FinEst Centre
for Smart Cities

SMART CITY CHALLENGE 2025
Solution idea for the city challenges

Max 3 pages
send to smartcity@taltech.ee by Nov 30, 2025

Solution Idea Title (max 5 words, no acronyms) - AI-Powered City App
Planned pilot project duration – 24 months
Main contact/-s – Kamran Omarov, kamran.omarov@klhousing.ee, +372 5889 1683, KL Housing OU

1. Which urban challenge or problem are you planning to provide a solution to?

Cities today use a mix of websites, apps, social media pages, and occasional SMS messages to reach people. The problem is that none of these channels are truly interactive or personalized. Everyone gets the same information, and the city has no clear idea who saw it, who clicked it, or whether it led to any real action.
Because of this, communication becomes generic, engagement stays low, and the city cannot understand what different groups of citizens need.
Our solution focuses on fixing exactly this problem and as a bonus, it also helps tackle other issues like managing tourist flows and bringing different city systems together.

2. The solution you are proposing

The solution is an AI-powered city app built as a scalable SaaS platform. It will serve citizens first, providing personalized access to city services, events, and programs. At the same time, it will become the city's first comprehensive digital tool for tourists, allowing them to explore the city, check local events, see real-time updates, and plan visits.
The platform will be modular and flexible, so it can be deployed in multiple cities or countries. It will be able to integrate with city cards, transport cards, and other municipal systems through APIs, read and analyze existing data, and provide actionable insights while keeping all data secure and anonymized.
City managers will have access to a dashboard/admin panel with real-time insights on service usage, engagement, survey results, and reported issues. This will help them plan resources, run campaigns, and make data-driven decisions more efficiently.
For users, the app will offer a personalized and interactive experience, suggesting relevant events, services, and programs, providing real-time alerts, and allowing easy reporting of issues or feedback. All user data will be securely stored, encrypted, and anonymized, and accounts will include privacy controls and consent management.

Core functions:

1. *All-in-One City App*

- The app will bring together news, announcements, events, public facilities, and services in one place.
- It will be able to connect with city cards, transport cards, and other systems via APIs, read and analyze the data, and use it to improve the user experience.

2. *Personalized Recommendations*

- The app will use AI to suggest events, services, courses, and programs based on each user's interests and behavior.
- For tourists, AI will generate simple, tailored itineraries based on location, time, and preferences.

3. *Real-Time Alerts and Reporting*

- The city will be able to send notifications about emergencies, road closures, hazards, or other updates.
- Citizens and tourists will be able to report issues with photos, location, and priority.
- Cities will be able to run surveys, polls, or collect feedback to better understand users' needs.

4. *Virtual Assistant*

- A chat-based AI assistant will help users navigate services, book events, register, or make payments.
- It will be available 24/7, reducing the load on call centers.

5. *User Segmentation and Data Insights*

- The app will segment users by demographics, lifestyle, interests, parent or pet status, disability, and other characteristics and statuses.
- It will track engagement and participation to help cities plan resources, improve services, and measure campaign effectiveness.

6. *Security, Privacy, and Data Protection*

- All accounts and user data will be securely stored, encrypted, and anonymized.
- Users will have full control over privacy and consent.
- The system will comply with data protection regulations.

7. *Scalable, Future-Ready Platform*

- The platform will be modular and cloud-based, allowing deployment across multiple cities and countries.
- It will be ready for future integrations, such as live transport data, ticketing, mobility dashboards, or multi-city management.

3. Innovation and piloting of your pilot solution.

There are some existing city apps, such as the Liepaja City App or Bağcılar Belediyesi Mobil, as well as city websites like Tallinn.ee. These solutions provide basic services, such as news, event calendars, live public transport data, or ticketing. However, none of them are AI-powered, and they do not offer personalized recommendations or user segmentation. Most of these platforms mainly serve as information pages or simple service apps.
Our solution will be different. It will combine AI-driven personalization, user segmentation, and predictive analytics with a fully integrated city platform. Citizens and tourists will receive tailored suggestions based on their interests, behavior, and location. City managers will gain real-time insights into engagement, service usage, and campaign effectiveness. This approach will make the app not just a service portal, but a smart, interactive tool for citizens, tourists, and city governance.

After developing the initial MVP, cities will need to provide access to local data, APIs, and support to go live with the tested beta version of the app. The pilot phase will include:

- Running campaigns and marketing to encourage citizens and tourists to download and use the app.
- Collecting feedback and usage data to understand what works and where improvements are needed.
- Adjusting features and refining the app to ensure it is fast, robust, and useful for all users.

This collaborative pilot approach will allow the app to be fine-tuned based on real-world use before full deployment.

The current team consists of two members:

- A senior full-stack developer, responsible for core development and system architecture.
- A project manager with coding experience (myself), supporting development, coordination, and testing.

We do not currently have a TalTech team member, but we are keen to collaborate with TalTech, especially for machine learning and AI development, to strengthen the personalization and predictive analytics features of the app.

4. Expected impact of your pilot solution.

The app will make city life easier and more engaging for citizens by providing a single place for all services and personalized suggestions that encourage participation in events, courses, and programs. Tourists will have a first-of-its-kind digital tool to explore the city, find local events, and plan visits, while also providing the city with valuable insights. City managers will benefit from real-time data to allocate resources more effectively, improve services, and run targeted campaigns. The platform will also support sustainability and behavior-change initiatives, such as promoting recycling, public transport use, and healthy lifestyles. Real-time alerts and reporting will make the city safer and more responsive for everyone.