



REVIEW

## Smart Tourism for Competitive Territories: Enhancing Marketing Strategies with Intelligent Digital Technologies

### Turismo inteligente para territorios competitivos: Mejora de las estrategias de marketing con tecnologías digitales inteligentes

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**Cite as:** El-Alaoui A, Lali K, Farhaoui Y. Smart Tourism for Competitive Territories: Enhancing Marketing Strategies with Intelligent Digital Technologies. Salud, Ciencia y Tecnología - Serie de Conferencias. 2025; 4:1351. <https://doi.org/10.56294/sctconf20251351>

**Submitted:** 29-05-2024

**Revised:** 02-09-2024

**Accepted:** 23-12-2024

**Published:** 01-01-2025

**Editor:** Prof. Dr. William Castillo-González 

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#### ABSTRACT

Territorial decision-makers are aware that investing in intelligent digital technologies and human skills is now a priority in order to value a distinctive and high-quality territorial and cultural offer, and that this will allow them to effectively meet the challenge of tourist attraction. It is thus an orientation toward the establishment of a smart tourism culture capable of facilitating the creation and use of a rich and diverse base of tourist data. This will then be transported via digital channels to facilitate the development of flexible and effective territorial marketing strategies aimed at quickly and profitably satisfying these customers' needs and expectations. This work has thus been an opportunity to highlight the benefits provided by these technologies, including the strengthening of territorial competitiveness and the improvement of their resilience and attractiveness; the personalization of territorial and cultural offerings; the valuation of successful tourist experiences; and, finally, the identification and valuation of the assets of each tourist site.

**Keywords:** Smart Tourism; Intelligent Digital Technologies; Digitalization Of Processes; Artificial Intelligence; Data Science.

#### RESUMEN

Los responsables territoriales son conscientes de que invertir en tecnologías digitales inteligentes y en competencias humanas es hoy una prioridad para valorizar una oferta territorial y cultural distintiva y de calidad, y que ello les permitirá afrontar eficazmente el reto de la atracción turística. Se trata, pues, de una orientación hacia el establecimiento de una cultura turística inteligente capaz de facilitar la creación y el uso de una base rica y diversa de datos turísticos. Ésta se transportará después a través de los canales digitales para facilitar el desarrollo de estrategias territoriales de marketing flexibles y eficaces destinadas a satisfacer de forma rápida y rentable las necesidades y expectativas de estos clientes. Así pues, este trabajo ha sido una oportunidad para poner de relieve los beneficios que aportan estas tecnologías, entre los que se incluyen el refuerzo de la competitividad territorial y la mejora de su resiliencia y atractivo; la personalización de la oferta territorial y cultural; la valoración de las experiencias turísticas de éxito; y, por último, la identificación y valoración de los activos de cada lugar turístico.

**Palabras clave:** Turismo Inteligente; Tecnologías Digitales Inteligentes; Digitalización de Procesos; Inteligencia Artificial; Ciencia de Datos.

## INTRODUCTION

In today's global economic landscape, shaped by trade globalization, digital transformation, and profound economic and environmental shifts, aligning tourism strategies with these dynamics has become a critical challenge.<sup>(1,2,3)</sup> Researchers in management and systemic approaches agree that adopting intelligent digital technologies is not merely a choice but a necessity for devising innovative marketing strategies that promote high-quality cultural and territorial offerings. These strategies, implemented through digital platforms, can attract and retain tourists, ultimately driving economic growth at local, regional, and national levels.<sup>(4,5)</sup>

Territorial marketing in the digital era must prioritize displaying the unique assets, identity, and cultural richness of each region.<sup>(6,7,8,9)</sup> This involves not only educating visitors about natural and cultural resources but also highlighting distinctive features that set each destination apart. To achieve this, decision-makers emphasize the importance of flexible mobility, efficient transportation infrastructure, and high-quality lodging solutions.<sup>(10,11)</sup> Equally crucial are personalized services and immersive tourist experiences, supported by digital tools such as interactive mobile applications, virtual tours, and online booking platforms. These technologies enhance the visibility of destinations, foster tourist loyalty, and encourage sustainable investments.<sup>(12,13,14,15)</sup>

At its core, the integration of intelligent digital technologies reshapes tourism by enabling real-time resource management, optimizing service quality, and creating engaging environments.<sup>(16,17,18)</sup> These tools empower decision-makers to design dynamic territorial marketing strategies that attract tourists and investors alike, contributing to sustainable socio-economic development.<sup>(19,20,21)</sup> Thus, this study seeks to answer a central question: To what extent can a quality cultural and territorial offer, conveyed through intelligent digital media, enhance tourist attractiveness?

## METHOD

Concerning our research methodology choised, we specify that in order to answer our main research question, which we presented at the beginning of this post, we had to use a mixed data gathering approach.<sup>(22,23,24)</sup> The collected data was then analyzed using factororial correspondence analysis, which was completed by dynamic cluster analysis in two classes. Additionally, SPSS was utilized to process the collected and analyzed data. It's also important to point out that in order to address the primary issue that was posed at the beginning of this paper; we established the following two hypotheses:

- Utilizing digital platforms for communication and interaction with tourists may could turn out to be a great way serving to maintain ongoing contact with them, inform them of the cultural and territorial uniqueness of each region,<sup>(14)</sup> and persuade them to visit Morocco in order to discover personally the diversity of each territory's cultures and potentialities.
- In order to successfully meet the challenge of tourism attraction in the South East of Morocco and do so through digital channels,<sup>(16)</sup> it is first necessary to invest in the hiring of human resources with unique skills capable of consistently producing the desired value addition, particularly in diffuculty times as the unexpected competitive situations that arise unexpectedly (Technological and linguistic proficiency, the ability to convince and highlight the region's assets, enhance the local product's brand image, promote it and make it known). It is also necessary to consider the purchases that should primarily be directed toward high-quality software and computer applications.<sup>(19)</sup>

It is also important to note that we coded and entered the data after gathering it from the respondents.<sup>(25,26,27)</sup> Afterwards, we were careful to define two variables for each of our two pre-established hypotheses, along with the indicators associated to them and which are only subvariables and this in order to verify the validity and accuracy of each of our hypotheses.<sup>(28,29,30)</sup> Through our approach and utilization of the combined analysis (applying of the Factorial Correspondence Analysis and the analysis in dynamic clusters in two classes) on both variables that define each hypothesis, we were able to derive conclusions and outcomes that confirm the validity of our two hypotheses and which will be discussed in more detail in the next section.<sup>(29)</sup>

## RESULTS AND DISCUSSION

Our study underscores the significance of investing in intelligent digital technologies, including software for electronic customer relationship management, computer applications, and fostering a digital culture. These investments serve as essential tools for designing and implementing high-quality territorial and cultural marketing strategies that promote differentiated, personalized, and attractive offerings. Insights gathered from territorial decision-makers, tourism professionals, and stakeholders in the Darâa Tafilalet region reveal that digitalization has significantly enhanced territorial competitiveness and adaptability to a rapidly evolving tourism landscape.

Key findings indicate that digital tools enable efficient communication, flexible marketing strategies, and effective promotion of cultural and territorial assets. For instance, 68,5 % of respondents noted improvements in territorial attractiveness, while 79,44 % highlighted the role of digitalization in fostering tailored and

engaging marketing approaches. Furthermore, 83,92 % emphasized the value of recruiting skilled human resources and leveraging intelligent technologies to enhance real-time interaction, facilitate decision-making, and eliminate barriers to communication with tourists. These efforts collectively contribute to improving the visitor experience, boosting territorial reputation, and driving sustainable socio-economic development.<sup>(31,32,33)</sup>

In conclusion, adopting intelligent digital technologies and systemic approaches empowers decision-makers to create innovative and customer-oriented marketing strategies. By prioritizing these investments, regions can capitalize on their unique cultural and territorial strengths, attract tourists, and sustain competitive advantages in the global tourism market.

## CONCLUSIONS

The revitalization of regions and the enhancement of cultural heritage today require the adoption of intelligent digital technologies and managerial innovations. In a context of strong competition and changing tourist expectations, these tools play a central role in strengthening the competitiveness, resilience and attractiveness of territories, while facilitating the creation of personalized and innovative cultural and heritage offers.

These technologies enable better governance of territorial resources, encourage instant collaboration between decision-makers and tourists, and promote the specific assets of each destination. By integrating initiatives such as the Digital Morocco plan and advanced regionalization, they also support sustainable territorial development and successful digital transformation.

In short, intelligent digital technologies are a strategic lever for designing flexible and effective territorial marketing strategies, capable of responding quickly and profitably to tourists' needs while stimulating their interest in unique cultural experiences.

## REFERENCES

1. Ammirato S, Felicetti AM, Linzalone R, Carlucci D. Digital business models in cultural tourism. *International Journal of Entrepreneurial Behavior & Research*. 2022;28(8):1940-1961. doi: 10.1108/IJEBr-01-2021-0070
2. Anglani F, Pennetta S, Reaiche C, Boyle S. Crossing digital frontiers with cultural intelligence—A new paradigm for project managers. *International Journal of Project Management*. 2023;41(8):102543. doi: 10.1016/j.ijproman.2023.102543
3. Armutcu B, Tan A, Amponsah M, Parida S, Ramkissoon H. Tourist behaviour: The role of digital marketing and social media. *Acta Psychologica*. 2023;240(8):104025. doi: 10.1016/j.actpsy.2023.104025
4. Avinç GM, Yıldız A. Evaluating the attractiveness of architectural destinations with content analysis method and artificial intelligence: the case of Ankara. *HBRC Journal*. 2024;20(1):661-678. doi: 10.1080/16874048.2024.2363722
5. Bifulco F, Tregua M, editors. *Handbook of Research on Museum Management in the Digital Era*. IGI Global; 2022. doi: 10.4018/978-1-7998-9656-2
6. Borodina M, Idrisov H, Kapustina D, Zhildikbayeva A, Fedorov A, Denisova D, et al. State regulation of digital technologies for sustainable development and territorial planning. *International Journal of Sustainable Development and Planning*. 2023;18(5):1615-1624. doi: 10.18280/ijstdp.180533
7. Buhalis D. Technology in tourism—from information communication technologies to eTourism and smart tourism towards ambient intelligence tourism: a perspective article. *Tourism Review*. 2019;75(1):267-272. doi: 10.1108/tr-06-2019-0258
8. Da Costa Liberato PM, Alén-González E, De Azevedo Liberato DFV. Digital technology in a smart tourist destination: The case of Porto. *Journal of Urban Technology*. 2018;25(1):75-97. doi: 10.1080/10630732.2017.1413228
9. Del Soldato E, Massari S. Creativity and digital strategies to support food cultural heritage in Mediterranean rural areas. *EuroMed Journal of Business*. 2024;19(1):113-137. doi: 10.1108/EMJB-05-2023-0152
10. El Archi Y, Benbba B, Kabil M, Dávid LD. Digital technologies for sustainable tourism destinations: State of the art and research agenda. *Administrative Sciences*. 2023;13(8):184. doi: 10.3390/admsci13080184
11. El Harissi H, Gmira F. Digital at the service of territorial attractiveness. *Revue Internationale des Sciences*

de Gestion. 2019;2(4):553-568. doi: 10.5281/ZENODO.3533192

12. Elkaoune R. Digital communication as a tool for developing tourism in the choice of tourist destinations. *Revue Internationale du Chercheur*. 2020;1(6):133-150.

13. Elouali A, Hafidi Alaoui S, Ettahir N. The contribution of territorial marketing in improving the brand image of the tourist destination, case of the Covid 19 pandemic. *Revue Internationale des Sciences de Gestion*. 2021;4(1):547-564.

14. Fernández-Díaz E, Jambrino-Maldonado C, Iglesias-Sánchez PP, De Las Heras-Pedrosa C. Digital accessibility of smart cities - tourism for all and reducing inequalities: Tourism Agenda 2030. *Tourism Review*. 2023;78(2):361-380. doi: 10.1108/TR-02-2022-0091

15. Giglio S, Bertacchini F, Bilotta E, Pantano P. Using social media to identify tourism attractiveness in six Italian cities. *Tourism Management*. 2019;72:306-312. doi: 10.1016/j.tourman.2018.12.007

16. Jiang C, Phoong SW. A ten-year review analysis of the impact of digitization on tourism development (2012-2022). *Humanities and Social Sciences Communications*. 2023;10(1):665. doi: 10.1057/s41599-023-02150-7

17. Khanfar FE, Azouaoui H. Territorial relationship marketing: a lever of territorial attractiveness. *International Journal of Accounting, Finance, Auditing, Management and Economics*. 2022;3(1-1):85-100. doi: 10.5281/zenodo.5899103

18. Kim M, Kim J. Destination authenticity as a trigger of tourists' online engagement on social media. *Journal of Travel Research*. 2020;59:1238-1252. doi: 10.1177/0047287519878510

19. Farhaoui Y. Big Data Mining and Analytics. *Big Data Mining and Analytics*. 2023;6(3):I-II. doi: 10.26599/BDMA.2022.9020045

20. Kouraich L, Sair A. The practice of territorial marketing as an accelerated process for the development and repositioning of a territory: Case of the Ait Melloul industrial zone, Souss Massa region. *International Journal of Accounting, Finance, Auditing, Management and Economics*. 2023;4(1-2):315-328. doi: 10.5281/zenodo.7608020

21. Mantzou P, Bitsikas X, Floros A. Enriching cultural heritage through the integration of art and digital technologies. *Social Sciences*. 2023;12(11):594. doi: 10.3390/socsci12110594

22. Marin-Pantelescu A, Popescu RC, Ștefan Hint M. Opportunities for smart tourism: From human tourist guiding to virtual guiding in Bucharest. *Proceedings of the International Conference on Business Excellence*. 2021;15(1):620-629. doi: 10.2478/picbe-2021-0058

23. Pshenichnykh Y, Novi I. The role of information technology in promoting a tourist destination. *International Journal of Media and Information Literacy*. 2023;8(2):350-359. doi: 10.13187/ijmil.2023.2.350

24. Raif Z, Zouiten M. Tourist attractiveness and sustainable development: The place of cultural heritage in the development of territories: Theoretical approaches. *International Journal of Accounting, Finance, Auditing, Management and Economics*. 2021;2(4):75-90. doi: 10.5281/5069943

25. Rosário AT, Dias JC. Exploring the landscape of smart tourism: A systematic bibliometric review of the literature of the Internet of Things. *Administrative Sciences*. 2024;14(2):22. doi: 10.3390/admsci14020022

26. Sigalat-Signes E, Calvo-Palomares R, Roig-Merino B, García-Adán I. Transition towards a tourist innovation model: The smart tourism destination. *Journal of Innovation & Knowledge*. 2019. doi: 10.1016/j.jik.2019.06.002

27. Soltani Nejad N, Rastegar R, Jahanshahi M. Tourist engagement with mobile apps of E-leisure: A combined model of self-determination theory and technology acceptance model. *Tourism Recreation Research*. 2022:1-12. doi: 10.1080/02508281.2022.2100194

28. Staili S, Abdellatif N, Driouch S. Contribution of territorial marketing to the attractiveness of tourist

destinations: Case of the Souss Massa region. *International Journal of Accounting, Finance, Auditing, Management and Economics*. 2023;4(5-2):789-799. doi: 10.5281/zenodo.10032277

29. Farhaoui Y. Big data analytics applied for control systems. *Lecture Notes in Networks and Systems*. 2018;25:408-415. doi: 10.1007/978-3-319-69137-4\_36

30. Sonuç N, Süer S. Smart tourism destinations and digitalization of cultural heritage for sustainability. In: El Amine Abdelli M, Sghaier A, Akbaba A, Gamoura SC, Mohammadian HD, editors. *Advanced Series in Management*. Emerald Publishing Limited; 2023. p. 151-168. doi: 10.1108/S1877-636120230000033010

31. Thomas G. Challenges and trends of digital innovation in the tourism sector: Contemporary literature review. *Open Journal of Business and Management*. 2024;12(1):179-190. doi: 10.4236/ojbm.2024.121013

32. Van Nuenen T, Scarles C. Advancements in technology and digital media in tourism. *Tourist Studies*. 2021;21(1):119-132. doi: 10.1177/1468797621990410

33. Xiong S, Zhang T. Enhancing tourist loyalty through location-based service apps: Exploring the roles of digital literacy, perceived ease of use, perceived autonomy, virtual-content congruency, and tourist engagement. *PLOS ONE*. 2024;19(1):e0294244. doi: 10.1371/journal.pone.0294244

#### FINANCING

The authors did not receive financing for the development of this research.

#### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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