

Public Bike Sharing System



Main sector

- Smart urban mobility

Overview

Developing a bike sharing system has been one of the mobility priorities of the City of Tartu. A respective feasibility analysis was carried out in 2014 and a business model was developed based on the findings. The analysis showed that the potential number of bike share users in Tartu could be up to 224,000 people annually. The aim of setting up a public bike sharing system is to encourage the use of bicycles and make this a considerable alternative to cars. It is expected that the bike sharing system will bring about decreased environmental problems (noise, air quality), parking issues and problems with traffic intensity. Bike sharing is considered a part of the public transport system of the City of Tartu.

As such, the current bike share system consists of 750 bikes in 69 bike share stations across the city and was launched on 8 June 2019. A total of 510 bikes are electric and the remaining 240 are regular bikes.

The bike share system is supplied by the Canadian company Bewegen Technologies Inc, who won the public procurement organised in 2018.

In order to rent a bike, the user must have a valid Tartu bus season ticket, or they must purchase a bike share membership. The user must create a bike share account, either online (ratas.tartu.ee) or via the mobile app (Tartu Smart Bike) and connect it to a credit card. As technical support and to report any errors, an information hotline and email address have also been set up.

All in all, the bike sharing launch has been an unprecedented success and currently, nearly a third of Tartu citizens are active users. More information at <https://ratas.tartu.ee/>

Business model

The bike sharing system is co-financed by the City of Tartu, national and private funds. No funding is requested from H2020. The bike sharing system is operated by the Canadian company Bewegen Technologies Inc.



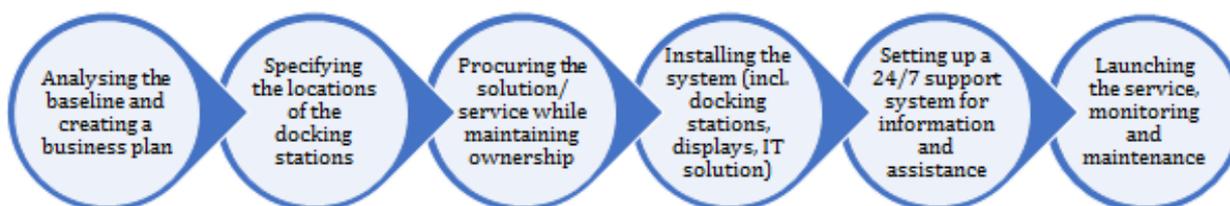
Citizen engagement

The residents of Tartu have been involved in the implementation of the bike sharing system already from the beginning of planning the solution and they had several roles in this process. First of all, the residents were involved in deciding on the locations of the docking stations and drafting the service pricing policy (e.g. length of free driving time, daily and monthly pass prices). After setting up the bike sharing system, residents continue to be involved in improving the service quality. More specifically, feedback will be collected via phone and email and questionnaires will be conducted to identify user expectations and needs, and the design of the service will be adjusted accordingly.

Citizens have also been engaged through awareness-raising – they have been informed of how the system operates, how they can register as users, use the system and pay for it, how they can ensure their own and others' safety etc. Similar content will be communicated to visitors and tourists, also with the help of instructional videos. The main communication messages will include the following aspects:

- Bike sharing is convenient, practical, safe, healthy, fast, flexible and affordable;
- Bike sharing will make the urban environment more human friendly and approachable;
- Users need to make sure that they take care of the safety of themselves, others and the bike sharing equipment.

Process



Benefits

- Traffic reduction and decrease in the need of parking spaces
- Behavioral change
- Fast implementation compared to other means of transportation
- Reduction of carbon emissions and noise
- Greener and cleaner urban environment
- Autonomy from fossil fuels
- Improving the mobility and health of the citizens
- Increase in data availability
- New business opportunities (e.g. safety gear)

Stakeholders

Owner of the solution	City of Tartu
Service/technology provider	Bewegen Technologies Inc
Users	Citizens, visitors
Investors	City of Tartu, national and private funds

Investment/Finance

Ca. 1,500,000 €

Potential for replication

Various bike sharing systems have been successfully set up in ca. 700 cities all over the world. In most of the cases, these systems have been established by large cities that have taken a strategic goal to increase the use of bikes and bring down the use of private cars. A considerable decrease in the cost of respective technologies has also brought cities closer to the point from which the implementation of bike sharing systems is attractive. However, as cities mostly set up bike sharing systems partly, e.g. in the central area or between major attractions, the comprehensive approach taken by Tartu to cover the entire city can serve as a good practice. After all, it is more likely that people will use the system if they can get to their exact destinations, not just the approximate neighborhood.

As such, the main factors that determine the success of the bike sharing solution are the following:

- Coverage of the system/number of parking lots
- Availability of bikes and docking stations
- Safety (e.g. requirement to wear a helmet)
- Simplicity of the solution
- Weather conditions (e.g. whether the service can be used in wintertime)
- Affordability
- Population and density

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