras clave: Turismo Rural; Plataforma Digital Inteligente; Marketing Basado en Sitios Web; Empoderamiento Comunitario; Turismo Sostenible; Satisfacción del Usuario.

INTRODUCTION

For most countries, tourism is one of the cores of boosting economic growth significantly.⁽¹⁾ Especially for countries that have geographical conditions with high appeal, this allows it not only as a source of economy but also as a means of promoting a country's unique identity that reflects its local wisdom.^(2,3) In the last decade, tourist villages have become the center of attention of the community and government. The reason is, that through the development of the attractiveness of tourist villages, they can become a motor of microeconomic growth, a center for education and training, community empowerment, and cultural conservation, which ultimately improves people's welfare. This has been proven for a long time by various developing countries to developed countries, for example: Thailand, Japan, and Spain which have introduced and brought village tourism which they have become favorite destinations on a national and international scale, so that it is now a pillar of a competitive and sustainable economy.^(4,5,6) For example, tourist villages in Thailand, such as Ban Rak Thai and Mae Kampong, promote their unique appeal of well-preserved cultural heritage and traditions, attracting various international tourists.

This has had a positive impact on local economic growth and increased the community's welfare index.⁽⁵⁾ Various potential benefits that focus on micro-economic to macro-economic growth are the orientation of the development and management of tourist villages by the community and government.⁽¹⁾ In addition, the mission of preserving culture and local wisdom is also their responsibility by integrating it into village tourism.⁽⁷⁾ Even now, the orientation is also directed at education and training for tourists through direct interaction with local practices.^(8,9) Therefore, comprehensively, village tourism has meaning, goals, and values that are upheld, so that its focus is not only as a tourist destination but also as a center for empowerment and improving the quality of life of local communities.

Indonesia is one of the countries that has many tourist villages with a myriad of potentials that have extraordinary charm and magical power. Starting from natural beauty, traditions, and cultures, performing arts, ethnic diversity, and livelihoods, to culinary dishes. Therefore, tourist villages in Indonesia are always known as tourist villages that not only offer natural beauty but also the charm and magical power of unique cultural arts and local wisdom that continue to be preserved.^(10,11,12) For example, tourism villages in Yogyakarta offer educational experiences such as batik-making, local culinary processing, and cultural conservation⁽¹³⁾, while villages in Bali provide training in waste management and biodiversity conservation.⁽¹⁴⁾ Visitors, both domestic and international, benefit from unforgettable experiences that deepen their understanding of local traditions, provide new skills, and offer opportunities to engage directly in community activities.⁽¹⁵⁾ These benefits not only enrich the tourist experience but also have great potential to enhance the marketing of tourism villages, ultimately contributing to the improvement of local and national economies and the welfare of local communities.⁽¹⁶⁾

Unfortunately, despite this significant potential, many tourism villages in Indonesia have not been able to maximize their marketing efforts and attract a substantial number of visitors, both domestic and international.^(10,17) This is caused by several internal factors of the tourism village as the main obstacles: delays in accessing information, the use of inappropriate promotional strategies, and minimal use of digital technology in marketing so that the various potentials of the tourism village have not been properly exposed.^(18,19,20,21) As a result, this makes the noble goals of the tourism village, such as improving the standard of living and welfare of the community, very difficult to achieve, due to the minimal income from tourist visits caused by the lack of comprehensive information about the tourism village received by tourists. Ultimately, this has the potential to reduce competitiveness which over time can worsen the economic conditions of people who depend on tourism as their main livelihood.

Overcoming these various obstacles is certainly not easy, because the differences in the characteristics of residents in tourist villages can cause ongoing problems. Moreover, young people who should be the main driving force in the development of tourist villages are starting to be eroded by the current of globalization which leads them to their respective interests, so that several reports deeply regret the minimal involvement of young people in this matter.^(22,23) Therefore, innovative solutions are needed that are mutually integrated and can enable the visibility and marketing of tourist villages to occur effectively and efficiently. The main smart solution is to encourage the development of digital marketing media that can present in-depth interactions between tourism managers and visitors in a container that can package the various potentials of tourist villages comprehensively.

Smart digital platforms based on websites are the most recommended digital marketing media, although significant adjustments are needed when applied to tourist villages with different characteristics. The main advantage of implementing a smart digital platform is its ability to package various potentials of tourist villages attractively and interactively and reach wider marketing.^(9,24,25) Many tourist villages around the world have adopted this platform and have proven successful. For example, Japan has successfully developed a digital platform for tourist villages such as Shirakawa-go, which combines booking information and virtual experiences to attract tourists worldwide.^(26,27) The potential and benefits during the implementation of a smart digital platform are not only limited to reaching a wider market but also providing easy access for tourists to explore and plan their visits.^(28,29) Similar applications in Indonesia must consider the unique characteristics and specific needs of each tourism village to ensure the developed platform truly highlights the potential and meets marketing needs.

This study aims to develop an innovative digital platform based on a website aligned with the needs and potential of tourist villages in Indonesia. This study will answer several main questions: This study will answer two main questions: (1) What are the characteristics and design of an effective digital platform in raising the potential of tourist villages? and (2) and to what extent is the level of feasibility of the platform developed for application in various tourist villages in Indonesia? By answering these questions, this study is expected to provide a significant contribution to the development of tourist villages in Indonesia, strengthening the local economy, and improving community welfare through sustainable digital innovation.

METHOD

This study employed a systematic research and development (R&D) methodology, utilising the ADDIE Model (Analyse, Design, Develop, Implement, and Evaluate), one of the most commonly used models in educational technology and instructional design.⁽³⁰⁾ The primary aim of designing an innovative website-based digital platform for marketing tourist villages was to enhance the marketing of these villages. Each of the five ADDIE stages had specific tasks to be completed. In the Analysis stage, site visits, focus group discussions, and consultations were conducted with stakeholders, including local government officials, practitioners, and visitors, to identify and address the defined and actionable functional, content, and managerial needs. In the Design stage, user-centred workflows were developed, which involved drafting the system's and content's architecture, defining specific features, designing user interfaces, and storyboarding. During the Development stage, the website was created and integrated with ancillary components, including digital map tours, videos, word clouds, and visit data analytics. During implementation, the platform underwent validation and pilot testing. Subsequently, the tourism and digital specialists provided reviews for the platform, which were integrated into the final version. In the Evaluation stage, respondents were the users of the platform and its administrators. Evaluation of the platform included measuring its quality, user responses to it, and applying the ISO 9126 criteria (functionality, reliability, usability, maintainability, and portability) alongside structured questionnaires.

This testing involves three experts who are members of information systems, website development, and digital security experts. In addition, after the platform has been properly validated, the final step is to test the user's response and perception of the platform, to provide feedback and experience during its implementation. The users in question are managers or administrators who operate the platform, and visitors who will use the platform's services. In this case, we involved 7 respondents as administrators and 48 respondents as service

users to assess and provide responses during later use. Table 1 presents a brief profile of the practitioners involved in validating and assessing the smart digital platform being developed.

Table 1. Profile of tourism experts			
Expert Type	Expert Code	Expertise	Description
Tourism Practitioner	TP1	Tourism Management	Professor with 40 years of teaching experience, involved in research and development of learning models in tourism destination management, and advisor to professional tourism associations in Indonesia.
	TP2	Tourism Management	Associate Professor with 28 years of teaching experience, engaged in research and development of instructional models in tourism, tourism training instructor, BNSP assessor in Indonesia, and collaborator with the Ministry of Tourism and Creative Economy.
	TP3	Tourism and Hospitality	Associate Professor with 26 years of teaching experience, specializing in tourism curriculum development, training instructor, BNSP assessor in Indonesia, and collaborator with leading destinations such as Bali and Yogyakarta.
	TP4	Ecotourism and Destination Management	Associate Professor with 30 years of teaching experience, focusing on sustainable tourism development, training instructor, BNSP assessor in Indonesia, and collaborator with international institutions in sustainable tourism development projects.
ISO 9126 Testing Expert	IT1	Information Systems	Professor with 25 years of teaching experience, expert in research and development of information systems for public and private sectors, principal consultant in government digitalization projects, and advisor to professional IT associations.
	IT2	Website and Application Development	Associate Professor with 25 years of teaching experience, specializing in UI/UX design, web-based application development, web programming training instructor, and collaborator with technology startup companies in Indonesia.
	IT3	Cybersecurity	Associate Professor with 28 years of teaching experience, engaged in research and development of cyber defence strategies, BNSP assessor in cybersecurity, and collaborator with the National Cyber and Crypto Agency (BSSN) in national data security projects.

Data collection was conducted using a questionnaire technique to determine the needs, validation, and expert testing. Development needs are based on the use of tourism village marketing media, use of content, human resource competency, and development support. Then, the validation technique to evaluate the suitability of content and language use is based on the assessment of tourism experts who focus on the suitability of the features contained in the platform, the suitability of the materials and content on the platform, and the use of language and platform layout.

In this case, we are analysing the quality of the platform using the ISO 9126 Standard Reference, which focuses on six critical aspects of testing: functionality, reliability, usability, efficiency, maintainability, and portability. All these aspects were evaluated using a 4-unit Likert Scale: 1 = 'not feasible at all', 2 = 'not feasible', 3 = 'feasible', 4 = 'very feasible'. In theory, functionality concerns the platform's provision of its functions which must and must not fulfill the expressed and latent needs; reliability assesses the platform's capable of maintaining performance over time; usability concerns the ease of access and satisfaction of the user in using the platform; efficiency concerns optimal use of resource, such as time, processing, and storage toward a target; maintainability concerns the modification or updating of a given platform to respond to emerging needs; and portability ease in transfer the platform from one environment to another without modifying.

Respondent answers were obtained using the same 4-point Likert scale, where 1 = 'very not good', 2 = 'not good', 3 = 'good', and 4 = 'very good'. The user response parameters captured were: design and visualisation, consistency, ease of use, and language appropriateness. In general, design and visualisation refer to the aesthetic and functional arrangement of the platform. Consistency assesses the uniformity of navigation and content structure. Ease of use assesses the simplicity and intuitiveness of actions performed on the platform. Finally, language appropriateness examines the content in terms of its precision, clarity, and appropriateness

of the expressions. In table 2, we present the research instrument grid, which is adopted from several previous relevant studies.

Aspect	Item (n)	Distribution	Sources
Need assessment			Alrawadieh et al. ⁽³¹⁾
Use of tourism marketing media	4	1 - 4	
Use of tourism marketing content	4	5 - 8	
Human resource competencies	4	9 - 12	
Development support	4	13 - 16	
Expert of Tourism			Chamboko-Mpotaringa & Tichaawa ⁽²⁴⁾
Suitability of the features	9	1 - 9	
Suitability of the material and content	5	10 - 16	
Language and platform layout	5	17 - 21	
Expert of Digital Platform			Meneses & Varajão ⁽³²⁾
Functionality	8	1 - 8	
Reliability	4	9 - 12	
Usability	8	13 - 20	
Efficiency	4	21 - 24	
Maintainability	6	25 - 30	
Portability	4	31 - 34	
User			Haryanto et al. ⁽²⁹⁾
Design and visualization	4	1 - 4	
Consistency	3	5 - 7	
Ease of use	3	8 - 10	
Language suitability	2	11 - 12	

Data analysis techniques are carried out to determine categories at the feasibility validation stage based on expert and user assessments. The categories in this include four categories, namely VF “very feasible”, F “feasible”, NF “not feasible”, and VNF “very unfeasible”. Finally, for observation, the assessment category is also divided into four, namely VG “very good”, G “good”, NG “not good”, and VNG “very not good”.⁽³³⁾ The number of respondents determines decision-making, the assessment scale chosen, and the question items for each variable are determined. The data were analyzed descriptively using a quantitative approach based on the formula shown in table 3 below.

Interval Score	Interval Score (Based on Mean)	Feasibility Category	Assessment Category
$Mi+1,5 SDi < M \leq Mi+3,0 SDi$	3,26 - 4,00	Very Feasible (VF)	Very Good (VG)
$Mi+0 SDi < M \leq Mi+1,5 SDi$	2,51 - 3,25	Feasible (F)	Good (G)
$Mi-1,5 SDi < M \leq Mi+0 SDi$	1,76 - 2,50	Not Feasible (NF)	Not Good (NG)
$Mi-3,0 SDi \leq M \leq Mi-1,5 SDi$	1,00 - 1,75	Very Not Feasible (VNF)	Very Not Good (VNG)

RESULTS

During the needs analysis process, we identified various needs related to structured, systematic, and massive promotion. We at least mapped six tourist villages into two development clusters (lower and middle), where the problems they faced were the inability of marketing media to help promote various potentials packaged in tourism packages or products effectively and efficiently. Demographically, the human resources in these tourist villages have met good criteria, although there are some notes about skills in building digital content that need to be improved. It's just that the biggest obstacle they experience is how to create effective and efficient packaging to package various content that describes the details of their products and tourism packages. Currently, the digital marketing media used by them has not been able to promote and explain their products and tourism packages comprehensively. Therefore, they hope for cooperation for research and development on the right media to package various potentials of tourist villages in one integrative, holistic, and interactive package to support the promotion of tourist villages, so that the final target is increased marketing that leads to the development of community welfare.

As to which aspects were lacking the most, we identified issues beyond the ineffective marketing strategies employed. This flaw pertains to the absence of sufficient interactivity among the tourism managers, the marketing media used, and the users. In this scenario, offering a tour which is fully integrated into the marketing media is a necessary condition. In this case, the marketing media designed is a digital platform aimed at enhancing

marketing for several tourist villages in Indonesia. A limited pilot study was done in the Special Region of Yogyakarta, particularly in Kulon Progo Regency.

This digital marketing platform's primary concept is designed to promote community-based tourism as a means to showcase the local potential of the village to a broader audience. The website seamlessly integrates cultural and traditional elements, as well as the natural beauty of the village, to create an authentic and unforgettable tourism experience. With the use of an interactive and informative website, this platform enables visitors to select and book various tour packages tailored to their specific needs and interests.

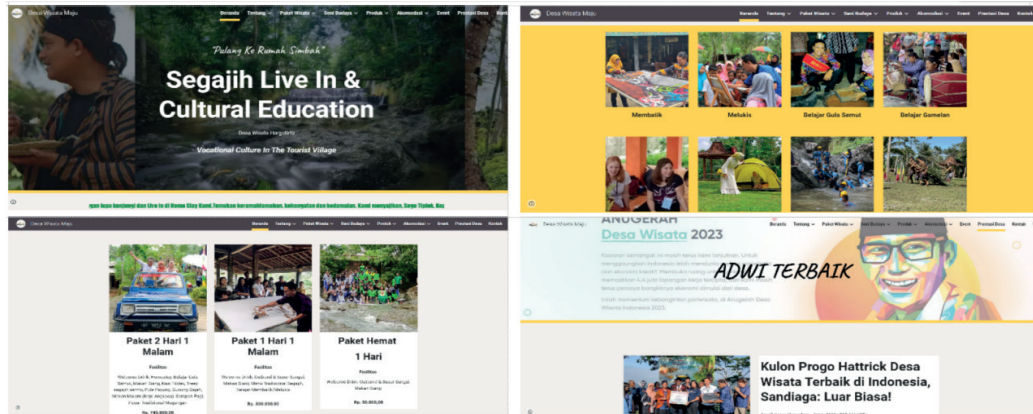


Figure 1. Results of Digital Platform Development for Tourist Villages

The platform offers comprehensive and organised tour packages, enhanced by essential components such as in-depth descriptions, photo and video galleries, and visitor feedback showcases. Users can reserve slots and consult village managers online in real time. Communities are kept informed and engaged through news articles and other relevant information. Real-time reservation and consultation extend the reach of promotions to community-based strategies through social media. From a business perspective, the platform enhances village revenue and better markets local products. It also socially empowers community members by skill-building in tourism and digital marketing. This technology, in Indonesia, is advancing as a means of preserving culture, the environment, and promoting community-based sustainable tourism in the long run. Figure 1 presents an illustration of a successfully developed digital platform.

After the platform is developed, the next step is to conduct a feasibility validation test by requesting assessments from tourism experts and digital platform experts. Tourism experts provide assessments of the features and appeal of the platform, while digital platform experts assess the quality of the platform developed based on ISO 9126 standardization. Table 4 is a summary of the validation results carried out by tourism experts and digital platforms. Based on the results of the tourism expert validation, it can be explained that the value of the suitability of the features to the context of the tourist village is in the “feasible” category. The value of the suitability of the materials and content, and the use of language and layout of the digital platform are in the “very feasible” category. Then, the results of the digital platform expert validation obtained the values of functionality, usability, maintainability, and portability are in the “very feasible” category. Meanwhile, the feasibility validation value for reliability and efficiency is in the “feasible” category.

Table 4. Summary of expert validation results

Expert	Aspect	Score	Category
Tourism	Suitability of the features	4,22	Feasible
	Suitability of the material and content	4,40	Very Feasible
	Language and platform layout	4,40	Very Feasible
Digital Platform	Functionality	4,54	Very Feasible
	Reliability	4,00	Feasible
	Usability	4,67	Very Feasible
	Efficiency	4,10	Feasible
	Maintainability	4,34	Very Feasible
	Portability	4,48	Very Feasible

After being declared feasible for use and implementation, the next step is to implement the digital platform product developed to market products and packages in the tourist village. Implementation is carried out to explore responses from tourist village managers and visitors to the platform. Implementation is carried out in 2 stages, namely the first stage on a limited sample and the second stage on a wider sample. The first stage implementation involved 4 tourist village managers as administrators or platform operators and 24 platform

visitors. The results of the first stage are shown in table 5 below. The results of the analysis of the response of digital platform users in the first stage of implementation obtained a very good assessment based on the perspective of the platform administrator. Meanwhile, the perspective of visitors gave an assessment of the design and visualization, consistency, and suitability of the context in the “good” category. Meanwhile, the aspect of ease of use received a “very good” assessment. Thus, in the first stage of implementation, a very good response was obtained to the product being developed. After the first stage was completed, the second stage implementation was carried out with a wider sample.

The second stage of implementation involved 7 tourism managers and 48 visitors to the tourist village. The results of the response test in the second stage of implementation are presented in table 6. The results of the user response analysis in the second stage of implementation of the developed product were obtained in 4 aspects. All aspects, including design and visualization, consistency, contextual suitability, and ease of use, were in the “very good” category in the assessment of teachers and students. Thus, the first stage implementation received a very good response. Finally, we compared the two test scales using an independent sample t-test to determine whether there was a difference, thus allowing for more in-depth and specific interpretation and discussion. The test results in table 5 indicate no difference between the two, as evidenced by the very slight mean difference (0,1075) with a very low significance value at the 5 % error interval (0,520).

Table 5. Limited Scale Assessment Results

No	Aspect	Score		Category	
		Administrator	Service User	Administrator	Service User
1	Design and visualization	4,67	4,00	Very Good	Good
2	Consistency	4,33	3,67	Very Good	Good
3	Context suitability	4,33	4,67	Very Good	Good
4	Ease of use	4,67	4,00	Very Good	Very Good

Table 6. Large Scale Assessment Results

No	Aspect	Score		Category	
		Administrator	Service User	Administrator	Service User
1	Design and visualization	4,82	4,50	Very Good	Very Good
2	Consistency	4,38	4,33	Very Good	Very Good
3	Context suitability	4,41	4,67	Very Good	Very Good
4	Ease of use	4,82	4,50	Very Good	Very Good

Table 7. Score Comparison Between the Limited Scale and the Large Scale

No	Aspect	Score		Comparison	
		Limited Scale	Large Scale	Mean Defference	p-Value (p<0,050)
1	Design and visualization	4,82	4,50	0,1075	0,520
2	Consistency	4,38	4,33		
3	Context suitability	4,41	4,67		
4	Ease of use	4,82	4,50		

DISCUSSION

The development of a smart digital platform tailored for village tourism represents a significant theoretical advancement in the intersection of digital marketing and community-based tourism. The findings from this study, which involve a comprehensive evaluation of the platform by tourism experts, digital platform specialists, and end-users, provide valuable insights into how digital solutions can be leveraged to enhance the appeal and accessibility of village tourism. From a theoretical standpoint, the platform validates the concept that digital technology can bridge the gap between traditional tourism models and the demands of the modern market. This supports previous theories suggesting that digital interventions can drive tourism growth by expanding market reach and enhancing visitor engagement.^(24,34) Synchronization efforts towards digital platforms based on ISO 9126 standardization provide important highlights for related practitioners to comply with industry benchmarks in ensuring the relevance and effectiveness of the developed digital platforms. However, there are still notes that there are two standardizations that have received less than optimal assessments, which notes lead to challenges related to reliability and efficiency, which conclude that optimization of several aspects of the platform can still be improved. This is very potential to be done, considering that there are previous studies that have encountered the same challenges related to technical challenges from tourism managers which affect their effectiveness.^(32,35)

The advancement opportunities for this research focus on developing platform systems that incorporate local

tourism information into contemporary digital marketing tools to achieve an even deeper user engagement. Contemporary tourism scholars emphasise the importance of interactivity for responding to changing patterns in tourism, such as video-based virtual tours and bespoke booking options.^(36,37,38,39) Not only do these functions boost visitor engagement, but they also align with contemporary, pervasive approaches to personalised digital marketing, where user satisfaction is driven by bespoke content and seamless user interfaces. Approving evaluations of the platform's digital marketing tools and their relative tourism contexts, as received from digital marketing specialists, supports the assertion that tourism marketing in cyberspace can only thrive when the interface is user-friendly.

In line with earlier research, this study also highlights concerns regarding the platform's effectiveness and adaptability in rural areas. Tourism in remote areas faces challenges of low infrastructure and digital illiteracy.^(40,41) Study participants in this research express similar concerns to those of previous respondents, mentioning the persistent connectivity issues in rural areas and sluggish platform response times. These challenges underscore the necessity of simultaneously developing and enhancing rural operators' digital skills to improve their tourism-related digital competencies. Moreover, the use of technology, such as augmented reality and relevant remote or underdeveloped tourism content, can enhance access and interaction with these areas.^(36,42) These considerations, when systematically and flexibly implemented, can counter the digital divide and provide equitable access to the enduring advantages of intelligent tourism frameworks.

The findings from the development of smart digital platforms enrich the discourse on digital transformation in tourism by demonstrating how technology can act as a catalyst for innovation and sustainability. Smart platforms enable seamless interactions among tourists, service providers, and local communities, creating integrated and dynamic tourism ecosystems that enhance both visitor experiences and sustainable development.^(43,44,45) Digital transformation in tourism requires the interplay of technological innovation with local contexts, acknowledging regional characteristics, organizational behavior, and infrastructure readiness as critical to achieving effective outcomes.⁽⁴⁶⁾ Despite their transformative potential, digital platforms are not a universal remedy; reliability and efficiency gaps remain, underscoring the need for holistic evaluations of the broader ecosystem, including stakeholder readiness and adaptability of local settings.⁽⁴⁷⁾

Future research should focus on integrated models that combine technological advancements with socio-cultural and economic dimensions to develop more sustainable and inclusive practices. Literature reviews consistently highlight the importance of uniting methodological rigor with practical application to ensure digital innovations are effectively leveraged.^(48,49) Optimal performance of digital platforms depends on alignment with local circumstances, and frameworks for their use must remain adaptive to evolving technological and socio-economic paradigms.^(50,51) Understanding these intersections can guide the creation of dynamic tourism systems capable of sustaining innovation, inclusivity, and resilience in diverse settings.

CONCLUSION

This study developed and validated an innovative website-based digital platform tailored to the needs and potential of tourist villages in Indonesia. The platform demonstrated high feasibility based on expert validation and received excellent ratings from users in terms of design, usability, and contextual relevance. By integrating interactive features, cultural content, and user-friendly navigation, the platform addresses key marketing challenges faced by tourist villages and expands their market reach. While reliability and efficiency require further optimisation, the findings indicate that such platforms can strengthen tourism marketing and enhance visitor experiences when implemented in real settings. Continued adaptation to local socio-economic and infrastructural contexts is essential to ensure long-term sustainability and impact.

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