

Specification of business processes

1. Business goals of the organization

Traficar is a Polish car-sharing service that allows users to rent vehicles for short time periods via a mobile app. Users can find available cars in their area, unlock them through the app, and drive as long as needed, paying based on both the distance traveled and the rental duration. Once finished, the car can be left within designated zones, and users are charged accordingly. The service offers a variety of vehicles, including compact cars, SUVs, electric vehicles, and light trucks. Unlike traditional car rental services, Traficar offers a fully digital, staff-free experience, making it a more flexible and convenient alternative to traditional rentals or personal vehicle ownership.

Traficar's primary goal is to maximize earnings, aiming for a **3% quarterly income increase**. The CEO is highly optimistic about car-sharing as the future of transportation and has set an additional goal of attracting **at least 10 000 new users per month**. A key challenge is understanding fluctuations in the number of rides, as the company seeks to address why ride volumes increase or decrease over time.

The most important issues in the company include renting cars and getting new users. Vehicles are distributed across major cities in Poland and come in different models and categories (e.g., compact, commercial, family-sized). Rental pricing is influenced by the car's model, luxury level, and maintenance costs. Customers vary widely in age, driving experience, and usage frequency. Some use Traficar as a substitute for personal vehicles, while others rent occasionally. Commercial vehicles are also used for transporting bulky items, for example doing removals.

The CEO aims to make Traficar more attractive and affordable to both new and existing customers by analyzing key factors like:

- The most popular rented car models.
- The most common routes and destinations.
- User profiles to identify the most frequent users, segmented by age and driving experience.

2. Business Processes

Car rent

- a. A general description of the business process and a description of the performance metrics generated by this process, possible current analytical problems.

The process of renting a car is as follows: the customer must register in the application and pass the verification process contained therein. Next, he/she selects the car he/she wants to rent, then goes to a third-party payment provider to plug in his/her means of payment to pay for the service. After proper verification, the car is unlocked and available for driving. Once the ride is complete, the user confirms completion in the app and a bill is issued, which is sent to him/her via email.

- b. Typical questions

Which locations have the most car rentals?

What car models are rented the most?

Do users prefer to use an automatic transmission or a manual transmission?

Does engine power translate into willingness to rent a particular car?

Give the total profit for the last year.

Give the total profit of each car model for the last year.

Determine during which periods the most cars are rented.

What is the average duration and length of customer rides.

- c. Data

All data is curated from the company's application database system. The system stores information about all rentals, the most important about each car including its cost of rent and all user data.

Furthermore, there is a separate excel sheet with all the information about damage done by users.

Car damage procedure

- a. A general description of the business process and a description of the performance metrics generated by this process, possible current analytical problems.

When a user damages a car, they must immediately report the accident or damage by contacting Traficar staff and providing all necessary details. Every Traficar vehicle is insured, but the customer may be responsible for a portion of the repair costs depending on the extent of the damage. Traficar will assess the damage, and if the user is found responsible, they will receive an invoice detailing the amount to be paid for the repairs.

Additionally, Traficar reserves the right to suspend the user's account for inappropriate or irresponsible use of their vehicles.

b. Typical questions

How many damage incidents were reported in the last year?

Which car models have the highest frequency of damage claims?

Is there a correlation between customer age or driving experience and the likelihood of causing damage?

c. Data

All data is curated from an excel sheet containing all information about damages made by users.