

**Digital Heritage Valorization Strategies: Lessons from International  
Cross-cultural Experiences for Casablanca**

**Karima Bouziane**

ALCS Laboratory  
Faculty of Letters and Humanities  
Chouaib Doukkali University

**Abdelmounim Bouziane**

LIRO Laboratory  
National School of Commerce and Management  
Chouaib Doukkali University

**Wadi Tahri**

LIRO Laboratory  
National School of Commerce and Management  
Chouaib Doukkali University

**Abstract:**

*This article explores how digital heritage is valorized by examining lessons learned from studies conducted in different countries around the world. Through an extensive review of experiences from ten prominent cities in neighboring countries, including Paris, Lisbon, and Barcelona, this research attempts to extract best practices and key learnings. Methodologically, the study adopts a rigorous approach, analyzing each case study in-depth and discussions with experts from various fields such as urban planning, architecture, and landscape design. The collaborative discussions have provided valuable insights and have resulted in actionable recommendations customized for the unique context of Casablanca. These suggestions inspire the creation of a strong digital strategy for showcasing Casablanca's architectural heritage, ensuring its preservation and promotion in the digital age.*

**Keywords:** *digital transition, digital strategies, cross-cultural experience, cultural heritage, experience exchange*

**1. Introduction**

The preservation and valorization of cultural heritage are of crucial importance in the context of globalization and the increasing digitization of society. Rapid technological advancements have led to a paradigm shift in how we approach the conservation and promotion of our cultural heritage, which necessitates cities to rethink their traditional strategies. Casablanca, as an emblematic city of Morocco,

faces similar challenges as it seeks to preserve and promote its rich architectural heritage in the contemporary digital world.

In this context, this article delves into the issue of cultural heritage valorization in the digital age, drawing on lessons learned from international experiences. By closely examining the strategies implemented in ten cities from neighboring countries, such as Paris, Lisbon, and Barcelona, we strive to identify best practices and lessons learned that could be adapted and applied to Casablanca. Our goal is to offer concrete recommendations for developing a strategy to valorize Casablanca's architectural heritage that is both effective and suited to the digital era.

To achieve this, we adopt a rigorous methodological approach, combining a thorough review of case studies with collaborative discussions with experts in urban planning, architecture, and landscape design. We analyze each case study in depth, examining the challenges encountered, the proposed solutions, and the outcomes achieved. By drawing from these diverse experiences, we aim to identify common trends and guiding principles that could inform the formulation of effective strategies for Casablanca.

The results of this study aim to provide tangible recommendations for the development of a robust digital strategy for the valorization of Casablanca's architectural heritage. By preserving and showcasing its cultural heritage, the city will not only strengthen its identity and attractiveness but also contribute to the preservation of world heritage for future generations.

## **2. Literature Review**

The valorization of cultural heritage has become a major issue in the contemporary context of globalization and digital transformation. Rapid technological advancements have opened up new possibilities for the preservation and promotion of cultural heritage but have also posed new challenges for the stakeholders involved in this domain.

In his work, Terras (2008) explores the various ways in which digital technologies, such as 3D modeling and virtual reality, are used to document, preserve, and present cultural heritage. The author highlights the growing importance of these tools in the conservation of both tangible and intangible heritage, offering immersive experiences that allow the public to discover and appreciate cultural heritage in innovative ways.

In the field of urban planning and territorial development, researchers like Querrien (1998) have emphasized the importance of considering cultural heritage in urban planning. The integration of architectural and historical heritage into urban development policies can help strengthen the cultural identity of cities and promote cultural tourism while preserving local values and traditions.

Furthermore, Alvarado Vazquez et al. (2023) have examined the impact of information and communication technologies (ICTs) on social participation in cultural heritage preservation. Their research highlights the role of digital platforms in engaging local communities in the documentation and safeguarding of cultural heritage, thus fostering a participatory and inclusive approach to heritage valorization.

Additionally, authors such as Wu (2011) and Pariser (2011) explore the broader implications of societal digitization on access to information and cultural diversity. These works emphasize the need to ensure that digital technologies contribute not to cultural homogenization but rather to the preservation and valorization of cultural diversity in the digital age.

The exchange of experiences plays a crucial role in the development and implementation of cultural heritage valorization strategies. By examining lessons learned from past experiences in an international and intercultural context, it becomes evident that this sharing of knowledge is essential for understanding the challenges and opportunities of heritage preservation and promotion. The ongoing dialogue and exchange of best practices among different communities, would, thus, help in creating more effective and inclusive heritage valorization initiatives, benefiting a wider range of audiences and cultural contexts.

The exchange of experiences between countries has become a crucial aspect of international cooperation in many fields, including education, health, environment, and economic development. This practice is based on the recognition that each country possesses unique knowledge, skills, and resources that can benefit other nations facing similar challenges.

In the field of education, studies such as those conducted by Hargreaves and Fullan (2012) highlight the benefits of exchanging experiences among teachers and educators from different countries. These exchanges enable the sharing of innovative pedagogical practices, exploration of new approaches to teaching and learning, and promotion of international collaboration in the field of education.

In public health, initiatives such as the World Health Organization's Global Network of Healthy Cities facilitate the exchange of experiences and best practices among cities worldwide to address urban health challenges. Knowledge exchange on disease prevention, promotion of healthy lifestyles, and management of health services contribute to improving the health and well-being of populations globally.

In the environmental field, organizations such as the United Nations Environment Programme (UNEP) encourage the exchange of experiences and technologies between countries to combat climate change, protect biodiversity, and promote sustainable development. Countries can learn from each other by sharing effective environmental conservation strategies, natural resource management policies, and clean energy initiatives.

On the economic front, free trade agreements and regional economic partnerships promote the exchange of experiences between countries in trade, investment, and economic development. These agreements allow countries to share their best practices in trade policy, strengthen economic ties, and stimulate regional and global economic growth.

In summary, the exchange of experiences between countries plays a crucial role in promoting progress and development globally. By fostering international collaboration, sharing knowledge, and transferring technologies, it contributes to addressing global challenges and building a fairer, more sustainable, and prosperous future for all.

### **3. Methodology**

To address the issue of valorizing Casablanca's cultural heritage in the digital age, a rigorous methodology was adopted, involving the close collaboration of a group of 10 architects with significant international experience. This collaborative approach aimed to leverage the diverse knowledge and perspectives of the experts to analyze digital strategies implemented by major cities to preserve their urban architectural heritage.

Firstly, a careful selection of experts was made, prioritizing those with practical experience in implementing digital strategies for valorizing cultural heritage in diverse urban contexts. This diversity of experiences allowed for a wealth of information and perspectives to inform the analysis.

Next, a systematic analysis process of digital strategies was implemented. Major international cities such as Paris, Lisbon, Madrid, and Barcelona were selected as case studies due to their renown in preserving and promoting their cultural heritage. The digital strategies implemented in these cities were examined in detail, focusing on innovative initiatives and best practices.

The expert group members then participated in extensive discussion and debate sessions, during which the different digital strategies were analyzed and evaluated for their relevance and applicability to Casablanca. These discussions highlighted the strengths and weaknesses of each strategy, as well as potential challenges in their implementation within the specific context of Casablanca.

Finally, key elements and the most relevant recommendations were identified and synthesized. These elements were grouped to form a set of specific strategic recommendations tailored to the unique needs and characteristics of Casablanca. These recommendations aim to guide the development of a robust digital strategy for valorizing the city's architectural heritage, ensuring that it is both effective and adapted to the digital age.

### **4. Results**

Discussions on the various digital strategies for valorizing and preserving the heritage of neighboring major cities of Morocco have shed light on a diverse range of strengths and weaknesses. These findings result from an in-depth analysis of digital initiatives implemented in cities such as Paris, Madrid, Barcelona, Lisbon, Venice, Toulouse, Granada, and Frankfurt. Each city has adopted varied and innovative approaches to harness digital technologies in the conservation and promotion of its cultural heritage.

The strengths identified in these strategies include the effective use of augmented and virtual reality to provide immersive experiences to visitors, the integration of 3D modeling for detailed documentation of historical buildings, and the development of interactive mobile applications providing real-time information on cultural events and guided tours. Additionally, some cities have successfully encouraged active participation of residents in the documentation and preservation of cultural heritage through collaborative digital platforms.

However, these digital strategies are not without their weaknesses. Some cities have encountered challenges related to funding and maintenance of digital applications, while others have reported gaps in the accessibility of digital information for foreign visitors. Furthermore, the risk of excessive dependence on digital technologies, to the detriment of the physical experience of heritage, has been

highlighted in several cases. Additionally, coordination among the various actors involved in heritage preservation and the need for increased public awareness of available digital resources have been identified as areas requiring improvement.

In detail, the evaluation of the strategies was as follows:

City	Strengths	Weaknesses
Paris	<ul style="list-style-type: none"> <li>• Effective use of augmented reality to provide immersive experiences to visitors.</li> <li>• Interactive online platforms allowing visitors to discover the history and culture of the city.</li> </ul>	<ul style="list-style-type: none"> <li>• Need to improve the accessibility of digital information for foreign visitors.</li> <li>• Lack of coordination among the various stakeholders involved in heritage preservation.</li> </ul>
Madrid	<ul style="list-style-type: none"> <li>• Use of 3D modeling for documentation and preservation of historical buildings.</li> <li>• Mobile application providing virtual guided tours of the city's cultural heritage.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of funding for the development and maintenance of digital applications.</li> <li>• Need to improve Wi-Fi connectivity in tourist areas.</li> </ul>
Barcelona	<ul style="list-style-type: none"> <li>• Use of virtual reality to recreate destroyed historical sites.</li> <li>• Online platforms allowing residents to contribute to the documentation of local heritage.</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of excessive dependence on digital technologies, at the expense of the physical heritage experience.</li> <li>• Need for increased awareness among the public about available digital resources.</li> </ul>
Lisbon	<ul style="list-style-type: none"> <li>• Use of drones for aerial documentation of historical sites.</li> <li>• Mobile applications providing real-time information on cultural events and exhibitions.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of translation of digital content into multiple languages to attract an international audience.</li> <li>• Need to improve website accessibility for people with disabilities.</li> </ul>
Venice	<ul style="list-style-type: none"> <li>• Use of augmented reality to virtually restore damaged artworks.</li> <li>• Use of IoT sensors to monitor the condition of historical buildings and prevent damage.</li> </ul>	<ul style="list-style-type: none"> <li>• Challenge of maintaining Internet connectivity in densely populated historical areas.</li> <li>• Risk of degradation of the city's authentic character due to digital over-commercialization.</li> </ul>

<b>Toulouse</b>	<ul style="list-style-type: none"> <li>• Use of digital mapping to highlight less-known historical sites.</li> <li>• Online platforms allowing residents to share personal stories related to the city's heritage.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of coordination among digital initiatives led by different stakeholders in the city.</li> <li>• Need for investment in digital training for workers in the tourism sector.</li> </ul>
<b>Grenade</b>	<ul style="list-style-type: none"> <li>• Use of virtual reality to recreate lost Moorish architecture.</li> <li>• Mobile applications providing contextual historical information during guided tours.</li> </ul>	<ul style="list-style-type: none"> <li>• Need for increased awareness among the local population about the importance of cultural heritage preservation.</li> <li>• Challenge of ensuring digital access to historic areas without compromising their integrity.</li> </ul>
<b>Frankfurt</b>	<ul style="list-style-type: none"> <li>• Use of 3D scanning to document historical buildings in detail.</li> <li>• Online platforms enabling researchers to access digital archives and special collections.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of coordination among cultural institutions to create a unified digital database.</li> <li>• Challenge of ensuring the security and confidentiality of sensitive digital data.</li> </ul>

### 5. Recommendations

In light of the insights extracted from the digital strategies for enhancing and preserving heritage in neighboring cities, specific recommendations can be formulated for Casablanca. These recommendations aim to inform the development of a robust digital strategy for enhancing the city's rich architectural heritage, while ensuring its preservation and promotion in the contemporary digital era.

❖ Development of an interactive mobile application:

It is recommended to create an interactive mobile application offering virtual guided tours of Casablanca's architectural heritage. This application should provide detailed information about historical sites, interactive maps, videos, and augmented reality images to offer an immersive experience to visitors.

❖ Citizen participation platform:

Establishing an online platform allowing residents to contribute to the documentation and preservation of local heritage is essential. This platform could serve as a sharing space for Casablanca residents, where they could share stories, photographs, and memories related to the city's historical sites.

❖ Use of 3D modeling for conservation:

Investing in 3D modeling to thoroughly document Casablanca's historical buildings is recommended. These digital models could be used for virtual conservation of heritage structures, as well as for creating virtual tours and online exhibitions.

❖ Strengthening Wi-Fi connectivity in tourist areas:

Improving Wi-Fi connectivity infrastructure in Casablanca's main tourist sites is crucial. Robust internet connectivity will enable visitors to fully enjoy mobile applications and digital content available.

❖ Public awareness of the importance of cultural heritage:

It is necessary to implement awareness and education campaigns to inform local residents and visitors about the importance of preserving Casablanca's cultural heritage. These campaigns could include cultural events, exhibitions, conferences, and guided tours.

❖ Promoting collaboration among stakeholders:

Encouraging collaboration among various stakeholders involved in Casablanca's heritage preservation, including local authorities, cultural institutions, private businesses, and civil society, is recommended. Effective coordination will maximize the impact of digital initiatives and ensure a holistic approach to heritage valorization.

## **6. Conclusion**

The study of digital strategies for enhancing and preserving heritage in neighboring cities provides valuable insights for Casablanca as it seeks to develop a digital strategy tailored to its rich architectural heritage. By integrating lessons learned from international experiences, Casablanca can design innovative and effective initiatives to showcase its cultural heritage while adapting to the challenges and opportunities of the digital age.

The recommendations put forward for Casablanca, such as the development of an interactive mobile application, the creation of a citizen participation platform, and the use of 3D modeling for conservation, offer tangible pathways to guide future efforts. By strengthening Wi-Fi connectivity in tourist areas, raising public awareness of the importance of cultural heritage, and encouraging collaboration among local stakeholders, Casablanca can create a dynamic digital ecosystem that highlights its cultural identity and enhances its tourist appeal.

Ultimately, the preservation and promotion of Casablanca's cultural heritage in the digital age requires a holistic and collaborative approach. By drawing on lessons learned and mobilizing local resources, Casablanca can assert its unique heritage while engaging in sustainable and inclusive development. As a cultural gem of Morocco, Casablanca is ready to embrace the challenges and opportunities of the digital age to ensure the longevity of its heritage for future generations.

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**Declarations:**

- We hereby declare that we have contributed equally to the research described in this article. There is no conflict of interest to disclose.
- This project has not received any funding from any organization.
- Consent has been obtained from all participants, each of whom is over 18 years old.
- No harm has been inflicted upon nature, the environment, or animals within the scope of this research, as it is not applicable.
- We affirm that there has been no discrimination involved in any aspect of this research.