

Valorization Pathways of the Underwater Archaeological Parks. Tecnology enablers and Marketing Canvas of the “CampiFlegrei Diving Center”

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Abstract

The Submerged Archaeological Park of Baia, located near Naples, Italy, holds significant historical and cultural value, showcasing Roman ruins submerged due to volcanic activity. This study focuses on innovative strategies to enhance the park's appeal through advanced technologies, leveraging the Campi Flegrei Diving Center (CSCF) as a case study. The research examines how AR and VR technologies can overcome physical limitations, allowing wider access to underwater heritage and providing an enriched visitor experience. Using the Business Model Canvas (BMC), the study analyzes CSCF's marketing approach, focusing on customer segments, channels, and customer relationships. The preliminary findings suggest that the center effectively uses technologies, such as the serious game "Dive in the Past," to engage diverse audiences, particularly younger, tech-savvy visitors. CSCF's partnerships with local entities and its use of modern communication platforms enhance its visibility, making it a key player in promoting and conserving underwater cultural heritage. The integration of technology with human expertise ensures both educational and conservational goals are met, positioning the park as a sustainable cultural resource. This research highlights the potential for other heritage sites to apply similar strategies for broader global appeal.

Keyword

Cultural Heritage Valorization
Underwater Archeological Parks
Marketing of Cultural Heritage
New Technologies

Introduction

The underwater cultural heritage, particularly in Campi Flegrei Archaeological area, represents an invaluable historical and cultural resource that remains largely untapped in terms of its full potential for education, tourism, and cultural preservation. The Submerged Archaeological Park of Baia, located in the Gulf of Pozzuoli near Naples, Italy, is a unique site that showcases the remnants of Roman villas, imperial palaces, and other significant structures submerged due to volcanic activity and coastal subsidence. This research explores innovative strategies for valorizing the Submerged Archaeological Park of Baia, focusing on enabling technologies to enhance its attractiveness and sustainability. Using the Campi Flegrei Diving Center (CSCF) as a case study, the study examines the implementation of advanced technologies, strategic

partnerships, and audience development. A "marketing-oriented" approach through the Business Model Canvas is employed to analyze how these technologies contribute to the park's value proposition and long-term viability. This work represents an ongoing effort to integrate technology and heritage conservation.

The Research Question is: "How can innovative technologies be leveraged to enhance the marketing activities of underwater cultural heritage?"

Literature Background

Preservation, marketing and promotion of submerged cultural heritage have garnered increasing attention in recent years, intersecting various disciplines such as underwater archaeology, innovative technologies, tourism, and cultural heritage management and marketing (Berman, 2012; Russo Spina & Bifulco, 2021; Greco et al., 2024). Despite its significance, this field still needs to be explored compared to terrestrial heritage conservation. This research highlights the dualism between "Humanism and Technology," underscoring how these two dimensions coexist and mutually enrich the visitor experience. The literature identifies an emerging "new corporate humanism" (Moscatelli, 2024), which advocates for a thoughtful and practical approach to integrating new technologies. Advanced technologies, such as augmented reality (AR) and virtual reality (VR), play a crucial role in overcoming physical and logistical barriers in underwater environments, enabling visitors to "see" and interact with submerged sites in ways previously considered impossible (Unesco, 2021). However, integrating human expertise remains essential, as it provides the context and guidance to ensure these technological experiences are meaningful (Nunes & Roeder, 2014; Repola et al., 2015). Moreover, combining these technological tools with humanistic approaches ensures that technology serves as a bridge rather than a barrier to cultural understanding, enhancing both the educational and conservational value of these sites.

Methodology

This research methodology is qualitative, adopting a case study approach, specifically focusing on the Diving Center of the Submerged Archaeological Park of Baia. The literature already includes studies on the valorization of archaeological parks that utilize the case study method (Bruno et al., 2019; Manglis et al., 2021;)

This ongoing research employs the Business Model Canvas (BMC) as an analytical framework to explore the strategic activities of the Campi Flegrei Diving Center within the Submerged Archaeological Park of Baia (Osterwalder, 2012). The BMC, widely used in entrepreneurial environments to outline new businesses or innovative projects,

has been adapted in this study to examine the intersection of traditional business dynamics with the cultural and innovative objectives of the organization. This study will specifically focus on the Business Model Canvas blocks most relevant to the marketing activities of the Diving Center at the Archaeological Park. The framework systematically explores critical elements such as customer segments, value propositions, channels, customer relationships, revenue streams, essential resources, key activities, key partnerships, and cost structures (Canvanaizer.com, 2024). Adapting the BMC to a cultural context, such as the Submerged Archaeological Park of Baia, represents a novel application, reflecting how traditional business models can be intertwined with cultural and technological innovations to create sustainable and impactful heritage conservation strategies. Furthermore, this study incorporates qualitative data from narrative interviews (Erlach et al., 2020) with Diving Center Board Members and observations to provide a comprehensive understanding of how these elements contribute to the overall strategy of the diving center, ensuring that both technological and human resources are optimized for the park's sustainable development.

Preliminary Findings

The initial findings of this research suggest that the Campi Flegrei Diving Center plays a pivotal role in facilitating the valorization of the underwater heritage through strategic partnerships and the adoption of advanced technologies. The center has effectively utilized AR and VR to enhance the visitor experience, as demonstrated by the development of the serious game "Dive in the Past," which allows users to explore the submerged Ninfeo of Punta dell'Epitaffio virtually. This approach not only enriches the visitor experience but also addresses the physical limitations of traditional diving, providing access to those who may not be able to participate in conventional underwater explorations (Auriemma, 2023). The center's strategic focus on audience development is evident in its efforts to engage younger audiences through digital applications, virtual visits, and interactive exhibits, which have proven effective in attracting a broader and more diverse audience (Claesson, 2011).

The three Business Model Canvas blocks most closely related to marketing are:

1. **Customer Segments:** CSCF targets key segments, including certified divers, adventure tourists, tour operators, and private yachts, allowing for tailored marketing strategies focused on unique experiences like Discover Scuba Diving and underwater tours of Baia's submerged archaeological park.
2. **Channels:** CSCF has evolved its distribution channels, moving from traditional methods like word-of-mouth and trade fairs to modern platforms

such as PADI Adventure, e-commerce, and WhatsApp, improving customer outreach and communication.

3. **Customer Relationships:** Trust and personalized interaction are central to CSCF's marketing. By focusing on safety, direct communication, and long-term relationships, CSCF builds customer loyalty and enhances its reputation

Additionally, the center has successfully established a network of partnerships with local entities, which has been crucial in increasing the international visibility of the park and attracting investments for its conservation (Canoro, 2018; Ricca, 2020). These partnerships have facilitated the creation of a cohesive strategy that integrates tourism, education, and conservation, ensuring that the park remains a vibrant and sustainable cultural resource.

Discussion

The initial findings emphasize the Campi Flegrei Diving Center's strategic use of advanced technologies and partnerships to market and valorize underwater cultural heritage. By incorporating AR and VR, such as the serious game "Dive in the Past," the center enhances the visitor experience and broadens accessibility, attracting audiences beyond traditional divers (Auriemma, 2023). This technological approach serves as a key marketing tool, allowing the center to differentiate itself with immersive, unique experiences.

The center's focus on audience development through digital applications and interactive exhibits reflects a marketing-driven strategy aimed at engaging younger, tech-savvy audiences (Claesson, 2011). Key Business Model Canvas blocks—Customer Segments, Channels, and Customer Relationships—demonstrate CSCF's tailored marketing strategies, targeting specific groups like certified divers, adventure tourists, and luxury travelers, while leveraging modern platforms like PADI Adventure, e-commerce, and social media to enhance visibility and engagement. CSCF's commitment to building long-term, trust-based relationships further strengthens customer loyalty and brand reputation. Additionally, strategic partnerships with local entities have boosted the park's international visibility, attracted investment and positioning it as a premium cultural tourism destination (Canoro, 2018; Ricca, 2020).

As the research progresses, CSCF aims to refine these marketing-driven strategies, ensuring long-term sustainability and accessibility. The insights gained will be valuable for other heritage sites seeking to leverage innovative technologies and marketing approaches.

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