Smart City Cluster experiences from City of Tartu

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Second-largest city in Estonia, well-known for its living environment
Research and education centre
Traditional university city

- Almost 100,000 citizens
- 50% are under 35 years
- About 18,000 students
- Around 15,000 companies
- 3% of unemployment
- 90% uses internet
- 98% holds ID-card

Smart city since 1632
Challenge for small & medium sized cities: limited in-house human & financial resources

Strategy:
• Co-creation and collaboration with other sectors – clusters, common projects etc
• Tartu as open innovation platform

Tactics:
• Collaboration with private sector
• Collaboration with universities & research centres
• Collaboration with neighbouring municipalities
Ecosystem has the power to deliver creative new solutions that neither of the parties could have realized on its own.
Mission

• To support the development of smart city solutions in order to improve quality of life in the cities and to accelerate export (private sector).

• This is achieved via internationally valued innovation environment, where city authorities and citizens, scientists, enterprises etc are co-creating smart solutions.
Cluster Initiative and Cooperation Platform for Smart Solutions for Cities

- Companies
- Universities
- Smart City Lab
- Science Parks
- Cities
- Citizens & Users

28 members from private, public and academic sector

SMART PRODUCTS
Cluster partners the city has collaborated with:

- Positium – mobile positioning data-based solutions, public transportation network
- Cityntel – smart management of street lighting, sensor network
- Ridango – public transportation ticketing and real-time information solutions
- MobiLab – public transportation m-application
- Reach-U – street-view solutions
- Jiffi – hands-free ticketing solution in public transportation
- Bercman Technologies – smart pedestrian crosswalks
- CGI Estonia – infosystem developments
- Tartu Science Park – international collaboration projects
- Baltic Innovation Agency – international collaboration projects, SmartEnCity
Focus topics:
- Intelligent transport
- Energy Efficiency
- Healthcare and Social Care
- Government and Governance

From bottlenecks to smart products

1. Describing bottlenecks
2. Finding ideas (city-companies cooperation)
3. Prototyping
4. Tartu as the first customer?
5. Going global with products

Smart solutions from Tartu

Conquer the World!
Examples of collaboration projects with the Smart City Lab cluster:

- Mapping and rearranging of public services provided in Tartu
- Geo-archive citizen interface – analysis on technical requirements and usability
- Open Data – analysis on usability of Open Data
- Public transportation network based on data
- Study on public transportation mobile application – analysis of user needs, technical requirements and usability
- SmartEnCity Project (Horizon 2020)
Collaboration with WSP Finland & Positium – new bus line network for Tartu & new methodology

Data based modelling

- Mobile positioning data
- Demographic data
- Ticket validation data
- Development plans, legal acts, research results etc
- Interviews with focus groups

Collaboration with WSP Finland & Positium – new bus line network for Tartu & new methodology
Jiffi is world’s first hands-free ticketing system for passengers.
Board, validate and pay. Without doing anything.

Uses secure Bluetooth Low Energy (BLE) beacons & micro-location technology to detect, when smartphone-equipped passengers enter and exit the public transit vehicle.
Collaboration projects besides clusters

SmartEnCity (Horizon 2020)

Robots4Future: Urban Innovative Actions (ERDF)
Thank you for your attention!

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