About Electro.ro

Our platform provides three categories of announcements.

1. A normal user can register and has the opportunity to post an announcement to rent a product (car, electronic product, etc), can place an announcement to provide services or can add a product / task to bidding.

Ex1: Someone needs a car for 5 days. So he posts an announcement that he wants to rent a car along with the necessary details and the other users can "bid" on that announcement so the customer chooses the best option.

Ex2: Someone wants to be taken to another district, so he puts an announcement that he wants a driver with a personal car, provides the necessary details and those who can and want, bid on the announcement. The customer choose the best offer depending on what the others offer (car, route, feedback for drivers)

2. In the sale category, we want to implement a functionality in which the user can put his object for sale in a simple way, or with the help of a specialized company that offers an inspection of that device to guarantee that everything works in normal parameters in order to assure the future buyer that the product is functional.

3. Also, our application offers the possibility to filter the announcements depending on the type(sell, rent).

In the current reality, this application is something that many people will need, it is an alternative between OLX and BlaBlaCar.

Technical details about existing solutions close to the one proposed

We will take two applications that we heard and will document technologies that they are using.

1. **OLX**

This application offers the possibility for a customer to post an announcement for sale and to communicate via chat.

Technologies:

OLX offers a public API documentation. They have a REST API which through JSON File to the backend. They offer API for /taxonomy and /profile and /adverts.

It does not provide enough information about the technologies used in the frontend.

2. BlaBlaCar

This application offers the possibility to people who are constrained to travel a medium-long distance alone in the car to offer those seats available to other people at a very low price compared to other options (train, bus).
Technical details:
This application provides a public API to see more details about / trips.
The API gives access to carpool trips on BlaBlaCar.

Overview of technologies we wish to use

Frontend

React + TypeScript + Redux

Backend

Node.js

Services

We use google cloud services(Firebase, Google App Engine, Google Maps, Google Storage)

Motivation

We consider that these technologies are the most suitable for the application we want to implement. First of all, it offers a simple way to create a very scalable and at a great price web platform. Google Cloud services are simple and easy to use, and together with React and Node.js we can form an easy to maintain application.
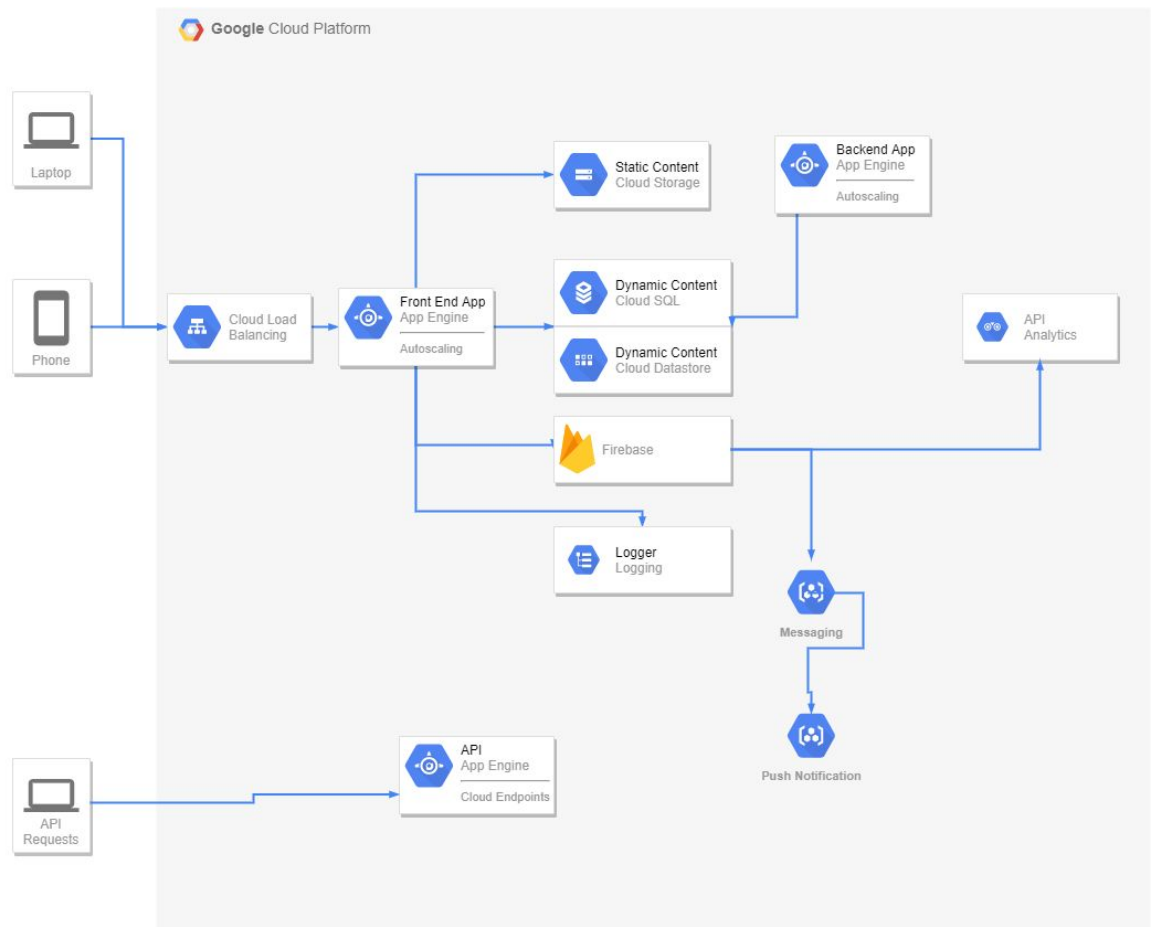
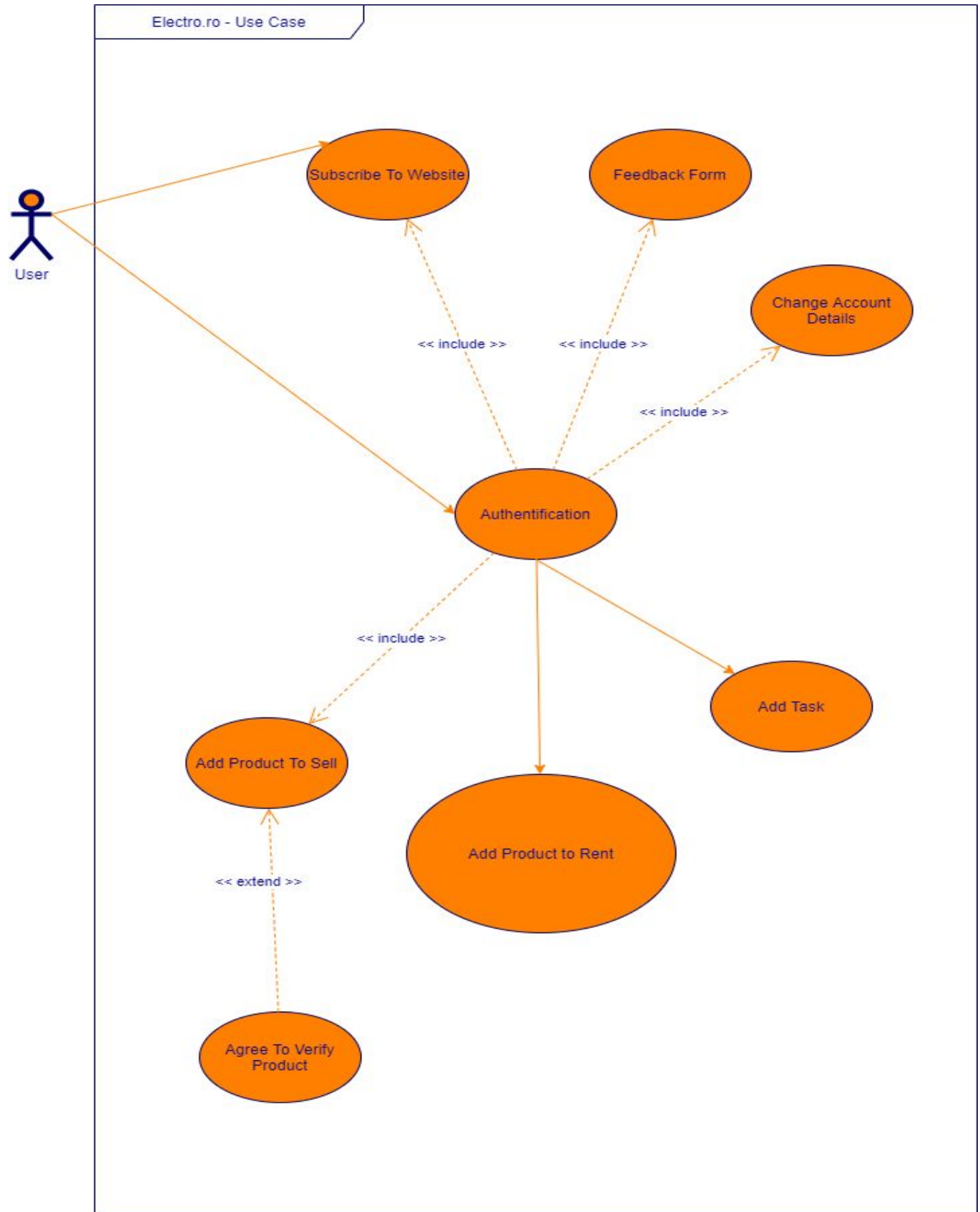# Business canvas for the proposed solution

[Original Business Canvas File](#)

Business Model Canvas

			Designed for:	Designed by:	Date:	Version:
			Electro.ro	Electro.ro TEAM	13.05.2020	1.0.12

Key Partners

Our key partners are:
1. Individuals who want to buy/sell/rent a product cumpere/vanda/inchirieze.
2. Authorized companies that provide services (verify a product or rent a car)

Our partners ensure the quality of our products, but also a constant number of task offers and services available

Parteneri Publicitate
-The firms that are involved in the business
-Paid Ads from Google, Facebook, Instagram, Linkedin

Key Activities

- Rent/Sell a device
- Contact details for all the key partners
- Maps and activities related(distance, directions, schedule)
- Reviews for all
- Bidding of a certain product
- Prestare servicii anunturi

Key Resources

Web Application resources wich includes: google cloud solutions, server hosting and data storage

Development Team(human resources) that build and maintain the application

Call Center Team(human resources) that verify each key partner.

Value Propositions

-Provide accessibility for customers to reach offers and rent/buy products.
-Placing a products for rent/buy
-Quick process for verification of a product with a verified firm.
-Connect organizations with local markets and services.
-Provide a place where people can bid on a certain task offer.

Customer Relationships

-No fixed or long term engagement
-Relations built on trust and feedback received from others.
-No initial costs.
-Self-Service platform.
-Our app facilitates details contact and bidding services for a certain product/task.

Channels

-Website
-Email notifications
-Feedback for everybody
-Advertising

Customer Segments

-People that want to rent/buy/sell electronic devices.
-People who want to be paid for a certain task.
-People who need a person to finish a certain task.

Cost Structure

-Technology and development(+Cloud Services)
-Marketing
-Advertising
-Human Resources(Internal and External)

Revenue Streams

-Usage fee(types of account)
-Donations
-Sponsors
-Advertising

Architectural diagram for the proposed solution

Architecture: General > Web Application on Google App Engine

Google Cloud Platform

Laptop

Phone

Cloud Load Balancing

Front End App
App Engine
Autoscaling

Static Content
Cloud Storage

Dynamic Content
Cloud SQL

Dynamic Content
Cloud Datastore

Backend App
App Engine
Autoscaling

API
Analytics

Firebase

Logger
Logging

Messaging

Push Notification

API
Requests

API
App Engine
Cloud Endpoints

Use-case diagrams

Electro.ro - Use Case

User

Subscribe To Website

Feedback Form

Change Account Details

<< include >>   << include >>

<< include >>

Authentification

<< include >>

Add Task

Add Product To Sell

Add Product to Rent

<< extend >>

Agree To Verify Product

Electro.ro - Use Case