



Cyber Physical System: The Role of Website as a Medium of Digital Marketing for Ecotourism

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Abstract: The advancement of human civilisation and the development of the global economy in various fields has now entered Indonesia with various new digital-based technologies and is currently known as the industrial era 4.0 which is based on cyber physical systems. Digitalisation in various fields is currently also intensively carried out in the tourism sector which is one of the country's foreign exchange boosters. Indonesia's tourism development is supported by adequate human resources and the diversity of natural resources which is an added value in order to sedate tourists to visit tourist destinations in Indonesia. The tourism village will later become an independent tourism village with sustainable tourism village certification. The assistance is carried out through the development of Human Resources in the management of tourist villages, product development or travel patterns, and digital development. In the management of digitalisation-based Independent Tourism Villages, the 7 destinations have used websites as a marketing communication medium. With the existence of digital technology-based marketing communication, many Tourism Villages are now increasingly recognised by the wider community across time and space. Marketing communication through websites is one of the right strategies for tourism businesses because it is a more efficient and effective media display and has a positive significance for the tourism sector.

Keywords: Cyber; Digital; Ecotourism; Physical System

Introduction

The advancement of human civilisation and the development of the global economy in various fields has now entered Indonesia with various new digital-based technologies and is currently known as the industrial era 4.0 (Alatas, 2023; Susilawati & Budimansyah, 2023) which is based on cyber physical systems. Digitalisation in various fields is currently also intensively carried out in the tourism sector which is one of the country's foreign exchange boosters (Zhang & Shang, 2022; Zhou et al., 2023). Indonesia's tourism development is supported by adequate human resources and the diversity of natural resources which is an added value in order to sedate tourists to visit tourist destinations in Indonesia.

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village certification. The assistance is carried out through the development of Human Resources in the management of tourist villages, product development or travel patterns, and digital development. In the management of digitalisation-based Independent Tourism Villages (ALshubiri et al., 2023), the seven destinations have used websites as a marketing communication medium. With the existence of digital technology-based marketing communication, many Tourism Villages are now increasingly recognised by the wider community across time and space.

Marketing activities, including branding, use several web-based media, such as email, adwords and blogs (Febriyantoro & Arisandi, 2019). Marketing communication through websites is one of the right strategies for tourism businesses because it is a more efficient and effective media display and has a positive significance for the tourism sector.

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Figure 1. Candirejo Website

Method

A qualitative research method followed by a demonstration of its application in project studies through one concrete example, combining diaries and interviews, to investigate organisational justice in the project context (Patton, 2014; Tracy, 2019; Unterhitzberger & Lawrence, 2022). In this research, using qualitative content analysis techniques to dissect the problem from the perspective of the use of websites as a marketing communication medium in the effort of community economic independence in the domestic tourism sector on the object of 7 websites used by Independent Tourism Villages in Indonesia. This website was chosen because it is a very effective display media to introduce and market various products or services to be offered. In addition, the website has an international scale so that it has a very wide penetration to the audience.

In this study, the research subject is the website of 7 Independent Tourism Villages and the research object is the content on the website. The unit of analysis of website features in this research object includes 8 (eight) components, namely: Freshness, Diversity of Recipients, Diversity of Signs, Diversity of Language, Personal Resources, Processed Memory, External Recording and Conformity. The analysis in this study is based on Media Richness Theory (MRT) to see "media richness", and the website is a medium that can facilitate information needs with a more varied display. Then for data analysis in this study using the interactivity analysis model.

Result and Discussion

The trend of tourist villages that are currently becoming tourist destinations is one form of sustainable tourism development which is an interesting thing to study, because the development of Desa Wisata is definitely different from other tourism development concepts. The concept of back to nature has enormous potential to bring in foreign tourists as foreign exchange earners for the country (Wood, 2002) with this concept,

it should also go straight with the promotion strategy carried out by the tourism manager through media that can reach its target market. Many things need to be considered, especially how to promote, considering that the tourist segment for tourist villages is a market segment that has special characteristics. In addition, the development of increasingly sophisticated technology has also resulted in significant changes in consumer or tourist behaviour.

Technology, in this case communication media, has a vital role in the success of marketing activities of tourist villages (Chan et al., 2020). In the world of rapid technological evolution and economy of digitalisation, consumers are continuously changing. Tourists are among the first (Gorlevskaya, 2016). It is no different in the field of marketing communication, which in this new era requires accelerated adaptation in the use of new media as a digital marketing communication medium with the aim of expanding marketing reach and getting the right target. At least in the marketing communication of independent tourist villages can include a promotion mix which is an effort to make all marketing and promotional activities can produce an image or image that is consistent for tourists.

The development and utilisation of information technology must be addressed by society as an opportunity to optimise their participation and contribution in village development (Cvar et al., 2020). Information technology is present as an effort to foster community awareness and and strengthening the capacity of the community, which is required to contribute to village development. The implication is that the community must have an open attitude and adopt information technology as part of their daily life, both in a personal context and in their daily lives. Both in a personal context and in the context of social and as well as in the context of social and village governance. By doing so, the community will not only will benefit from the existence of information technology, but also in a broader context (Szymkowiak et al., 2021). the community will benefit from the utilisation of information technology in the social and governmental context of the village (Herdiana, 2019).

The future global strategic objectives set out the need to accelerate the dissemination of energy and environmental policies (Alkaraan et al., 2022) as well as the implementation of wide-ranging actions, it sets out priority actions aimed at investing in environmentally friendly technologies, supporting innovation, introducing cleaner, cheaper, and more sustainable forms of private and public transport, ensuring greater energy efficiency and, finally, increasing collaboration between actors (Boumali & Tamine, 2022). Looking at the level of marketing communication, Ducan and

Moriarty say that all messages must be delivered and received consistently in an effort to create a complete perception among customers and related parties (Rehman et al., 2022), including through advertising, direct marketing, interactive / internet marketing, sales promotion, publications / public relations, and personal selling. The digital transformation that has now penetrated into business activities has encouraged the emergence of online buying and selling platforms (Setyawan, 2022).



Figure 2. Website of Panglipuran Tourism Village

Based on the analysis of the Media Richness Theory perspective, the use of the website as a marketing communication medium managed by Human Resources in the 7 Indonesian Independent Tourism Villages has not fully fulfilled the information needs of the audience regarding up-to-date issues that can attract the desire of the audience to dig deeper into information related to the Tourism Village. So that in this case related to the economic independence of the surrounding community can be said to be less than optimal to be empowered in a sustainable manner. By exposing local potentials around independent tourist villages, both directly and indirectly, it is said to be one of the efforts to empower local communities to achieve sustainable economic independence.

In theory, community empowerment can be seen from three sides, namely: First, creating an atmosphere or climate that allows community potential to develop (enabling) (Mondejar et al., 2021). In this case, the emphasis is on recognising that every human being, every community, has potential that can be developed. Community empowerment is the concept of economic development that encapsulates community values to build a new paradigm in development that is people-centred, participatory (Munawar, 2011; Walmsley, 2021). Second, strengthening the potential or power of the community (empowering) (Surya et al., 2021). In this context, more positive steps are needed, apart from just

creating a climate and atmosphere that includes concrete steps and involves. The purpose of community empowerment strengthening the power of the community, especially the weak groups who are in powerlessness (Ismail & Rachim, 2016).

This requires more positive steps than just creating a climate and atmosphere, including concrete steps and the provision of inputs, as well as access to opportunities that will make the community empowered. In the MRT analysis, it can be seen that there is still a lack of support for human resources in this context as independent tourism village managers to be empowered in accessing various opportunities, especially the maximisation of the use of digital media as a well-integrated marketing communication medium (Syahputra, 2021). by looking at changes in consumer behaviour in the digital era that rely on various digital media to access whatever they want to look for, especially when they are going to travel in a destination.

This is very visible in the MRT analysis where the manager of an independent tourist village has not maximised the use of the website as a marketing communication medium, such as local culinary that is able to attract culinary lovers, local merchandise, facilities in each independent tourist village, then the diversity of features that look very not optimal from each of the 7 independent tourism websites in Indonesia.

Third, empowering also means protecting. Related to this research, in the process of managing an independent tourist village, it must be prevented from weakening each other in local potential. By using the concept of empowerment that are offered within the framework of the theory of "ACTORS", then the changes that will result is a change has been planned, because the input to be used in the change was anticipated early on so that the output will be produced capable of optimally efficient (Maami, 2011).

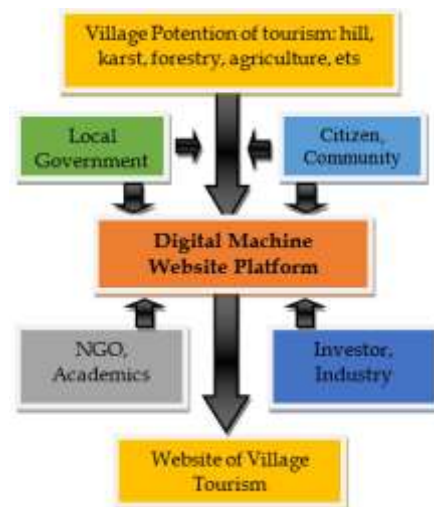


Figure 3. Model of Digital Approach

Due to some villages that are also tourist destinations, there are some managers who do not have the same vision and mission in their managerial role, resulting in inconsistent efforts to empower the economy of their communities through the potential of the village as a tourist destination. It will be ironic when 7 tourist villages have been proclaimed as independent tourist villages, but in reality they are still weak in the management of human resources in this case the use of media as marketing communication of independent tourist villages to realise economic independence for the local community. Community participation is very important to achieve the objectives of any training or learning process (Hadiyanti, 2008).

Smart Village is an alternative in village development because it applies the concept of appropriate technology concept, especially in increasing the capacity of capacity of the village government and creating a technologically literate community (Nuraini et al., 2021). Along with the development of information technology, several villages in Indonesia have started to develop smart village projects. However, given there seems to be little agreement about what the elements of the smart village are, various interpretations of the smart village emerge. Therefore, this article aims to develop the smart village concept for Indonesian villages (Rozi et al., 2017).

Smart village is a concept development that emphasises that the people of the village within the community can solve problems that occur in their area by utilising the potential of their resources intelligently, wisely, and efficiently as well as their resources intelligently, wisely, and efficiently as well as promoting local cultural customs and norms. Based on this explanation, of course, the concept of smart villages is certainly not (Haniyuhana & Wicaksono, 2023). In the era of regional autonomy, the village is a very important part in determining the success of development and direct affiliation with the public in the public service (Rozi et al., 2017).

Conclusion

Based on the analyses and descriptions that have been presented above, it can be concluded that in general, the 7 independent tourism villages in Indonesia are technologically literate, as evidenced by the existence of a website that each village has used as a marketing communication medium. Although when viewed in terms of media richness theory, the use of the website is still very less attention and less than optimal to meet the needs of prospective tourists surfing in it with the aim of finding various information related to tourism facilities offered by the manager. In this case, it means that there

is still a need for support from both the government and private investors to facilitate managers in terms of digitalising the marketing of tourism potential which leads to the economic independence of the local community. Because when the local potential in a tourist village is exposed through digital media, especially in this context is a website, it will be a special attraction to attract potential tourists to visit an independent Indonesian tourist village because they will get a good experience when looking for the latest information and also experiences from other tourists who have travelled to the destination.

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Author Contributions

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Conflicts of Interest

In this research, there is no tug of interest and or hidden interests among the researchers. In addition, this research is also not an order from any funder because it is an independent research.

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