

Al & IoT-Powered Smart Tourism Smart City Expo World Congress

Project Vision

EMPOWERING CITIES, ENRICHING TOURISM IN REAL TIME!

We imagine a future where cities are not only connected to real-time data but where the power to make real-time decisions extended is beyond municipalities to citizens and visitors alike. By empowering everyone with access to immediate, accurate information, we create a city where every individual can navigate their urban environment more efficiently, enjoyably. sustainably. and This democratisation of real-time data transforms urban living, making cities more responsive, inclusive, and vibrant for all.



Project Mision

SHAPING THE FUTURE OF URBAN TOURISM WITH REAL-TIME TECHNOLOGY

Our mission is to empower cities by integrating real-time data and advanced technologies that enhance urban life for both residents and visitors. We aim to create a connected and responsive urban environment where decisionis democratised, making allowing municipalities, citizens, and tourists to make informed, eco-friendly choices that improve the overall experience of the city. Through the collaboration between Thinkz and Libelium, we are committed to drivina sustainable tourism, fostering cultural engagement, and ensuring that our cities are resilient, inclusive, and vibrant spaces for all.





Who Are We?

Thinkz...

Thinkz is a pioneering company that specialises in real-time data solutions for smart cities, offering advanced Altechnologies to empower municipalities, citizens, and visitors Thinkz platform integrates existing seamlessly with urban infrastructures, providing accurate. real-time insights that enhance urban living and promote sustainable, ecofriendly practices.



Libelium is a leading IoT technology company known for developing scalable and adaptable solutions that enable cities and companies to harness the power of datacracy. Their iris360 platform supports data sovereignty and interoperability, aligning standards to international secure, high-quality IoT services that drive innovation and efficiency in urban environments.

Description Of The Smart City Solution

REAL-TIME TOURISM

The "Real-Time Tourism" project represents a groundbreaking collaboration between Thinkz and Libellium, aiming to transform urban tourism through the power of real-time data. By integrating advanced AI and IoT technologies, this solution provides cities with the tools to deliver instant, accurate, and actionable information to both tourists and residents.

A key focus of "Real-Time Tourism" is the need to better manage the flow of tourists in a way that is both effective and non-restrictive. The platform offers concrete solutions that allow cities to enhance the visitor experience while simultaneously increasing the economic benefits for local businesses, parking facilities, museums, and monuments. Through real-time insights, cities can optimise the distribution of tourists across various attractions, reducing overcrowding and ensuring that all areas of interest are more evenly visited. This not only improves the quality of the tourist experience but also boosts revenue generation for the city and its commercial entities.

Furthermore, the platform enhances the entire urban experience by offering dynamic insights into everything from local attractions and eco-friendly mobility options to crowd management and air quality. With "Real-Time Tourism," cities can seamlessly blend cultural enrichment with sustainability, creating a more vibrant, responsive, and inclusive environment for all. This innovative approach not only empowers cities to better manage their resources but also allows visitors and citizens to make informed decisions that optimise their time, reduce environmental impact, and enhance their connection to the urban landscape.



Innovating Urban Tourism with Real-Time Intelligence

GROUNDBREAKING COLLABORATION BETWEEN THINKZ AND LIBELIUM

The collaboration between Thinkz and Libelium's Smart Tourism Solution is transforming the way visitors experience cities, using cutting-edge Al and real-time technology. By integrating an interactive map, augmented reality (AR) tours, real-time updates, and personalized recommendations, the platform revolutionizes tourist engagement with cultural and historical sites. This innovative approach not only enriches the visitor experience but also stimulates local businesses, driving increased foot traffic and revenue. The Al-powered technology ensures that information is both accurate and timely, while real-time data creates a more immersive and dynamic experience for users. This groundbreaking solution sets a new benchmark for smart tourism, offering a seamless fusion of convenience and cultural depth.

Aligned with the emerging data economy, Thinkz's solution harnesses the power of tourism data to foster smart and sustainable destinations. The data collected is modeled and analyzed through Libelium's iris360 data space, further enhancing the capability to create intelligent, data-driven insights that support the development of sustainable tourism ecosystems. You can explore more about the solution **here**.

ENHANCING VISITOR EXPERIENCE WITH AI-VERIFIED DATA

This project addresses the city's need to deliver comprehensive and easily accessible tourist information in a single, user-friendly platform. It enhances the visitor experience by offering all essential details, including special offers, eco-friendly mobility options, transportation updates, and real-time queue lengths at popular attractions. Crucially, the information is Al-verified and continuously updated in real time, ensuring its accuracy and relevance. This aligns perfectly with the expectations of modern tourists who value convenience, cultural immersion, and reliable, up-to-date data for seamless activity planning. Combined with the robust, standardized infrastructure provided by Libelium's iris360 data space, the solution empowers cities, citizens, and visitors with actionable insights. It also demonstrates a strong commitment to regulatory compliance, offering intuitive analytical tools that enable intelligent decision-making, resource optimization, and a sustainable future.

Maximising Tourism Impact with Real-Time Data

DRIVING ECONOMIC GROWTH AND SUSTAINABILITY IN SMART CITIES

The solution greatly enhances the city's tourism sector by attracting more visitors and encouraging longer stays, thereby increasing both the average duration of stays and the return rate of tourists. By offering real-time data and personalized recommendations, the platform drives higher bookings for tourist attractions and supports local businesses.



This results in increased tourism revenue for the city while enabling better management of tourist flows through real-time monitoring of crowd levels and waiting times at popular sites such as monuments and museums. Additionally, the project promotes eco-friendly practices by optimizing routes and providing air quality information, contributing to the city's sustainability goals.

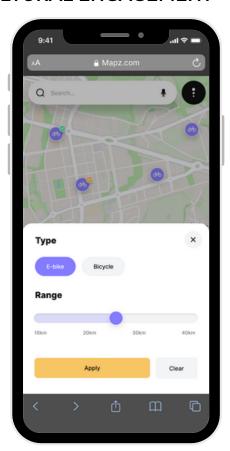
Libelium's iris360 complements this impact by delivering valuable insights through advanced analytics, artificial intelligence, and machine learning techniques. These data-driven services include automatic analysis and reporting, which not only highlight key trends and patterns but also identify anomalies and opportunities. As a result, smart destinations can anticipate potential risks and optimize decision-making. The platform maximizes the potential of each territory by addressing specific aspects of intelligent city management, offering advanced solutions tailored to the needs of each smart city, its citizens, and tourists.

Empowering People with Real-Time Insights

FOSTERING ECO-FRIENDLY CHOICES AND CULTURAL ENGAGEMENT

The platform empowers both citizens and visitors by offering real-time visualizations tailored to their needs, enabling them to make more eco-friendly choices that optimise their city experience and enhance urban living. This active engagement fosters a stronger connection to local culture while promoting sustainable behaviours. By providing actionable insights, the platform aligns with the city's broader cultural and environmental objectives, ultimately contributing to a more informed, responsible, and environmentally conscious community.

Libelium's iris360 ensures a human-centred approach through participatory processes by sharing relevant data via open data portals and gathering insights from public surveys. These tools, such as <u>EU Survey</u>, enable the collection of stakeholder views, ensuring that the platform remains responsive to the needs and perspectives of both residents and visitors.





Advancing Inclusivity Through AI and Accessibility

CREATING A UNIVERSALLY ACCESSIBLE SMART TOURISM PLATFORM

Thinkz's Smart Tourism Solution champions inclusivity by integrating Al-driven multilingual support and an accessible design, ensuring that users from diverse linguistic backgrounds and varying abilities can equally benefit from the platform.

The system is also equipped with Accessibility Tools for individuals who require them, such as screen readers, voice commands, and adjustable text sizes. Real-time translation and adaptive interfaces make the platform universally accessible, allowing everyone to fully enjoy and engage with the rich cultural and historical content. This inclusive approach not only enhances the user experience but also fosters a more welcoming and accommodating environment for all visitors.

Ensuring Feasibility Through Strategic Integration

ADAPTING AND SCALING SMART TOURISM SOLUTIONS SEAMLESSLY

The feasibility of Thinkz's and Libelium's Smart Tourism Solution is highlighted by its strategic use of existing urban infrastructure and IoT devices. The SaaS model ensures a smooth and scalable implementation, allowing for quick and efficient deployment across diverse urban environments. The integration of advanced Al and real-time data processing not only demonstrates technical viability but also ensures the solution can adapt to the evolving needs of smart cities. Thinkz is already connected to hundreds of IoT types worldwide, providing the flexibility to connect new real-time data sources on demand, further enhancing the system's adaptability and responsiveness.

Libelium's iris360 is a fully adaptable and modular solution. Regardless of the territory size or the challenges at hand, every use case is meticulously analyzed and customized to ensure complete and effective implementation. This approach guarantees that the solution remains relevant and impactful, no matter the unique demands of each city.

Scalable Solutions for Global Smart Tourism

LEVERAGING AI AND MODULAR DESIGN FOR SEAMLESS ADAPTATION ACROSS URBAN ENVIRONMENTS

The collaborative solution developed by Thinkz and Libelium is designed for seamless adaptation and replication across various cities. Its modular and scalable nature ensures it can be customized to meet the unique needs of different urban environments, making it an invaluable asset for cities aiming to implement smart tourism initiatives effectively. By leveraging Thinkz's Al-driven data analysis and real-time insights alongside Libelium's adherence to current international standards for data spaces, the platform provides a versatile tool for enhancing tourism on a global scale.



The integration of Thinkz's flexible, real-time data processing capabilities with Libelium's iris360, which is conceived under these international standards, ensures technological interoperability and scalability. This combination is crucial for fostering a data economy based on sovereign and trustworthy data sharing at the European level, while also guaranteeing that the solution can be seamlessly integrated into the broader ecosystem of European data spaces. Together, Thinkz and Libelium offer a solution that is not only adaptable to diverse urban contexts but also aligned with the global shift towards federated, data-driven ecosystems.



Engaging Stakeholders for Successful Smart Tourism Initiatives

COLLABORATIVE EFFORTS FROM MUNICIPALITIES TO LOCAL BUSINESSES ENHANCE PROJECT EFFECTIVENESS AND OWNERSHIP

The project engages a diverse group of stakeholders, including the municipality, loT integrators, Thinkz, Libelium, and local businesses. This collaborative approach ensures that the solution is comprehensive, addressing the needs and concerns of all involved parties. By involving a broad spectrum of stakeholders, the project fosters a sense of ownership and commitment, which enhances the overall effectiveness and acceptance of the smart tourism initiative.

Both Thinkz and Libelium bring unique strengths to the project. Libelium's iris360 focuses on building data services under a governance-based approach, catering to different users based on their specific needs. The services provided are aimed at both city managers and citizens/visitors, facilitating valuable decision-making support while also collecting insights and feedback for continuous improvement. Through participatory processes, the platform ensures that the perspectives of all stakeholders are incorporated, driving the ongoing evolution of smart city services.

Ensuring Robustness in Smart City Solutions: Thinkz and Libelium

AI-DRIVEN ACCURACY AND EUROPEAN STANDARDS DELIVER RELIABLE AND TRUSTWORTHY INFORMATION

The robustness of the Thinkz and Libelium solution is achieved through a combination of Al-driven data verification, real-time updates, and adherence to stringent European standards. Thinkz ensures that the platform consistently delivers accurate and timely information by leveraging Al to validate data in real-time. This approach minimizes errors, enhances user experience, and builds trust, ensuring that users always have access to the most current and reliable information.

Complementing this, Libelium's iris360 reinforces the solution's robustness by emphasizing data sovereignty and standardization. Every feature and implementation within the platform is developed under rigorous European standards, including certifications such as ISO/IEC 27001:2013, ISO 9001:2015, ISO 45001:2018, and ENS - High level. This commitment to excellence ensures that the solution not only meets but exceeds the expectations for security, quality, and reliability, as guided by the European Commission's strategy for data and Common European Data Spaces. Together, Thinkz and Libelium provide a robust, secure, and trustworthy platform that stands at the forefront of smart city innovations.

DATA PRIVACY AND GDPR COMPLIANCE

At the heart of our solution lies a profound commitment to data privacy and GDPR compliance. We believe that cities should not only harness the power of real-time data but also retain full ownership and control over it. Our platform ensures that municipalities are the custodians of their data, empowering them to safeguard their digital assets while preserving their heritage. By prioritising data sovereignty, our solution enables cities to focus on what truly matters—maintaining cultural heritage and making impactful decisions based on accurate, localised insights. This approach underscores our dedication to protecting individual privacy and ensuring that data use aligns with each city's values and priorities.

Unlocking the Benefits: How Our Smart Tourism Application Transforms Urban Experiences

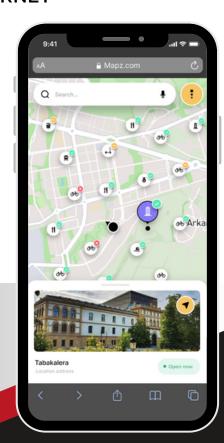
1. ELEVATING EVERY VISIT: PERSONALISED INSIGHTS AND REAL-TIME INFORMATION FOR AN UNFORGETTABLE JOURNEY

Comprehensive Knowledge of Attractions: Centralises all tourist attraction information in one place, providing easy access to details about historical sites, events, and popular destinations.

Cultural Development and Heritage Sharing: Showcases the city's rich cultural heritage, encouraging exploration of local traditions, arts, and history.

Attracts Repeat Tourists with Fun Experiences: Engages visitors with activities that encourage return visits and offers exclusive promotions to enhance their experience.

Engaging Content and Virtual Tours: Features rich multimedia content, including images, videos, and AR tours that bring historical sites to life.



2. BOOSTING REVENUE AND OPTIMISING URBAN DEVELOPMENT THROUGH DATA-DRIVEN INSIGHTS

Economic Growth: Drives longer stays and increased bookings, enhances revenue for tourist companies, and promotes services through targeted promotions and real-time updates. Centralises data for seamless integration and personalised booking options.

Optimised City Planning and Operations: Facilitates planning of new attractions based on tourist and citizen behaviour, supports investment in existing attractions using analysed data, and uses crowdedness data to optimise visitor flow.



3.ADVANCING ECO-FRIENDLY TRAVEL AND EFFICIENT URBAN MOBILITY WITH REAL-TIME INSIGHTS

Promotes Sustainability with Micro-Mobility, Public Transport, and Parking Options: Encourages eco-friendly travel options like bike-sharing and e-scooters, provides real-time updates on public transport and parking, and highlights convenient options to reduce unnecessary driving.

Optimises Usage and Customer Satisfaction with Real-Time Data: Manages and optimises transportation resources, provides accurate information to enhance user experience, and reduces wait times for improved transportation efficiency.

Supports the 2030 Carbon Emission Goals: Reduces carbon footprint through smarter transportation choices, aligns with environmental goals to lower CO2 emissions, and promotes sustainable urban living.

4. PERSONALISED, INTERACTIVE, AND SEAMLESSLY INTEGRATED EXPERIENCES FOR ENHANCED USER SATISFACTION

Enhances User Experience with Personalised Options and Seamless Integration: Tailors content and recommendations based on user preferences, ensures a smooth and intuitive interface, and integrates with existing city services for a cohesive experience.

Provides Accurate, Up-to-Date Information: Offers real-time updates on attractions, events, and transportation to help users make informed decisions and plan visits efficiently.

Provides Fun and Engaging Experiences, Encouraging Repeat Visits: Features interactive elements such as personalised itineraries and event notifications, incorporates gamification and rewards to enhance enjoyment, and engages users with rich multimedia content and virtual tours.



Conclusion

REVOLUTIONISING URBAN TOURISM: THE PIONEERING INNOVATION OF REAL-TIME DATA SOLUTIONS

In the realm of smart city innovation, the "Real-Time Tourism" project spearheaded by Thinkz and Libelium represents a transformative leap forward. By marrying advanced AI with cutting-edge IoT technology, this solution not only meets but exceeds contemporary urban needs and trends. Its commitment to real-time data accessibility, accuracy, and adaptability positions it as a pioneering force in smart tourism. The platform's capacity to democratise decision-making, coupled with its robust adherence to European standards, reflects a deep understanding of both market demands and technological evolution.

What sets this project apart is its holistic approach to integrating real-time data into everyday urban experiences, ensuring that municipalities, citizens, and visitors can make informed, eco-friendly choices. It stands as a beacon of innovation by seamlessly blending cultural engagement with sustainability, making it a standout candidate for the innovation category. This solution's flexibility, stakeholder engagement, and rigorous adherence to quality and security standards underscore its potential to redefine urban tourism on a global scale. It embodies the future of smart cities—where technology not only supports but enriches urban living for all.