

## D.T2.2.4 - Individual **Final** Pilot Report - *Awareness*

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Poznan Pilot on low carbon mobility  
management - testing car-pooling platforms  
and implement public awareness campaigns

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## 1. Introduction

As part of the campaign for airport employees, Poznan has organized a one-day workshop using the BMC model. The workshops were aimed at raising awareness of Poznań Ławica Airport employees about ecological ways of commuting to the airport. At the same time, they were to develop a substantive contribution to the Local Strategy for the long-term integration of Poznań Airport into the Functional Urban Area.

The findings of the report will be used to develop the Airport Accessibility Strategy and will be helpful in the development of the Mobility Policy in Poznań. These shall indicate the direction of actions for airport employees to change their mobility behaviour.

Four options have been analysed:

1. Building a Poznań City Bike Station (PRM) at the airport.
2. Building a new tram line to the airport.
3. Changing the frequency of bus journeys to the airport, adapting it to the working hours of airport employees and operating the route by electric buses.
4. The use of electric cars for car-sharing and the construction of charging stations for electric cars at the airport.

## 2. Specifications of pilot

We have organized one-day workshops led by professional moderators and experts. During these workshops, Business Model Canvas was created.

- Created groups of max. 8 people, groups analyzed min. 4 selected solutions (e.g. additional bike station near the airport, commuting by public transport, car-sharing, carpooling).
- Each solution contained 9 elements (e.g. key partners, key activities, key resources, value proposition, customer relations, channels, cost structure, pricing model) and presented in the form of a visual canvas, which result in a better view of the solution and facilitate cooperation.
- The workshop was based on the results of the survey made as part of task D.T1.4.9.
- On the basis of the workshop results, a report was created and used to create the final strategy.



- What's more important, is to get to know the preferences and expectations of employees, which can be used for further analysis and recommendations.

Additionally, the real consequences of commuting by car were presented at the workshops (e.g. how much CO<sub>2</sub> is produced by one person driving a car, what ecological footprint we make and how much we can reduce it by commuting by other means of transport).

Workshop participants were divided into 4 groups assigned to particular means of transportation to the airport by employees of Poznań-Ławica Airport:

- city bicycle,
- tram,
- an electric bus,
- car-sharing.

Within 4 groups, an implementable business model based on the Business Model Canvas methodology was developed.

The CANVAS business model was built as a sum of resources and activities that the entity organizes and implements in order to provide a specific value for a specific customer. The BMC template was divided into 9 interdependent elements, which identified a number of supplementary questions to facilitate the analysis. The structure of the model is structured as follows:

### 1. Customer Segments

- Who is our client?
- Who do we build the product/service for?
- To whom do we offer value?
- Who will pay?

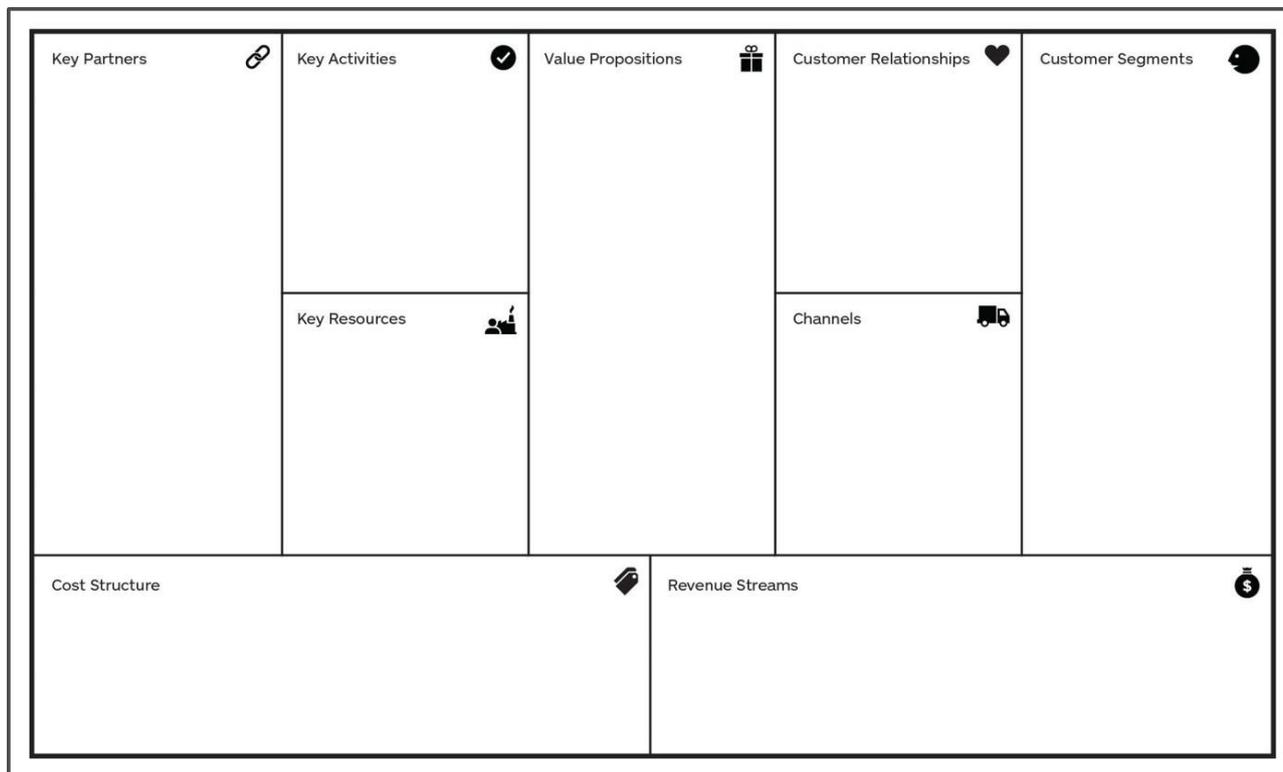
### 2. Value proposition

- What value do we generate for our customers?
- What will customers pay for?
- What is the customer's problem and what is the key for them?
- What customer problems do we solve?
- What products and services will we offer?

### 3. Key Partners



- Who is our key partner?
  - What external companies or organizations are necessary for us to operate?
  - What are the key resources and activities of our partners?
4. Channels
- Where are our customers?
  - Where do we want to meet our customers?
  - What channels will we use to contact our customers?
5. Customer Relationships
- What kind of relationships do our customers expect from us?
  - Do they expect personal support or maybe fast and automatic service?
  - Is the way of establishing relations with customers integrated with other areas of the business model?
6. Revenue Streams
- What are customers willing to pay for?
  - What will they pay for and how much?
  - Which elements of our product/service will be free and which elements will be paid for?
7. Cost Structure
- What are the costs of our business model?
  - What financial outlays are generated by key resources, activities and partners?
8. Key Activities
- What actions do we need to take to deliver value to our customers?
  - What actions do our customer-facing channels require?
9. Key Resources
- What resources do we need to offer our value proposition?
  - What resources do our customer reach channels and relationships require?



Picture 1 BMC Template

The groups' task was to think about particular categories from the point of view of the business model created for the City of Poznań, which becomes the initiator and coordinator of the activities to be analysed.

Challenges:

The difficulties we could encounter were lack of cooperation in groups and communication problems.

### 3. Objectives and impact

Based on local analysis, the following objectives have been identified:

- Objective 1 - passengers and airport employees cycle to the airport
- Objective 2 - connection of the airport with a tram line
- Objective 3 - operation of the existing non electric bus line to the airport by electric buses
- Objective 4 - airport access by car-sharing/electric cars



The aim of the workshop was to raise environmental awareness and change the behaviour of airport employees.

Thanks to the training, they had an opportunity to realise that their ideas will have an impact on the local strategy of mobility.

## 4. Insights on developments of KPIs

### 4.1. Efforts

In order to carry out the campaign, we needed to hire specialists to create the Business Model Canvas. We started cooperation with the Ławica Airport, which is not a partner in the project. Thanks to the involvement of the airport, we were able to organize workshops for employees. A group of 10 people was gathered. The meeting was one-time and lasted about 4 hours. During the meeting, the employees were introduced to the project, its objectives and basic information about the carbon footprint and broadly understood ecology. Also we presented a diagram of the BMC model and then started the proper workshop part - creating the BMC for transport solutions. During the workshop we managed to work out models for 4 different ways of commuting to the airport.

### 4.2. Effects

When creating the workshops, we used surveys of airport employees' behaviour conducted in May 2018. The surveys showed that more than half of the employees commute to work by car. In the report there were also direct comments from the respondents. They show that employees feel the lack of a bus timetable adapted to their working hours, the lack of direct tram or train connections. Additionally, they see the potential of bicycle paths leading to the airport and they lack a city bicycle station near Ławica Airport. During the workshops we wanted to engage office workers (working 9-5) and physical workers (working in shifts). When working on the model, we tried to address all of these issues and consider the feasibility of each project. We wanted our employees to participate in the workshops, commuting both from Poznań and from outside the city. The employees were strongly involved in the creation of the model. The results of the workshops were included in the local strategy for the airport and in the Mobility Policy of the City of Poznań. In the near future they will be included in the Poznan SUMP. Our intention was to create a convenient and ecological access to the airport so that employees could easily switch to public transport - which will be achieved by consistently implementing the Mobility Policy.



| Awareness raising campaign for employees in numbers  |           |
|--|-----------|
| Airport employees involved in workshop   | 10        |
| Number of worked out solutions   | 4         |
| Number of strategic documents that will include the results of the campaign                | 3         |
| Environment-friendly (impact on emissions, noise, etc.)                                    | 2         |
| Number of airport employees affected by LAIRA transport changes                            | 350       |
| Number of the residents of Poznań and its surroundings affected by LAIRA transport changes | > 350 000 |

## 5. Insights on qualitative survey results

We haven't received any questionnaires results from airport employees.

## 6. Learnings

### 6.1. Success factors

Our success factor was the percentage of engagement of a single employee, which was huge. This is due to the fact that employees felt obliged (and willingly did) to create a model of green commuting to the airport.

As it was said, the commitment of the employees has been well worked out. They worked independently - it was not an obligatory scheme of action. Better than expected, the number of airport employees' ideas for solutions, and individual questions of the BMC model came out. The pilot gave us the opportunity to develop viable solutions for airport communication.

We received a clear overview of the successfulness of the ideas because we have carefully analysed the implementation of each of the objectives. In addition, we listed them in the table as a summary of the considered transport options. The authors of the report created a valuable analysis that can be used by the City of Poznań to assess the impact of the involvement of resources in solutions facilitating access to the local airport.

Eleven evaluation criteria were used, which were ranked from 1 (the best solution in a given category) to 4 (the solution with the lowest score in a given category) during the debate at the end of the workshop.

|   | The evaluation criteria            | City Bike | Tram | Electric bus | Car-sharing |
|---|------------------------------------|-----------|------|--------------|-------------|
| 1 | Costs of implementing the solution | 2         | 4    | 3            | 1           |



|             | The evaluation criteria  | City Bike | Tram | Electric bus | Car-sharing |
|-------------|--|-----------|------|--------------|-------------|
| 2           | The level of complexity of the solution (speed of implementation, resources, procedures) | 1         | 4    | 3            | 2           |
| 3           | Public response  | 3         | 1    | 2            | 4           |
| 4           | Environment-friendly (impact on emissions, noise, etc.)                                  | 2         | 3    | 1            | 4           |
| 5           | Flexibility of the solution (possibility of pilotage)                                    | 2         | 4    | 3            | 1           |
| 6           | Number of potential users  | 3         | 1    | 2            | 4           |
| 7           | Territorial coverage of the service  | 3         | 1    | 2            | 4           |
| 8           | Reputational effect for the city and the airport   | 3         | 2    | 1            | 4           |
| 9           | Flexibility of the solution (baggage transport possibility)                              | 4         | 3    | 2            | 1           |
| 10          | Relationship potential with partners   | 1         | 4    | 3            | 2           |
| 11          | Socio-economic benefits  | 3         | 2    | 1            | 4           |
| 12          | Side effects   | 1         | 4    | 3            | 2           |
| 13          | External costs   | 1         | 4    | 2            | 3           |
| TOTAL SCORE |  | 29        | 37   | 28           | 36          |

## 6.2. Failure factors

We were able to involve a limited number of airport employees in the workshops due to the nature of their work (some of them work in passenger service stations, operate aircraft, etc.), not all of them could participate in the workshops. Also, there was a risk that the workshops would not succeed and would not produce reliable results, ready to be integrated into a mobility strategy.

## 7. Conclusions

The analysis clearly shows that despite the expected significant impact on the reduction of congestion and mass impact, launching a tram line is the least preferred solution, ex-aequo with car-sharing, which despite the ease of implementation, independence and a significant level of comfort does not solve the important problems of city residents and airport employees.



The situation is different in the case of an electric bus and, which seems to be at the other end of the spectrum - a city bicycle, which has gained the support of the employees of "Ławica" in Poznan. However, the winner was an electric bus, which is a relatively inexpensive mass solution, which does not require any expensive infrastructure (e.g. bus-pass and charging stations) compared to a tram. In case of a quick implementation of this solution, the image of the city will definitely gain, and both employees of the airport and the companies associated with it, after adjusting the timetables to their working hours, will commute to work efficiently. It is also important to note that line 159 is already largely running on the bus lanes, and its electrification has been indicated in the strategic documents of the City.





