

Assessment of the Potential of Tourist Rentals through Online Platforms: a Case Study of Melilla

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ABSTRACT

This study analyzes the impact of recent public policies to promote tourism in Melilla and assesses the growth potential of the market for tourist rentals offered through digital platforms. A mixed methodology based on documentary analysis of institutional initiatives and empirical data from AirDNA was used. Specifically, this study examines the evolution of supply, market performance, and the relative position of Melilla compared with other urban destinations in Spain. The results show that, although holiday rentals in Melilla are still in their infancy, the city is highly attractive in terms of potential demand and market conditions (with a Market Score of 93), suggesting significant room for growth in this segment. At the same time, we identify risks associated with pressure on the residential market and the need for forward planning to avoid negative effects such as gentrification or overtourism observed in other cities that were analyzed in this research. The strategic dimensions of the STRATECMEL project were incorporated into the analysis, highlighting that it can support the competitiveness of a city's tourism. Potential factors such as digitalization, the use of emerging technologies, and Melilla's special tax regime are emphasized. The work concludes with a series of strategic recommendations aimed at fostering sustainable, well-regulated, and technologically advanced development of the city's digital tourism market.

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Prados-Castillo, J. F., Fuentes Collado, M., & Fuentes Jiménez, A. M. (2025). Assessment of the Potential of Tourist Rentals through Online Platforms: a Case Study of Melilla. *Joinetech (International Journal of Economy and Technology)*, 1(2), 81–90. UTAMED. <https://doi.org/10.65479/joinetech.28>

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1. Introduction

Melilla's Strategic Focus as a Tourist and Technological Destination

The Autonomous City of Melilla (hereafter Melilla), a Spanish city in North Africa, has been the subject of numerous studies exploring its potential in different fields: social, political, religious (López-Bueno, 2013; Pelican & Steinberger, 2017), economic, and cultural (López-Guzmán et al., 2007; Soto Bermant, 2014). In recent decades, the city has undergone significant changes in governance, economic development, and urban planning (Navarro-Ortega et al., 2024), positioning it as an emerging tourist destination. Several authors have highlighted the historical evolution of its tourism sector (Jiménez, 2015), its geostrategic importance (Gálvez, 2022) MELILLA, GIBRALTAR AND WESTERN SAHARA. SPANISH AND EUROPEAN STRATEGIES FOR THE EXTERNAL BORDER CITIES IN AFRICA, AND THE ROCKS OF VÉLEZ AND ALHUCEMAS. In Spain-Morocco relations, there is an imbalance in favour of Morocco in the territorial issues of the bilateral relationship. Various measures to consolidate and strengthen Ceuta and Melilla in the European Union are analysed, with short, medium- and long-term strategies that take into account the interests of the cities and Spain in the Strait of Gibraltar Area and Region. The objective of consolidating the EU in Spain's Cities, Islands and Rocks on the African coast must be permanent in Spanish action, especially after the Ceuta crisis of 2021, with Morocco's use of mass immigration as a diplomatic weapon against Spain; and the subsequent Spanish shift to Western Sahara in 2022. These events confer a cer-

tain international-legal precariousness on Ceuta and Melilla, given Spain's lack of reaction to Morocco's serious breaches of its international obligations. This paper analyses short- and medium-term strategies, such as the establishment of a European outermost region, and especially proposes the creation of a specific status in the EU adapted to the needs of Ceuta and Melilla, as 'EU External Border Cities in Africa', given the absolutely unique nature of their circumstances in the European and Mediterranean context. Long-term strategies that can serve to strengthen the Cities and serve Spain's interests in the Strait region are also analysed. These include the possible analogy of future solutions for Gibraltar as an internationalised city linked to the EU. Along the same lines of the search for strategies, the possible geostrategic interest for Spain of the option of dividing up the Saharan territory, proposed by the UN Secretary General in 2002, as one of the options for resolving the Western Sahara conflict, is analysed. Finally, it analyses the situation of legal limbo in which the islands and rocks, particularly the rocks of Vélez and Al Hoceima, find themselves in Spanish law. The need for a policy of 'Lawfare' is raised, intensifying Spanish and European normative references. It is also proposed to consider new functions and meanings for the Peñones as places of memory and historical interpretation of the Rif wars of the 19th and 20th centuries. "container-title": "PEACE & SECURITY-PAIX ET SÉCURITÉ INTERNATIONALES (EuroMediterranean Journal of International Law and International Relations, and its fiscal uniqueness (Morón Pérez & Sellam Mohamed, 2023) as key factors impacting its competitiveness. Recently, Melilla has

defined three strategic axes for its development in the period 2020–2029: Tourism, New Technologies, and University (Ciudad Autónoma de Melilla, 2023).

In line with this strategy, the Strategic Analysis of Tourism, Technology and Competitiveness in Melilla (STRATECMEL) project (Prados-Castillo, 2025) has been launched in collaboration with the Melilla Tourist Board to scientifically advise the local government on improving its tourism and technology policies. The main objectives of STRATECMEL include: (1) to analyze tourist flows visiting Melilla and characterize the profile of visitors; (2) to promote the adoption of new emerging technologies in the tourism sector, such as virtual reality, Big Data, blockchain (Antoniadis et al., 2020), or immersive metaverse solutions (Colakoglu et al., 2023); and (3) to explore the adaptation of Melilla's special tax regime to boost tourism activity and attract companies and professionals in the sector. These strategic objectives frame the present research, which focuses on assessing a specific aspect of tourism development: the potential growth of the digital holiday home rental market in Melilla, while also including the technological and fiscal dimensions that may influence this market.

Currently, tourism in Melilla is in a phase of expansion driven by various public initiatives (Cope Melilla, 2025). The reopening of trade with Morocco (expected after years of closure) could further stimulate cross-border tourism (El Faro de Melilla, 2024). However, historical challenges remain, such as limited connectivity—Melilla relies on air and sea connections with the Iberian Peninsula—and the need to counteract a sometimes negative external perception linked to its location on a border.

Research Objectives

The overall objective of this study is to examine the impact of recent public policies to promote tourism in Melilla and their effect on the emergence and development of the market for digitally marketed holiday homes (holiday rentals through *online* platforms). Given the global growth of Airbnb-type platforms in the last decade, the aim is to comparatively analyze how this segment has evolved in Melilla compared with other cities, identifying the potential for expansion of tourist rental in the autonomous city.

Specifically, the aim is to (1) evaluate the public policies and tourism promotion measures implemented in Melilla in recent years, (2) analyze the tourist housing market in Melilla using empirical data, (3) evaluate the potential socioeconomic impact of an eventual growth of holiday rentals in Melilla, (4) incorporate into the analysis the dimensions of the tourist rental market in Melilla, (5) incorporate the emerging dimensions of the STRATECMEL project into the analysis, in line with Melilla's strategic axes, and (6) propose strategic recommendations and policy actions based on the evidence gathered, aimed at optimizing the development of tourism in Melilla in a sustainable and competitive manner.

This comprehensive approach ensures a thorough understanding of Melilla's tourism dynamics and the challenges posed by the growth of holiday rentals. By integrating em-

pirical data with strategic frameworks such as STRATECMEL (Prados-Castillo, 2025), the analysis will provide a solid foundation for evidence-based decision-making. Ultimately, the proposed recommendations aim to balance tourism development with socioeconomic sustainability and competitiveness.

2. Literature Review

Digital Tourism Housing Markets and the Collaborative Economy

The emergence of digital vacation rental platforms, with Airbnb as a global benchmark, has transformed the tourism accommodation sector in recent years. Founded in 2008, Airbnb positioned itself as the leading company in this segment of the tourism market (Guttentag, 2019). Through its online platform, Airbnb brokers rental of private accommodation (rooms, flats, and houses), offering owners the possibility to monetize their properties in exchange for a service fee. Airbnb currently operates in more than 220 countries and regions, with more than 5.7 million properties listed worldwide (Airbnb, 2024). Alongside Airbnb, other collaborative economy platforms in tourism (HomeAway/Vrbo and Booking.com in its flat section) have proliferated, facilitating direct contracting between individuals and tourists. The expansion of digital marketplaces for holiday homes has generated new business opportunities for owners in both established and emerging destinations. For many urban destinations, peer-to-peer holiday rentals have increased accommodation capacity without the need to build hotels, thus diversifying the supply. However, numerous studies show that it also has multiple effects on local stakeholders (Martín Martín et al., 2021). From a public policy perspective, digital tourist homes present regulatory dilemmas: on the one hand, they represent innovation and economic dynamism; on the other hand, they challenge traditional regulatory frameworks (regarding land use, hidden economic activity, taxation, etc.). Many cities have had to react by formulating specific regulations on tourist accommodation, such as restricting licensing, setting quotas, restricting zones, or limiting the number of allowed annual rental days. All these measures aim to balance the economic benefits of the activity with the protection of residents (Gutiérrez et al., 2022; Oskam, 2020).

Gentrification, Overtourism, and Conflicts in Urban Destinations

Gentrification and overtourism are two distinct but sometimes interconnected phenomena that may emerge in urban destinations as the short-term rental market expands. Specifically, gentrification refers primarily to a socio-residential process in which long-term, often low- or middle-income residents are progressively displaced owing to rising housing prices, changes in tenure structures, and the transformation of neighborhood commerce. In the context of tourism, "tourism-induced gentrification" occurs when the profitability of short-term rentals incentivizes owners or external investors to convert residential units into tourist accommodation, thereby reducing the availability of long-term housing and contributing to displacement pressures (Martín et al., 2020) by

means of a press analysis, the positioning of the media on the problems generated by the growth of tourist pressure in city centers and by the expansion of tourist accommodation intermediated online. The main objective of this work is to analyze, classify, and group the main press media and agencies and their positioning with respect to their coverage of socio-economic impacts linked to tourist accommodation platforms. Two different statistical techniques will be used, MultiDimensional Scaling and Hierarchical Ascending Classification (Clustering).

In contrast, overtourism concerns the saturation of a destination when the influx or concentration of visitors exceeds its physical, environmental, infrastructural, or social carrying capacity. Manifestations include overcrowded public spaces, pressure on mobility systems, degradation of visitor experience, and the emergence of negative resident attitudes toward tourism (De Luca et al., 2020)there has been an increase in international tourist arrivals worldwide. In this respect, Art Cities are among the most favorable tourist destinations, as they exhibit masterpieces of art and architecture in a cultural environment. However, the so-called phenomenon of overtourism has emerged as a significant threat to the residents' quality of life, and, consequently, the sustainability of Art Cities. This research aims to develop a management toolkit that assists site managers to control tourism flows in Art Cities and World Heritage Sites and promotes the residents' quality of life. The research methodology was developed within the framework of the Atlas Project in 2019. In this project, five European Art Cities, including Florence, Edinburgh, Bordeaux, Porto, and Santiago de Compostela, discussed their common management challenges through the shared learning method. After developing selection criteria, the Atlas' partners suggested a total of nine strategies as best practices for managing overtourism in Art Cities in multiple sections of accommodation policies, monitoring tactics, and promotional offerings. The Atlas project was conducted before the outbreak of the COVID-19 virus pandemic. Based on the current data, it is somehow uncertain when and how tourism activities will return to normal. The analysis of the Atlas findings also highlights some neglected dimensions in the current strategies in terms of environmental concerns, climate change impacts, crisis management, and cultural development plans, which require further research to boost the heritage planning process."}, "container-title": "Sustainability", "DOI": "10.3390/su12093929", "ISSN": "2071-1050", "issue": "9", "language": "en", "license": "http://creativecommons.org/licenses/by/3.0/", "note": "number: 9\npublisher: Multidisciplinary Digital Publishing Institute", "page": "3929", "source": "www.mdpi.com", "title": "Sustainable Cultural Heritage Planning and Management of Overtourism in Art Cities: Lessons from Atlas World Heritage", "title-short": "Sustainable Cultural Heritage Planning and Management of Overtourism in Art Cities", "volume": "12", "author": [{"family": "De Luca", "given": "Giuseppe"}, {"family": "Shirvani Dastgerdi", "given": "Ahmadreza"}, {"family": "Francini", "given": "Carlo"}, {"family": "Liberatore", "given": "Giovanni"}], "issued": {"date-parts": [{"2020", "1"}]}, "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} . While housing im-

pacts may be an expression of overtourism, the phenomenon primarily refers to the imbalance between tourist flows and destination capacity.

Although these processes may coexist and reinforce each other in some cities, it is important to distinguish them analytically. Short-term rentals can act as a connecting mechanism: their rapid growth may accelerate gentrification by increasing the opportunity cost of residential rental while simultaneously intensifying tourism in specific urban areas, contributing to localized forms of overtourism. However, each phenomenon has different drivers and requires different regulatory responses. Gentrification calls for housing and land-use policies, whereas overtourism demands visitor flow management, destination governance, and capacity-based planning. This distinction is particularly relevant for emerging markets such as Melilla, where early policy interventions can prevent the negative externalities observed in more mature destinations.

In the context of Melilla, this phenomenon is not yet a problem compared with other destinations on the Iberian Peninsula. However, it is relevant to consider this phenomenon because one of the local strategic objectives is precisely to increase tourist arrivals and exploit segments such as culture, shopping, or events. Although desirable in economic terms, tourism growth must be managed with foresight to avoid compromising sustainability. This is even more important in a small territory (13 km²), where there are physical limits on accommodation capacity and where the housing market is small and already strained by internal demand (local buyers and tenants).

In the literature, several strategies have been proposed to address these problems. Some of these include comprehensive tourism governance policies involving all stakeholders (Gutiérrez et al., 2022)—administration, residents, the private sector, and platforms—to agree on boundaries and cooperative solutions, although not all of these have been applied to Melilla.

Impact Measurement Tools and Emerging Technologies in Tourism

A field of research and practice that has recently gained momentum is the development of metrics and indicators to measure the impact of tourism in urban destinations. Faced with complex problems such as those described above, there is a need for objective data to inform decision-making. Several studies have proposed tools to quantify tourism load and anticipate overtourism, as recommended by De Luca et al. (2020)there has been an increase in international tourist arrivals worldwide. In this respect, Art Cities are among the most favorable tourist destinations, as they exhibit masterpieces of art and architecture in a cultural environment. However, the so-called phenomenon of overtourism has emerged as a significant threat to the residents' quality of life, and, consequently, the sustainability of Art Cities. This research aims to develop a management toolkit that assists site managers

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3. Methodology

To address the objectives, this research uses a mixed methodology, combining qualitative policy analysis and quantitative market data analysis. The main stages of the study were as follows:

Analysis of Tourism Promotion Policies in Melilla

Initially, a compilation was made of the main public policies, plans, and initiatives aimed at promoting tourism in Melilla in recent years. For this purpose, official documents were consulted (strategic plans, public budgets, and local regulations), communiqués from the Melilla Tourist Board, and relevant news in the local press that reported on new actions (e.g., tourist voucher campaigns, air connectivity agreements, and promotional events). This documental analysis allowed us to contextualize the institutional environment and confirm which measures could influence the development of alternative tourist accommodation. In this qualitative phase, access to information provided by the Tourist Board, a collaborating partner in the STRATECMEL project, was gained.

Analysis of the Tourist Accommodation Market using AirDNA

A comprehensive quantitative analysis of the tourist housing segment in Melilla was carried out using data from AirDNA, a leading market intelligence platform for short-term rentals (Airdna, 2020). AirDNA collects data from multiple platforms (mainly Airbnb and Vrbo) and provides consolidated metrics on vacation rental supply and performance in destinations around the world. Using the academic account of the project, indicators were extracted for Melilla, as presented in Table 1.

Table 1. Indicators extracted from AirDNA for quantitative analysis of the holiday home market in Melilla.

| Indicator | Description |
|--|--|
| Number of active accommodation listings | Number of active tourist dwellings on platforms and its evolution over time |
| Average occupancy rate | Percentage of nights booked over the total number of nights available |
| Average daily rate (ADR) | Average price per night booked, expressed in euros |
| Monthly and annual revenue per accommodation | Estimated revenue calculated from the occupancy and average daily rate |
| Revenue per available room (RevPAR) | A metric that combines the rate and occupancy to measure the profitability per available unit |
| Destination Market Score | An AirDNA index from 0 to 100 that measures the attractiveness of the market considering demand, growth, seasonality, and regulation |

Source: Authors' own elaboration.

To contextualize Melilla's position within the broader Spanish short-term rental landscape, a set of comparative urban destinations was selected for benchmarking. The selection followed a structured multicriteria approach designed to ensure analytical relevance while acknowledging the uniqueness of Melilla's geographic, fiscal, and demographic characteristics.

First, the cities included (Malaga, Valencia, Palma de Mallorca, and Las Palmas de Gran Canaria) are consolidated tourism destinations with a significant volume of short-term rental activities (AirDNA, 2024), ensuring stable and reliable AirDNA data for comparison. Second, all are coastal urban destinations that combine cultural, leisure, and business tourism segments, which aligns with the strategic positioning that Melilla seeks to strengthen according to its 2020–2029 development plan. Third, these cities are widely cited in academic research and in Spanish tourism policy reports as reference cases for the analysis of rental platform dynamics, regulatory evolution, and destination competitiveness.

Although none of the selected cities fully replicates Melilla's structural conditions—given its smaller scale, border location, and special tax regime—they collectively offer a representative spectrum of mature markets whose trajectories provide useful insights for an emerging destination. For this reason, the benchmarking exercise should be understood not as a strict like-for-like comparison but as an indicative reference framework that allows the identification of relative performance patterns, opportunities, and risks as Melilla's digital rental market evolves. The combination of these methodologies provides a broad view of the research topic. The use of primary data sources (AirDNA and official documents), together with institutional collaboration, ensured the validity of the findings. It should be noted that some methodological limitations were encountered: mainly associated with the limited availability of historical data on tourist dwellings in Melilla (being a nascent market, the time series is short, and there may be underreporting) and the difficulty of finding cities truly comparable to Melilla in all their characteristics (size, border location, tax regime, etc.).

4. Results

Analysis of Tourism Attraction Policies in Melilla

The public body in charge of tourism promotion in Melilla is the Melilla Tourist Board (Ciudad Autónoma de Melilla, 2025a). This body has deployed various strategic initiatives to position Melilla as an emerging destination, consistent with the Melilla 2020–2029 Strategic Plan (Ciudad Autónoma de Melilla, 2023). The main lines of action identified are summarized below:

- **Thematic axes of promotion:** Melilla has focused its tourist offer on enhancing its modernist architecture (having the second-largest modernist complex in Spain after Barcelona), the historical heritage of Melilla La Vieja (a fortified citadel), and its multicultural and religious wealth (including the route of the temples). Active and sports tourism is also promoted, taking advantage of the mild climate year-round for nautical and adventure activities and sporting events, as well as local gastronomy. A priority segment identified is meetings, incentives, congresses, and exhibitions

(MICE) tourism, seeking to attract events that take advantage of the existing infrastructure and to improve the external image of the city, detaching it from negative stereotypes.

- **Participation in fairs and promotional campaigns:** The Patronato allocates resources to a regular presence at national and international tourism fairs, with FITUR (Madrid) standing out as a showcase for disseminating Melilla's offering. It collaborated with tour operators and transport companies to create affordable tourist packages. For example, a tourist train was launched for internal tours, and a "route of the temples" was promoted, which successively visits a synagogue, a mosque, a Catholic church, and a Hindu temple in the city, emphasizing cultural coexistence.
- **Digital transformation and ICTs:** Recognizing the importance of online visibility, Melilla has invested in digital promotion. The official portal <https://melillaturismo.com> was created to concentrate tourist information and multimedia resources of the city. Institutional websites and their positioning in search engines have also improved. In parallel, progress is being made on the collection of tourism data using ICT tools, for example, by installing visitor counting systems in museums or digital satisfaction surveys, with the aim of feeding a future integrated data system (in line with the STRATECMEL project).
- **Bonuses and subsidies to attract tourists:** Given the historical disadvantage of the cost of transport to Melilla, in 2020–2023, so-called Tourist Vouchers were designed and have been in operation since 2023, providing direct economic assistance to travelers. In essence, the Autonomous City subsidizes up to 50–75% of the price of plane or boat tickets to Melilla, and also part of the accommodation, in order to encourage visits from the Iberian Peninsula. The data on this program are shown in Table 2.

Table 2. Summary of the tourism rebates and subsidies applied in Melilla (2023–2024).

| Variable/indicator | Quantitative value |
|--|--------------------------------|
| Transport subsidy | 50–75% of the cost |
| Accommodation subsidy | Variable according to campaign |
| Additional tourists attracted | 23,000 travelers |
| Estimated economic impact | 16 million euros |
| Impact/investment ratio | 4.3:1 |
| Overnight stays in hotels | 9,700 |
| Overnight stays in informal accommodation (families and friends) | 13,200 |
| Total overnight stays generated | 22,900 |
| Proportion of overnight stays in hotels/informal accommodation | 42%/58% |

Source: Authors' own elaboration.

- Traditionally, accessibility has been one of the biggest barriers to tourism in Melilla, as it is only accessible by air or ferry. Aware of this, the local government negotiated with airlines and authorities to open new routes and extend operating schedules. At the end of 2023, the opening of direct winter flights to Gran Canaria and Palma de Mallorca was announced, increasing the number of cities regularly connected to Melilla to eight (Melilla Turismo, 2024).
- Melilla has reinforced its tourist attraction strategy through the **recent modification of the Decree Regulating the Discount for Tourist Packages** (Ciudad Autónoma de Melilla, 2025b). **With this change, the** type of accommodation allowed **was expanded**, and the stay requirements were made more flexible to increase visitor arrivals. This measure has been complemented with an economic allocation **of 4.7 million euros** to encourage tourism demand through ordinary and extraordinary calls for applications managed by the Tourist Board.
- Melilla has achieved tourism quality certification, specifically the "Q for Tourism Quality" mark for its tourist information office, which reinforces its position as a sustainable destination with professionalized management (ICTE, 2025). This is in addition to new cultural and heritage promotion actions, such as free guided tours, historical routes, and communication campaigns aimed at highlighting the multicultural and modernist uniqueness of the city, measures that are expected to have an impact in the medium term (El Faro de Melilla, 2025b).

The Tourist Housing Market in Melilla: AirDNA Analysis

Existing Supply and Trend

The number of active accommodation listings on online platforms in Melilla remains very limited, with fewer than 24 properties being available, in contrast to figures in the hundreds or thousands for larger cities. However, an upward trend has been observed since the pandemic: supply in Melilla experienced growth between 2022 and 2023, coinciding with the general post-COVID tourism recovery and the launch of the local incentive programs discussed above. This suggests that some landlords in Melilla have begun to explore Airbnb and other platforms as an avenue to rent rooms or flats to tourists.

Market Score

This indicator gives Melilla a Market Score of 93 out of 100. This remarkably high index suggests that, despite the small size of the market, conditions for holiday rentals are favorable in the city. The Market Score is composed of sub-indices that assess relative demand, revenue growth potential, seasonality, and the level of regulatory restrictions in the destination. A score of 93 indicates that Melilla presents a de-

mand with early growth and potential for accommodation revenue growth, all supported by low seasonality, as tourism is not exclusively concentrated in the summer. On the other hand, the city authorities do not apply strict regulation of the market analyzed.

From this perspective, for a hypothetical investor, a score of 93 out of 100 is a highly positive indicator of the attractiveness of Melilla's market. In fact, among the cities compared, Melilla stands out in this regard, surpassed only by Malaga, which achieved a score of 100. This is explained, in part, because, in very consolidated destinations, limitations such as regulations and saturation begin to emerge, while Melilla represents a "blue ocean" that remains untapped. Table 3 presents a comparison between the analyzed destinations based on information provided in a previous document (Prados-Castillo et al., 2025).

Table 3. Comparison of holiday rental metrics between Melilla and other selected Spanish cities.

| City | Market performance | Annual revenue (thousand €) | Average occupancy | Average daily rate (€) | RevPAR (€) |
|---------------------------|--------------------|-----------------------------|-------------------|------------------------|------------|
| Melilla | 93 | 10.8 | 50% | 76.9 | 36.6 |
| Malaga | 100 | 33.8 | 73% | 152.0 | 109.4 |
| Palma de Mallorca | 76 | 45.1 | 68% | 230.6 | 149.7 |
| Las Palmas (Gran Canaria) | 98 | 17.8 | 64% | 104.2 | 67.3 |
| Valencia | 98 | 27.2 | 68% | 134.8 | 90.2 |

Source: Authors' own elaboration using data from AirDNA (2024).

Despite its smaller market scale, Melilla achieves high performance (with a score of 93), indicating attractive market conditions. However, absolute indicators (revenue, occupancy, ADR, and RevPAR) clearly lag behind consolidated cities, as seen in Table 3. These data for Melilla confirm that the tourist accommodation market is still incipient (currently making a small contribution to the total amount of tourist accommodation), but there is considerable room for growth, which should be monitored and studied.

5. Discussion

The findings of this study align with recent literature on the growth of tourist rentals in emerging destinations. Melilla's high Market Score (93 out of 100) reflects characteristics typical of blue-ocean markets, where an initial scarcity of tourist supply coexists with early signs of demand, low seasonality, and a relatively unrestrictive regulatory framework. These dynamics echo the observations of Guttentag (2019), who noted that digital platforms can accelerate the transformation of accommodation in cities where tourism is not yet dominant.

Conversely, the literature on gentrification and overtourism warns of the risks associated with rapid growth in tourist rentals in compact urban areas. Although Melilla's current results do not indicate tourist saturation or significant residential displacement, its small size (13 km²) and strained property market resemble the early stages identified in cities that later faced residential pressure and conflicts with the local population. This suggests that Melilla is at a nascent stage, where public policy decisions could be crucial in preventing the negative effects observed in established destinations such as Palma or Barcelona.

Public policy plays a particularly significant role in this context. Tourist voucher programs and improvements in connectivity, along with the special tax regime, support the idea that institutional intervention can accelerate the development of a digital tourism market, consistent with studies analyzing the influence of governance in peripheral or border destinations. The integration of emerging technologies—one of the pillars of the STRATECMEL project—also aligns with the literature emphasizing digitalization as a driver of competitive differentiation in emerging tourism markets.

Ultimately, integrating these findings with the existing literature suggests that Melilla combines the opportunities inherent in an emerging market with the vulnerabilities described in previous research. This underscores the need for data-driven, sustainability-oriented strategic planning, particularly for balancing tourism growth while protecting access to housing.

Development opportunities for Melilla in the field of tourism, and specifically in the segment of tourist accommodation marketed through online platforms, can be focused on several key areas aligned with the STRATECMEL axes. First, improvements in connectivity and accessibility continue to be the determining factors. In this sense, any increase in the influx of tourists will increase the demand for accommodation. It is therefore essential to ensure more frequent flights and ferries, establish new routes (e.g., connections to European cities via Morocco or charter flights), and offer competitive fares, possibly by extending subsidy possibilities. The promotion of digital channels and travel platforms is essential to foster the growth of holiday rentals. This requires adequate representation of the Melilla destination on sites such as Airbnb (with a sufficient number of hosts, positive reviews, super hosts, etc.), Booking, TripAdvisor, social travel networks, and blogs, among others. It would be interesting to develop a coordinated digital marketing strategy, possibly in collaboration with travel influencers promoting Melilla, to generate interest and bookings in non-hotel accommodation. This is where the adoption of immersive virtual experiences can come into play, for example, by offering virtual tours of featured accommodation and its surroundings to attract potential guests. Specifically, the implementation of virtual-reality-based tools and Metaverse experiences can be an innovative differentiator for Melilla. For example, the creation of a virtual space of Melilla in already available platforms such as Decentraland or in virtual reality applications would allow tourists to "walk" through its streets or visit its emblematic monuments from anywhere in the world.

On the other hand, one of Melilla's clearest opportunities is its economic and fiscal regime. Generally speaking, companies and freelancers in Melilla benefit from a 50% rebate on state taxes (personal income tax and corporate taxes) and a significantly reduced local tax (IPSI, 4–10% depending on the product) instead of VAT. Promoting these advantages to attract digital tourism businesses could have a considerable impact. For example, tourism startups, travel software companies, booking call centers, or even holiday rental platform operators could set up their headquarters in Melilla to benefit fiscally, generating skilled jobs locally, something that is already being promoted by the city. For the tourist housing segment, owners could be encouraged to formalize their tourist homes by offering them local tax benefits (such as a reduction in the IPSI on tourist services or subsidies to refurbish homes for high-quality tourist rentals). Another clear opportunity would be to make it easier for European digital nomads to establish their tax residence in Melilla to take advantage of the low taxes in exchange for residing there for part of the year and contributing to the local ecosystem.

6. Opportunities and Recommendations from a Management Point of View

The holiday rental market in Melilla does not currently constitute a significant segment of the local accommodation supply, which is dominated by hotels, traditional hostels, and private homes for family visits. However, the observed trends suggest some opportunities. Preliminary comparative analysis indicates that Melilla has the capacity to generate growth in this tourism segment, taking as a reference the success of other destinations but adapting to the unique characteristics of Melilla as a tourist destination, as shown in Table 4.

Table 4. Key indicators of the potential of holiday rentals in Melilla.

| Indicator | Description |
|---|---|
| High Market Score | Indicates that Melilla has room to expand the supply of holiday rentals without risk of market saturation |
| Recent tourism growth | The increase in visitors in 2023, especially owing to tourist vouchers, shows a notable boost in tourism demand |
| Low current presence of holiday rentals | The market is underdeveloped with respect to hotel accommodation and stays in private homes |

Source: Authors' own elaboration using data from AirDNA (2024).

7. Conclusions

The evidence gathered in this study allows several key conclusions to be drawn about the potential of the digital holiday rental market in Melilla while pointing to strategic actions for its sustainable development. There is a strong commitment by Melilla's authorities to position the city as an

emerging tourist destination in line with its strategic tourism and technology axes. Recent policies, ranging from cultural promotion to tourist vouchers and investments in digitalization, have begun to bear fruit, reflected in an increase in visitors and greater visibility of Melilla on the tourism scene. The current volume and tourism activity of the holiday home segment in Melilla remain modest when compared with consolidated Spanish destinations such as Malaga or Valencia. However, this lower level of present activity should not be interpreted as lower development potential. On the contrary, the exceptionally high Market Score obtained by Melilla (93 out of 100) indicates highly favorable structural conditions for future expansion, including low seasonality, early but growing demand, and limited regulatory constraints.

Melilla should be understood as a nascent high-potential market: a destination where the short-term rental sector is still in its introductory phase but that shows strong prospects for growth if the appropriate governance, regulatory, promotional, and technological measures are implemented. This clarification aligns the conclusions with the empirical evidence and avoids confusion between the current market size and future development potential.

The market for tourist accommodation marketed through online platforms, such as Airbnb and similar platforms, in Melilla does not currently constitute a significant segment of the total accommodation and can still be considered to be in an introductory phase. However, data availability remains limited. At the same time, any boost in tourist rentals should be approached with caution because of the particularities of the city. Melilla has a small and stressed real estate market. An abrupt increase in tourist housing, although unlikely in the short term, could further strain access to housing for residents. It is crucial that Melilla learns from cases such as Palma de Mallorca and Barcelona, where unchecked success led to overtourism and gentrification.

Overall, Melilla is considered to have the potential to develop a digital holiday rental market. However, its expansion needs to be gradual, strategically planned, and backed by comprehensive strategies encompassing technology, data, taxation, and sustainability. Future research should focus on monitoring this process through longitudinal studies that analyze the evolution of the parameters examined here over the medium and long term, allowing strategies to be recalibrated as Melilla moves into this new phase of tourism and technological development.

This study has some limitations, mainly owing to the limited availability of historical data on the tourist accommodation market in Melilla. It is also difficult to find cities that are fully comparable to Melilla in terms of size, border location, and tax regime. Furthermore, reliance on metrics provided by digital platforms may lead to an underestimation of the actual supply. On this basis, future research should develop longitudinal analyses to observe the evolution of the market in the medium and long term, incorporating mixed methodologies that integrate surveys of residents and actors in the tourism sector. It would also be advisable to explore in greater

depth the role of emerging technologies (such as blockchain and the Metaverse), differential taxation, and cross-border dynamics in shaping tourism and digital accommodation in Melilla.

8. Strategic Recommendations

The following is a series of integrated strategic recommendations derived from the previous results and analysis, which could effectively guide the evolution of the digital tourism market (and tourism in general) in Melilla. They are visually represented in Fig. 1.

Fig. 1. Strategic recommendations for tourism development in Melilla.



Source: Authors' own elaboration.

Strengthening the Tourism Data System

There is a need for tools that can integrate data from different sources such as the Instituto Nacional de Estadística (INE, the Spanish national statistics institute), the city's satisfaction survey, tourist voucher programs, and other databases. This would allow policies to be adjusted dynamically, for example, by optimizing the timing of the launch of voucher campaigns.

Developing a Regulatory Framework for Tourist Accommodation

Given that the development of the tourist housing sector in Melilla is in its early stages, there is a short-term need to consider a local regulation that establishes fundamental rules, such as mandatory registration of tourist housing, compliance with safety and quality requirements, and payment of equitable fees/taxes. This framework would provide security for both residents and hosts and could be adjusted according to the evolution of the phenomenon. The key is to "contain negative effects before they appear," following recommendations in the literature (Gutiérrez et al., 2022; Oskam, 2020).

Encouraging the Adoption of Immersive Technologies for Promotion and Experiences

As mentioned above, virtual reality (VR) should be integrated into Melilla's tourism strategy, for example, the development of virtual reality content such as virtual tours of Melilla La Vieja, diving simulations on the shores of Aguadú, and 360° views of multicultural festivities, among others, for

dissemination via fairs, websites, and social media. Moreover, exploring the creation of a space in Melilla's Metaverse in which users can interact with digital representations of the city may also have a place in the city's tourism strategy. This not only constitutes an innovative form of promotion but also positions Melilla as a technology-friendly destination, aligned with the tourism and technology brand that it seeks to promote. Local tourism companies (agencies and guides) should also be encouraged to adopt digital tools (apps, augmented reality, QR codes, blockchain technology, etc.) in their services, thus improving the quality perceived by visitors.

Enhance Sustainable and Cultural Tourism Niches for Differentiation

It is thus imperative to develop products for ecotourism and cross-border tourism, for example, the creation of guided hiking routes in nearby natural sites, potentially including visits to the neighboring province of Nador, or offering packages combining Melilla with Moroccan destinations to take advantage of cultural duality. Furthermore, halal tourism development should not be overlooked. These niches, as they are not massive, would generate high-quality visitors who are likely to prefer stays in unique homes or charming accommodation, which is in line with the holiday rental offering.

Continue to Improve Connectivity and Reduce Isolation

It is necessary to continue to deepen, together with the Spanish administration and airlines, the expansion of routes and destinations to continue the expansion already achieved in recent months. This would make it easier to rely not only on the tourist voucher program. In this context, it is necessary to persist with the initiative to recognize Melilla as the outermost region of the European Union (El Faro de Melilla, 2025a).

Monitoring and Managing Local Integration of Tourism

As tourism activity increases, it is essential to implement citizen feedback mechanisms, such as resident satisfaction surveys and complaint boxes for noise or other problems, to identify signs of tourism-phobia or discomfort from stakeholders such as neighbors and shopkeepers. At the same time, awareness campaigns should be carried out to involve the local community in the benefits of tourism, for example, by demonstrating its positive impact on the local economy and encouraging Melillan families to also offer services or products to tourists.

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CRediT authorship contribution statement

Juan Francisco Prados-Castillo: Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Software, Validation, Conceptualization. Miguel Fuentes Collado: Investigation, Data curation, Validation, Writing – review & editing. Antonio Miguel Fuentes Jiménez: Investigation, Data curation, Validation, Writing – review & editing.

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