Vision Document
Topic: ConviRent - car rental company
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1. The organization acquiring the IT system

1.1. Name of the organization

**ConviRent**

1.2. Description of the organization

Brand new car rental company operating within the Pomeranian region. Renting, maintaining, cleaning and expanding the fleet. Company has 1 manager (also the owner), 5 drivers, 1 social media manager, 2 cleaners (vacuuming, cleaning, washing, changing fluids) and a fleet of 50 middle class cars. Company is operating on a whole pomeranian voivodeship with headquarters in Gdansk.
We conduct b2b activity with a car workshop, Toyota car dealer and accounting office.
Plan is to expand the fleet by 10 cars every year and extend long term relationships with customers.

1.3. Organizational structure

A diagram showing the organizational structure org. (insert figure):
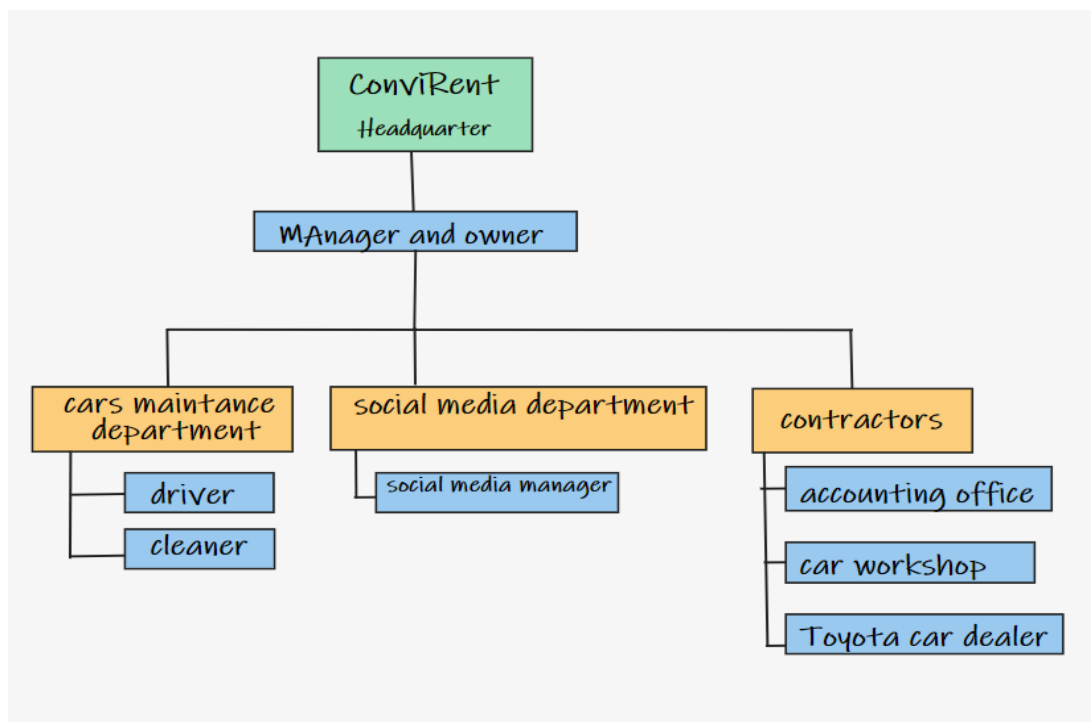
Responsibility of the organizational units:

Organizational unit	Responsibilities
manager	negotiating future car deals, dividing tasks between drivers and cleaners
social media manager	taking care of company's social profile, organising marketing actions, answering customers's questions
driver	transporting car to potential repair center (car workshop) or driving cars from the outskirts to the center of the city. Fueling the fleet.
cleaner	cleaning and maintaining interior and exterior of dirty cars
accounting office	keeping track of invoices, counting and sending salaries to employees
car workshop	repairing cars
Toyota car dealer	delivering brand new Toyota cars to our headquarter

1.4. Problems occurring within the organization:

- Clients have problems with delays of service.
- Lack of continuity and documentation regarding repairs.
- Lack of cars especially during peak hours (mainly weekends and concerts).
- Unknown position and conditions of a car.
- Unknown specification of the car (number of seats, size of car).
- Difficult communication with clients.

1.5. Generic concept of an IT system

- storing data in a cloud
- delivering the infrastructure to rent the car with all the necessary features (from the side of the customer and ours employees)
- making employees' work less prone to mistakes, help them organise their work and relieve them from overwhelming amount of day to day tasks
- making the overall user experience very smooth and convenient by introducing user friendly interface

2. System goals

Goal	Criteria (measures, levels)
making employees' work less prone to mistakes (wrong location of delivery)	decrease the unnecessary costs (more than 100 złoty) by 70%
user satisfaction	increase of positive reviews by 70%
offer fully functional fleet of cars	1. decrease the average time of the whole repair process from 5 days to 2 days. 2. decrease average time for cleaning from 1 day to 5 hours

3. Stakeholders

Stakeholder	Viewpoint
b2b customer	Cheaply rent reliable cars with possible long term cooperation.
seasonal customer	Quickly and cheaply rent fully functional car with only a few clicks on their devices.
driver	Have exact information about current location and fuel level of a car.
cleaner	Have information which cars are demanded fastly by customer (to start cleaning them first)
manager	Have information what task every employee is currently performing, see cars' status, and fast contact with other stakeholders.
accounting office	Have insight to invoices
car workshop	Receive immediate report about car's damage to order needed replacement parts and assign mechanic to repair job.

4. System's context

4.1. System users and their characteristics

User	Characteristics	
b2b client	Profile	advanced, long term contractor
	Conditions of use	office

	User interface requirements	Variety of necessary features including used milage of each car and adequate cost.
seasonal renter	Profile	novice, foreigners
	Conditions of use	outdoor, office, house, car
	User interface requirements	access to different language options(Polish, English, German), basic tutorial, easy access to support
cleaner	Profile	advanced, employee
	Conditions of use	headquarter, carwash
	User interface requirements	Easy access to cars' condition and priority of their cleaning
driver	Profile	advanced, employee
	Conditions of use	office, car
	User interface requirements	Easy access to cars position and their mechanical condition, fuel level status.
accounting office	Profile	advanced (after two-day training)
	Conditions of use	office
	User interface requirements	Have up to date insight to invoices
car workshop	Profile	advanced (after two-day training)
	Conditions of use	office
	User interface requirements	Have up to date insight to cars' mechanical conditions
Manager	Profile	advanced
	Conditions of use	office
	User interface requirements	tasks division option, cars tracking and employees tracking, statistics for improving efficiency

4.2 External cooperating IT systems and their interfaces

Cooperating IT system	System's interface (provided / expected functions, transmitted data, technical means of cooperation e.g. API, web service, export/import)
Google Cloud	storing data (users profile)
Google Map	API
Przelewy24	payment provider

5. Functional requirements

5.1 Users and their required functions/services.

User	Function
b2b clients	F1.1 tracking a car
	F1.2 making payments
	F1.3 contacting support if needed
	F1.4 rent a car
	F1.5 return a car
	F1.6 view invoices
	F1.7 see past rents
	F1.8 report car's mechanical status
	F1.9 see details about rent (time left, current rent's cost)
	F1.10 Direct contact with manager
	F1.11 Log in
	F1.12 print, download invoices
seasonal renter	F2.1 tracking a car
	F2.2 making quick payments
	F2.3 contacting support if needed
	F2.4 rent a car
	F2.5 return a car
	F2.6 report car condition
	F2.7 see details about rent (time left, current rent's cost)
	F2.8 view receipt
	F2.9 see past rents
	F2.10 Print, download receipt
	F2.11 Log in
driver	F3.1 Change task's status
	F3.2 tracking a car
	F3.3 view tasks from manager
	F3.4 see summary of work from whole month
	F3.5 Log in
cleaner	F4.1 checking cars that need cleaning, sorted by priority
	F4.2 tracking a car

	F4.3 view tasks from manager
	F4.4 see summary of work from whole month
	F4.5 Log in
	F4.6 Change task's status
Manager	F5.1 dividing job between employees
	F5.2 analyzing cars which are rented most frequently on diagram
	F5.3 tracking a car
	F5.4 view employees details
	F5.5 report about the task every employee is currently performing
	F5.6 See bills and invoices paid
	F5.7 Log in
	F5.8 Give order to employees
	F5.9 See rents done by customers
	F5.10 Check car's details (i.e. fuel level)
	F5.11 Add new service needed for particular car
car workshop	F6.1 see information about cars that need repairing
	F6.2 see full details about car's damage
	F6.3 change information about repair status (in process,finished)
	F6.4 Log in
accounting office	F7.1 Report on invoices and bills to manager
	F7.2 Downloading invoices in proper format
	F7.3 Track how long employee has been working and send him appropriate salary
	F7.4 Log in

5.2 Priorities for functional requirements

Requirement	MUST	SHOULD	COULD
F1.1	x		
F1.2	x		
F1.3		x	
F1.4	x		
F1.5	x		
F1.6			x
F1.7			x
F1.8		x	
F1.9		x	
F1.10			x
F1.11	x		
F1.12			x
F2.1	x		
F2.2	x		
F2.3		x	

F2.4	x		
F2.5	x		
F2.6		x	
F2.7			x
F2.8		x	
F2.9		x	
F2.10		x	
F2.11	x		
F3.1	x		
F3.2	x		
F3.3	x		
F3.4		x	
F3.5	x		
F4.1	x		
F4.2	x		
F4.3	x		
F4.4		x	
F4.5	x		
F4.6	x		
F5.1	x		
F5.2			x
F5.3	x		
F5.4		x	
F5.5		x	
F5.6		x	
F5.7	x		
F5.8	x		
F5.9		x	
F5.10	x		
F5.11	x		
F6.1	x		
F6.2	x		
F6.3	x		
F6.4	x		
F7.1		x	
F7.2		x	
F7.3	x		
F7.4	x		

6. Quality requirements

Attribute	Requirement regarding that attribute	Priority

	(expressed in a way that enables objective verification whether the system complies to such requirement)	
performance	possibility to serve 300 customers and 10 employees with maximum 1 sec delay	1
reliability	real time track of vehicle status (preventing from double rent)	1
availability	potential uptime 95 % when update is conducted, with preceding email notification	2
security	users' profile data, unexpected rent of a car without payment, abuse of car usage by employee	1
safety	control safety of a car, do not rent damaged car	1
portability	possibility to use app on smartphones with iOS (required version 12.0 or higher) and Android (required version 10.0 or higher) to be able to rent cars while not in front of a stationary pc	2
flexibility	possibility to add new features (changing buttons layout)	4
configurability	Options that enable changing prices and parameters of a car by administrator. Possibility to add brand new cars to application.	2

7. Constraints

Time: 6 months

Budget: 150 000 złoty

Specific conditions to be operated in: none

Specific equipment to be used on: deployment of data to Google Cloud, reliable service from Przelewy24

Development technologies imposed by the customer: none

Specific data formats to be used: JSON

Required documentation: Basic API for contractors

Required trainings to be organized: YouTube tutorials for customers, in-house employee two-day training

Required deployment arrangements: none

Product/development process compliance with specific standards: CI/CD, Scrum methodology