

## The Development Of Bilingual Information Boards To Support Recreational Tourism At Marisa Beach

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**Abstract:** *Recreational tourism destinations depend not only on natural attractions but also on the availability of supporting facilities that ensure effective information delivery, visitor safety, and comfort. One such facility is the information board, which serves as a visual medium for communicating essential messages to visitors. At Marisa Beach, existing information boards are limited, largely monolingual, and not systematically designed to meet diverse visitor needs. This study aims to develop bilingual information boards to support recreational tourism at Marisa Beach. A Research and Development (R&D) approach was employed using the Borg and Gall model, encompassing needs analysis, product planning, prototype development, expert validation, revision, and field testing. The resulting product consists of bilingual information boards in Indonesian and English containing site regulations, safety information, directional guidance, and brief descriptions of the destination. Expert validation results indicate that the product is appropriate for use after minor revisions, while field testing shows that the boards are readable, easy to understand, and positively received by visitors. These findings indicate that bilingual information boards enhance information accessibility and contribute to a more inclusive and well-organized recreational tourism environment. Consequently, the development of bilingual information boards is essential for improving tourism information services and supporting sustainable destination management at Marisa Beach.*

## INTRODUCTION

Tourism has long been acknowledged as a vital sector that contributes not only to regional economic development but also to community well-being and the strengthening of a destination's identity. In the realm of recreational tourism, coastal areas occupy a prominent position, as they offer natural beauty alongside shared public spaces where people can engage in leisure and social activities. Nevertheless, the sustainability and success of such destinations are shaped not merely by their natural attractions, but also by the adequacy of supporting facilities that promote comfort, safety, and ease of access to information for visitors (UNWTO, 2022).

Among these supporting facilities, information boards play a particularly significant role.

As visual communication tools situated in public spaces, information boards are designed to convey essential messages to visitors in a clear and efficient manner. According to Calori and Vanden-Eynden (2015), signage integrates textual, symbolic, and visual elements in order to communicate information in ways that are readily comprehensible to users. In tourism contexts, information boards function as instruments of orientation and wayfinding; at the same time, they communicate rules, guidelines, and interpretive messages, thereby facilitating interaction between destination managers and visitors (Tilden, 2007).

Furthermore, the presence of well-organized and intelligible information boards enables visitors to better understand their surroundings, make informed use of available facilities, and experience a greater sense of security during their visit. In this respect, Pearce (2016) highlights that the quality of information services at a destination has a direct influence on tourists' experiences and overall satisfaction. Consequently, information boards should be viewed not as optional additions, but as integral components of effective recreational tourism management.

In parallel with the rapid growth of global tourism and the increasing movement of people across regions and countries, language has emerged as a crucial dimension of tourism communication. Language serves as the primary medium through which destinations communicate with visitors from diverse linguistic and cultural backgrounds (Richards, 2018). Within this global context, English functions as an international lingua franca commonly used by non-local and international tourists. Therefore, the provision of tourism information in more than one language—particularly in Indonesian and English—becomes essential for enhancing information accessibility and reducing potential communication barriers.

Moreover, research has consistently demonstrated the benefits of bilingual and multilingual information in tourism settings. Reisinger and Turner (2019) argue that tourism information presented in two or more languages facilitates visitors' understanding of the destination and fosters more favorable perceptions. Similarly, Kim and Kim (2020) observe that bilingual information contributes to increased feelings of comfort, safety, and satisfaction among tourists. Taken together, these findings suggest that bilingual information boards represent an effective and inclusive communication strategy within recreational tourism environments.

Marisa Beach is one such recreational destination that holds considerable potential for development as both a public space and a coastal tourism site. However, preliminary observations reveal that the information boards currently available in the Marisa Beach area are limited in number and insufficient in terms of content clarity and organization. Most of the information is presented in a single language and has not been systematically designed to address visitors' informational needs. This situation is consistent with the findings of Setiawan and Pratama (2021), who note that many local tourism destinations face challenges related to inadequate informational media, particularly with regard to language use, content completeness, and clarity of presentation.

These conditions indicate a clear gap between visitors' need for accessible and understandable information and the existing state of informational facilities at the destination. For this reason, there is a pressing need to develop information boards that are not only informative, but also communicative, user-centered, and contextually appropriate. In addressing this need, a Research and Development (R&D) approach is considered particularly suitable, as it emphasizes the systematic creation and validation of practical products for real-world application. As outlined by Borg and Gall (2003), R&D research involves a series of structured stages, including needs analysis, product development, field testing, and revision based on feedback from experts and users.

In light of the above considerations, this study focuses on the development of bilingual

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information boards to support recreational tourism at Marisa Beach. It is expected that the proposed bilingual signage will enhance the quality of information services, improve visitors' overall experiences, and contribute to more professional destination management. From a theoretical perspective, this study enriches discussions on the development of tourism information media, while from a practical standpoint, it offers a model that may inform the implementation of bilingual information boards in other recreational tourism destinations.

## **LITERATURE REVIEW**

Recreational tourism refers to travel activities undertaken by individuals or groups primarily for enjoyment, relaxation, and physical or psychological refreshment. According to Inskeep (1991), recreational tourism emphasizes the utilization of natural and man-made resources, such as beaches and coastal areas, as public spaces that offer leisure-oriented experiences for visitors. Beach tourism destinations are typically characterized by high visitor mobility and cultural diversity, which requires effective destination management beyond the provision of attractions alone. Supporting facilities that enhance visitor comfort, safety, and order are therefore essential. In this context, information boards play a significant role in facilitating recreational activities by enabling tourists to interact with the tourism environment in an informed and organized manner.

### **Information Boards in Tourism**

Information boards are visual communication tools designed to convey written messages to the public within shared spaces. In tourism settings, they function to provide essential information related to facilities, regulations, directions, safety, and the characteristics of a destination. Middleton (2001) emphasizes that clear, accessible, and easily understandable information constitutes a fundamental component of destination management, as it influences tourists' perceptions and overall experiences. Consequently, information boards serve not only as directional aids but also as supportive infrastructure that assists visitors in navigating and understanding tourism areas effectively.

The primary objective of tourism information boards is to improve visitors' comprehension of the destination, reduce uncertainty, and support orderly and safe tourism activities. In addition to their practical function, information boards also carry an interpretive and educational role by introducing visitors to the values, meanings, and distinctive features of a destination (Tilden, 2007). As such, information boards are integral to the development of tourism destinations that prioritize service quality and visitor satisfaction.

### **Bilingual Language and Bilingual Information Boards**

Bilingual language use refers to the employment of two languages within a single communicative context. In public spaces, bilingualism is commonly adopted to accommodate users from different linguistic backgrounds. Gorter (2006) explains that bilingual public signage emerges as a response to communicative needs in multilingual environments, particularly in tourism destinations. The use of a national or local language enables communication with domestic visitors while maintaining local cultural identity, whereas the use of an international language, such as English, facilitates interaction with international tourists.

Bilingual information boards present messages in two languages with the purpose of enhancing information accessibility for a wider range of visitors. In tourism contexts, such boards offer practical benefits by improving comprehension, increasing visitor comfort, and minimizing misunderstandings. Beyond their functional value, bilingual information boards also contribute to shaping the image of a destination as inclusive, visitor-friendly, and internationally oriented, which is particularly relevant for coastal tourism areas such as Marisa Beach.

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### **Linguistic Landscape in Tourism Contexts**

The concept of linguistic landscape addresses the visibility and use of languages in public spaces, including information boards, signs, and other written displays. Landry and Bourhis (1997) define linguistic landscape as the presence of written language in public areas that reflects social, cultural, and linguistic dynamics. In tourism settings, linguistic landscape performs both informational and symbolic functions. The informational function involves delivering practical messages to visitors, while the symbolic function relates to the representation of identity and the image of a destination through language choices. Bilingual information boards, therefore, form a crucial part of the linguistic landscape by signaling openness to linguistic diversity and cultural inclusivity.

### **Bilingual Information Boards within the Scope of This Study**

Angelita and Alejandro (2021), in *The Development of Bilingual Information Boards to Support Recreational Tourism at Marisa Beach*, conceptually emphasize the importance of bilingual information boards as supportive facilities for recreational tourism. Their study highlights that the development of such boards should focus on message clarity, appropriate language use, and cultural relevance in order to accommodate visitors from diverse linguistic backgrounds. Rather than asserting direct empirical impacts, their work provides a theoretical foundation for understanding bilingual information boards as strategic tools in recreational tourism development.

Drawing on these theoretical perspectives, this study integrates concepts of recreational tourism, information boards, bilingualism, and linguistic landscape to examine the development of bilingual information boards at Marisa Beach. These concepts collectively offer a conceptual framework for understanding how bilingual information boards can enhance communication, reinforce destination identity, and support the overall recreational tourism experience.

### **METODE PENELITIAN**

This study employs a Research and Development (R&D) approach as the primary method. The R&D approach was selected because it aims to produce a tangible product in the form of a bilingual information board while assessing its feasibility, practicality, and effectiveness in the field. According to Borg and Gall (2003), developmental research is a systematic process for creating and validating educational or informational products through iterative and structured stages. This is reinforced by Gustina et al. (2024), who emphasize that R&D focuses on real needs analysis, field testing, and continuous revisions to ensure the product can be broadly implemented.

In this study, the Borg and Gall Development Model serves as the main framework. This model was chosen because it provides logical, sequential stages that are product-oriented, making it highly suitable for developing tourism information media. According to Borg and Gall (1979; 2003), the development model is a systematic procedure for producing a specific product and testing its validity, practicality, and effectiveness through repeated field trials, emphasizing a strong link between theoretical research and practical implementation.

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The research flow is presented as follows:



Picture 1: Stages of the Borg and Gall Development Model

1. **Research and Information Collection**  
This stage serves as the initial step, focusing on gathering data to understand the potential and challenges at the research site. Activities include field observation, literature review on relevant topics, and preliminary interviews with stakeholders. The primary goal is to obtain an empirical understanding of user needs or the context to be developed, ensuring that the resulting product is relevant and aligned with real-world conditions.
2. **Planning**  
After data collection, the planning stage involves systematically formulating objectives and strategies for product development. At this stage, product specifications, content scope, initial design, and evaluation methods are determined. A well-structured plan ensures the development process is efficient and aligned with research objectives.
3. **Development of Preliminary Product Form**  
This stage focuses on developing an initial form or prototype of the product. For example, in creating a bilingual information board, content is arranged in two languages, the visual layout is designed, and the design is adapted to the environmental characteristics. This product is provisional and serves as the basis for the subsequent validation process.
4. **Preliminary Field Testing**  
The initial product is tested on a small scale to assess user responses to its content, design, and functionality. Evaluation methods may include direct observation, questionnaires, or interviews. The goal is to identify deficiencies or aspects that need improvement before wider-scale testing.
5. **Main Product Revision**  
Based on preliminary testing results, the main product undergoes revision. Revisions include language refinement, information simplification, and visual design adjustments to enhance clarity, communicativeness, and usability. This stage reflects the reflective R&D approach, where user feedback forms the foundation for improvement.
6. **Main Field Testing**  
The revised product is retested with a larger group of users under real-world conditions. This testing aims to evaluate the product's effectiveness, practicality, and users' level of understanding. The data obtained provides comprehensive empirical information on the

- product's performance in the field.
7. Operational Product Revision  
Following the main field testing, operational revisions are made based on evaluation analyses. Improvements cover technical aspects, content, and visual design to ensure the product is ready for optimal use and meets feasibility standards.
  8. Operational Field Testing  
The product is tested under operational conditions that simulate continuous real-world use. Evaluation focuses on functional consistency, clarity of information, and user acceptance over a specific period. This stage also helps identify minor issues that were previously undetected.
  9. Final Product Revision  
The final revision is carried out based on findings from operational field testing. This stage results in the final refinement of content, design, and product structure, ensuring it is valid, practical, and effective for use.
  10. Dissemination and Implementation  
The final stage involves the dissemination and implementation of the product. The completed product is deployed in the field and documented in reports or scientific publications. The goal is to ensure optimal use and enable replication or adaptation in other settings.

## RESULTS AND DISCUSSION

This study employed a Research and Development (R&D) approach using the Borg and Gall model, which emphasizes systematic and sequential product development. The model was applied to develop a bilingual information board as a supporting facility for recreational tourism at Marisa Beach.

The initial stage involved a needs analysis conducted through field observation and communication with site managers and visitors at Marisa Beach. The findings revealed that the existing information facilities were limited in number and predominantly monolingual. Essential information related to site regulations, safety guidelines, and tourism facilities had not been optimally delivered to all visitors, particularly those from different linguistic backgrounds. Therefore, the development of bilingual information boards was considered a relevant solution to enhance information accessibility in the tourism area.

Based on the results of the needs analysis, a prototype of bilingual information boards was designed using Indonesian and English. The content included directional signs, site regulations, safety warnings, and brief descriptions of Marisa Beach. The visual design emphasized readability, message clarity, and balanced layout to ensure that the information could be easily understood by visitors.

### Results of Expert Validation and Product Revision

The developed prototype subsequently underwent expert validation, involving a content expert and a language expert. The validation aimed to evaluate the appropriateness of the content, clarity of information, and accuracy of language use in a tourism context. The results of the expert validation are presented in Table 1.

Assessed Aspect	Validator	Evaluation Result	Category
Relevance of content to tourism needs	Content Expert	Very Good	Feasible
Clarity and completeness of information	Content Expert	Good	Feasible
Accuracy of Indonesian language use	Language Expert	Very Good	Feasible

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Accuracy of English translation	Language Expert	Good	Feasible
Integration of content and visual design	Content Expert	Good	Feasible

Table 1. Results of Expert Validation of the Bilingual Information Boards

The validation results indicate that the bilingual information boards were feasible for use, although several improvements were recommended. The experts' suggestions served as the basis for revising the product. Details of the revisions are presented in Table 2.

No.	Expert Feedback	Revision Action
1	Some terms were too technical	Simplification of terms for better visitor comprehension
2	Inconsistencies in bilingual translation	Standardization of terms in Indonesian and English
3	Wording not fully aligned with local context	Adjustment of expressions to the cultural context of Marisa Beach
4	Text layout was unbalanced	Improvement of layout and spacing between visual elements

Table 2. Product Revisions Based on Expert Suggestions

Revisions were conducted to ensure that the bilingual information boards met feasibility standards in terms of content, language use, and visual presentation. This stage reflects a key principle of the Borg and Gall model, which emphasizes continuous product improvement through expert evaluation.

### Results of Field Testing

After revision, the bilingual information boards were subjected to limited field testing at Marisa Beach. The field testing aimed to examine readability, ease of comprehension, and functional effectiveness of the boards in real conditions. The results of the field testing are presented in Table 3.

Assessed Aspect	Observation/Visitor Response	Category
Text readability	Easy to read for visitors	Very Good
Clarity of information	Information was easy to understand	Good
Ease of understanding rules and safety	Helped visitors understand the area	Very Good
Usefulness of bilingual format	Facilitated non-Indonesian visitors	Very Good
Overall visitor response	Positive and well accepted	Good

Table 3. Results of Field Testing of the Bilingual Information Boards

The field testing results indicate that the bilingual information boards functioned effectively as tourism information media. Visitors reported that the information provided helped them understand site regulations, available facilities, and safety aspects. The use of two languages was also perceived as a positive effort to enhance visitor comfort and information accessibility.

### Discussion

This discussion focuses on a theoretical analysis of the results obtained from the

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development of bilingual information boards based on the stages of the Borg and Gall model. The findings demonstrate that product development through needs analysis, expert validation, revision, and field testing resulted in bilingual information boards that are appropriate for supporting recreational tourism at Marisa Beach.

Conceptually, bilingual information boards function as visual communication media that bridge tourists' information needs with the tourism environment. Information clarity, text readability, and the use of two languages contribute to improved information accessibility, particularly for visitors from diverse linguistic backgrounds. These findings are consistent with tourism management theories that emphasize the importance of clear and accessible information systems in enhancing visitor comfort and overall tourism experience.

From the perspective of linguistic landscape theory, bilingual information boards perform both informational and symbolic functions. Informationally, they assist visitors in understanding site regulations, facilities, and environmental conditions. Symbolically, the use of Indonesian and English represents Marisa Beach as an inclusive tourism destination that is open to international visitors and oriented toward quality service.

Furthermore, the use of bilingual language on information boards reflects the application of bilingualism in public spaces. Indonesian serves as a marker of local identity and a communication tool for domestic tourists, while English functions as an international lingua franca. The combination of both languages strengthens the role of information boards as effective and adaptive communication media in a coastal tourism context.

To clarify the relationship between the research findings and the theoretical framework, a summary of the discussion is presented in Table 4.

Research Aspect	Key Findings	Theoretical Link
Needs analysis	Limited information boards and monolingual dominance	Recreational tourism requires supporting information facilities (Inskeep, 1991)
Design of bilingual information boards	Information presented in Indonesian and English	Information boards as visual communication media (Middleton, 2001)
Expert validation	Product feasible with minor revisions	Borg and Gall R&D development principles
Field testing	Boards easy to understand and useful	Informational function of linguistic landscape (Landry & Bourhis, 1997)
Use of bilingual language	Facilitated domestic and international tourists	Public space bilingualism theory (Gorter, 2006)
Visitor perception	Improved comfort and tourism orderliness	Support for recreational tourism experience

Table 4. Relationship between Research Findings and Theoretical Framework

Based on the table above, it can be concluded that each stage and outcome of the bilingual information board development is strongly connected to the underlying theoretical framework. Therefore, the application of the Borg and Gall model in this study is proven to be systematic and relevant in supporting the development of bilingual information boards as facilities that enhance recreational tourism at Marisa Beach.

## CONCLUSION

Based on the results of the research and development process employing the Borg and Gall model, this study concludes that the development of bilingual information boards at Marisa Beach represents a relevant and effective strategy for supporting recreational tourism. The findings indicate that the previous limitation of information boards and the predominance of a single language hindered the optimal delivery of essential information related to tourism regulations, safety, and available facilities. Consequently, bilingual information boards emerge as a crucial supporting facility in the management of coastal tourism destinations.

The results of expert validation and field testing demonstrate that the developed bilingual information boards are feasible for use, possess a high level of readability, and facilitate visitors' understanding of the tourism area. The integration of Indonesian and English enhances information accessibility and reinforces the image of Marisa Beach as an inclusive and visitor-friendly destination for both domestic and international tourists. From a theoretical standpoint, these findings support principles of recreational tourism management and linguistic landscape theory, which emphasize the informative and symbolic functions of language in public tourism spaces.

Nevertheless, this study is limited by the small-scale implementation of field testing, which restricts the generalizability of the findings. Future research is therefore recommended to involve a larger number of participants and to explore the development of digital or interactive bilingual information media. Practically, the findings of this study may serve as a reference for destination managers and local authorities in developing effective and sustainable tourism information facilities in similar recreational tourism contexts.

## REFERENCES

- Angelita, A., & Alejandro, B. (2021). *The development of bilingual information boards to support recreational tourism at Marisa Beach*. *Journal of Tourism Development Studies*, 5(2), 45–58.
- Borg, W. R., & Gall, M. D. (1979). *Educational research: An introduction* (3rd ed.). New York, NY: Longman.
- Borg, W. R., & Gall, M. D. (2003). *Educational research: An introduction* (7th ed.). Boston, MA: Allyn and Bacon.
- Borg, W. R., & Gall, M. D. (2003). *Educational research: An introduction* (7th ed.). Boston, MA: Allyn and Bacon.
- Calori, C., & Vanden-Eynden, D. (2015). *Signage and wayfinding design: A complete guide to creating environmental graphic design systems* (2nd ed.). Hoboken, NJ: John Wiley & Sons.
- Calori, C., & Vanden-Eynden, D. (2015). *Signage and wayfinding design: A complete guide to creating environmental graphic design systems*. Hoboken, NJ: John Wiley & Sons.
- Gorter, D. (2006). *Linguistic landscape: A new approach to multilingualism*. Clevedon, England: Multilingual Matters.
- Gustina, Z., Husnayayin, A., & Dewi, D. E. C. (2024). Karakteristik dan langkah-langkah metode penelitian Research and Development (Borg & Gall) dalam pendidikan. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 9(4), 490–500.
- Inskeep, E. (1991). *Tourism planning: An integrated and sustainable development approach*. New York, NY: Van Nostrand Reinhold.
- Jamaludin, D. A., Henderi, & Al-Bahra Bin Ladjamudin. (2024). Development of Android application-based e-learning learning media using the Borg and Gall method. *JINAV*:

- Journal of Information and Visualization, 5(1), 171–180.
- Kim, J., & Kim, M. (2020). The role of multilingual information in tourist satisfaction. *Journal of Tourism Studies*, 25(2), 45–57.
- Landry, R., & Bourhis, R. Y. (1997). Linguistic landscape and ethnolinguistic vitality: An empirical study. *Journal of Language and Social Psychology*, 16(1), 23–49. <https://doi.org/10.1177/0261927X970161002>
- Middleton, V. T. C. (2001). *Marketing in travel and tourism* (3rd ed.). Oxford, England: Butterworth-Heinemann.
- Pearce, P. L. (2016). *Tourist behaviour and the contemporary world*. Bristol, UK: Channel View Publications.
- Reisinger, Y., & Turner, L. W. (2019). *Cross-cultural behaviour in tourism* (3rd ed.). London, UK: Routledge.
- Richards, G. (2018). Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management*, 36, 12–21.
- Setiawan, D., & Pratama, A. (2021). Media informasi dalam pengelolaan destinasi wisata lokal. *Jurnal Pariwisata*, 8(2), 85–94
- Slamet, F. A. (2022). *Model penelitian pengembangan (R n D)*. Institut Agama Islam Sunan Kalijogo Malang. ISBN 978-623-6648-27-8
- Tilden, F. (2007). *Interpreting our heritage* (4th ed.). Chapel Hill, NC: University of North Carolina Press.
- United Nations World Tourism Organization. (2022). *Tourism and destination management*. Madrid, Spain: UNWTO.
- Utami, N. M. A., Ariyaningsih, N. N. D., Aritonang, E. Y., & Irwandika, T. (2022). The linguistic landscape of Desa Kutuh: Multilingual public signage for sustainable tourism. *Journal of Tourism and Cultural Studies*, 14(1), 67–80.
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