Overtourism: European Problem - Local Perspectives

Problem-Solving Creathon about Inclusivity

Book of Solutions

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About the Creathon

During the CIVIS Days in Rome from 11th to 12th of June, 2025, the CIVIS Student Council invited students from across the CIVIS Alliance to take part in a groundbreaking event: *"Overtourism: European Problem – Local Perspectives. A Comparative Problem-Solving Creathon about Inclusivity"*

This Conference brought together brilliant minds from across the CIVIS Alliance to address pressing global challenges through creative and collaborative solutions. The participants were invited to develop innovative responses to the issue of overtourism, focusing on solutions that enhanced inclusivity and sustainability in tourism.

By joining this Creathon, students had the chance to contribute to meaningful change, develop new skills, and help spread awareness about the CIVIS Alliance and the work of the CIVIS Student Council. This was more than just a competition—it was an opportunity to innovate, connect, and make a difference!

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Ticketour: A Smart Solution to Overtourism Through Dynamic Pricing

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Executive Summary

By 2030, global tourism is projected to reach 1.8 billion visitors, raising serious concerns around overtourism, especially at iconic cultural heritage sites. Overcrowding strains infrastructure, diminishes visitor satisfaction, and undermines the sustainability of tourism. Our proposed solution, "Ticketour,"is a smart ticketing application that uses real-time data and dynamic pricing to distribute visitor flows more evenly across urban attractions. Through AI-powered demand forecasting, alternative site recommendations, and gamified incentives for off-peak travel, we aim to create a more inclusive, sustainable, and rewarding travel experience for both tourists and local communities.

Problem Statement

Tourism has become one of the fastest-growing sectors worldwide, but the side effect—overtourism—presents serious challenges. Popular destinations often experience bottlenecks, especially during holidays and peak seasons. For example, cities like Venice, Barcelona, and even Athens frequently struggle with managing large crowds, which harms local life, degrades cultural heritage sites, and causes accessibility issues for both locals and less-mobile visitors. Moreover, the benefits of tourism are often unevenly distributed, with major attractions soaking up most of the tourist revenue while lesser- known spots remain under-visited. As a result, there is a need to actively reshape tourist flows and make tourism more equitable and sustainable. Our approach is motivated by the desire to:

- Alleviate pressure on overcrowded hotspots.
- Boost visibility and revenue for off-the-beaten-path locations.

- Ensure a better, more personalized experience for visitors.

Proposed Solution Overview

Ticketour is a smart tourism app that dynamically adjusts ticket prices in real-time based on visitor density. The system incorporates the following features:

- Dynamic Pricing: Prices rise during peak hours and drop during off-peak times.
- Real-Time Tracking: IoT devices and QR code scans track crowd flow at key attractions.
- Alternative Recommendations: AI-driven suggestions for nearby or under-visited sites.
- Gamified Incentives: Rewards and discounts for travelers who explore during non-peak hours.
- Personalized Experience: User profiles allow for tailored recommendations based on interests and past activity.

By integrating seamlessly with public transport and existing ticketing systems, Ticketour supports a smooth and user-friendly experience for tourists.

Implementation Plan

We propose a five-stage rollout for the Ticketour app:

1. Research & Feasibility Study
   - Conduct market research.
   - Identify pilot cities.
   - Assess existing ticketing infrastructure.
2. Core Development
   - Develop and test the dynamic pricing engine.
   - Design UX/UI and app infrastructure.
   - Begin partnerships with local tourism boards.
3. Pilot Program Launch
   - Test app in a high-traffic destination such as Athens.
   - Gather user feedback and analyze traffic patterns.
4. Evaluation
   - Refine based on pilot outcomes.
   - Expand to include more cities in the CIVIS Alliance.
5. Full Launch
   - Release app across platforms (iOS, Android).

- Launch marketing and awareness campaigns.

Expected Impact

Short-Term Impact:

- Reduced congestion at key sites (decrease during peak hours).
- Enhanced visitor satisfaction scores.

Long-Term Impact:

- More equitable distribution of tourism revenue.
- Reduced environmental footprint from concentrated traffic.
- More authentic travel and cultural experiences.
- Stronger collaboration between local stakeholders.

Evaluation Metrics:

- Visitor count distribution data.
- App engagement and adoption rates.
- Feedback through post-visit surveys.

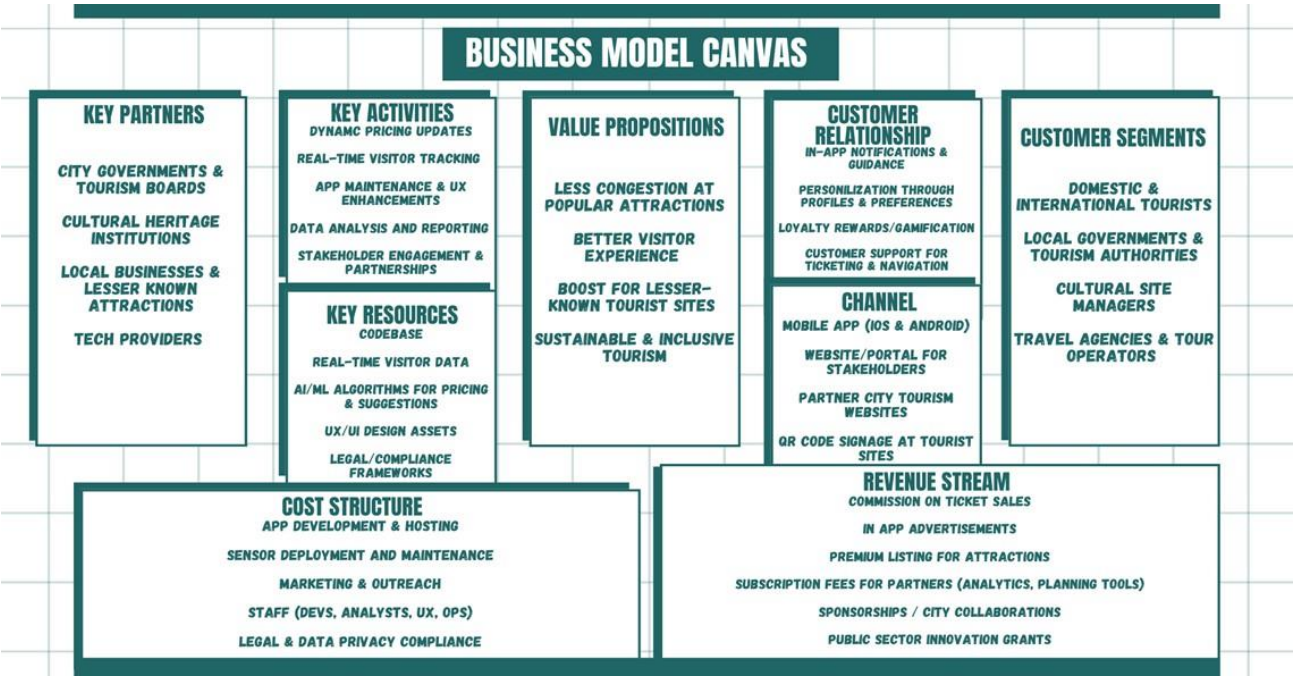
Challenges and Risks

- User Resistance to Price Changes: To address this, we will implement educational prompts and clearly communicate the benefits of dynamic pricing.
- Integration Complexity: We'll begin with pilot partners who are already tech-enabled and scale as integrations mature.
- Privacy Concerns: All tracking will be anonymized and GDPR-compliant.

Mitigation strategies also include user onboarding tutorials, initial usage discounts, and close collaboration with city officials to align with local policies.

Conclusion and Call to Action

Ticketour represents a future-forward solution to a pressing global issue. It doesn't just react to overtourism, it anticipates and reshapes it. With your support, we can scale this platform across Europe and create a new standard for responsible, inclusive, and intelligent tourism. We invite CIVIS member cities, tourism boards, and local stakeholders to join us in piloting Ticketour and shaping the future of travel, one smart ticket at a time.



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DecSys: AI-Powered Decentralized Tourism System

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Problem Statement

Many European cities struggle with overtourism, where excessive visitor numbers overwhelm local resources and drive-up living costs (Amore et al., 2020; Zemla, 2024). Conventional tourism management strategies have proven inadequate in addressing these challenges. There is a pressing need for a technology-driven, data-informed approach that optimizes tourist distribution (Mrsic, 2020), reduces environmental impact, and ensures economic benefits are equitably shared.

Proposed Solution

An AI-Powered Decentralized Tourism System is a smart tourism management approach to reduce overcrowding by guiding tourists to less crowded, yet culturally rich locations. This system works by tracking visitor movement, predicting congestion, and providing smart recommendations to create a more balanced, sustainable, and enjoyable travel experience for both tourists and local communities.

The objective of the AI-Powered Decentralized Tourism System is to reduce congestion in over-touristed areas by leveraging AI technologies and digital platforms to guide visitors toward less crowded, culturally rich destinations. This is achieved by developing AI-powered alternative routes, using real-time geospatial analytics and predictive modeling to analyze tourist distribution patterns and highlight underexplored locations. The system applies machine learning algorithms to assess seasonal visitor trends, detect overcrowding in real time, and adjust recommendations dynamically based on current conditions.

To support this process, the system integrates edge computing and IoT-based

monitoring in key tourist zones to measure foot traffic and anticipate congestion. This data feeds into a real- time guidance system accessible through mobile applications and wearable devices, offering visitors optimized and up-to-date travel suggestions. In parallel, the solution employs AI- enhanced urban planning models, developed in collaboration with local governments, to identify underutilized areas and support the creation of data-driven infrastructure policies. These models ensure that destination development aligns with principles of accessibility, inclusivity, and long-term sustainability.

Implementation Plan

Phase 1: Research and Data Collection (Months 1-3): This initial phase focuses on understanding tourism dynamics and user needs, using Salzburg as the pilot city. The main goals are to collect relevant data and build a strong foundation for the AI system.

- Tourist Flow Analysis: Historical and real-time tourist movement data will be collected from sources such as local tourism boards, mobile device tracking (anonymized), transport systems, and public space sensors. This analysis will identify high-congestion zones, peak times, and seasonal trends.
- Stakeholder Collaboration: Partnerships will be established with local municipalities, tourism authorities, and community organizations to understand pain points, gather feedback, and ensure alignment with local policy goals.
- Qualitative Research: Surveys and interviews will be conducted with residents and tourists to understand preferences, challenges, and perceptions of current tourism patterns. Standardized questionnaires will be used to ensure consistent data across all user groups.
- Data Integration Plan: A structured plan will be created to integrate collected data (geospatial, demographic, behavioral) into the AI system for further analysis and modeling.

Phase 2: System Development and Pilot Testing (Months 4-6): In this phase, the technical foundation of the system will be built with the help of Prof. Christine Bauer, an expert in recommender systems at the University of Salzburg.

- Development of AI Recommender System: The core recommendation engine will be built using machine learning algorithms that analyze user profiles, tourist flow data, location attributes, and congestion levels to provide personalized

suggestions.

- Integration of Real-Time Inputs: The system will be connected to IoT-based foot traffic sensors, weather feeds, and event calendars to adapt suggestions in real time.
- Mobile App Development: A user-friendly pilot mobile application will be developed to provide users with AI-generated alternative routes, live crowd updates, and cultural content via AR or multimedia.
- Pilot Testing in Salzburg: The app will be tested with a small group of users, including locals and tourists, to evaluate usability, accuracy, and user satisfaction. Feedback will be collected for improvement.

Phase 3: Implementation and Optimization (Months 7-12): Following successful testing, the system will be expanded and refined through broader deployment and ongoing performance analysis.

- Multi-City Rollout: The AI system and mobile application will be adapted and rolled out in other selected cities, in collaboration with local governments and tourism boards.
- Real-Time Optimization: The system will be continually updated using live user interactions and new data inputs, enhancing the accuracy of predictions and recommendations.
- User Feedback Loop: Ongoing feedback from users, businesses, and stakeholders will be integrated to improve the system's relevance and responsiveness.
- Scalability and Infrastructure Assessment: Infrastructure needs in new deployment areas will be assessed and improvements recommended to support smart tourism capabilities (e.g., Wi-Fi coverage, IoT sensor deployment).
- Impact Evaluation: Metrics such as changes in visitor distribution, local business engagement, and user satisfaction will be tracked to assess the project's success and refine future strategy.

Expected Impact

Our AI-powered system will help reduce congestion by guiding visitors to less crowded, yet culturally valuable locations through the use of real-time data, predictive

analytics, and smart recommendations. This not only enhances the visitor experience by avoiding overcrowded spaces, but also relieves pressure on overburdened sites, helping to preserve cultural and natural landmarks. In the long term, the system will stimulate local economies by redirecting tourism flows to under-visited areas, spreading economic benefits more evenly and encouraging the development of small, local businesses. By reducing the concentration of tourists in specific areas, the system also supports environmental sustainability, lowering emissions, reducing waste, and preserving urban infrastructure.

This project directly contributes to several UN Sustainable Development Goals (SDGs) by promoting a more balanced and sustainable approach to tourism. It supports SDG 11 (Sustainable Cities and Communities) by reducing overcrowding and improving urban livability, and SDG 12 (Responsible Consumption and Production) through smarter, more efficient use of local resources. By lowering tourism-related emissions, it aligns with SDG 13 (Climate Action), while fostering local business growth and job creation contributes to SDG 8 (Decent Work and Economic Growth). Finally, the project emphasizes collaboration with local authorities and partners, reinforcing SDG 17 (Partnerships for the Goals).

Challenges

The first challenge lies in data sparsity (insufficient data for accurate recommendations) and cold start issues (lack of data for new users or destinations), which reduce the effectiveness of AI-driven suggestions (Guo, 2012). These limitations can be addressed through hybrid models with fallback mechanisms. Additionally, unique user preferences may hinder personalization, but techniques like dynamic clustering and customizable filters enhance accuracy. Popularity bias may also cause AI to favor well-known destinations; applying fairness constraints and diversity-aware recommendations helps promote lesser-known locations.

A second key challenge is the balance between personalization and privacy, especially under GDPR regulations. Technologies such as differential privacy and

federated learning enable AI systems to learn without storing personal data, while clear opt-in/out options ensure user control over data use.

Finally, the lack of digital infrastructure in some regions may limit the implementation of smart tourism systems. Collaborating with local governments to improve connectivity and applying cloud-based AI solutions can help achieve scalability and accessibility.

Conclusion

Overtourism strains cities, disrupts communities, and harms sustainability. Our AI-Powered Decentralized Tourism System offers a smart, data-driven solution to optimize visitor flow, support local economies, and reduce environmental impact. Dear tourism boards and tech partners: support us in creating a sustainable and balanced tourism future!

Let's make DecSys happen!

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Overcrowded Ports, Overwhelmed Peoples: Solutions for Cruise Ship Overtourism

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Problem Statement

Given its indisputable benefits (Pernice & Kuzhym, 2024) (Guterres, 2023) and its role within popular destinations as a cornerstone of the local economy (Bunghez, 2016), how does tourism become a problem? And for whom? While overtourism and overcrowding have long been recognized as policy issues, some of their impacts have remained mostly unconsidered. In this proposal, we propose to take a look at tourism, specifically the overtourism caused by cruise ship arrivals, as a public health issue. We decided to focus on the cruise ship industry since evidence indicates it is one of the sectors of tourism with the highest negative externalities for local populations while simultaneously providing the lowest economic benefits for them (Dodds & Butler, 2019; González, 2018).

There is an ample body of evidence of added stressors by the tourism industry. These include: the feeling of becoming a stranger in your own living space, anger directed towards tourists (Ferika & Nazli, 2021), increased cost of living, increased prevalence of crime and drugs (Rasoolimanesh et al., 2015), problems related to traffic, noise increment due to tourist density (Vargas-Sánchez et al., 2011). All of which are multiplied and echoed by the cruise ship industry (Jordan & Vogt, 2017).

Overtourism from the cruise ship industry can be understood as a public health concern, as it brings with it a myriad of stress inducing problems for the local population. The regular flood of tourists arriving like clockwork to Europe's port cities

leads to crowding, congestion, increased costs of living, overused utilities and displacement for local populations (Jordan & Vogt, 2017). Social conditions can be fundamental causes of disease (FDC) and stress and stressful life events directly influence a population's health, especially of those of lower socioeconomic status (SES) (Link & Phelan, 1995). Given the myriad of problems caused by cruise ship arrivals, many of which cause stress for the local population, we believe that these arrivals will have long term impacts on the quality of life, health and wellbeing of locals. As summarized in a literature by Yaribeygi et al. (2017), there are multiple studies on the effects of stress in health. Some of the most notable effects are: negative effects on memory, learning and cognition, decreased immune function, an increase of cardiovascular diseases, and long-term negative consequences on the endocrine system.

These health consequences are disproportionately affecting low SES locals, which we hope to address by mitigating the effects of stress and managing overcrowding. As such, we believe tourism can be understood as a FDC.

Proposed Solution Overview

Rome was not built in a day, and neither will all the issues related to cruise ship tourism be solved with one simple solution. As such, we will focus only on the overcrowding and congestion stressors, which are notable issues for local populations. To address these concerns, our proposed solutions focus on diluting the tourists throughout the city, carving out spaces for residents and incentivising staying at local hotels through discounts.

Implementation Plan

We propose that cities impacted by cruise ship tourism implement the following:

- Allowing residents to get a ‘resident specific’ public transport card that allows them early access to busses and metros and provides access to public transportation options exclusive to residents during rush hours created by cruise ship arrivals and during high season (ie. some buses and metro carriages).
- Giving discounts on tourist attractions (i.e. museums, landmarks) to tourists staying at local hotels as opposed to AirBnBs or cruise ship passengers.
- Requiring cruise ship companies to have multiple destinations on the shuttle services they offer to passengers from the port to the city while limiting capacity

on each, thus encouraging tourists to visit multiple areas or points of interest in the city.

- Encouraging tourists to visit different zones of the city by supplying information through digital media and creating "instagrammable" tourist attractions in different sites spread throughout the city.

Expected Impact

We expect our proposed measures will reduce the stress caused by the high-intensity overcrowding caused by cruise ship arrivals at popular port cities. Specifically, this will be achieved by both spreading out tourists to more areas of the city (3 and 4), creating incentives for staying at local hotels (2) and carving out spaces exclusive to locals while also creating exclusive public transportation options available to locals in specific time slots (1). This last option in particular is especially worthwhile as it can reduce the stress caused on residents by the overcrowding of public transport in touristic areas while also generating a feeling of exclusivity which adds a collective feeling of excitement (Upshaw et al., 2017). We believe this plan can help decrease the pressure that tourists put on popular destinations. This can possibly get the tourism industry's impact to below the 'threshold' that is proposed to be a context-specific point for when tourism starts bearing negative health consequences instead of positive (Bornioli et al., 2022; Tokarchuk & Gabriele, 2018).

Challenges and Risks

The most substantial challenge will likely be procuring sufficient funding for these proposals, especially those regarding public transportation. When a policy has no direct monetary benefit, it can be hard to secure funding for it. It may also be challenging for smaller destinations to achieve solutions 3 and 4, as these are better suited to population centers spread out over larger areas.

In this regard, it is also important to highlight the difficulty of accurately estimating the costs generated by the stress introduced through cruise ship tourism on local populations. While it may be fairly trivial to calculate the expected costs of our solutions, the benefits are extremely challenging to estimate. This not only makes a cost-benefit analysis a significant challenge it also means that evaluating the success or failure of these proposals is difficult. This is due in part to the fact that measuring the stress introduced by cruise ships on a population is an inherently difficult task and also

in part because many of the impacts and costs of stress can only be observed in the long term, where it may be impossible to isolate the effects of cruise ships relative to other stressors.

A significant risk will be lobbying from the cruise ship industry to block initiative 3. This industry has a history of successfully lobbying against policies that would affect their profit (Chan & Hancock, 2022). An additional risk comes with the nature of the problem and solution themselves. As a long-term problem (the impact of stress on health over years), that will rely on institutional funding, there is risk that funding may dry out before impacts on health occur.

Conclusion and Call to Action

Tourism, while a necessary economic force, cannot continue to exist in its present form without acting as a FCD for local populations. As such, there are significant improvements waiting to be made. We urge governments to take action to protect local populations and invest in their health and well-being. We also call for the funding of research quantifying the specific burden caused by the cruise ship tourism industry.

In diluting the negative effects of the industry on quality of life, it will be possible to make cruise ships work for the locals instead of at their expense.

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Overtourism and Exclusion: When Overcrowding Closes Doors

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Introduction

Overtourism, defined as the excessive and unsustainable number of tourists visiting a specific area, has become a major challenge for many urban centers. What once was seen as a source of economic growth and cultural exchange is now causing deep structural problems: pressure on city infrastructure, degradation of cultural heritage, rising housing costs, and social inequality. Among those most affected—but often overlooked—are people with disabilities, who represent over 16% of the global population, according to the World Health Organization.

In cities like Madrid, Paris, and London, the consequences are tangible: crowded streets, saturated public transport, and long queues at major tourist attractions create physical, sensory, and cognitive barriers. People who use wheelchairs may find elevators blocked, while blind or deaf visitors struggle with poor signage or untrained staff. Even in places that meet minimum accessibility standards, the high density of visitors often nullifies those efforts.

This situation represents not just a social failure, but also a missed economic opportunity. The European Network for Accessible Tourism (ENAT) estimates that the accessible tourism market could generate €88.6 billion annually by 2030. Addressing this gap means not only fighting exclusion but also opening a sustainable and profitable future for the tourism sector.

This proposal analyzes the social dimension of overtourism through three scales: local (Madrid), national (Spain), and international (European context), and presents a practical and inclusive solution aimed at structural change.

Problem Statement

The root problem of overtourism goes beyond crowding. It leads to the systemic exclusion of people with disabilities by making everyday travel, recreation, and participation in cultural life more difficult—or outright impossible.

In Madrid, central areas such as Sol or Gran Vía see constant congestion. According to reports by El País and UNWTO, individuals with limited mobility often miss several trains before finding enough space to board. Similar trends are reported in Paris, where landmarks like the Eiffel Tower and the Louvre are technically accessible, but effectively out of reach due to long waits and a lack of staff trained in disability assistance.

Importantly, disability is not limited to wheelchair use. Visitors who are blind, deaf, or who have neurodivergent conditions face barriers including:

- Transport limitations: Overcrowded vehicles, lack of visual/auditory announcements.
- Infrastructure barriers: Broken elevators, poorly maintained ramps, or tactile paths that are blocked.
- Information gaps: Inaccessible websites and no real-time updates on facility conditions.
- Economic exclusion: Higher costs for adaptive services, with little transparency or public support.

These obstacles prevent full participation in cultural life and travel and affect not just individuals but their companions, family, friends, and caregivers, amplifying the economic and social consequences.

Proposed Solution: Inclusive Mirror Tourism

Inclusive Mirror Tourism is a two-part strategy aimed at reducing the pressure of overtourism while promoting accessibility for all. Rather than limiting visitor numbers or increasing fees, this model uses inclusion as a core design principle for sustainable tourism.

1. **Redirection to Mirror Destinations**

Mirror destinations are less crowded, culturally valuable, and physically accessible alternatives to over-visited sites. For example:

- Promoting Girona or Tarragona instead of Barcelona’s Gothic Quarter.

- Recommending the National Archaeological Museum in Madrid as a quieter, accessible alternative to the Prado.

Selection criteria include:

- Barrier-free transport access
- Cultural or natural value
- Collaboration with disability organizations and local communities

This strategy not only spreads visitor flows, but also economically revitalizes under-visited regions.

2. Inclusive Infrastructure Upgrades

Tourism hotspots will be adapted through universal design, including:

- Ramps, tactile paths, accessible signage, rest zones, and quiet spaces
- Mobile apps with real-time updates on accessibility (e.g., lift status, queue length)
- Mandatory training for hospitality and transport workers in disability awareness

By embedding inclusive design into infrastructure, these sites will become more welcoming— not only to tourists with disabilities but to all users, including seniors and families.

Expected Impact

Short-Term (1–3 Years)

- Enhanced Access: Shorter wait times and easier navigation for people with mobility, sensory, or cognitive disabilities in sites like the Eiffel Tower or Madrid's public transit.
- Economic Diversification: Growth in under-visited cities such as Segovia or Zaragoza, reducing the strain on tourist-saturated areas.

Long-Term (5+ Years)

- Systemic Change: Normalization of inclusive urban planning across European cities, with accessibility integrated from the start.
- Policy Integration: Stronger ties with EU frameworks like the European Accessibility Act, Smart Tourism Initiatives, and Sustainable Development Goals (particularly SDGs 10 and 11).

Challenges and Risk Mitigation Key Challenges:

- Insufficient funding or lack of political will
- Tourism sector resistance, especially in businesses driven by short-term profit
- Fragmentation between private and public stakeholders

Mitigation Strategies:

- Economic Justification: Present data from ENAT and other studies showing that inclusive tourism leads to higher satisfaction, longer stays, and greater spending.
- Incentives: Offer tax breaks, "Accessibility Champion" labels, and grants to businesses that invest in inclusive infrastructure.
- Community Involvement: Work with residents, advocacy groups, and people with disabilities to co-design solutions and create shared value.
- EU Funding: Apply for support through the European Social Fund, Urban Agenda, and Horizon Europe programs to finance infrastructure and training.

Conclusion and Call to Action

Overtourism is no longer just a matter of overcrowding, it is a matter of social justice. Cities cannot claim to be sustainable or inclusive while continuing to marginalize millions of residents and visitors with disabilities. The Inclusive Mirror Tourism model offers a path forward: redistributing visitor flows, promoting universal design, and generating economic and social benefits.

We urge decision-makers to view accessibility not as a secondary concern, but as a fundamental right and opportunity. The next steps include:

- Integrating inclusive tourism into local development plans
- Launching regional pilot projects
- Applying for EU co-funding
- Sharing outcomes through policy briefs, European forums, and public awareness campaigns

This is more than a policy, it is an invitation to build a tourism industry that opens doors for everyone.

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Towards slow tourism

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Problem statement

In recent years, the number of people visiting the Romanian seaside has increased, most of them coming to the city of Constanța (Sorcaru I.A., 2019). Constanța, the largest coastal city on the Romanian seaside and the fifth at a national level, is a dynamic city, being one of the most important European ports and one of the most ethnically diverse places in Romania, with a history spanning almost 3 millennia. The Turkish and Tatar communities have a long history in the city, Constanța being a part of the Ottoman Empire between 1418-1878, and representing 37,3% of the city population în 1853. They left an important mark on the city architecture and culture, contributing to the attractiveness of the city today.

The number of tourists visiting the city has increased from 0.45 million in 2009 to 0.62 million in 2019 (Duhnea et al., 2024), an increase of 37% over a decade. Due to the seasonal nature of seaside tourism, the congestion of tourism fluxes over the short span of 3 months leads to overtourism. “Overtourism describes destinations where residents and also tourists and visitors feel that there are too many people and that the quality of life in the area or the quality of the tourism experience and the traditional lifestyle of the residents have deteriorated to an unacceptable” (Carlos et al., 2020). This increase in tourists has led to economic disparity where foreign firms have taken most of the tourism revenue, excluding small businesses and artisans from the main tourist areas, as locals are being pushed out by foreign competition.

This problem extends to the European level, with the increase in the number of tourists, which threatens both traditional tourist hotspots such as Venice, Barcelona, and Athens, but also cities accustomed to less tourism. It affects the locals’ quality of life, leading to the erosion of the sense of community at a larger scale (Sorcaru I.A., 2019).

Proposed solution overview

Our solution is to create a thematic cultural tour, consisting of small groups of 20-25 people, who will get the chance to visit objectives scattered across the city of Constanța in order to experience the Turkish cultural heritage of the city, a niche sector through which the city could promote itself. This tour will focus both on the tangible heritage of Constanța, consisting of homes, mosques, and statues of the Turkish community, and the intangible heritage, consisting of local customs, crafts, and cuisine, creating an immersive experience for the tourist. The sites chosen for this tour will be proposed by locals of Constanta through participatory planning, a method which is unfortunately not employed yet in planning at the level of the city of Constanța. This will ensure that the tourists get to visit more than just the standard tourist attractions in the city center and truly experience the city.

Our solution has 4 main objectives: fostering community involvement through participatory planning, promoting the cultural heritage of Constanța, supporting the local Turkish community and stimulating slow tourism businesses.

Implementation plan

In order to implement the plan, we will need to conduct a survey, which will be distributed to locals, where they will be asked to name their favorite cultural sites. Once data is collected, a tour route can be designed based on both the historical significance and accessibility of the suggested sites with the help of local cultural associations. This tour will highlight both tangible and intangible heritage, offering immersive experiences such as guided storytelling, local food tastings, and visits to artisans.

To avoid overcrowding, the tours will consist of small groups of people of around 20 to 25, the tourists having to book in advance for the tour. This initiative will take tourists around Constanța, under the supervision of a local tour guide. We will promote the initiative through tourism websites and social media, and through partnerships with several tourism networks. We plan to collaborate with local businesses in order to offer special packages and discounts for the tour participants, further incentivizing tourist participation while supporting the local economy.

Fig. 1. Proposed tour sites

Expected impact

In the short run, this project will benefit the local Turkish community. It will boost local, community-based businesses, creating more jobs and bringing in more tourism revenue. The locals of Constanța will gain a sense of community through civic participation in the project, offering them the possibility of exploring their own city as well. As the flux of tourists will be diverted over a larger area, this will reduce the negative impacts of mass tourism, decreasing the strain on infrastructure and resources. In the long run, the Turkish community will get a sense of pride, helping them preserve their traditions. They will be able to diversify their economy and attract more investments. Additionally, offering these cultural tours will help bring tourists off-season, because most of these attraction will be available year-round.

Challenges and risks

Despite it benefits, the project faces a couple of problems. Initially, there might be a low number of tourists choosing these tours. This will change naturally in time, as tourist habits evolve constantly, and more and more people will choose these tours in order to try new experiences. Additionally, the project, good in its intentions, may

exacerbate the problem of overtourism, bringing more tourists and leading them to new places where overtourism wasn't considered a problem before. We plan to monitor the evolution of the project and take into account the opinions of the local community through different surveys, which will be organized regularly. Thus, we will know first-handly if they are dissatisfied with the outcome of the project.

Strengths	Weaknesses
• Rich Turkish historical and cultural heritage • Large tourist basin	• Resentment from locals • Limited awareness among locals and tourists • Predominance of seasonal tourism
Opportunities	**Threats**
• Preservation of Turkish heritage • Tourism diversification • Development of off-season and experiential tourism • Reducing overcrowding at the major sites	• Commodification of Turkish culture • Proliferation of overtourism in new areas • Resistance from the local community

Fig. 2. SWOT analysis of the project

Conclusion and call to action

In conclusion, this project seeks to promote the Turkish cultural heritage of Constanta, with the support of locals, in cultural tours aimed at showcasing the beauty of slow tourism. The tourists will benefit from an alternative and immersive experience that will be focused on the local communities, while the locals will have the chance to discover a new side of their city.

The problem that we are facing today is not the growth of tourism, but the way we manage it. We need to act now because as the number of tourists grows all across Europe, the problems associated with overtourism will affect all the countries, leading to many social and economic problems. If we include local communities, we can help develop a more sustainable form of tourism, in which all of us can contribute in some way in order to create an authentic experience for the tourists, while making sure that everyone can benefit from it.

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Navigating Inclusivity: Addressing Overtourism Through Innovative Technology

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Problem statement

In many popular European cities, the massive influx of tourists during peak seasons leads to overcrowding of public space (Peeters et al., 2018). This can create significant barriers for people with disabilities (Amiaud, 2014). This problem highlights the tensions between tourism development and the quality of life of residents and visitors, particularly those with special needs. It represents a concrete challenge for cities seeking to balance tourist attractiveness and urban inclusiveness.

At the local level, many European cities like Venice, Amsterdam, and Barcelona are experiencing a convergence of visitors to a limited number of places, leading to overcrowding of public spaces and infrastructure (Peeters et al., 2018). This concentration creates significant barriers for people with disabilities, who may struggle to navigate crowded areas or access overloaded public transportation (Amiaud, 2014). Regionally, this problem extends beyond individual cities to affect entire tourist-heavy areas. For example, smaller cities with attractive touristic profiles such as Florence, Porto, Lucerne, Salzburg, and Dubrovnik also report issues related to overtourism (Hospers, 2019). In the broader European context, the issue of overtourism and its effects on inclusivity is becoming increasingly prevalent. The European Parliament has recognised this as a growing concern, with popular destinations across the continent struggling to balance the economic benefits of tourism with its negative impacts on local communities and the environment (Nádasi et al., 2024).

This problem is important for several reasons. First, it directly affects the quality of life for both residents and visitors (Hospers, 2019), particularly those with special needs. Second, it challenges the principles of accessible and inclusive tourism, which are key priorities for the European Union (Acteurs du Tourisme Durable, 2024).

Moreover, it represents a concrete obstacle for cities striving to maintain their attractiveness while ensuring urban inclusivity (Berger, 2018). If left unaddressed, it could lead to a form of exclusionary tourism where only the most able-bodied or affluent can fully experience popular destinations.

Proposed solution overview

Our proposed solution centers on the development of a smart city application that acts as a real- time guide for tourists, with a strong focus on inclusivity and sustainability. When popular attractions or city areas become overcrowded, the app uses information gathered from urban sensors to detect congestion and immediately suggests alternative routes or lesser-known points of interest. This not only helps to ease pressure on the busiest sites but also encourages visitors to discover new places, spreading the benefits of tourism more evenly across the city. Integrated with local public transport systems, the app provides up-to-the-minute information on how busy buses, trams, and trains are, allowing users to plan their journeys more comfortably and avoid packed vehicles. A key feature is dedicated support for people with disabilities: the app enables them to connect with local “buddies”, volunteers from the community who can offer practical help, companionship, and personalized recommendations for accessible routes, attractions, and services.

The main objectives of this solution are to manage visitor flows more effectively by redirecting tourists away from overcrowded areas, to support sustainable tourism by making better use of urban space, and to improve inclusivity by offering tailored assistance to travelers with special needs. By incorporating the buddy system, the app also fosters community participation, creating meaningful connections between locals and visitors and helping everyone feel welcome in the city. Furthermore, by highlighting businesses and attractions in less-visited neighborhoods, the app supports local economies and encourages a more balanced distribution of tourism’s economic benefits. City planners and local authorities can also use the real-time data collected by the app to make informed decisions about urban management, such as where to improve accessibility or invest in infrastructure. Overall, this solution aims to enhance the tourist experience, protect the quality of life for residents, and set a new standard for inclusive and sustainable tourism in European cities.

Implementation plan

App Development (3-6 months)

First, we'll create a user-friendly mobile app that helps tourists avoid crowded places by suggesting alternative routes and attractions. The app will be designed to be easy to use for everyone, including people with disabilities. Special features like larger text, voice instructions, and clear maps will be included. The app will also have a "buddy system," allowing visitors with special needs to connect with local volunteers who can help them navigate the city and find accessible routes.

Sensor Network Installation (4-8 months)

To know which areas are getting too crowded, we'll set up small sensors in busy spots like popular squares, museums, and public transport stations. These sensors will simply count how many people are in an area (without collecting personal information), so the app can warn users about overcrowding and suggest quieter alternatives.

Building Partnerships (2-4 months, alongside other steps)

We'll work closely with city transport services, tourism offices, and local businesses. This will help us get real-time information about public transport and promote lesser-known attractions. We'll also recruit and train local "buddies"—friendly volunteers who can assist tourists, especially those with disabilities.

Testing and Improving (2-3 months)

Before launching, we'll test the app with a small group of users, including people with different accessibility needs. Their feedback will help us fix any problems and make the app as helpful as possible.

Launch and Promotion (2-3 months)

We'll introduce the app to the public with a strong marketing campaign, using social media, local events, and partnerships with hotels and tourism offices. The goal is to reach both tourists and locals, encouraging everyone to use the app and support inclusive tourism.

Ongoing Monitoring and Expansion

After the launch, we'll keep collecting feedback and data to see how well the app is

working (are crowds spreading out, are people with disabilities finding it easier to get around and are local businesses in quieter areas seeing more visitors?). Based on what we learn, we'll make improvements and plan to expand the project to other cities.

Expected impact

Our solution will have an immediate impact by reducing congestion at popular tourist sites, making these spaces more enjoyable for everyone. By guiding visitors to less crowded routes and attractions, the app eases pressure on busy areas while also improving accessibility for travelers with disabilities through features like accessible route suggestions and a local buddy system for personalized assistance. This approach creates a more comfortable and inclusive experience for all tourists.

Additionally, by encouraging exploration of lesser-known neighborhoods, the app supports local businesses outside the main tourist zones, helping distribute the economic benefits of tourism more fairly across the city. In the long term, our goal is to transform urban tourism by promoting inclusivity and sustainability—redistributing tourist flows, protecting cultural sites, and fostering vibrant local communities. Ultimately, we aim to create cities where tourism drives positive change, benefiting both residents and visitors.

Challenges and Risks

Launching a smart city app to manage overtourism and promote inclusivity brings clear benefits but also faces several challenges and risks that must be addressed for long-term success.

Using sensors to monitor crowds offers valuable real-time data but raises privacy concerns among residents and tourists (Pan et al., 2021). To build trust, data must be fully anonymised and comply with regulations like GDPR, with clear communication about its use. The app's effectiveness also depends on accessible infrastructure, especially in historic areas that may lack features like ramps or elevators (Makharashvili, 2024). Collaboration with city authorities is essential to improve accessibility and ensure only inclusive routes are recommended.

Low user adoption is another challenge. Tourists might be unaware of the app, and locals may lack motivation to join. Marketing, easy-to-use design, and incentives like discounts can help boost engagement. Technical reliability is critical too: failures like inaccurate data or app crashes can erode trust, so ongoing testing and support are

vital.

Funding and sustainability must also be addressed. Long-term success requires investment through partnerships, grants, or public funding, with clear plans for scaling and upkeep (OECD, 2025). Lastly, local businesses in busy tourist areas may resist changes that shift foot traffic. Involving them and showcasing the benefits of distributed tourism, like spotlighting offers in quieter zones, can help ease concerns.

Conclusion and Call for Action

Our innovative solution directly addresses the pressing issues of overtourism and inclusivity in urban destinations. By harnessing technology and fostering community engagement, we present a holistic approach to creating more sustainable and accessible tourism experiences.

We invite city planners, tourism boards, and technology partners to join us in reshaping urban tourism. Together, we can build cities that are welcoming to all visitors while safeguarding local quality of life and cultural heritage. Let's collaborate to implement this solution and establish a new global standard for inclusive and sustainable tourism.

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EcoNomads: A platform connecting young travelers

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Problem statement

Rural destinations are increasingly accessible with the emergence of affordable aviation services and other fast transportation modes (Butler, 2019). However, this influx of visitors has posed significant challenges to local communities, particularly in areas lacking a well-structured tourism management framework. In our case study of Cinque Terre, Italy, we identified a gap between the growing demand for workforce in traditional sectors such as agriculture and the positive willingness of Gen Z (Individuals born between 1997 and 2012) to contribute meaningfully to local communities. (American Express, 2023). As of 2024, the EU had a population of 449 million, of which 5.3% were aged 14-19 and 23.7% were aged 20- 39 (Eurostat, 2025). Shaped by climate change, globalisation, and global crises, younger generations place a high value on sustainability and tend to prioritize meaningful travel experiences over material possessions. Recent research indicates that 79% of Gen Z and Millennials consider leisure travel a priority (CBI, 2024).

The region attracts a diverse mix of international tourists, including day trippers from cruise ships and independent travellers. The location gained social media traction for its picturesque scenery which contributed to the influx of tourists (Naqvee, 2024). The resident population of the five villages is just four thousand (Steves, nd). Roughly 2.5 million tourists visit annually, and for the year 2023, 4 million tourists were known to have been concentrated in the spots most popular among tourists, which is just one square kilometre (Larrata, 2023). Additionally, mass pouring into the villages during the months of summer, where 70% travel by train resulting in congestion in train stations reflecting on transportation challenges. However, it is difficult to divert these constraints as traveling by road is even more unsustainable due to the fragile terrain of

the area (Larrata,2023). Cinque Terre is currently facing issues related to carrying capacity which have caused a range of social, economic, and environmental challenges in the area (Lemmi et al, 2015). In response, there is a growing interest in implementing tourist levies to address overtourism in high-demand travel destinations. Although pricing plays a vital role in tackling overtourism by matching the demand and tourism supply in the destination (Seraphin and Ivanov, 2020) such a global tendency toward over- pricing and the introduction of tourist taxes raises concerns about the potential exclusion of young generations, particularly those with limited financial means. It is critical to ensure that travel does not become an exclusive privilege for affluent travellers, as the younger generation represents a valuable cohort in the preservation of both cultural heritage and natural landscape. In alignment with the United Nations Sustainable Development Goal 8, which calls for inclusive and sustainable economic growth, it is essential to foster equitable access to tourism opportunities.

Despite the interest of young generation in engaging with local communities and sustainable travel practices, official tourism platforms can have more adequate information regarding opportunities for responsible tourism or community-based volunteering. This reflects a broader disconnect between the supply and demand of sustainable initiatives, thereby limiting the potential to address overtourism in a meaningful and inclusive manner.

Proposed solution overview: Develop a Digital Platform for Sustainable Tourism

We envision a transformative digital platform that empowers the young generation of travellers to make meaningful contributions to the communities they visit while addressing the critical issue caused by overtourism. There are various initiatives funded by tourist tax on the official website of Cinque Terre, including supporting local farmers and regular cleaning of the villages (Cinque Terre, n.d.). Another initiative is the “Grape and Heroes” project to support local winemakers in Cinque Terre with crowdfunding and volunteers (Fino, 2022), additionally locals within the Liguria area posted various opportunities, E.g. help to restore lands or crops in secluded farms, permaculture projects, building restoration, and general maintenance in rural and urban homes (Workaway, 2025). By seamlessly connecting motivated tourists with community projects to mitigate the impact of overtourism, the platform provides a dual benefit: locals gain much-needed support to implement sustainable initiatives, and travellers enjoy authentic, purpose-driven experiences that leave a lasting impact.

Residents must identify their carrying capacity and the necessary initiatives to address tourism- related issues to gain the first benefit. This step is a key step in inclusive tourist destinations and addressing overtourism. For instance, the perception of "Too much" defers to each stakeholder (Tokarchuk et al., 2022), and the degree of priority in each initiative might differ among residents. The destination needs to discuss a vision of what it aspires to be and how that vision can be supported through planning and consultation with the people who live and work in those destinations (CBC, 2018).

According to research, the average daily carrying capacity for the Cinque Terre region is 3,650 people (Candia et al., 2019). Whereas the Regional Observatory on Tourism disclosed the average daily tourist presence registered as 8,000 visitors (Candia et al., 2019). The tourism load for Cinque Terre is almost double in comparison to the limit which was calculated to secure tourism sustainability. This ensures that future tourism growth can be accommodated in the following years.

The potential initial financial resource will be EU grants for the smart tourism initiative. The running cost will be covered by tourist tax. Additionally, policy frameworks such as European Agenda for Tourism 2030 and the Tourism Transition Pathway are potential funding sources as well (Interreg Europe, 2025). More than just a volunteer hub, this platform is a catalyst for mutual growth—fostering stronger, more resilient relationships between local communities and socially conscious tourists and redefining the future of travel as a force for good.

Implementation plan

- It is crucial to encourage community involvement at an early stage to the successful implementation of tourism plan (Gets and Jamal, 1994). Co-create the platform development plan and discuss issues with a broad range of stakeholders. The local government facilitates the whole plan while ensuring mutual interactions and collective agreement (Anesell and Gash, 2008).
- Develop budget to find funding (Grant applications, fundraising, use tourist tax)
- Meet with developers and programmers to create an app/website prototype.
- Conduct user testing to collect feedback and optimise the platform.
- Launch event held at Cinque Terre and social media promotion.

Expected impact

The potential impact from creating the platform reflects on inclusion, active participation, and accountability, together with greater efficiency and transparency to build a better future for the next generation by using systems thinking (Parco Nazionale delle Cinque Terre, 2015).

Socio-physical impacts:

- Sustainable refurbishment of the natural areas while improving resilience.
- Less foot traffic allows them to manage their hiking trails' natural beauty to ensure preservation (Buckley, 2023).
- Mitigate the gap of seasonality, striving for annual economic balance.

Socio-psychological impacts:

- Encourage respectful participation in local traditions to reduce tourism resentment.
- Meaningful engagement with locals would create 'high value, low impact' tourism.
- Inclusion of younger generations by helping to educate on sustainable tourism.

The Enviromental Quality Label 2.0 - ESCT Phase II is a certification awarded to Cinque Terre tourism enterprises that commit to sustainable practices, environmental respect, and enhance local culture (Parco Nazionale delle Cinque Terre, n.d). Partnering with certified enterprises can shift the tourist preference towards businesses that support sustainable practice, while redistributing demand. Our long-term vision is creating a concept which can be easily adapted to other regions facing similar challenges. It is a multifaceted approach which will foster sustainable tourism growth while allowing locals to play a bigger role.

Challenges and risks

Challenge: Resistance to change by local communities.
Mitigation: Involve the local community in the change process from the beginning.
Challenge: Difficulty fitting within government regulatory framework.
Mitigation: Ensure credible data, and address how the platform is feasible
Challenge: Unable to find investment for the platform due to high initial cost.

Mitigation: Look for external funding through grants, investors, or consider partnerships.

Conclusion and call to action

The proposed digital platform seeks to combat over- tourism in Cinque Terre by linking Gen Z's desire to contribute to local communities with sustainable tourism practices. It will foster a mutually beneficial relationship with proper planning, community engagement, and funding, it has the potential to make Cinque Terre a model for sustainable tourism.

Together, we can protect Cinque Terre for future generations to keep living la dolce vita! Join the platform to combat overtourism one village at a time.

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