International Conference on Sustainable Tourism and Entrepreneurship

Vol. 01 No.01 August 2026, ISSN: 3163-2912

Exploring the Role of Collection Conservation and Museum Management in Achieving Sustainable Tourism at the Presidential Museum of the Republic of Indonesia Balai Kirti

Raisa Chaerani Umayah[1], Sri Endah Yuwantiningrum[2], Charles Parnauli Saragi[3], Nisa Rahmaniyah Utami[4]

[1] *Student at Institute of Business and Informatics Kesatuan Bogor, Indonesia*
[2] *Research Advisor and Lecture at Institute of Business and Informatics Kesatuan Bogor, Indonesia*
[3] *Secretary of the Tourism Undergraduate Program at Institute of Business and Informatics Kesatuan Bogor, Indonesia*
[4] *Lecturer in Tourism at the Tourism Undergraduate Program at Institute of Business and Informatics Kesatuan Bogor, Indonesia*

**Corresponding author. Email: raisachrnmyn1@gmail.com*

ABSTRACT

Museums are increasingly recognized as strategic actors in sustainable tourism; however, limited studies examine how internal conservation and management practices contribute to measurable sustainability outcomes. This study investigates the role of collection conservation and museum management in supporting sustainable tourism at the Presidential Museum of the Republic of Indonesia Balai Kirti. Using a qualitative case study approach, data were collected through in-depth interviews with museum managers, conservators, and education staff complemented by direct observation and document analysis. The findings indicate that preventive conservation practices such as environmental monitoring, routine inspections, regulated visitor access and technical preservation measures play a critical role in safeguarding artifact authenticity and ensuring intergenerational transmission of cultural heritage. These efforts strengthen socio-cultural sustainability by protecting historical integrity while maintaining relevance for contemporary audiences. Museum management further mediates this process by translating preserved collections into structured visitor experiences through interpretation, educational programs, digital integration, and community outreach. By aligning conservation priorities with engagement strategies, the institution enhances educational value and tourism competitiveness. Nevertheless, long-term sustainability remains dependent on institutional resilience financial capacity professional competence and integration with broader cultural policies. Budget limitations infrastructural constraints and administrative procedures may restrict optimal environmental control and strategic planning. Ultimately this study demonstrates that conservation functions not merely as a technical task but as a foundational governance mechanism that supports sustainable tourism development and reinforces cultural continuity within heritage-based institutions while promoting responsible heritage management for future generations.

Keywords: *Sustainable tourism, Museum management, Collection conservation, Cultural heritage, Indonesia.*

1. INTRODUCTION

Sustainable tourism has become a guiding framework in contemporary tourism development. Sustainable tourism considers current and future economic, social, and environmental impacts while addressing the needs of visitors, industry stakeholders, and host communities. While sustainability discourse is often examined at the macro-destination level, less attention has been given to how heritage institutions operationalize sustainability internally [1].

Museums occupy a unique position within tourism systems. Museums are permanent, non-profit institutions serving society through the collection, conservation, interpretation, and exhibition of tangible and intangible heritage. This definition highlights the dual mandate of preservation and public engagement [2].

The Presidential Museum of the Republic of Indonesia Balai Kirti represents a significant heritage

institution dedicated to preserving presidential history and national identity. Located within the Bogor Presidential Palace complex, the museum attracts visitors seeking educational and historical experiences. However, the sustainability of such institutions depends not only on visitor numbers but also on how collections are preserved and managed.

This study aims to explore how collection conservation and museum management contribute to sustainable tourism at Balai Kirti.

2. LITERATURE REVIEW

Tourism activities are closely related to human motivations, which are influenced by psychological, social, and intellectual needs. Tourism may serve various purposes such as recreation, religious activities, health improvement, sports participation, business events, and special interest activities [3].

The diversification of tourism purposes demonstrates that tourism is increasingly shifting from being purely leisure-oriented toward experiences that offer educational and cultural values.

In line with this shift, cultural and historical tourism have emerged as significant tourism segments. Cultural tourism highlights local traditions, arts, and community identity, while historical tourism focuses on heritage assets that represent socio-political and cultural developments of past civilizations [4]. Within this framework, museums emerge as strategic cultural tourism destinations because they function as institutions responsible for preserving and communicating cultural heritage. Museums are defined as non-profit permanent institutions that serve society by collecting, conserving, researching, and exhibiting tangible and intangible heritage for educational and recreational purposes. Museums therefore function not only as exhibition spaces but also as educational institutions and knowledge center that support research, cultural preservation, and public learning [2]. Through interpretive approaches, museums provide meaningful visitor experiences that strengthen public understanding and appreciation of historical and cultural values.

As heritage-based institutions, museums must implement effective conservation strategies to ensure long-term sustainability. Conservation constitutes a fundamental component of sustainable tourism, referring to the protection and responsible management of natural and cultural resources for future generations. Contemporary perspectives view conservation as a socio-ecological process integrating scientific knowledge, ethical considerations, governance structures, and community participation [5]. Effective conservation practices therefore require collaboration among stakeholders, including governments, communities, and the private sector.

In the museum context, conservation practices generally encompass preventive and curative strategies. Preventive conservation focuses on controlling environmental factors such as temperature, humidity, lighting, and biological threats to minimize deterioration risks. The identification of deterioration agents—including physical forces, pests, pollutants, and environmental fluctuations—is essential in preventive planning. Curative conservation, on the other hand, involves direct intervention in collections through treatments such as fumigation, restoration, and stabilization to repair or mitigate existing damage [6], [7]. Integrating conservation practices with interpretation and visitor management is increasingly important in supporting sustainable museum development. Museums must balance preservation with accessibility by implementing alternative interpretive strategies, such as replicas, multimedia displays, and interactive exhibitions. These approaches enable institutions to uphold conservation standards while enhancing visitor engagement and educational outcomes, thereby strengthening the role of museums as sustainable cultural tourism destinations.

3. FRAMEWORK

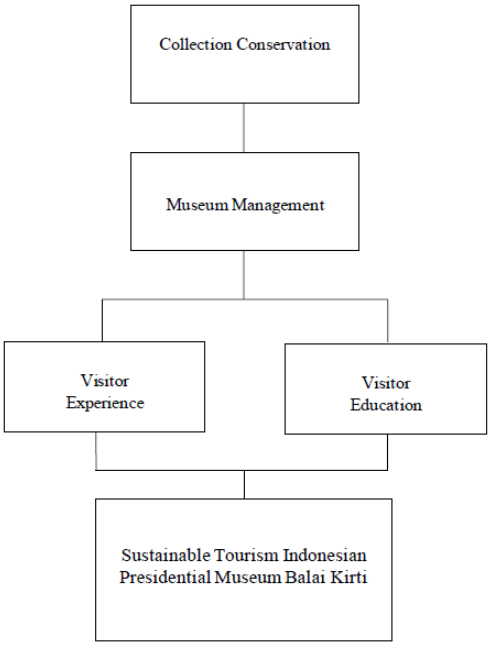


Figure 3.1. Conceptual Framework

The Conceptual Framework above illustrates the hypothesized relationship between the internal functions of the museum and the achievement of our ultimate goal: Sustainable Tourism. The process begins with two critical internal drivers: Collection Conservation and Museum Management. The quality of the policies and technical practices within these two domains determines the success of all subsequent stages. These drivers then lead directly to our crucial mediating outcomes which are the quality of the Visitor Experience and the effectiveness of Visitor Education. If conservation is poor, the collection lacks integrity, and both the experience and educational value suffer. Finally, when we maximize the quality of the Visitor Experience and

the Educational Value, we can successfully achieve the final objective which Sustainable Tourism for the Indonesian Presidential Museum Balai Kirti. This demonstrates that internal action is the prerequisite for external sustainability.

4. RESEARCH METHODS

The qualitative data analysis approach is a simultaneous process, beginning with the initial data collection stage and continuing until the final research report is completed [8]. This process is fundamentally inductive, where researchers identify very specific data and then develop it into general themes or categories. This inductive method aims to ensure that the data produced is meaningful, understandable, and relevant in the context of the research [9]. In the data processing stage, researchers use the NVivo software. NVivo is derived from NUD*IST (Non-Numerical Unstructured Data Indexing, Searching, and Theorizing). NVivo is a software created to support, develop, and facilitate the management of qualitative data analysis projects. Meanwhile, the name NVivo itself is adapted from the term "in-vivo" introduced by Grounded Theory experts Strauss and Glaser. The term in-vivo refers to the practice of coding that is sourced directly from real, live data experienced by participants in the field. Therefore, it can be concluded that NVivo is a software platform that functions to develop and support qualitative research management, where its main function is to help researchers carry out data coding efficiently and effectively [8].

The presence of NVivo provides significant support for qualitative researchers who have often faced major challenges related to issues of subjectivity (researcher bias), validity of findings, and reactivity, such as changes in informants' behaviour when being studied. Overcoming these obstacles is often difficult when researchers rely solely on manual data analysis processes. These challenges can be minimized through this software by facilitating the coding of data obtained from various literature references and the separation of data sources [8].

A crucial final step in data analysis is verification and conclusion drawing. Tentative conclusions (initial findings) obtained in the early stages may change or be adjusted as new facts emerge during the data collection process. However, if these preliminary conclusions are consistently supported by valid evidence throughout the research, the final findings will be highly credible and accountable [9].

Data collection in this study was obtained by conducting field visits to the Balai Kirti Presidential Museum of the Republic of Indonesia to obtain data through interviews with informants. In addition, the researchers conducted a study in the form of documentation by searching for information related to museum conservation and sustainable tourism through sources from the internet, books, and journals, which were then used for research purposes.

Table 4.1. List of Research Sources

Description	Person	Information
Unit Manager	1	Interview
Conservator	2	Interview
Facilities and Infrastructure Team	1	Interview
Cultural Officer	1	Interview
Educator	5	Interview

In this study, ten informants representing five different roles were identified through the interview process. The Unit Manager is responsible for overseeing the overall management of the Presidential Museum of the Republic of Indonesia Balai Kirti. The Conservator team is responsible for preserving both the collections and their environmental conditions within the museum. The Facilities and Infrastructure team manages the museum's physical facilities and supporting infrastructure. The Cultural Officer primarily handles curatorial responsibilities, focusing on curatorial work, while also contributing to conservation activities to a limited extent, as well as supporting public programs and educational initiatives. Lastly, the Educator team is responsible for developing educational narratives and delivering interpretive information to museum visitors.

In conducting this research, the researcher applied data validity checking techniques through triangulation. Conceptually, triangulation is defined as a method of checking data validity by utilizing sources or instruments outside the primary data that has been collected. This technique serves as a comparative tool to verify the consistency and validity of the data obtained. The triangulation stages that applied by researchers are divided into three types, namely source triangulation, technique triangulation, and time triangulation, with the following details: (1) Source Triangulation, this approach is carried out by re-examining data findings by comparing information obtained from different sources, even though the topic or source data used remains the same. (2) Technical Triangulation, this technique is carried out by cross-checking the data that has been obtained, namely by using different data collection methods, for example, verifying the results of interviews by conducting direct observations of the research subjects.

Based on the above definition of triangulation in this study, this study used the type of triangulation of data examination techniques carried out by comparing the results of observations and interviews conducted by researchers with informants. Then the researchers will re-

examine using information that has been published in various forms, such as books, articles, or other scientific publications. This step aims to ensure that the data used can be considered credible [8].

5. RESULTS AND DISCUSSION

Conservation aims to maintain the integrity of the collection material as the basis for its aesthetic and historical value. This theory emphasizes that the authenticity of the collection is the main element that determines the authentic value of cultural heritage [10]. Conservation does not only focus on objects, but also considers the relationship between collections, the environment, and human resources as an integrated system [11]. The interview results show that conservation practices at Balai Kirti have reflected this concept. The informant emphasized that conservation is carried out continuously through routine maintenance activities such as fumigation, restoration, and monitoring of lighting conditions and exhibition spaces. The analogy given by the conservator regarding collection care as being like skin care shows the awareness that collections require ongoing care to maintain their aesthetic and historical value.

Professional museum management includes space arrangement, visitor services, and collection management aimed at creating a positive visitor experience. Good management enables museums to convey information systematically and increase visitor engagement [2]. The results of the study show that the management of visits to Balai Kirti is carried out by dividing visitor groups according to the capacity of the museum space. Educators have an important role in ensuring that visitors receive complete information by adapting interpretation materials based on the age segmentation and background of visitors.

The research findings show that Balai Kirti emphasizes historical value-based interpretation as the main strategy for visitor education. Educators not only explain the collection informatively, but also instill the values of nationalism and the preservation of Indonesian presidential history. This interpretive approach strengthens the theory that museum education functions as a medium for forming cultural awareness. This statement is in line with principles of sustainable tourism, education plays a crucial role in raising public awareness of cultural resource preservation [4]. Education serves as a means to instill sustainability values, ensuring that tourists not only enjoy the attractions but also understand the importance of preserving cultural heritage.

Tourism development must consider the balance between resource conservation and utilization [12]. The concept of carrying capacity is important to ensure that tourism activities do not damage the preserved objects. The research results show that Balai Kirti applies the principle of sustainability through regulating the number of visitors, supervising collections, and developing educational programs outside the museum such as museum travel. This program shows that museums do not only function as exhibition spaces, but also as a means of disseminating cultural values to the wider community.

The interview aims to analyze how museum management collaborates in realizing sustainable tourism at the Balai Kirti Indonesian Presidential Museum by maintaining the collection through collection conservation activities without reducing the quality of the visitor experience. Data processing in this study was carried out using NVivo 12 Pro software. The use of this device can make it easier for researchers to carry out the research process because the device has provided features that can organize, process, analyze data, and prepare reports. This feature is very helpful for researchers, especially in conducting qualitative research which often encounters large amounts of unstructured data. Before entering the interview data processing process, the researcher created a research project and then entered the data. Next, create codes and themes, visualize the data, and present it in a more structured form.

After importing the data, the next important step is to code the data and divide it into several themes and subthemes. In this case, the researcher first conducted an analysis of the results of the interviews that had been conducted. In creating themes and subthemes, researchers must identify the objects most frequently mentioned in informant interview conversations. After creating codes and adjusting the codes that produce themes, the researcher determines subthemes to facilitate the process of identifying relationships between several aspects in the theme.

Table 5.1 Research Themes and Subthemes

Themes	Subthemes
Management Interpretation	Management Support
	Improvement Needed
	Human Resource Capacity
	Conservation Based Interpretation Planning
	Collection Access Management
Sustainable Conservation	Heritage Preservation
	Collection as Attractions
	Conservator Role
Visitor Education & Experience	Innovation Value-Based Interpretation
	Visitor Engagement
Tourism Conservation Trade-off	Collection Alternatives
	Conservation Dilemma
Sustainable Museum Practices	Environmental Management
	Museum Sustainability
	Facility Management

The study identifies five interrelated concepts that shape museum management and sustainability. Management Interpretation refers to the strategic process of planning and delivering interpretive content to communicate historical meanings and cultural values effectively while remaining aligned with collection preservation principles. This is closely connected to Sustainable Museum Practices, which encompass integrated management approaches that balance collection preservation, visitor experience, environmental responsibility, and long-term institutional sustainability. Supporting this, Sustainable Conservation emphasizes the systematic and long-term preservation of collections to maintain their authenticity and material integrity while still allowing responsible public access. However, museums often face a Tourism Conservation Trade-off, reflecting the tension between increasing visitor access and ensuring adequate preservation, thus requiring balanced and adaptive management strategies. Finally, Visitor Education & Experience highlights the educational and experiential outcomes derived from visitor interactions with collections, interpretive strategies, and museum programs, reinforcing the role of museums as both educational and cultural institutions.

The formulation of themes and sub-themes in this study was based on the key research variables, namely the role of conservation demands, the requirements to support visitor education and experience, and the role of management in aligning these aspects to achieve sustainable tourism within the museum context. These variables served as the initial analytical foundation for the thematic structure. Furthermore, the development of themes and sub-themes was conducted iteratively throughout the interview process, allowing for the incorporation of emerging insights from the data. As a result, additional findings were identified, including the need for continuous improvement and the importance of human resource capacity. This indicates that the thematic structure was not only theory-driven but also enriched by empirical evidence obtained during the research process.

Following the coding process, in which the data were systematically categorized according to the predetermined sub-themes, the dataset was subsequently visualized through the use of word clouds and project maps. These analytical visualization techniques enabled the identification of recurring patterns, thematic relationships, and dominant concepts within the data, thereby enhancing the rigor, clarity, and depth of interpretation in the analysis of the research findings.



Figures 5.1 Word Cloud Based on Interview Data

Based on the results of the word cloud above, the results of the frequency of words that frequently appear in the results of informant interviews were obtained where the word "Museum" (1.64) was the main object studied, namely the Indonesian Presidential Museum Balai Kirti, the word "Conservation" (1.60) which was the main analysis factor, and the word "collection" (1.47) which showed that the main focus of the analysis was the collection as the main attraction of a museum.

In presenting the research results, the researcher coded the data using the Project Map visual data, which is one of the features in NVivo 12 Pro. This was done by the researcher to make it easier to see the perspective of each of the 10 informants. The Project Map itself is a method for exploring or presenting data visually in a project consisting of elements that require data from previous projects as a basis, thus providing significant benefits, especially in supporting the data analysis process, developing relevant theories and facilitating the presentation of research results in a systematic and easy-to-understand manner. The results of the interviews indicate varied perspectives, influenced by the specific professional roles and functional domains of the informants. This diversity constitutes a significant strength of the study, as it enables the collection of data from multiple domains, each with its own specific needs and priorities. Consequently, the role of museum management as a mediating mechanism becomes essential in balancing these differing demands and ensuring coherent and sustainable decision-making.

Research Findings Unit PIC, Ms. Linda



Figure 5.2 Informant 1's Project Map

Source: Processed Data (2026)

This study set out to examine how collection conservation and museum management contribute to the achievement of sustainable tourism at the Presidential Museum of the Republic of Indonesia Balai Kirti. Drawing from qualitative findings, the study reveals that sustainability within museum contexts does not emerge from a single operational dimension but rather from the interaction between management interpretation, conservation practices, institutional capacity, and visitor engagement. The assistance provided in the form of management support for conservation activities at the Balai Kirti Indonesian Presidential Museum is carried out in the form of involving conservators to participate in technical guidance or conservation training. By supporting the need for conservation training, training activities will help conservators to improve their skills in more advanced conservation techniques and environmentally friendly conservation so that the role of collection conservation as a contributor to achieving sustainable tourism at Balai Kirti can be maintained.

Research Findings Cultural Officer, Mr. Arie

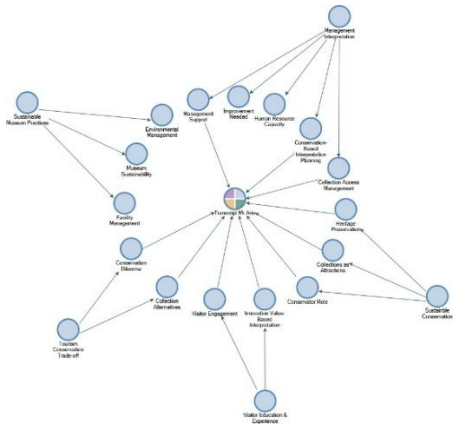
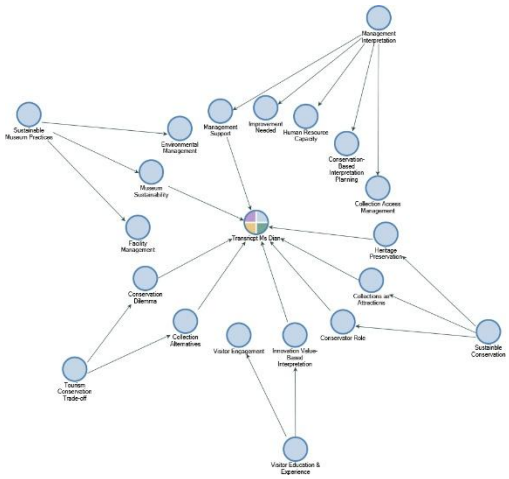


Figure 5.3 Informant 2's Project Map

In conclusion, Informant 2's perspective reveals that sustainable tourism at Balai Kirti is achieved through a protection-oriented model characterized by conservation-based interpretation, controlled access, and adaptive innovation. Sustainability emerges not from expansion but from careful stewardship, strategic management interpretation, and continuous negotiation between preservation and tourism demands.

Research Findings Conservator, Ms. Dian

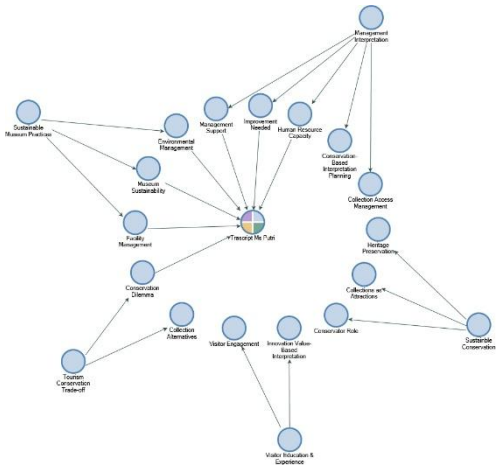


Source: Processed Data (2026)

Figure 5.4 Informant 3's Project Map

In conclusion, this perspective reinforces that sustainable tourism in museum contexts depends primarily on environmental discipline, technical expertise, and ethical stewardship. Sustainability is not driven by expansion but by the institution's ability to protect its collections while gradually adapting interpretation strategies to contemporary visitor expectations. The data emphasized that museum collections are the main element that forms a tourist attraction and also represents the authentic value of cultural heritage. In the Sustainable Conservation theme, the Collections as Attractions subtheme is seen from the view that visitors have an interest in seeing original collections directly because it provides a different emotional and educational experience compared to digital media. it was stated that several improvements were still needed to maximize conservation activities.

Research Findings Infrastructure, Ms. Putri

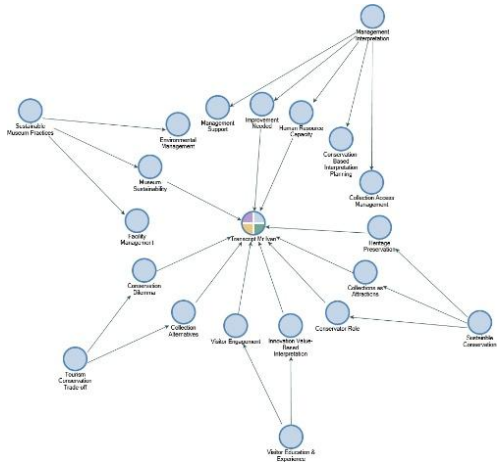


Source: Processed Data (2026)

Figure 5.6 Informant 4's Project Map

Informant 4 frames sustainable tourism as an outcome of coordinated infrastructure management, budget prioritization, and professional development. Conservation goals cannot be achieved without reliable environmental systems, sufficient financial planning, and competent staff. Sustainability, therefore, is operationally grounded—it depends on consistent maintenance, energy efficiency, and institutional coordination. This effort reflects the implementation of preventive conservation aimed at maintaining the stability of the collection's environment while reducing the risk of damage due to excessive light exposure, thus contributing to maintaining the integrity of the national heritage. In addition, efficient facility management also supports the comfort and quality of visitors' experience while at the museum.

Research Findings Educator, Mr. Ivan



Source: Processed Data (2026)

Figure 5.7 Informant 5's Project Map

Informant 5's perspective frames sustainable tourism as a collaborative and adaptive process that balances conservation discipline with community engagement. Sustainability emerges through continuous monitoring, program innovation, transparent communication, and institutional coordination. While conservation challenges persist—particularly regarding vulnerable collections and bureaucratic approval processes—the museum demonstrates efforts to integrate preservation with participatory visitor experiences.

6. CONCLUSION

Based on the results of research on the influence of collection conservation on the achievement of sustainable tourism at the Republic of Indonesia Presidential Museum Balai Kirti, several conclusions can be drawn regarding the strategic role of collection conservation as a contributor in supporting tourism achievements based on the results of the study showing that conservation efforts do not only focus on the physical preservation of collections, but also become the main foundation in maintaining historical, educational, and identity values of national heritage. Maintaining the authenticity of the collection can increase the museum's appeal as an educational tourism destination, while also raising visitors' awareness of the importance of cultural preservation. In addition, conservation practices also strengthen the value of sustainability through controlling the museum's environment, regular collection maintenance, and regulating visitor access to minimize the risk of damage to the collection.

The implementation of collection conservation practices and policies at Balai Kirti has been carried out systematically, but still faces several operational challenges. Conservation practices have been carried out through controlling temperature, humidity, lighting, fumigation, and regular maintenance of the collection. In addition, the museum also implements a policy of restricting access to collections, using boundary lines, and supervision by educators to maintain the security of the collections. However, this study found that there were limitations in infrastructure, the need for updated lighting technology, limited exhibition space, and budget constraints as factors that influenced the optimization of conservation implementation.

Museum management plays a vital role in enhancing the quality of visitor experience through value-based interpretation and education strategies. Balai Kirti develops various educational programs such as walking tours, workshops, talk shows, the Museum Goes to School program, and collaborations with historical communities. These programs have been proven to increase visitor engagement, expand access to historical learning, and create more interactive tourism experiences. The use of replica collections, multimedia,

and storytelling approaches are also innovative strategies to bridge conservation needs with the educational interests of visitors.

The synergy between collection conservation and museum management is a key factor in supporting the creation of sustainable tourism at Balai Kirti. Research shows that the success of museum management is not only determined by the quality of collection conservation, but is also influenced by cross-work unit coordination, human resource capacity, and management support in developing interpretation and visitor management programs. This synergy is able to create a balance between protecting collections and fulfilling the need for quality and sustainable tourism experiences.

REFERENCES

[1] B. H. Rainanto, A. T. Bon, and J. H. V. Purba, "Developing the Conceptual Model of Sustainable Industrial Performance in the Hospitality Industry," *Int. J. Glob. Optim. Its Appl.*, vol. 1, no. 2, pp. 80–89, 2022, doi: 10.56225/ijgoia.v1i2.17.

[2] M. J. Pucek, F. Ochrana, and M. Placek, *Museum Management*. 2021. doi: 10.4324/9780203973172.

[3] S. Anggarawati *et al.*, *Kepariwisataan*. 2022.

[4] Z. Ermy *et al.*, *Komunikasi Pariwisata Pt Global Eksekutif Teknologi*. 2023.

[5] S. Giakoumi *et al.*, "Advances in systematic conservation planning to meet global biodiversity goals," *Trends Ecol. Evol.*, vol. 40, no. 4, pp. 395–410, 2025, doi: 10.1016/j.tree.2024.12.002.

[6] N. M. Dawson *et al.*, "Is it just conservation? A typology of Indigenous peoples' and local communities' roles in conserving biodiversity," *One Earth*, vol. 7, no. 6, pp. 1007–1021, 2024, doi: 10.1016/j.oneear.2024.05.001.

[7] H. C. Nugraha and N. Laugu, "Pelestarian Naskah Kuno dalam Upaya Menjaga Warisan Budaya Bangsa di Perpustakaan Museum Dewantara Kirti Griya Tamansiswa Yogyakarta," *Lentera Pustaka J. Kaji. Ilmu Perpustakaan, Inf. dan Kearsipan*, vol. 7, no. 1, pp. 105–120, 2021, doi: 10.14710/lenpust.v7i1.37694.

[8] P. T. Endah, S. A. Wilujeng, F. Rifka, S. Achmad, and Z. Imbalan, "NVIVO | i," *Pemanfaat. NVIVO dalam Penelit. kualitatif*, pp. 1–125, 2020.

[9] M. Dr. Julhadi *et al.*, *Metodologi Penelitian Pendidikan*. 2023.

[10] L. Swedberg, "Contemporary Conservation Theory for Sustainable Development of Cultural Heritage Objects (2016)," no. June, 2024, doi: 10.18848/1835-2014/CGP/v10i01/1-8.

[11] N. Kamba, *Conservation Practices in Museums*, Translatio. Tokyo: Musashino Art University Press, 2022. doi: 10.1007/978-4-431-56910-7.

[12] Y. Sulistyadi, F. Eddyono, and B. Hasibuan, *PARIWISATA BERKELANJUTAN; PENGELOLAAN DESTINASI WISATA BERBASIS MASYARAKAT*. Bandar Lampung: AURA CV. Anugrah Utama Rahaja, 2017.