

Customer Experience in Urban Heritage Tourism: Insights from the Palácio da Bolsa

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Abstract: Urban heritage tourism plays a pivotal role in sustaining cultural identity and enhancing the experiential value of historic cities. Within this context, the Palácio da Bolsa, a 19th-century neoclassical landmark located in the heart of Porto's UNESCO-listed historic centre, exemplifies how cultural heritage sites function simultaneously as civic institutions and major tourist attractions. Despite its architectural splendour and symbolic importance, limited empirical research has explored how visitors perceive service quality and how these perceptions shape satisfaction, loyalty, and recommendation behaviour in monument-based settings. This study investigates the visitor experience at the Palácio da Bolsa through a quantitative approach grounded in an adapted SERVQUAL framework, encompassing five core dimensions of service quality: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. A structured on-site survey was conducted with visitors to assess perceptions of service quality and its influence on visitor behaviour. The analysis identified key dimensions—particularly those related to staff competence, trust, and reliability—as the strongest drivers of satisfaction and recommendation. Overall, the findings confirmed that the adapted SERVQUAL framework provides a valid and reliable approach for evaluating service quality in heritage tourism contexts. Results also highlight the continued relevance of human interaction in shaping the heritage experience, while revealing opportunities to enhance visitor engagement through context-sensitive interpretation and optional digital tools. Balancing technological innovation with authenticity and emotional connection emerges as a central challenge for managing visitor experiences in heritage environments. The study contributes to advancing experience-based place management in urban heritage tourism by integrating service quality assessment with experiential and emotional dimensions. It demonstrates that maintaining consistency, professionalism, and authenticity are crucial for sustaining visitor satisfaction and advocacy. By linking established service models with the unique characteristics of urban heritage sites, this research offers both academic insight and practical guidance for designing meaningful, sustainable visitor experiences in culturally significant destinations. This paper expands the understanding of how service quality shapes visitor experience in urban heritage contexts, highlighting the human and experiential dimensions of heritage tourism. Contributes to advancing theoretical and practical insights for developing authentic, emotionally engaging, and sustainable visitor experiences within culturally significant urban destinations.

Keywords: Urban Heritage Destination; Visitor Experience; Service Quality; Place Management

1. Introduction

Urban heritage tourism is seen as a central pillar of cultural sustainability (Carbone, 2017), contributing to the preservation of local, urban and even national identity. Heritage sites today function as dynamic spaces of cultural production where interpretation, visitor experience, and authenticity intersect with economic viability. In this context, the Palácio da Bolsa situated in the heart of Porto's UNESCO-listed historic centre, embodies the dual role of urban monument and tourism icon, offering a valuable opportunity to study how heritage interpretation and service delivery shape visitor satisfaction.

Commissioned by Queen Maria II and constructed by the Associação Comercial do Porto (ACP) atop the ruins of the former São Francisco Convent (destroyed during the Siege of Porto in 1832), the Palácio da Bolsa was completed in 1909 as a venue for commercial arbitration and civic representation. Today it serves as a multifunctional space for institutional events, state receptions, and, most prominently, multilingual guided tours that attract several hundred thousand visitors each year. Renowned for its richly decorated interiors—particularly the Salão Árabe, Escadaria Nobre, and Pátio das Nações—the Palace offers both architectural splendour and an embodied narrative of Porto's mercantile heritage and cosmopolitan identity. The Palácio da Bolsa is located within the UNESCO World Heritage area, which reinforces its symbolic and experiential significance as both a heritage attraction and a living civic institution.

Despite its prominence, empirical evaluations of the visitor experience at the Palácio da Bolsa remains scarce. Most prior studies in heritage tourism have focused on museums, destinations, or intangible heritage experiences, leaving a gap in understanding visitor perceptions within monument-based contexts. It is becoming increasingly vital to better understand the experiential dimensions of heritage visits and the role they play in determining not only satisfaction but also loyalty and recommendation behaviour. Managing such experiences

requires attention to the service encounter, namely the moment-to-moment interactions through which visitors construct meaning and evaluate authenticity.

This study aims to bridge that gap by employing an adapted SERVQUAL framework (Parasuraman et al., 1988) to assess visitors' perceptions of service quality and its impact on satisfaction and recommendation behaviour. SERVQUAL has been used extensively in hospitality and tourism. Its use in urban heritage settings, particularly those centred on architectural monuments, remains limited. Additionally, place management research has yet to fully integrate service-quality metrics into its analytical models, despite the growing importance of experience-based differentiation in heritage tourism (Carù & Cova, 2007; Chen & Chen, 2010).

This study, by situating quantitative evidence within the theoretical frameworks of service quality and place management, reinforces the value of adapting SERVQUAL to heritage contexts. It advances understanding of how traditional service-quality models can be applied to monument-based cultural settings characterised by symbolic depth and emotional engagement, while offering practical insights for managers seeking to design authentic, emotionally resonant, and sustainable visitor experiences. Our findings highlight that the human interaction is central in shaping heritage experiences, with visitors placing significant value on the clarity, friendliness, and interpretative ability of guides during the tour.

2. Palácio da Bolsa

In the Portuguese context, studies have focused on the challenges that lay at the intersection of heritage tourism, sustainability, and visitor expectations. Tourism-led urban regeneration places growing pressure on heritage assets, requiring them to juggle between conservation imperatives and rising tourist demand (Lak et al., 2020). This dynamic is reflected in the historic centre of Porto, where Lopes et al. (2021) show that heritage sites, including the Palácio da Bolsa, must negotiate this tension on an ongoing basis. Their results highlight the risks of over-tourism in culturally sensitive areas and the opportunities for heritage sites to act as catalysts for urban regeneration.

This is reinforced by Gonçalves and Costa (2019) suggestions of robust governance frameworks and the adoption of visitor-centred management approaches, as essential to balance cultural preservation and commercial tourism growth. Lopes et al. (2021) documented significant shifts in visitors' risk perceptions, motivations, and expectations regarding hygiene, crowding, and authenticity, due to Covid -19, suggesting that post-pandemic visitors prioritise trust and emotional reassurance alongside cultural engagement.

Service and digital management perspectives expand and complement this point of view. Xu et al. (2021) state that tourists' decision-making and booking behaviour are influenced by online review management, showing that perceived responsiveness outweighs the physical site. Additionally, Daskalaki et al. (2020) along the same lines, highlight the importance of assessing customer satisfaction and loyalty in cultural and heritage contexts, underscoring the importance of quantitative service metrics in managing the quality of visitor experiences.

Collectively, these studies suggest that heritage experiences in Portugal—and particularly in Porto's historic centre—are co-constructed across multiple dimensions: the physical and architectural environment, interpretative depth, emotional resonance, and digital engagement.

The Palácio da Bolsa best depicts this dynamic, which embodies both the material grandeur of the 19th century mercantile culture and the current challenge of providing authentic, professional, and sustainable equality service. This research, therefore, positions the Palácio da Bolsa as an ideal case for examining how service quality, in its multidimensional form, contributes to satisfaction and advocacy in urban heritage tourism.

3. Method

A structured questionnaire comprising both closed-ended Likert-scale items and a small number of open-ended questions for qualitative insights was used to collect data. The instrument was designed to measure perceived service quality based on an adapted SERVQUAL model (Parasuraman et al., 1988), supplemented with two heritage-specific dimensions, reflecting the model's continued relevance in the literature (e.g., Ladhari, 2009).

The questionnaire thus included seven composite dimensions. In addition to the five SERVQUAL dimensions, two supplementary dimensions were introduced for exploratory and contextual purposes. The first, Environment and Structure, captures spatial organisation, ease of circulation, and perceived preservation quality of the heritage site. This dimension was added because SERVQUAL's Tangibles dimension focuses primarily on facilities and appearance and does not account for monument-scale spatial experience. Similar distinctions

between physical environment and basic tangibles have been empirically validated in museum and heritage tourism research (Loureiro, 2014; Domínguez-Quintero et al., 2020).

The second added dimension, Technology and Interactivity, assesses visitors' perceptions of optional digital tools such as mobile applications, audio guides, or augmented reality. The original SERVQUAL model predates digital mediation and therefore does not include technology-related constructs. Recent heritage tourism studies have demonstrated that digital interactivity functions as an independent experiential dimension when aligned with authenticity and interpretation (Kim and Hall, 2019; Cunha et al., 2025; Recuero Virto et al., 2024).

Table 1 summarizes the dimensions and items included in each.

Table 1: Dimensions and items included in the questionnaire

Dimension	Core Focus	Illustrative Items / What It Measures
Tangibles	Physical and aesthetic elements of the visit	Are the physical facilities of the Palácio da Bolsa visually appealing? Are the staff well-dressed and professional? Do promotional materials (e.g., brochures, website content) accurately represent the services offered?
Reliability	Ability to perform the promised service dependably and accurately	Are services provided correctly and on time? Are ticketing records and processes error-free? Do staff offer reliable solutions to any problems that arise?
Responsiveness	Willingness to help visitors and provide prompt service	Is information about services and events easily accessible? Do staff respond promptly to questions or requests? Do staff effectively handle unexpected situations?
Assurance	The knowledge, courtesy, and professionalism of staff inspire visitor confidence.	Do the staff demonstrate knowledge and competence in their field? Are they polite? Does the institution inspire confidence in its ability to provide quality cultural experiences? Were the guide's explanations easy to understand?
Empathy	Individualised attention and genuine care for visitor needs	How would you rate the guide's friendliness and availability? Do staff provide individualised attention when needed? Does the institution accommodate the needs of diverse audiences? Are operating hours convenient? Did the guide keep the group engaged throughout the visit?
Environment and Structure	Organisation, spatial quality, and aesthetic value of the heritage site	How would you rate the organisation of the space and ease of circulation within the Palácio da Bolsa? Did the site exceed expectations in terms of beauty and preservation? Do you think any improvements are needed in the Structure or Environment?
Technology and Interactivity	Use of digital tools to enhance interpretation and engagement	Do you think a mobile app or interactive technology (such as augmented reality) could enhance the experience? Would you like access to audio guides in additional languages, or an app that provides supplementary information?

Each dimension was operationalised as a composite variable, calculated as the arithmetic mean of its respective item scores. Respondents were asked to indicate their level of agreement on a five-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree).

Data collection was conducted between March and May 2024 to Palácio da Bolsa visitors. A total of 197 valid responses were obtained. The two most represented age groups were respondents aged 31 to 50 years, who accounted for approximately 27.9% of the sample (55 respondents), and those aged 18 to 30 years, representing about 27.4% (54 respondents).

In terms of nationality, the sample was highly international. French nationals represented the largest group of respondents, accounting for approximately 38% of the sample, making them the most significant nationality group. This was followed by Belgian visitors (9%), Italian visitors (6%), and Portuguese visitors (5%). Respondents from North America, namely American (4%) and Canadian (3%) visitors, together accounted for 7% of the sample. The remaining 32% consisted of respondents from a wide range of other countries, including Greece, Germany, Denmark, Luxembourg, Switzerland, Taiwan, Singapore, the United Kingdom, and Australia, among others. This broad diversity of nationalities highlights the international appeal of the Palácio da Bolsa as a cultural tourism destination and reinforces the relevance of this study within an international tourism and visitor experience context.

The sampling technique used in this study can be described as non-probability convenience sampling. The respondents were visitors who had just completed their visit to the Palácio da Bolsa and voluntarily agreed to complete the questionnaire immediately after the experience.

Descriptive statistics were used to profile respondents and summarise mean scores for each service-quality dimension. Composite variables were tested for internal consistency using Cronbach's alpha, and relationships among dimensions were assessed through correlation analysis.

4. Results and Discussion

The internal reliability of the adapted SERVQUAL instrument registered a Cronbach's alpha of 0.872, indicating strong internal consistency. This value falls within the recommended range of 0.80–0.90 (Nunnally & Bernstein, 1994), confirming that the items coherently measure the underlying constructs of perceived service quality.

The analysis of the Recommendations and Intention to Return dimension shows a very high level of satisfaction. The vast majority of respondents (95%) said they would recommend the services of the Palácio da Bolsa to others, and 83% expressed their intention to return in the future.

The analysis of the responses shows a high level of satisfaction among visitors with the Palácio da Bolsa team. One of the most valued aspects was the professionalism and competence of the staff. The statement "Employees are well dressed and present themselves professionally" obtained an average of 4.96 (out of a maximum of 5), with a very low standard deviation (0.20), indicating consistency in the responses. Similarly, the statement "Employees demonstrate knowledge and competence" scored an average of 4.94, reflecting the perception of high technical preparation and mastery of content.

Customer service responsiveness and dependability were noted as other strengths. Both the statement "Services are provided correctly and on time" and "Employees respond promptly to questions" obtained an average of 4.91, indicating that visitors recognize the efficiency, punctuality, and availability of employees during the visit.

These results suggest that visitors feel welcome, value the service provided, and demonstrate high confidence in the team, which contributes significantly to the overall quality of the tourist experience.

The analysis of the data identified opportunities for improvement, particularly with regard to the use of technology and interactivity in the tourist experience. The statement "Technology (such as apps or augmented reality) could improve the experience" obtained an average of 3.02, while "I would like access to audio guides in other languages or an informative app" recorded the lowest average in the questionnaire, with 2.59. Both questions showed high dispersion in responses (standard deviations greater than 1.5). Nevertheless, the data points to a latent need for technological innovation, which could be explored to enrich the experience and meet the expectations of more demanding segments or those accustomed to digital resources, as suggested by Cunha et al. (2025).

The outcomes are generally favorable regarding the intention to return and to recommend. The statement "I would recommend this visit" obtained a high average of 4.86, reflecting a high degree of satisfaction. On the other hand, "I would like to return to the Palácio da Bolsa" had a slightly lower average (4.33) and a standard deviation of 1.03, indicating some variation in responses. This difference may be related to the unique nature of the visit which, although much appreciated, may not necessarily motivate a repeat visit.

In summary, the data shows an experience that is well evaluated and highly recommended by visitors, but also indicates clear opportunities for innovation, especially in the technological field, to further strengthen the engagement and impact of the visit. In short, the experience at the Palácio da Bolsa is extremely positive, with the professionalism of the team and the reliability of the service standing out. As suggested by Domínguez-Quintero et al. (2020), that the satisfaction of the heritage tourists is driven by the quality of the experience.

The high recommendation rate reflects strong overall satisfaction with the services provided. The main reasons highlighted in the open responses include the historical beauty of the Palace, the friendliness and professionalism of the guides, and the clarity of the explanations. The few negative responses indicate specific opportunities for improvement, such as the length of the visit or the price of tickets. Furthermore, the large number of voluntary comments shows emotional involvement with the experience. Most comments were positive, reinforcing the strengths already analyzed, and others included useful suggestions such as extending the length of the visit, improving the queuing system, and introducing themed visits.

In conclusion, the descriptive statistics showed consistently high visitor evaluations across all SERVQUAL dimensions, with mean values ranging from 4.71 to 4.90 on a five-point scale and low standard deviations (0.30–0.46). Assurance (mean = 4.90) and Empathy (mean = 4.87) received the highest scores, underscoring the significance of staff competence, professionalism, and personalised attention as key determinants of satisfaction and recommendation. Responsiveness (mean = 4.81) and Reliability (mean = 4.79) also achieved very positive ratings, reflecting efficiency and dependability in service delivery. Although Tangibles scored slightly lower (mean = 4.71), it still reflected strong satisfaction with the physical facilities and supporting materials, underscoring the importance of the museum environment in shaping visitor experiences (Loureiro, 2014).

These results highlight that, notwithstanding heritage sites' exploration of technical innovation, human interaction, trust, and emotional connection remain primary influences on visitors' evaluations of quality, consistent with findings in recent heritage tourism research (e.g., Sasongko et al., 2025).

5. Conclusion

The findings of this study provide strong empirical evidence that visitors' satisfaction and intention to recommend in urban heritage settings are primarily shaped by interpersonal and environmental factors rather than technological attributes. The importance of human interaction in heritage tourism is highlighted by the prominence of Assurance and Empathy, which show how trust, professionalism, and personalized communication play a major role in visitors' perceptions of authenticity and the emotional value they derive from the experience.

Palácio da Bolsa consistently provides high levels of perceived service quality, as evidenced by the high mean scores across all SERVQUAL aspects. This is consistent with research suggesting that well-managed heritage sites evoke satisfaction through professionalism and interpretive competence rather than solely through physical aesthetics (Kempiak et al., 2017; Chen & Chen, 2010). The results reinforce the conceptualization of heritage tourism as an experience economy (Pine & Gilmore, 1999), in which authenticity and emotional engagement define perceived value. Beyond the scope of the current analysis, more advanced statistical methods will be applied in subsequent stages of the research to further strengthen the robustness of the findings.

From a theoretical standpoint, the study extends the applicability of the SERVQUAL framework to monument-based heritage contexts by demonstrating its robustness and adaptability when supplemented with contextual dimensions. It also supports an expanded view of experience-based place management, where the visitor experience is co-created through both tangible and emotional interactions. The high reliability and intercorrelation among dimensions confirm that service quality in heritage tourism is multidimensional yet cohesive, anchored in trust, care, and the perceived authenticity of interpretation.

For heritage site managers, these findings emphasise the need for continuous staff training, particularly in interpretive communication, Empathy, and cultural mediation. Heritage managers should prioritise consistency in service delivery and invest in maintaining physical and aesthetic quality as visible signals of institutional reliability. Additionally, technological innovation should be introduced selectively, using digital tools to enhance accessibility, interpretation, and pre-visit engagement without disrupting the immediacy of human connection that defines heritage authenticity.

Overall the discussion highlights an essential paradox for heritage management: while visitors increasingly expect innovation, their satisfaction remains deeply rooted in trust, care, and authenticity. The Palácio da Bolsa demonstrates that heritage sites can sustain relevance and emotional resonance by preserving their human and cultural core, supported but not overshadowed by technology.

Acknowledgements

This work is funded by national funds through FCT – Fundação para a Ciência e a Tecnologia, I.P., under the Programme Contract UID/05105/2025. <https://doi.org/10.54499/UID/05105/2025>.

Ethics Declaration

Not applicable.

AI Declaration

During the preparation of this work, the authors used Grammarly and Chat GPT to improve language and readability. The authors then reviewed and edited the content and take full responsibility for the final manuscript.

References

- Carbone, F. (2017). 'International tourism and cultural diplomacy: A new conceptual approach', *Tourism: An International Interdisciplinary Journal*, 65(1), pp. 61–74.
- Carù, A. and Cova, B. (2007) *Consuming Experiences: An Introduction*. London: Routledge.
- Chen, C.-F. and Chen, F.-S. (2010). 'Experience quality, perceived value, satisfaction and behavioural intentions for heritage tourists', *Tourism Management*, 31(1), pp. 29–35.
- Cunha, C. R., Mendonça, V. and Moreira, A. (2025). Using virtual reality in museums to bridge material heritage and interpretation of its immaterial context. In *Applied Immersive Technology in Heritage*. Springer.
- Daskalaki, V.V., Voutsas, M.C., Boutsouki, C. and Hatzithomas, L. (2020) 'Service quality, visitor satisfaction and future behavior in the museum sector', *Journal of Tourism, Heritage & Services Marketing*, 6(1), pp. 3–8
- Domínguez-Quintero, A. M., González-Rodríguez, M. R. and Paddison, B. (2020). 'The mediating role of experience quality on authenticity and satisfaction in heritage tourism', *Current Issues in Tourism*, 23(2), pp. 248–260.
- Gonçalves, F. and Costa, C. (2019) 'Modelo de desenvolvimento e implementação do turismo criativo: o caso do Galo de Barcelos', *Revista Turismo & Desenvolvimento*, 32, pp. 25–36
- Kempiak, J., Hollywood, L., Bolan, P. and McMahon-Beattie, U. (2017) 'The heritage tourist: an understanding of the visitor experience at heritage attractions', *International Journal of Heritage Studies*, 23(4), pp. 375–392.
- Ladhari, R. (2009). 'A review of twenty years of SERVQUAL research', *International Journal of Quality and Service Sciences*, 1(2), pp. 172–198.
- Lak, A., Gheitasi, M. and Timothy, D.J. (2020) 'Urban regeneration through heritage tourism: cultural policies and strategic management', *Journal of Tourism and Cultural Change*, 18(4), pp. 386–403
- Lopes, H. da S., Remoaldo, P.C., Ribeiro, V. and Martín-Vide, J. (2021) 'Effects of the COVID-19 pandemic on tourist risk perceptions—The case study of Porto', *Sustainability*, 13(11), 6399
- Loureiro, S. M. C. (2014). 'The role of the physical environment in leisure service satisfaction: The case of museums', *International Journal of Culture, Tourism and Hospitality Research*, 8(4), pp. 386–398.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1988). 'SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality', *Journal of Retailing*, 64(1), pp. 12–40.
- Pine, B.J. and Gilmore, J.H. (1999) *The Experience Economy: Work is Theatre and Every Business a Stage*. Boston, MA: Harvard Business School Press.
- Sasongko, G., Kameo, D. D., Siwi, V. N., Wahyudi, Y. & Huruta, A. D. (2025). 'The effect of service quality and heritage attributes on tourist loyalty: The case of Borobudur Temple', *Heritage*, 8(2), p. 77.
- Xu, H., Zhang, J., Hu, X. and Zhang, J. (2021) 'Adapting to Social Media: The Influence of Online Reviews on Tourist Behaviour at a World Heritage Site in China', *Asia Pacific Journal of Tourism Research*, 26(4), pp. 436–450.