

AN EXAMINE OF ECO-TOURISM POTENTIALS IN SRI LANKA THROUGH DIGITAL STORYTELLING

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Abstract

This research examines the impact of digital narrative and collective authorship in developing Sri Lanka's Ocean tourism industry. Sri Lanka's tourism industry has to adapt to the growing international competition and evolving tourist preferences by expanding its offerings past the beach-centric marketing. This study looks at best practices of tourism in Queensland, Australia to recommend the use of immersive technologies, including AR and VR, for the development of sustainable tourism. This research explains the role and importance of co-creation in tourism, in which tourists and community members actively participate in developing the experiences and share emotional bonds to the places visited. Findings indicate that digital storytelling would not only promote Sri Lanka's rich cultural and maritime heritage but also position the country as a frontrunner in sustainable tourism. This paper proposes a set of strategies which aims to increase the interaction between tourists and the nature and culture of the visited places while minimizing the ecological footprint tourism has on those places. This research illustrates ways in which Sri Lanka could adapt its tourism to the expectations of contemporary tourists and help in the restoration of ecological and cultural balance.

Keywords: *Digital storytelling, Co-creation, Immersive technologies, Sustainable tourism, Sri Lanka.*

1.0 Introduction

Sri Lanka has long attracted visitors from abroad for its beaches, diverse marine life, and vibrant coastal cultures. Sri Lanka also benefits from ocean-based tourism, but increasing global competition poses the issue of Sri Lanka differentiating itself. Striving for tourism provides more immense engagement, storytelling has turned out to be an impactful strategy that binds the visitors and the destinations (Pera, 2014; Bassano et al., 2023). Personalized digital narratives through digital storytelling and

the modern expectation of interactivity, engagement, and personalization can now be met through co-creation (Campos et al., 2025; Moreira et al., 2025).

Digital storytelling conveys facts through narratives, but more so utilizes technology, emotion, and interactivity (Korez-Vide, 2023). Co-creation furthers this to the travellers, so they become active participants to the narratives of the places they visit (Campos et al., 2025). This helps to advertise the marine heritage, local customs, and tourism of Sri Lanka and engages the travellers at a deeper level. This helps target eco-conscious and adventure-seeking travellers (Zins & Adamu, 2024).

Sri Lanka's tourism industry has not fully integrated immersive technologies such as augmented reality (AR) and virtual reality (VR), in contrast to their applications in Queensland, Australia (Mei et al., 2020; Zins & Adamu, 2024). This study investigates the application of digital storytelling and co-creation to Sri Lanka's tourism industry, using global best practices to design a framework that delivers innovative, captivating, and sustainable experiences for 21st-century travellers.

2.0 Literature Review

Tourism in Sri Lanka: Current Trends and Challenges

Despite the contribution of ocean-based tourism to Sri Lanka's economy, the industry faces numerous challenges including issues of sustainability, the impact of mass tourism on coral reefs, and the overarching impact on marine ecosystems. According to the Global Sustainable Tourism Council, the balance between the development of tourism and the preservation of the natural and cultural heritage of an area as its resources, is a fundamental issue that needs consideration (Korez-Vide, 2023). Sri Lanka is beginning to incorporate practices that prioritize sustainable tourism. However, certain areas of the country are still prone to over-tourism, which, coupled with the lack of coherent national tourism policies, developed infrastructure in priority areas, and national tourism strategies add to the problem.

Another issue stems from the branding image associated with Sri Lanka. The country is ethnically and historically rich; however, its image is primarily based on its beaches, which provides narrow appeal. The tourism industry has struggled to effectively make use of the island's rich cultural and environmental diversity, which would have allowed for compelling storytelling to be utilized (Bassano et al., 2019). Sri Lanka, as a passive tourist destination is not sustainable. The country needs to adapt to the shifts in post-pandemic tourism trends, which require deeper and more

meaningful engagement. The country should work towards the active engagement of tourists using innovative storytelling and co-creation.

Marketing and Branding Through Tourism Storytelling

For a long time, storytelling has served the purpose of connecting destinations and travelers with emotion, which is a necessity in modern tourism marketing. The storytelling potential of Sri Lanka could innovate the ocean-based tourism industry to include more of its rich culture and natural wonders instead of solely focusing on beaches. Sri Lanka has the ability to appeal to a wider range of tourists by integrating socio-historical and environmental aspects into immersive narratives (Bassano et al., 2019; Moreira et al., 2025).

The focus of tourism marketing has now changed from marketing products and services to marketing experiences. This development now highlights the need for effective storytelling because it connects a tourist with the destination on an emotional level as opposed to merely providing information (Zins & Adamu, 2024). Storytelling seeks to engage modern travelers who crave genuine experiences. Through storytelling, modern travelers are able to identify with the destination. Emotional storytelling creates an emotional bond between the tourist and the destination which increases tourism loyalty, while cultural storytelling fosters understanding and an intercultural exchange (Campos et al., 2025). In addition, social storytelling enables tourists to share stories about the experiences they have had, thus enhancing the identity of the destination and promoting community participation (Campos et al., 2025).

The Concept of Co-Creation in Tourism

The phenomenon of co-creation has become a popular concept in the field of tourism because it has changed the dynamics of the relationship between the tourists and the destinations. In the past, tourists were viewed as consumers of the experiences and services created for them by tourism specialists, and now with co-creation, tourists are active participants as they engage with the destinations, service providers, and the local communities to actively co-create the travel experiences (Campos et al., 2025). This change is vital in storytelling as tourists have the ability to tell their own stories and have the chance to interact with the destinations adding meaning to the experiences (Pera, 2017).

This shift could especially help Sri Lanka's tourism industry. Tourists appreciate and enjoy their stories more when they are told by the locals. This was aptly discussed by Campos et al. in 2025. For instance, local fishermen could narrate their traditional fishing stories and coastal residents could explain conservation of the sea. Through this form of participatory narration, tourists are able to enjoy their voyages more and build a bond with the areas and people they visit (Zins and Adamu, 2024).

The Impact of Emerging Technologies on Tourism

The implementation of digital technologies such as augmented reality (AR) and virtual reality (VR) has transformed the way tourists physically and virtually engage with various destinations and their offerings. These immersive technologies redefine how one can engage with a region's story and experience it on a deeper level. In the context of Sri Lanka, ocean tourism can be enhanced through digital storytelling that allows tourists to virtually navigate underwater ecosystems, historical trade routes, and marine conservation ventures through AR and VR (Korez-Vide, 2023).

In Queensland, Australia, AR and VR technologies enable virtual marine tours of the Great Barrier Reef, and tourists can interact with ocean animals without having to visit the location physically (Zins & Adamu, 2024). Ocean tourism in Sri Lanka can be augmented with similar technologies to enhance the educational dimension of the experience, focusing on marine ecology and conservation. The blending of both physical and digital worlds using AR and VR captivates tourists and actively engages their attention while delivering education in a fun way.

As digital technologies progress, they enable tourism providers to construct experiences that resonate on an emotional level with travelers, thereby augmenting the mark of the destination (Mei et al., 2020). In the context of Sri Lanka, one could digitalize the experiences of beaches and coral reefs as well as cultural sites, transforming them into virtual tours where tourists could interact with them in real time during the tour, enhancing their understanding and participation in the storytelling (Zins & Adamu, 2024).

Critical Evaluation of the Theoretical Base

The theoretical base of this research rests within the Service Science, Management, Engineering and Design (SSME+DAPP) and Viable Systems Approach (VSA). These models were selected because they allow an exploration of place storytelling as a strategic communication device aimed at enhancing regional competitiveness. The tourism multilevel system is better understood with the SSME+DAPP framework because it includes the tourism provider, service providers, and even the

local people of the community. This framework particularly attends to the contestable and systemic processes needed to compel tourism stakeholders to work together and participate, which is crucial in applying branding and sustainability to a destination through storytelling and tourism management (Spohrer, 2019).

Furthermore, a Narratology approach offers a coherent framework to analyze the storyline, characters, and setting used in the storytelling for tourism, which directly impacts the interview guide development for analyzing the narrated elements in Sri Lanka's ocean tourism (Campos et al., 2025). The theory of co-creation augments the framework by emphasizing the participatory aspect of the experience tourism and the role of the tourists as the co-constructors of their experiences. This primary consideration aids in designing an interview guide which seeks to find the local and tourist participation in the construction of ocean tourism stories (Campos et al., 2025). With the integration of these theories, the research presents an all-encompassing approach to the role of storytelling and co-creation in tourism, especially in the context of Sri Lanka, while illustrating the ways in which these processes might benefit from the application of digital technologies.

3.0 Methodology

The current investigation utilizes qualitative research to examine the prospects of storytelling and digital technologies in the context of co-creation to transform ocean tourism in Sri Lanka. The study was undertaken from February to May of 2025. The fieldwork portion was conducted in Noosa Heads, Queensland, an exemplar in ocean tourism because of its longtime effective use of digital storytelling and community engagement in marketing tourism. The context of Noosa Heads was helpful in understanding what could be applied to Sri Lanka's tourism industry.

The subjects of this study\Someone who operates various tourism activities in the Noosa Heads area, such as a tour operator, as well as a marketing director and a community representative can be considered as tourism concerned citizens who attend local events and participate in local tourism activities. Participants were selected using a purposive sampling strategy which determined certain individuals who were actively and explicitly participating in the design and marketing of tourism experiences in order wards focus on individuals who were relevant and experienced. Participants who were actively engaged in various important aspects of tourism, positions, such as local business owners and community members who were engaged in tourism activities. There were a total of thirty participants in this study. Participants were selected systematically to ensure the sample population had varying ideas to provide in regard to the research conducted in Noosa Heads.

The pre-identified members were contacted through local tourism networks and were approached by means of direct contact and were given invitations to take part in the research. Each enumerator conducted in-depth semi-structured interviews allowing narrative close to the cocreation of tourism and the digital divide in their tourism activities. Key interview patterns and themes identified in the interviews were termed thematic interview analysis.

4.0 Results

The study was conducted through interviews with primary stakeholders in tourism in Noosa Heads, Queensland, from which the results were formed. These stakeholders possess considerable knowledge regarding the application of digital storytelling and co-creation in tourism marketing. The insights from the interviews are summarized in Table 1 and Figure 1. Table 1 captures emerging insights from the data and explains the perception of tourism stakeholders in Sri Lanka regarding the impact of co-creation, AR/VR, and AI technologies on the tourism industry. Figure 1 illustrates the interrelation of the emerging trends and how they can be utilized for the development of ocean tourism in Sri Lanka. These results not only showcase the prospects of digital transformation for the Sri Lankan tourism industry, but also highlight the opportunities for strengthening the sustainability, authenticity, and engagement of the tourism industry in Sri Lanka. The next section presents a comprehensive explanation of these insights.

Theme	Description of New Knowledge	Frequency (No. of Participants)	Interview Evidence
Immersive Marine Conservation via AR/VR	Proposes the use of AR/VR not just for virtual tourism but for environmental education and interactive conservation . Tourists can engage in virtual restoration efforts or	15/30 (50%)	"Imagine tourists virtually restoring coral reefs using AR, contributing to conservation efforts before even arriving." – Interviewee 5, Local Tour Guide "The future of marine tourism in Sri Lanka can incorporate VR-

	conservation activities.		based marine preservation, bringing tourists into restoration work." – Interviewee 13, Marine Conservationist
Behavioral Economics and Digital Storytelling	Introduces behavioral economics to digital storytelling , allowing tourists' emotional responses to guide the direction and content of their tourism experience in real-time.	12/30 (40%)	"Tourism marketing will soon use real-time emotional analytics to adapt stories based on tourists' cognitive reactions. This is the next frontier in personalized digital tourism." – Interviewee 11, Marketing Expert
Co-Creation for Environmental Stewardship	Extends co-creation to include tourists as active participants in environmental conservation and sustainability . Tourists would play roles in real-time environmental efforts.	20/30 (67%)	"We can allow tourists to become part of the conservation narrative, helping restore coral reefs or engage in local community-led sustainability projects." – Interviewee 9, Tourism Expert "Co-creation goes beyond experiences; it's about giving tourists a sense of responsibility in preserving what they enjoy." – Interviewee 16, Local Business Owner

AI-Driven Personalization for Dynamic Experiences	AI personalization will create adaptive digital stories based on tourist data and real-time location, crafting individualized experiences that evolve during the trip.	18/30 (60%)	"AI could provide a curated storyline for each tourist, dynamically adapting based on their past experiences, preferences, and even on-site engagement." – Interviewee 7, Tourism Developer
Ethical Digital Storytelling Platforms	Proposes digital storytelling platforms as ethical tools for cultural preservation, where communities control how their stories are shared, ensuring cultural equity and fair compensation .	14/30 (47%)	"Imagine a platform where local communities own their narratives and get compensated for sharing their culture with tourists. This is what ethical storytelling can look like." – Interviewee 8, Cultural Preservationist

Table 1: Thematic Analysis
Source: Primary Data Collection

Developments in Storytelling and Co-Creation

In Queensland, co-creation and digital storytelling are essential to tourism, and the use of distilled technologies such as AR and VR is aimed at improving the visitor experience. Queensland's tourism industry has embraced these technologies to provide personalized, immersive stories in the form of tourism, especially in the Great Barrier Reef where users can digitally interact with marine life before physically visiting. Moreover, tourists co-create these stories by sharing narratives, reviews, and other relevant content which shape the ever-changing history of the destination. All these changes are indicative of a global and regional transformation in travel where tourists want to be more actively involved in the travel experience. For a country such as Sri Lanka, traditionally focused on beach tourism, the application of such strategies would greatly elevate the level of engagement in ocean tourism. With the use of

digital tools and co-creation, Sri Lanka can tailor to the global tourism market which demands personalized and community-based experiences.

Comparative Insights for Sri Lanka's Ocean-Based Tourism

Sri Lanka's ocean-based tourism currently suffers from an over-dependence on the generic beach holiday coupled with low levels of technology adoption. Sri Lanka's ocean tourism infrastructure still lags far behind regions such as Queensland, which have integrated technology into tourism, employing digital storytelling and co-creation. Sri Lanka's ocean-based tourism storytelling does not integrate the country's rich marine biodiversity, cultural heritage, and sustainability efforts, which are its hallmarks. Sri Lanka is still lacking a digital strategy that would integrate its diverse narratives, which is an investment and resource challenge but provides a competitive tourism identity opportunity.

Creating an Experiential Brand Via Storytelling

Building a brand around Sri Lanka's ocean tourism can be done by incorporating immersive digital technologies, such as AR and VR, which allow users to explore coral reefs, shipwrecks, and underwater cultural heritage virtually. This advanced and digital form of tourism would enrich travelers' connections to Sri Lanka's marine life and coastal topography and would promote Sri Lanka's image as a dual-purpose educational and entertainment destination that prioritizes deep personal traveler engagement.

Sustainability and Authenticity in Digital Storytelling

Cofacilitated tourism narratives, where tourists and local residents jointly create narratives, can help to preserve cultural integrity and promote sustainability in the tourism development of Sri Lanka. This form of storytelling, which integrates local participants, particularly around marine and cultural traditions, would help embody Sri Lanka's identity while giving the tourists a reason to engage with the destination more. This model of tourism aims to ensure that the socio-economic advantages of tourism go to the local people, which promotes local development and cultural sustainability, as well as local cultural heritage sustainability. Therefore, digital storytelling can be used to not only promote tourism but also to encourage better environmental practices and the involvement of tourists in sustainable practices.

Proposed Framework for Sri Lanka's Ocean-Based Tourism: Leveraging Digital Storytelling and Co-Creation

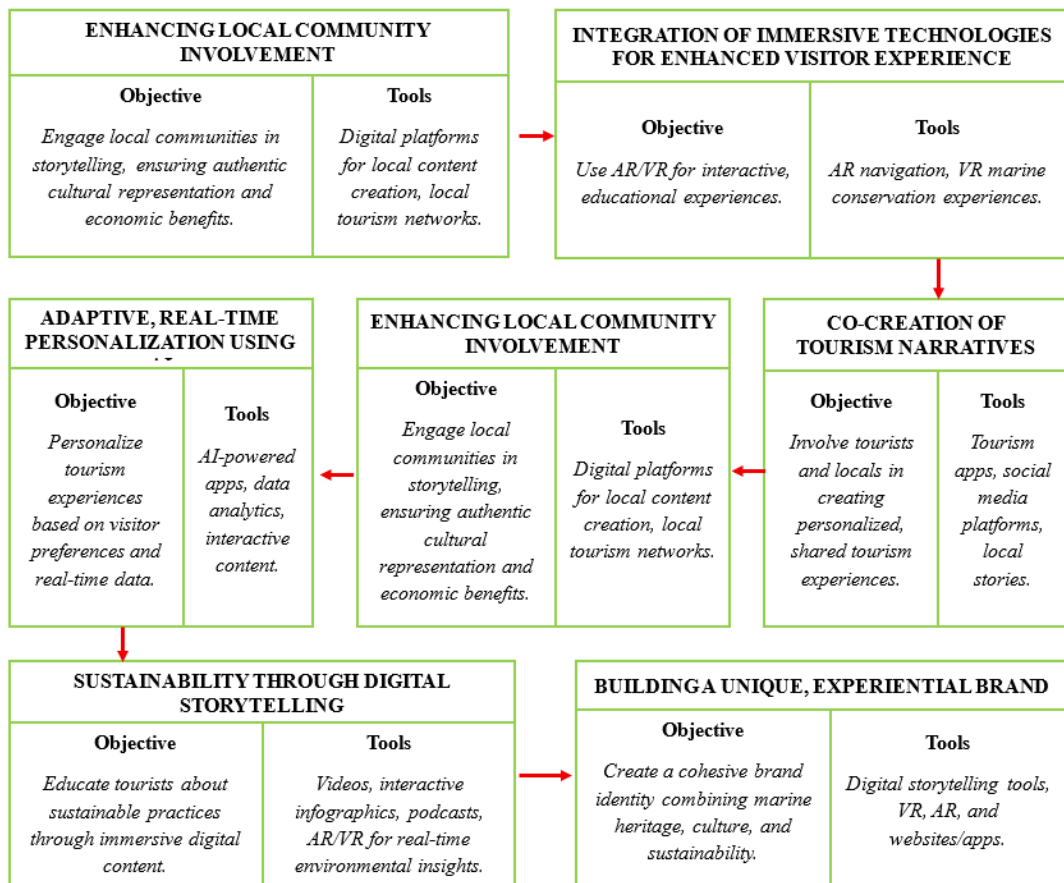
This framework aims to transform Sri Lanka's ocean-based tourism by blending immersive technologies, co-creation, and sustainability. Through AR/VR, tourists will explore marine ecosystems and history in a more interactive and educational way. By engaging local communities in storytelling, tourists can contribute to authentic, shared narratives. Real-time AI personalization ensures tailored experiences, while digital tools will highlight sustainability efforts like marine conservation. The framework focuses on creating a unique, authentic brand identity for Sri Lanka, positioning it as an eco-friendly, innovative destination that fosters meaningful connections between tourists, locals, and the environment.

5.0 Conclusion and Recommendations

This study has underscored the impact of digital storytelling and co-creation in transforming tourism in the oceans of Sri Lanka. Sri Lanka has the potential to appeal to millennial and Gen Z tourists by providing unparalleled experiences because of the country's rich cultural heritage blended with modern travel and tourism offerings and the ever-evolving interest of tourists in more personable travel experiences through immersive technologies like Augmented Reality (AR) and Virtual Reality (VR) in the tourism sector. Furthermore, the use of digital storytelling and co-creation locally not only expands the visitor's experiences but also promotes the education of sustainable tourism and conservation of the marine ecosystem. To add, educating communities while involving them in the tourism narrative cultivates authenticity and deeper relationships with the place while also fostering cultural heritage.

AI personalization technologies also provides a competitive and appealing stance to the country by customizing the offerings. With the use of these methods, Sri Lanka has the ability to shift away from being known solely as a beach destination and transform into a more active, engaging, and eco-friendly tourism center. This research aids in redefining the country's strategies and branding as well as providing the communities and tourists with more inclusive sustainable tourism opportunities.

Figure 1: Proposed Framework



Source: Primary Data Collection

The Sri Lanka government must invest in augmented and virtual reality technologies to develop interactive tourism marketing materials that register a broad, deep impact as advertised and spoken. Application can also be done to the country's marine environments and historical marine parks, providing virtual tours to Sri Lanka's rich marine life and biodiversity conservation efforts. Virtual and augmented reality offer immersive experiences that can engage potential visitors long before they book a physical visit to the country. For the tourism and technology goals to be achieved, the government of Sri Lanka should approach local technology firms, tourism stakeholders, and the community, enabling the development of these experiences in Mirissa, Galle, and Trincomalee by 2025.

Also, Sri Lanka should embrace the local community co-creation approach on the tourism experiences offered as storytelling workshops, local cultural performances, and local eco tourism, where local people design the experiences that tourists interact with. This participation enhances authenticity to the culture and traditions the tourists engage with while improving the local community's economy. Storytelling and community-based tours can be integrated into the tourism offering and help create sustainable economic development for coastal communities.

Additionally, Sri Lanka could use AI-driven systems to create and enhance unique eco-tourism, cultural, and sustainable travel activities tailored to individual visitors, thereby improving the overall experience. Sri Lanka can use mobile applications and websites to provide Sri Lanka unique and incredibly diverse tourism experiences, as the country will transform itself, to be viewed as the world's leading tourist center.

Sri Lanka should focus on sustainability by utilizing digital platforms to provide live updates on the ongoing conservation work and motivate tourism to conservation initiatives. Sri Lanka can promote sustainable responsible tourism through environmental impact apps, thus global eco-tourism standards will be fulfilled. By using information technology, the community, and sustainable initiatives, Sri Lanka can transform its ocean tourism from traditional to rich, deep, and sustainable experiences popular among travelers of today.

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