



POLICY LEARNING IN INFORMATION TECHNOLOGIES
FOR PUBLIC TRANSPORT ENHANCEMENT

GOOD PRACTICES – PUBLIC TRANSPORT AND/OR MULTIMODAL INFORMATION SYSTEMS

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INTERACTIVE PASSENGER SERVICE IN TRAIN TRAFFIC

General information

Description

Interactive complex solutions services for railway passengers are implemented on the base of infrastructure and IT solutions. Services are intended for multi-purpose auditorium and consider the basic requests of passengers in Latvia. To satisfy the needs of passengers the interactive information systems have been created. These systems allow passengers to manage and plan the trip, needed resources, and to determine the level of comfort in their travels. Using interactive IS, passengers can in real time determine the schedule of the train and find the main indexes of the route, such as duration and distance of the route, tickets prices, discounts, etc. For the convenience of purchasing tickets the multi-alternative solutions are offered, among them: buying tickets via Internet and mobile phone (SMS). To increase the level of comfort and security the additional important functions are offered, such as seats reservation in the wagons, usage of wireless Internet, carriage the bulky luggage (such as bicycles), as well as usage of special equipment for passengers with special needs.

November 24, 2009: the joint-stock company “Pasažieru vilciens” (in English “Passenger Train”) received an international certificate of quality management system ISO 9001:2008, which confirms that the control system meets the requirements of the enterprise.

The Quality Management System of the Information Technology Center (ITC) of the joint-stock company “Latvijas dzelzceļš” (in English “Latvian Railway”) was re-certified in 2010 (the ISO 9001:2008 is valid from 23 July 2010 to 22 July 2013).

Background and Context

The joint-stock company “Pasažieru vilciens” (in English “Passenger Train”) established in 2001. From 2005 to 2007, the activities of “Latvijas dzelzceļš” were reclassified according to the requirements of the European Union, resulting in gradual establishment of a concern with five subsidiaries. Each of the companies has its own management and governance system which is closely connected to the parent company as far as strategic decisions are concerned, yet retains autonomy in branch-specific decision making, budget planning and management. From October 2008, the joint-stock company “Pasažieru vilciens” is an independent state-owned company. November 24, 2009: the joint-stock company “Pasažieru vilciens” received an international certificate of quality management system ISO 9001:2008, which confirms that the control system meets the requirements of the enterprise.

Services are intended for multi-purpose auditorium and consider the basic requests of passengers in Latvia. Passenger can use 10 routes (4 electro-train routes and 6 diesel-train routes).

Company have 24 electro-trains with total 164 wagons, and 16 diesel-trains with total 74 wagons.

3 electro-trains and 2 diesel-trains have wireless Internet and 6 electro-trains and 4 diesel-trains have special equipment for passengers with special needs.

Across the country there are 101 cash points where you can buy a ticket.

Policy design details

Policy Design Steps and Timing

Regularly introduced in legislative amendments to the following documents:

- Railway law,
- Railway transport law,
- PT service law.

Regularly conducted Research on preferences and satisfaction of passengers service:

http://www.pv.lv/lv/par_uznemumu/pasazieru_apmierinatibas_petijums_2010/

http://www.pv.lv/images/userfiles/faili/petijums/2011/bsa_prezentacija.pdf

http://www.pv.lv/images/userfiles/faili/petijums/2011/ba_petijums_2011.pdf

http://www.pv.lv/images/userfiles/faili/petijums/2012/2012_ba_petijums.pdf

Actors Involved

The joint-stock company “Pasažieru vilciens” (in English “Passenger Train”) established in 2001. Company provides passenger internal transportation in Latvia. Services are intended for multi-purpose auditorium and consider the basic requests of passengers in Latvia. Passenger can use 10 routes (4 electro-train routes and 6 diesel-train routes). Company have 24 electro-trains with total 164 wagons, and 16 diesel-trains with total 74 wagons.

The company “Pasažieru vilciens” cooperates with the joint-stock company “Latvijas dzelzceļš” (in English “Latvian Railway”) which carries infrastructure support. It also includes the Information Technology Center, which in turn provides IT services and solutions.

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The company also cooperates with information service, such as 1188 to provide information about the schedule.

The company "Pasažieru vilciens" cooperates with CityCredit Ltd company, which provides SMS ticket buying by service (<https://www.mobilly.lv>). Mobilly is a payment system, which allows to make payments by text message or in the internet. The aim of Mobilly is to structure a payment system, which permits all mobile phone users to make and receive payments by their mobile phones anywhere the mobile communication is accessible.

Decision Making Process

The decision making process is divided into three parts:

- On-line Analysis Level (minutes to few hours) - which is a group of professionals (database administrators, operators and managers);
- Decisions Support Level (a day to few weeks) - which is a group of middle management specialist;
- Strategic Level of Management (a month to few years) - headed by the executive director.

Implementation details

Implementation Steps and Timing

Prior to 1999, information on passenger traffic formed from daily reports on all cash registers. By 1999, the modernization of cash register devices has been executed, supplying flash memory that records and transmits daily report about passenger traffic to the main IS "Express" for further processing. In 2005 and 2006, the company "Pasažieru vilciens" have received the new IS, which subsequently successfully implemented and used to this day. This system centrally collects information from 150 cash registers in online mode.

ICT/Infrastructures needed

Own development system collects information from 150 cash registers in a single system in online mode.

Own development system to prepare interactive schedule used temporal model.

Recognising the importance and value of up-to-date railway infrastructure and the opportunity to promote the competitiveness of the company in the railway sector, in 2011 the company initiated the preparation and financial adjustment of project application for European Cohesion Fund to receive funding for implementation of the GSM-R system across the entire Latvian railway system.

"Latvijas dzelzceļš" manages expansive and varied infrastructure including rail tracks, engineering structures, rail traffic management systems, rail telecommunications network, radio communication, power supply and contact lines. "Latvijas dzelzceļš" is in charge of maintaining the infrastructure in a good technical condition, timely repairs and upgrades to ensure uninterrupted and safe train traffic.

"Latvijas dzelzceļš" is in charge of maintenance of train traffic management systems, rail telecommunications network, radio communication, hot bearing control system, power supply and contact lines and other equipment according to the railway technical Maintenance regulations.

Human Resources

To provide rail passengers service in Latvia, the company employs 962 people in 2011:

- 8% of the administrators,
- 19% of a team of railway,
- 26% Katheer,
- 34% conductors-controllers,
- 12% of other specialty.

Monitoring Procedures

Monitoring is divided into several parts:

- monitoring the working infrastructure solutions;
- monitoring the working IT solutions.

Both parts are automated and occur in the form indicators and of alerts individual operators.

Uses a reliable and tested monitoring and prevention system that has been developed over decades and is continuously being updated and concerns all aspects of railway operation.

Supporting Mechanism

Awareness/Information Campaigns

Promotes safety and environmental transport, as well as its comparative speed of the other modes of transport, as well as company pricing policies. Advertising is broadcast on TV, as well as a large settlement posted ads.

Partnerships/Key Supporting Stakeholders

The government is interested in turning the company “Pasažieru vilciens” profitable enterprise, as well as to organize an effective passenger transportation within the country and also using friendly transport by environmental.

Results

Expected vs Actual Benefits

The company “Pasažieru vilciens”, after separation from the company “Latvijas dzelzceļš”, rationalizes government resources, but for a small turnover of passengers can not reach the level of profitable.

Quantitative Results Achieved

100% of the personification and determine the route, as well as determine the user's portrait.

Qualitative Results Achieved

Through regular surveys, determining the effectiveness of the company, quality of services and accounting requirements of the users.

Key Considerations

Lessons Learned

For the implementation of new automated systems, you need to clearly define all the elements with the integration of complex systems, as well as the process of supporting IS.

Primary Obstacles

A large number of heterogeneous systems from a lot of outsources companies and losses of the company.

Critical Success Factors

The development of online sales and the introduction of a single electronic ticket.

Introduce regular of express-trains on all routes.

To improve the existing rolling stock (internet, bicycle racks, magazines, etc.).

Improve access/exit trains for passengers with special needs.

To develop and promote the movement of trains and tourist infrastructure.

To promote and attract cyclists to use the trains.

Introduce Internet sales.

Implement electronic information screens at the overload stations.

First class wagons installation.

Transferability Considerations

Application of the results of research conducted the company “Latvijas dzelzceļš” in other transportation companies in Europe.

Up-scaling Considerations

Tariffs for PT and political decisions.

Contact

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