GOOD PRACTICE STUDIES ON PUBLIC TRANSPORT ORGANIZATION

INTERVIEW WITH IEVA STALEVIČIŪTĖ

Interview by Panevėžys Training Centre

CASE STUDY: Sustainable public transport in less densely populated areas

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WHAT ARE THE MAIN CHALLENGES LAZDIJAI FACES IN ORGANIZING PUBLIC TRANSPORT FOR A LESS DENSELY POPULATED AREA?

Lazdijai district is a large, sparsely populated municipality, creating significant challenges for public transport. The district covers over 130 hectares, with more than 18,000 inhabitants spread across towns, villages, and rural areas, many of which are difficult to reach using conventional public transportation systems. Traditional buses operate in the area and often run nearly empty because of the low population density. This makes it economically unfeasible to run a regular bus service that serves everyone and builds bus stops that can accommodate such a dispersed population. Additionally, many residents live far from the main roads, making it hard to access existing bus routes, which can be several kilometres away. This situation called for an innovative solution that would address the residents' mobility needs while being cost-effective and sustainable.

WHAT SOLUTION WAS DEVELOPED TO ADDRESS THIS CHALLENGE?

To overcome these challenges, we developed a unique shuttle service, which is more flexible and suited to the needs of our rural residents. Instead of relying on large, underutilized buses, we introduced smaller electric vehicles that can pick up residents directly from their homes. These vehicles follow a shared route, picking up additional passengers along the way and then taking them to central locations in the district, where they can connect to other public transport services or reach essential services like hospitals, pharmacies, and government offices.

The idea behind the service was to provide a solution that could be easily adapted to the dispersed population of Lazdijai while promoting sustainability through the use of electric vehicles. This shuttle service reduces emissions and operational costs while increasing accessibility for residents who previously struggled to connect with public transport.



HOW CAN RESIDENTS BOOK THE SHUTTLE SERVICE?

We've made it as easy as possible for residents to book a shuttle. There are three main ways to do this. First, they can call a centralized call center where an operator inputs their journey details into the system. Alternatively, they can visit our dedicated website (lazdijaiveza.lt) to make a booking. Lastly, for those who prefer digital solutions, we've developed a mobile app available on Android and iOS, where residents can quickly arrange a pick-up and track the vehicle's arrival.

This flexibility ensures that residents from all age groups, especially the elderly, can comfortably use the service.

WHAT WERE THE KEY CHALLENGES IN SETTING UP THIS SYSTEM?

The biggest challenge was that we had to create the system from scratch because no similar service existed in Lithuania or the Baltic region. We had to design the entire structure, from how passengers would register and book rides, to how the system would operate in real-time. The technology side was especially challenging - we had to develop a mobile app and website that would allow users to book rides, track vehicle locations, and manage payments, although currently, the service is free of charge. We were inspired by ride-hailing services like <u>Bolt</u>, and we tried to make the system as userfriendly as possible. Our goal was to ensure that the service could be easily used by everyone, including people who may not be familiar with digital platforms.

HOW HAS THE COMMUNITY RESPONDED TO THE SHUTTLE SERVICE?

The response has been overwhelmingly positive. Initially, we thought we'd need to conduct numerous presentations and community meetings to explain how the system worked. However, after only a few introductory sessions, word of mouth spread quickly, and the service took off. The demand has been so strong that we are already operating at full capacity. What's more, the service has gained a lot of attention in both national and local media, which has further boosted its popularity.

Even though we expected to face resistance, particularly from elderly residents who might be less comfortable with technology, the simple call center option helped them adopt the service without any issues. Within a couple of months, the system became an integral part of daily life in the municipality.



Login With Google

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Lazdijai VEZA Mobile App

Description of the application

- Safe and convenient
- 🗸 🛛 Plan your time
- Follow the journey live
- Get the latest information

WHAT ARE YOUR FUTURE PLANS FOR THE SERVICE?

We're actively looking for funding to expand the service. Our long-term goal is to purchase more electric vehicles and potentially shift the operation from a pilot project to a fully integrated municipal service. This would allow us to reduce the reliance on large, polluting buses and improve the frequency and reach of the shuttle system.

At the moment, we take bookings one day in advance, which helps us plan routes and accommodate as many passengers as possible. If demand continues to grow, we may implement real-time booking and expand the service to meet the increased needs of residents. Priority will always be given to residents with disabilities and those who need to travel to essential services like hospitals or pharmacies.

HOW DOES THIS SERVICE ALIGN WITH THE EU'S GREEN DEAL INITIATIVES?

Our shuttle service directly supports the EU's Green Deal goals by using electric vehicles to reduce carbon emissions and promote sustainable transport solutions. The project is part of the LIFE initiative, which is a pilot program aimed at promoting sustainable practices across various municipalities in Lithuania. By demonstrating the viability of electric vehicles in a rural transport system, we hope to show that even sparsely populated areas can benefit from green technologies. Currently, our electric vehicles travel approximately 320 kilometres a day and have covered over 30.000 kilometres since the service began. This has not only reduced our environmental impact but has also provided residents with a reliable, cost-effective transport option.

Phone consultation Booking by calling the call center, in the app, or on the website.



INTERVIEW WITH ANDRIUS SAMUILOVAS

Interview by Panevėžys Training Centre

CASE STUDY: Sustainable public transport through big data and digital solutions

Klaipėda city and Klaipėda district municipalities





BUY A TICKET

PRIVATIEMS

Andrius Samuilovas is the Deputy Director of <u>Klaipėda Public</u> <u>Transport</u>

SEARCH

TIMETABLES





CAN YOU EXPLAIN THE CONTEXT AND CHALLENGES KLAIPĖDA FACED IN MANAGING PUBLIC TRANSPORT?

Klaipėda is a city with a spread-out geography, stretching along both the lagoon and the sea, which makes managing public transport challenging. In the central part of the city, where many bus routes converge, we faced significant congestion during peak hours. Buses would frequently arrive back-to-back, causing delays and overcrowding at bus stops. This disrupted passenger flow and reduced the overall reliability of the system.

HOW DID YOU APPROACH SOLVING THIS CONGESTION PROBLEM?

To address this, we explored several solutions. One major step was partnering with a Norwegian startup to analyze public transport data. This collaboration helped us understand passenger flow and bus frequencies, providing insights into optimizing routes based on realtime data. The Norwegian team worked with us to design flexible schedules and adapt routes dynamically, which made our system more efficient. Additionally, through a GovTech project, we implemented an AI system that took this data-driven approach even further. The AI solution analyzed bus traffic patterns and suggested real-time route adjustments to stagger bus arrivals at busy stops. This prevented buses from arriving in clusters, reducing delays and easing congestion.

WHAT WERE THE RESULTS AND CHALLENGES WITH THIS APPROACH?

The AI solution significantly reduced congestion in the central areas, improving the flow of buses and making the system more predictable for passengers. However, we encountered a challenge: adjusting routes in the city center sometimes disrupted service in outer districts. For example, changing schedules to avoid overcrowding in the center could reduce the frequency of buses in suburban areas, where service is already less frequent. This complexity showed us that public transport is a delicate balance, and while AI and data analysis helped, ongoing adjustments are needed to ensure the entire network runs smoothly.

HOW DOES THE USE OF AI AND DATA CONTRIBUTE TO SUSTAINABILITY?

By optimizing routes and reducing unnecessary congestion, we're able to lower fuel consumption and emissions, contributing to our sustainability goals. Public transport, when efficient, encourages more people to use it instead of private cars, further reducing traffic and pollution. The integration of real-time data into our operations helps us ensure that buses are running only when and where they're needed, supporting our vision for a greener Klaipėda.

HOW DOES THE E-TICKETING SYSTEM INTEGRATE WITH OTHER TRANSPORT MODES?

Klaipėda's e-ticketing system is a key part of our public transport modernization. Since its introduction, the system has evolved to cover not just urban and suburban buses but also water buses and ferries, connecting passengers across different modes of transport seamlessly. The e-ticket works across the entire region, allowing passengers to use one card for buses, shuttle services, and even the Smiltyne ferries. We've also integrated with Lithuanian Railways, creating a unified experience where passengers can move from one mode of transport to another using the same ticket. This integration helps passengers travel more easily between the city and surrounding districts, while also simplifying fare collection and enhancing the overall convenience of public transport.

WHAT'S NEXT FOR KLAIPĖDA'S PUBLIC TRANSPORT?

We plan to continue refining the Al system, improving both central and suburban routes by integrating more data-driven insights. We're also looking into further expanding our use of electric and hybrid buses to reduce emissions. Our long-term goal is to fully digitize the network and make Klaipėda's public transport system a model of sustainability and efficiency, serving both the city and its surrounding areas.