



Inclusive Language for Digital Inclusion: A Case Study of the Self-Determination Perspective in Lon Malang, Madura

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Article Info	Abstract
Received: 2026 - 06- 01	<i>Language gaps between tourism managers and visitors often become barriers to effective information delivery. This study aims to identify the language choices used in tourism promotion at the Lon Malang ecotourism destination. A qualitative approach with a case study design was employed through in-depth interviews with managers and visitors, observations of promotional activities, as well as documentation and literature review. The findings reveal that proficiency in the Indonesian language is a key factor enabling visitors to understand promotional messages and fully enjoy the tourism experience. Meanwhile, the use of English is considered to enhance digital information access and strengthen Lon Malang's image as an inclusive destination open to international tourists. Furthermore, the study highlights that meeting digital information needs is an essential aspect of promotional strategies, particularly in reducing the digital divide among visitors. Overall, this research emphasizes that the implementation of inclusive language and the improvement of digital literacy are strategic steps toward developing an equitable, sustainable, and accessible tourism promotion system for all visitors.</i>
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1. Introduction

Digital citizenship has now become an integral reality in contemporary society. Human interaction in this era is increasingly mediated by internet-based technologies, connecting individuals through digital devices to participate in various forms of online activities. As a result, digital participation has become an important social necessity within contemporary global connectivity.

According to data from the Central Statistics Agency (Badan Pusat Statistik/BPS), at least 69.21% of Indonesia's population accessed the internet in 2023. Within just one year, there was an increase of 3.57%, indicating that 72.78% of Indonesians have an increasing need for internet access. However, despite the relatively high rate of internet penetration in Indonesia, digital exclusion and unequal access remain serious issues. These phenomena are unevenly distributed across society, with much higher levels of exclusion among certain groups, such as rural communities, those with lower levels of education, and individuals with economic limitations or disabilities.

Digital exclusion is closely related to the formation of social inequality. In other words, the absence of digital inclusion not only restricts individuals' rights to access technology-based resources and opportunities for well-being (Gantchev, 2019; Redden et al., 2020), but also directly contributes to the reproduction and reinforcement of social inequality within society (Ranchordás, 2021). In this context, digital inclusion encompasses a range of issues concerning equal access to information and communication technologies (ICTs) and their associated benefits, which play a fundamental role in achieving social inclusion in the modern era (Chadwick et al., 2023; Robinson et al., 2015).

Digital inclusion aims to build a more informed society by ensuring the participation of all groups, especially those previously marginalized in development plans (Hund et al., 2021; Xie et al., 2022). The first crucial component in this regard is access to technology, which serves as an essential prerequisite for bridging the digital divide and strengthening socio-digital cohesion. Ultimately, this creates opportunities through the use of the internet, mobile services, and computerization across various aspects of life (Alamelu, 2015).

Within the tourism sector, digital inclusion has become increasingly important because tourism promotion and visitor engagement are now highly dependent on digital platforms. Nevertheless, access to tourism information is not determined solely by infrastructure availability, but also by language accessibility. In multilingual societies such as Indonesia, language can simultaneously facilitate communication and create barriers to digital participation.

This study focuses on the dimension of digital inclusion in the tourism sector of Lon Malang, Madura, by positioning inclusive language as a mediating tool for digital participation in promoting and communicating tourist sites to visitors. Within this framework, the study formulates two main research questions: first, how do local administrators and government institutions represent digital inclusion practices; and second, how can language contribute to reducing the digital divide.

Previous studies collectively demonstrate that language functions both as a facilitator and as a barrier to digital participation. Research conducted by Balhara and Singh (2018) emphasized that digital inclusion is essential in government services to achieve digital citizenship. Several studies on digital government

services have examined the terminology gap in healthcare between patients and medical professionals (Thonon et al., 2021; Yu et al., 2020), continuous community engagement to overcome barriers to digital health (Hyman et al., 2022), and differences in digital skills among Australian immigrants in terms of age, language, and gender (Baganz et al., 2024).

Several earlier theories have associated language with the effectiveness of government services. Language does not merely function as a means of communication in the real world but also plays a central role in the digital space. Its role in the digital environment is crucial, because rather than being only a medium for conveying information, language can, in fact, create a digital divide (Flammia & Saunders, 2007; Rodriguez et al., 2021). The divide becomes evident among groups with limited literacy levels.

Such literacy limitations not only hinder individuals' access to online information and resources but also increase their vulnerability to misinformation (Bach et al., 2018; Lin et al., 2023). Vulnerability to misinformation can be understood through multidimensional factors that illustrate individual inequalities in understanding terms frequently encountered in cyberspace. These vulnerabilities often stem from personal characteristics such as age (MATTHEWS et al., 2019), limited cognitive functions and skills among rural communities (Rowse et al., 2017), financial constraints (Ranchordás, 2021), and low levels of education (Aguaded-Gómez et al., 2015).

Due to this diversity, inclusive design has become one of the key solutions for achieving a digital society. This approach not only focuses on user needs by designing and simplifying interface features but also stresses the importance of adopting plain language policies in government services, including the use of text to support images, text to support audio, and accessibility features to assist individuals with disabilities (Kurniawan, 2024, 2025).

Although previous studies have widely discussed digital inclusion in healthcare and public services, empirical studies examining the role of inclusive language in digital tourism promotion remain limited. Therefore, this study aims to address this gap by examining how inclusive language practices contribute to digital inclusion within the context of ecotourism promotion at Lon Malang, Madura.

Theoretically, this study contributes to the development of digital inclusion scholarship by integrating perspectives from multilingual communication, inclusive language, and tourism promotion. Practically, this study provides recommendations for tourism managers and policymakers in designing more accessible and inclusive digital communication strategies for multicultural audiences.

2. Method

This study employs a qualitative method with a case study approach. This approach was chosen to understand the social phenomenon of language application for digital inclusion in depth. As explained by Yin (2018:36), a case study allows researchers to examine a case comprehensively while maintaining a holistic perspective toward the factual reality occurring in a social environment.

Ultimately, this study seeks to develop and enrich the theory of the role of inclusive language in fulfilling information needs for digital inclusion through the analysis of interview, observation, and documentation data (Yin, 2018). Data in this study were obtained through three main techniques: interviews, observations, and documentation.

Interviews were conducted using a purposive sampling technique involving three groups of informants, namely government representatives, ecotourism managers, and tourists. Semi-structured interviews were conducted using purposive sampling involving 10 participants consisting of 2 local government representatives, 3 ecotourism managers, and 5 tourists. The design ideas and criteria for interview questions are explained in detail in Table 1.

Table 1. Interview Criteria at Lon Malang Ecotourism		
Actor	Aspect	Objective
Local Government	Digital inclusion	To examine policy direction on digitalization and inclusive language;
	policies; facilitation and training	to assess governmental support in strengthening ecotourism managers' digital and communicative capacities.
Management	Language and communication strategies;	To analyze managers' linguistic and communication practices in digital inclusion;
	collaboration and empowerment	to identify cross-sector collaborations that strengthen their digital capacity.
Tourists	Preferences and perceptions	To explore tourists' needs and perceptions concerning language accessibility and the effectiveness of digital promotion.

In addition, observation was conducted on the Instagram account of Lon Malang Ecotourism to analyze promotional content uploaded from 2024 to September 2025. The observed posts were selected based on three criteria: (1) promotional relevance to tourism activities, (2) use of Indonesian, English, or mixed language captions, and (3) audience interaction through comments, likes, and shares. The analysis focused on identifying linguistic strategies, visual communication patterns, and forms of inclusive content. The observation results

are presented in Table 2, which includes the categories and characteristics of the uploaded content.

Table 2. Observation Data Summary

Category	Total	Percentage
Video	65 posts	55%
Picture	53 posts	45%
Total Data	118 posts	100%

Meanwhile, the documentation technique was used to obtain secondary statistical data from the Central Statistics Agency (Badan Pusat Statistik/BPS), particularly those related to digital inclusion indicators and the number of Indonesian language speakers as contextual support for the analysis of this study's findings. Data validation was carried out using the triangulation technique, by combining the consistency and coherence among the results of interviews, observations, and documentation, and further supported by a literature review and relevant previous research findings.

Data analysis in this study was conducted to manage and understand the findings from interviews, observations, and documentation in depth, aiming to identify meanings and patterns related to the role of inclusive language in meeting information needs for digital inclusion. As explained by Yin [22, p.236], the process of data presentation involves identifying, categorizing, and analyzing data with the purpose of examining relationships among events or information as a whole based on existing evidence. Figure 1 illustrates the stages of data analysis.

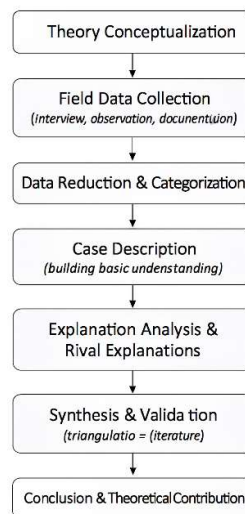


Figure 1. Data Analysis Stages

Data analysis followed Yin's (2018) framework consisting of data categorization, thematic coding, pattern matching, and interpretation. The coding process was conducted by transforming raw data into categories and themes. For example, captions such as "Good vibes" and "Vitamin Sea" were categorized as promotional code-switching practices and later interpreted under the broader

theme of inclusive multilingual communication. Figure 1 illustrates the stages of data analysis.

3. Result

At the national level, the rate of digital inclusion in Indonesia tends to remain stable at around 43–44%. This figure represents the breakdown of four established categories of digital inclusion, which include infrastructure and ecosystem, digital skills, empowerment, and employment. Table 3 summarizes Indonesia’s Digital Inclusion Index for the 2023–2025 period.

Table 3. Indonesia’s Digital Society Index

Year	National Digital Society Index (IMDI)	Infrastructure and Ecosystem	Digital Skills	Empowerment	Employment
2023	43.18	57.09	56.59	26.19	32.14
2024	43.34	52.7	58.25	25.66	38.09
2025	44.53	53.06	49.28	34.32	42.91

Based on Table 3, Indonesia demonstrates a gradual improvement in digital inclusion; however, the empowerment dimension remains comparatively low. This finding suggests that the challenge of digital inclusion in Indonesia is no longer limited to infrastructure availability, but increasingly concerns the unequal capacity of communities to participate meaningfully in digital environments. This aligns with the findings of Zhang et al. (2021), who stated that Indonesia falls into the category of countries with a medium to high level of digital inequality.

The relationship between national digital inclusion and the Lon Malang case becomes evident in the empowerment dimension. Although infrastructure development has expanded internet access, local tourism actors still require communicative and linguistic capacities to transform access into active participation and digital visibility. Digital inclusion not only focuses on accelerating economic growth but also on increasing the involvement of all segments of society.

The main pillar of digital inclusion is to promote economic growth and strengthen community social empowerment (Abubakre et al., 2021; Kraus et al., 2019). Therefore, it is crucial to enhance political empowerment, cultural identity, and community social connection to achieve comprehensive social inclusion (Yue & Cui, 2024). One major factor to consider is the presence of several vulnerable community members who experience digital exclusion.

These include low-income groups, the elderly, persons with disabilities, migrants, rural residents, and people with limited education levels, who are more likely to face barriers in accessing and using digital technology (Hartnett & Fields,

2020). Therefore, digital inclusion should be understood as a socio-cultural process that requires accessible communication strategies alongside technological infrastructure.

The Self-Determination approach enables individuals to create their own motivation in exploring experiences within social events. This motivation helps individuals build self-reflection to make decisions for themselves in order to achieve optimal social functioning (Yue & Cui, 2024). In the context of tourism promotion, this approach is reflected in the ability of local managers to independently create digital content, interact with visitors, and adapt language practices according to audience needs.

As an integral part of Indonesia's multicultural society, Lon Malang is not free from the potential of language gaps that may affect the effectiveness of communication among tourism stakeholders. The solution lies in understanding the use of 21st-century language, which should be directed toward sensitivity to shared goals while considering the needs, desires, and inherent differences of each cultural community (Mendes, 2020).

The Role of Indonesian as a national shared Language

Language and culture are two sides of the same coin that cannot be separated. They have a mutually dependent relationship. On one hand, the language used in a particular area is developed by the cultural community that creates and speaks it (Mendes, 2020). On the other hand, it travels wherever that community goes and settles. Similarly, in the Lon Malang ecotourism site, various languages are used for transactional communication. The Madurese language is used for local interactions, the Javanese language for visitors from Javanese ethnic groups, and the Indonesian language serves as a bridge for cross-cultural and interethnic communication.

Interestingly, a certain level of linguistic awareness has been identified within the ecotourism setting. Based on interviews with local authorities, tourism managers, and visitors, Indonesian has been established as the main language for intercultural interaction. In multilingual conversations, critical reflection on understanding and misunderstanding in communication is a common occurrence. On one hand, linguistic understanding is the main key to opening deeper insights and experiences. On the other hand, misunderstanding does not always arise from language differences; it can also emerge from the lack of shared cultural understanding, even when the same language is used (Goodchild & Weidl, 2024; King, 2023). In other words, linguistic misunderstandings also frequently occur among participants who speak the same language.

The solution is to utilize various elements of one's linguistic repertoire—such as language, style, register, and dialect—which are connected to personal experience, social and cultural knowledge, general knowledge, emotions, and individual intentions (Canagarajah, 2018). Furthermore, the government should be

encouraged to formulate intercultural communication policies that strengthen the roles of Indonesian, Madurese, and Javanese as named bounded entities. Table 4 illustrates these named bounded entities as part of Indonesia’s linguistic and cultural richness.

Table 4. Named bounded entity

Language	Context of Use	Estimated Number of Speakers	Notes on Functionality
Indonesian	Official and educational contexts	~200 million	National and official language used in government, education, and media.
Javanese	Local and family contexts (regional use)	~75–80 million	Widely spoken in Central and East Java; the largest regional language in Indonesia.
Madurese	Local and family contexts (regional use)	~10–14 million	Spoken mainly in Madura Island and parts of East Java (Bangkalan, Sampang, Pamekasan, Sumenep).

Table 4 indicates that Indonesian functions as a linguistic bridge within multicultural communication, while Javanese and Madurese maintain important regional and cultural functions. The coexistence of these languages reflects a dynamic negotiation between national identity and local identity in tourism communication practices. Rather than operating as strictly separated systems, these languages interact fluidly according to communicative needs and audience backgrounds. In this process, language identity and its communicative functions are determined by social contexts, relationships among speakers, and communicative needs that arise in daily life (Goodchild & Weidl, 2024).

The Role of English as a Global Demand

The application of possibly bounded practices can be observed in the promotion of Lon Malang ecotourism through its Instagram social media account. Between 2024 and 2025, six posts were recorded that mix Indonesian and English. Table 5 below illustrates the use of possibly bounded language on the Lon Malang Instagram account.

Table 5. The application of possibly bounded in the Lon Malang ecotourism

Year	Number of Posts	Captions in Indonesian	Captions in English / Mixed Language
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2024	71 posts	66 posts	5 posts
2025	13 posts	12 posts	1 post
Total	84 posts	78 posts	6 posts

Table 5 shows that social media platforms have provided transactional support in negotiating dual identities, particularly between Indonesian and English. Specifically, these platforms facilitate information exchange between managers and tourists on both national and global scales. The management aims to create an interactive space connecting those who exist between national and global cultures. In this context, they seek to foster multilingual engagement within their social media platforms, which McEntee-Atalianis et al. (2023) refer to as networked multilingualism, intentionally designed to connect local, national, and global networks. However, the implementation of multilingual practices is not simple.

There are numerous potential challenges, especially in Indonesia, which, according to Cabrera (2024), adopts a system of multilingualism. As further explained by Kurniawan, Indonesia consists of many regional languages, while Indonesian functions as the national shared language (Kurniawan, 2024, 2025). The integration of Indonesian and English in tourism promotion may increase digital visibility and improve algorithmic recognition within search engines and social media platforms.

Language as a Challenge for Democracy

Language has long been identified as one of the significant challenges to the sustainability of democracy. Language barriers have the potential to cause failures in understanding relevant information for decision-making, while also limiting individuals' participation in various forms of social and economic activities. This condition shows that linguistic limitations are not merely a matter of communication, but also have direct implications for the effectiveness of social and cultural transactional participation, which should be taken seriously in the formulation of public policies and the design of community participation mechanisms. The following table presents the social and cultural policies of ecotourism managers in using English terms in their content uploads.

Table 6. The use of mixed languages on the Lon Malang social media platform

Year	Total English / Mixed Captions	Examples of English Phrases
2024	5 posts	<i>Good Vibes, Vitamin Sea, Sunrise vibes, the sea is my calm, just do it</i>
2025	1 post	<i>New Spot Alert!</i>
Total	6 posts	

Table 6 shows that the use of code-switching can be employed to achieve certain social goals, particularly in expanding the promotional reach of ecotourism. This strategy enables more inclusive and adaptive communication toward the linguistic diversity of the target audience. These findings are consistent with KhudaBukhsh et al. (2020), who argue that code-switching can broaden the promotional scope of content and overcome language barriers, especially in regions with limited linguistic resources.

Such limitations reflect a form of linguistic inequality, where the uneven distribution of language resources results in a lack of representation of certain typological features. Consequently, low-resource languages often suffer digital disadvantages: information in these languages tends to be difficult to find, poorly translated, or not optimally displayed in search results. The following table illustrates the ranking of the Indonesian language in terms of linguistic resources.

Table 7. Ranking and Classification of World Languages (Joshi et al., 2020)

Rank	Language Class Name	Brief Description	Example Language	Approximate Number of Speakers
0	The Left-Behinds	Languages that are largely ignored in language technologies and have extremely limited digital resources.	Dahalo	About 1.2 billion speakers (88.38% of total languages).
1	The Scraping-Bys	Languages with minimal resources that require strong efforts and awareness to improve their digital presence.	Cherokee	About 30 million speakers (5.49%).
2	The Hopefuls	Languages with small but growing support communities and early-stage research initiatives.	Zulu	About 5.7 million speakers (0.36%).

3	The Stars	Rising	Languages with a strong online presence and active cultural communities but still lacking sufficient research data.	Indonesian	About 1.8 billion speakers (4.42%).
4	The Underdogs		Languages with substantial online resources and active research communities that are close to becoming major players. Highly resourced languages with dominant online presence and strong institutional and industrial support.	Russian	About 2.2 billion speakers (1.07%).
5	The Winners			English	About 2.5 billion speakers (0.28%).

Table 7 illustrates that the Indonesian language has shown significant potential for growth within the digital ecosystem and natural language processing (NLP). This indicates that there are great opportunities for the language to develop into one with more established digital resources. In contrast, English has already achieved a dominant position within the digital and NLP ecosystem. As a rich-resource language, English has access to a vast amount of data, well-developed technological infrastructure, and broad social and cultural reach.

Therefore, it has reached the peak of digital maturity and language technology readiness, providing significant advantages in maintaining and strengthening its position as the dominant language in NLP and online interaction (Joshi et al., 2020). The growing application of Indonesian as a language with limited resources can become more effective if supported or integrated with the already well-established English language, allowing for the acceleration of language technology development and the expansion of digital participation to meet diverse information needs for a broader audience.

Diverse Information Needs of Audiences

Every individual has diverse information needs as part of their efforts to fulfill various aspects of life. Information needs do not merely arise from curiosity but are rooted in the desire to accomplish tasks or achieve specific goals. Information, in this context, is obtained through a process of collecting from various sources so that one can make progress in carrying out their tasks, rather than simply satisfying explicitly stated needs.

Based on interviews with tourists, it was found that their information needs regarding the Lon Malang ecotourism site vary greatly, reflecting differences in motivation and purpose of their visit. Nevertheless, all interviewed tourists indicated that they already had prior knowledge about the existence and attractions of the Lon Malang ecotourism site.

Table 8. Levels of Information Need According to Taylor (Borlund & Ruthven, 2020; Ruthven, 2019)

Level of Information Need	Description	Main Characteristics	Lon Malang Ecotourism Context
Visceral Need	The most basic and unconscious level of information need. At this stage, an individual senses a vague feeling of dissatisfaction, an awareness that "something is missing" but cannot articulate it verbally or identify what information is actually needed.	- Unconscious and unexpressed- Felt as a vague uneasiness- Cannot be verbalized	A potential tourist feels the desire to visit a peaceful natural place but has not yet realized that Lon Malang could be an option.
Conscious Need	The stage at which the individual becomes aware of the need for specific information. The person has a general mental	- Awareness of information need emerges- Still vague and unstructured- Lack of clarity in formulation	The tourist becomes aware of wanting to find information about mangrove tourism in Bangkalan but does not yet know

	image of what they do not yet know, but it remains unclear or ill-defined.		the details.
Formalized Need	The stage when the individual begins to articulate their information need in a more structured and specific form. The person can now state a particular question or problem to be addressed.	- Structured formulation of need-Specific questions emerge-Focused information search	The tourist starts seeking detailed information such as ticket prices, opening hours, travel routes, and educational activities at Lon Malang.
Compromised Need	The stage where the individual finally expresses the need to an information system—either human or technical. The question is now “compromised” or reformulated into a query that the system or others can understand.	- Operationalized and explicit-Adjusted to fit the system’s language-Interaction with information source begins	The tourist searches online using keywords such as “Lon Malang mangrove tourism in Bangkalan” or asks a tourism officer for the desired information.

Based on the results of interviews and observations of the Lon Malang social media platform, it was recorded that the information provided has reached the levels of conscious need, formalized need, and compromised need. At the conscious need stage, the content contains general information such as location, road access, or opening hours. At the formalized need stage, the content is informative, including available facilities, educational tourism activities, and entrance ticket prices. At the compromised need stage, the content shows the active participation of tourists in providing comments, suggestions, or questions about information that has not yet been obtained. At this stage, the image of Lon Malang can be built,

either positively or negatively, through user engagement. These three stages are illustrated in Table 9.

Table 9. Types of Content Related to Lon Malang Ecotourism

Type of Content	Description	Purpose / Function
Informational Content	Provides factual details about the location, accessibility, available facilities, and educational activities offered at Lon Malang Ecotourism. It gives visitors a general understanding of what the site offers.	To inform and orient visitors prior to or during their visit.
Promotional Content	Consists of digital and social media materials such as photos, videos, and narratives highlighting the beauty, tranquility, and uniqueness of the natural landscape.	To attract potential tourists and increase destination visibility.
Participatory Content	Involves interactions between visitors and tourism managers, including testimonials, comments, and user-generated social media content.	To foster visitor engagement and strengthen community participation.
Educational Content	Focuses on raising environmental awareness by explaining the ecological role of mangroves and community-based conservation practices.	To educate visitors about sustainability and environmental protection.
Inclusive Content	Uses accessible and inclusive language to reach diverse audiences, including individuals with disabilities, by combining textual, visual,	To ensure equal access to information and promote inclusive tourism.

and verbal
communication forms.

Although information needs are an integral part of an individual's effort to accomplish tasks or achieve specific goals, an important aspect that is often overlooked is how to deliver information to individuals who have no prior knowledge of a particular subject. Taylor emphasizes that individuals often cannot clearly define what they need, but they can explain why they need it (Ruthven, 2019). This indicates that information needs do not always appear as explicit questions but are often rooted in situations or experiences that generate curiosity.

This phenomenon represents the level of visceral need, which is the most basic and authentic form of information need and should serve as the starting point that encourages individuals to explore information further until they reach the conscious need stage. Therefore, fulfilling information needs at the visceral level becomes the most crucial, even though it is difficult to identify verbally.

To bridge this gap, it is necessary to develop appropriate strategies for promoting information, whether through approaches based on local, national, or global target markets, and to consider demographic dimensions such as age and disability conditions. Such strategies require the use of varied and inclusive language, including a lingua franca and accommodative forms of language that can create more equal access to information for all groups in society (Kurniawan, 2024).

4. Discussion

The Role of Managers and the Government in Digital Inclusion

Although digital infrastructure in a country may already be adequate, this does not automatically guarantee the achievement of digital inclusion. Digital inclusion is not only related to the availability of infrastructure and technological advancement but also encompasses the dimensions of Digital Empowerment, Digital Opportunity, Digital Equality, and Digital Justice. For instance, although Indonesia's infrastructure data shows a score of 53.06 (see Table 3), its utilization must be directed as a primary means for education, economic development, and overall community welfare improvement. Enhancing digital empowerment must align with the existing infrastructure capacity so that communities can effectively use computational and internet resources to learn, communicate, innovate, and improve well-being—moving from the stage of digital beginners to digital professionals or innovators.

This process cannot be realized without the active involvement of all stakeholders. As stated by Chadwick et al. (2023), digital inclusion must ensure access to resources for all relevant parties, including researchers, government institutions, web managers, and especially the users themselves. In addition, digital

inclusion should be implemented as a strategy for economic growth through fair distribution of resources and investments, which should be reinforced by enhancing social participation through a self-determination approach (Yue & Cui, 2024).

Digital inclusion data in Indonesia indicate a significant upward trend; however, more targeted strategies are still required to achieve optimal results. According to Alamelu (2013), the realization of digital inclusion must go through five main stages. In this study, digital inclusion can be conceptualized as an interconnected process consisting of four stages: linguistic access, digital participation, communicative engagement, and social empowerment. Language becomes the mediating mechanism that enables individuals to move from merely accessing technology toward actively participating in digital tourism ecosystems. Figure 2 below illustrates the stages required to achieve digital inclusion.

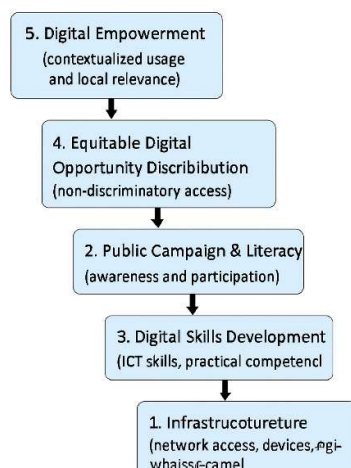


Figure 2. Five stages of digital inclusion realization.

The foundation of national policy on digital inclusion must be measurable and well-coordinated down to the regional level to ensure that all regions in Indonesia gain equal access to and opportunities in the digital sphere. Ecotourism can also involve researchers to enhance the managers' capacity and capability, particularly by including persons with disabilities to gain a deeper understanding of individual needs and abilities (Chadwick et al., 2023). A crucial aspect to consider is language learning through a self-determination approach, as some community members abandon the use of digital technology due to difficulties in understanding the language used (Menger et al., 2015).

The Role of Language in Reducing Gaps and Meeting Digital Needs

The internet is a global network that serves as a meeting space for individuals from diverse cultural and social backgrounds. Through this network, various services and information become accessible to users worldwide, with language

functioning as the primary medium for understanding and interpreting such information. On one hand, language serves as a tool that facilitates users in obtaining information; on the other hand, it may also become a multidimensional barrier in digital interactions (Flammia & Saunders, 2007). The first barrier lies in language literacy, where the level of literacy among communities determines how far they can access information and connect with available linguistic resources. The second barrier relates to the programming languages of websites, which often play a more significant role than network effects in determining information accessibility for users from different linguistic backgrounds.

The initial barrier to the effective use of the internet concerns linguistic limitations influenced by various factors such as physical, sensory, mental, or intellectual impairments. Social groups with these characteristics are at higher risk of experiencing digital exclusion, including older adults, individuals with disabilities, people with lower education levels, and those in limited socio-economic conditions (Menger et al., 2015). In the local context, the managers of Lon Malang ecotourism have demonstrated inclusive efforts by providing various forms of promotional content, such as videos, photos, and texts, to meet the diverse informational needs of visitors (see table 2).

Interestingly, such accommodation practices were carried out intuitively, without explicit awareness that they were part of an accommodation strategy for user diversity. Therefore, targeted training is required to enhance the managers' ability to create more accommodative and inclusive communication media so that messages and information can reach all segments of society, including groups that are digitally vulnerable.

The second barrier concerns the use of language in the digitalization process. The language used in the digital domain has a direct influence on the algorithms being trained, as digital models and systems are often developed based on linguistic data from specific languages. In this context, English not only serves as a *lingua franca* but is also widely recognized as the main language of the Internet. It represents the most dominant linguistic resource shaping the flow of global digital information (Joshi et al., 2020).

As a language with both symbolic and practical power in intercultural communication, English can be utilized in switchcoding strategies to expand audience reach (KhudaBukhsh et al., 2020) and to fulfill certain discourse functions, such as greeting geographically dispersed audiences or building connections with groups sharing national, ethnic, professional, or experiential identities (McEntee-Atalianis et al., 2023).

Interestingly, the managers of Lon Malang ecotourism have already practiced switchcoding in several of their promotional posts (see Table 6), reflecting an initial awareness of the potential of language use in expanding the reach of digital communication. Nevertheless, linguistic skill training remains essential to ensure that word choice and the application of switchcoding are performed accurately and

effectively according to the communication context and intended promotional goals.

Language serves as the primary medium in constructing and fulfilling the diverse informational needs of tourists. Given that each individual differs in physical, sensory, mental, and intellectual aspects, language also exhibits diversity that can be adapted to the communicative needs of each person. Kurniawan (2024) emphasizes that the use of a shared language enables multicultural societies to communicate and interact effectively.

This practice is reflected in the management of Lon Malang ecotourism, where the use of switchcoding and the fulfillment of tourist information needs have reached the conscious, formalized, and compromised stages. Optimizing the use of common terms is also essential so that Search Engine Optimization (SEO) algorithms can recognize and learn from relevant linguistic resources, thereby improving content visibility in online search results.

Thus, switchcoding should not merely be understood as replacing terms with English equivalents, but as the application of contextual and purposeful linguistic strategies. Conversely, switchcoding that is not aligned with the communication context may create linguistic ambiguity and hinder the effectiveness of message delivery (KhudaBukhsh et al., 2020).

Ruthven (2019) emphasizes that individuals' information needs are shaped by emotional, cognitive, and sensory factors that influence their motivation and personal interest in a given message. In light of these influences, the selection of terms capable of eliciting emotional, sensory, and cognitive responses becomes crucial for capturing audience attention more effectively.

In this regard, the researcher highlights the importance of employing mental and behavioral verbs, as elaborated by Halliday & Matthiessen (2004). Mental verbs represent processes of human consciousness, such as thinking (cognition), feeling (affection), and perceiving (perception), which reflect the individual's internal world [see pp. 197–210]. In contrast, behavioral verbs denote observable human actions that manifest such states of consciousness or emotion through outward behavior.

The use of these two types of verbs is considered strategic in designing promotional messages, as they help connect affective dimensions with tourists' concrete experiences. Furthermore, promotional content should also represent the identity of Lon Malang ecotourism, including its geographical location and national context, as part of a broader destination branding strategy (Kurniawan et al., 2025). For example, phrases such as "beautiful beach in Java," "Lon Malang, a hidden paradise in the world," or "Lon Malang, Indonesia's natural heritage and local wisdom" may serve as linguistic data for code-switching practices aimed at training search engine algorithms to recognize descriptive patterns associated with the Lon Malang tourism destination.

Overall, language serves as the main medium in promotional activities, as it

enables messages, values, and the identity of a destination to be effectively constructed and disseminated. An inclusive approach requires the use of accommodative language—language that can bridge audience diversity and ensure that meaning is accessible to all segments of society. Such linguistic strategies should be implemented not only in spoken and written forms but also through visual representations that are communicative and easy to access, so that promotional messages can be enjoyed and understood by various social and cultural groups.

5. Conclusion

This study confirms that language plays a central role as the main medium in ecotourism promotion, functioning not only as a tool for fulfilling informational needs but also as a means of shaping perceptions, emotions, and destination identity. With a well-planned inclusive language strategy through self-determination, language can serve as an instrument for digital inclusion. The results of the analysis show that meeting informational needs in *ecotourism* promotion can be optimized through the use of simple English sentences that are easily understood by non-native speakers, along with the application of switchcoding strategies.

An inclusive and accommodative linguistic approach can expand cross-cultural communication access and enhance social engagement among all types of tourists. This promotional strategy represents an essential step toward effective, participatory, and sustainable tourism communication practices. This study is expected to make a theoretical contribution to enriching applied linguistics research in the field of tourism communication and to serve as a foundation for designing more effective promotional strategies oriented toward linguistic diversity and social inclusivity.

This study has several limitations that should be acknowledged. *First*, the analysis focused on the aspect of inclusive language in the promotional content of Lon Malang ecotourism without involving direct perceptions from tourists or other stakeholders; therefore, the interpretation of the effectiveness of the language strategy remains interpretative. *Second*, this study was limited to observing the use of switch coding on Instagram, which does not yet fully represent linguistic variations in broader promotional contexts. Moreover, the limited time and scope of data prevented a deeper exploration of the sociocultural influence on how promotional language is received by multicultural audiences.

Based on the findings, it is recommended that tourism destination managers develop more structured communication strategies based on linguistic inclusivity. The use of switch coding should be designed by considering contextual relevance, emotional appeal, and linguistic accessibility for both local and international tourists. In addition, it is important to involve language experts, communication practitioners, and local communities in the formulation of promotional content to

create narratives that are representative and sustainable. Local governments and tourism agencies are also expected to support the enhancement of digital literacy and multilingual communication skills among tourism practitioners.

Future research can be directed toward empirical and participatory approaches to evaluate the actual impact of switch coding on tourists' perceptions, interests, and destination choices. Further studies should also integrate multimodal analysis, including visual, audio, and digital interactivity elements in ecotourism promotion. Moreover, future research can expand the context by comparing linguistic practices across different ecotourism destinations in Indonesia or the Southeast Asian region to gain a more comprehensive understanding of the dynamics between language, culture, and sustainable tourism promotion.

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