

THINGS



Prague Vision

#Nakopniprohu in collaboration with **RevoltBI**

Prague

problem challenge

the **visual pollution** problem of Prague

In order to solve visual pollution problems the municipality needs:

1. to identify and classify all issues
1. to navigate efficiently into the complicated bureaucratic workflow needed to solve the issues

Image analysis can identify more issues:

- ❖ Dead / dry urban greenery
- ❖ Car wrecks
- ❖ Illegal advertising
- ❖ Damaged roads and street furniture



other **potential use cases** in Prague
to be identified using machine learning over imagery



Damaged property



Road monitoring



Car Wrecks



Damaged Plants

solution (value proposition)

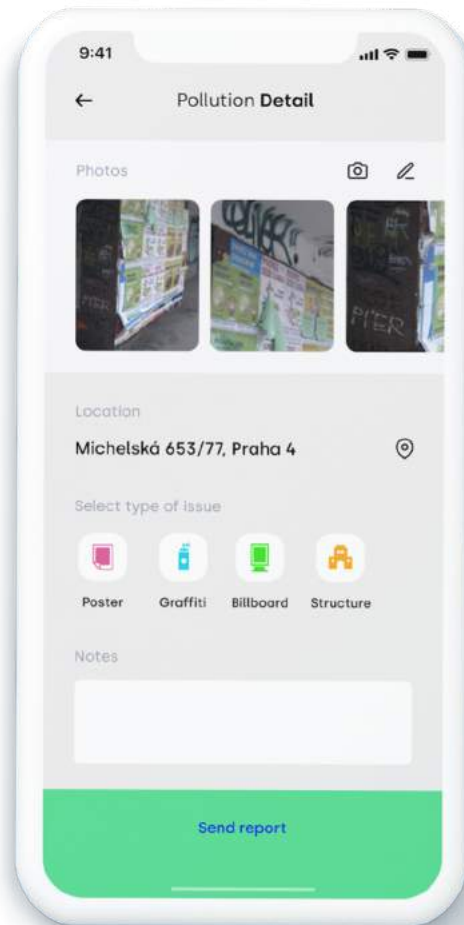
our **solution** is...

A platform composed by 2 main components:

1. Issue capture systém (Manual and AI);
2. Issue management system.

The manual issue identification component will help us to gather training data for issue identification using machine learning over imagery.

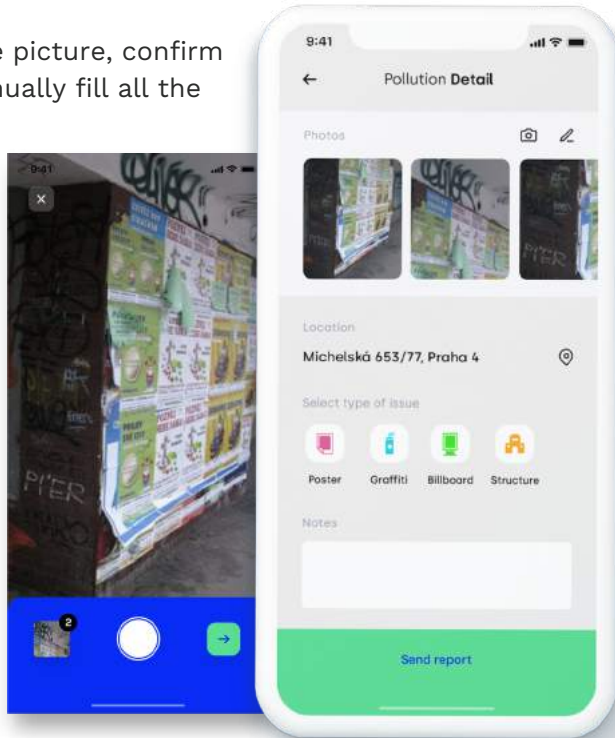
The issue management app is critical for actually solving the issues, since it will feed work to municipal bodies responsible for handling illegal advertisement.



manual and automatic identification

manual

Take the picture, confirm and manually fill all the infos



Autonomous (AI powered)

Automated systems gathering imagery in the city will automatically report use cases.

This is going to happen after a while thanks to the machine learning feature of the system.



how can we make money

how does the design solution **makes money**

The product can be sold to different municipalities to increase efficiency (and city aspect).

Image processing can be instrumental by large brands as they need to monitor the impact of advertising in larger cities such as pubs (POS)

Automated data collection can be used to build additional databases relevant to street furniture management, transport and marketing.



what is the magic

our **strength** points

Optimise internal workflow

Local government can better manage internally their maintenance processes regarding these advertising problems.

Local government can take better decisions regarding city life

Alert citizens to the location of certain visual pollution advertising, assign crews to fix them in the short term, and plan longer-term investments to revamp certain areas.

Early detection of problems can result in cost saving for the city

Data collected everyday on the street conditions (real-time and up-to-date).
Local government can take quick and right actions to fix the problems.

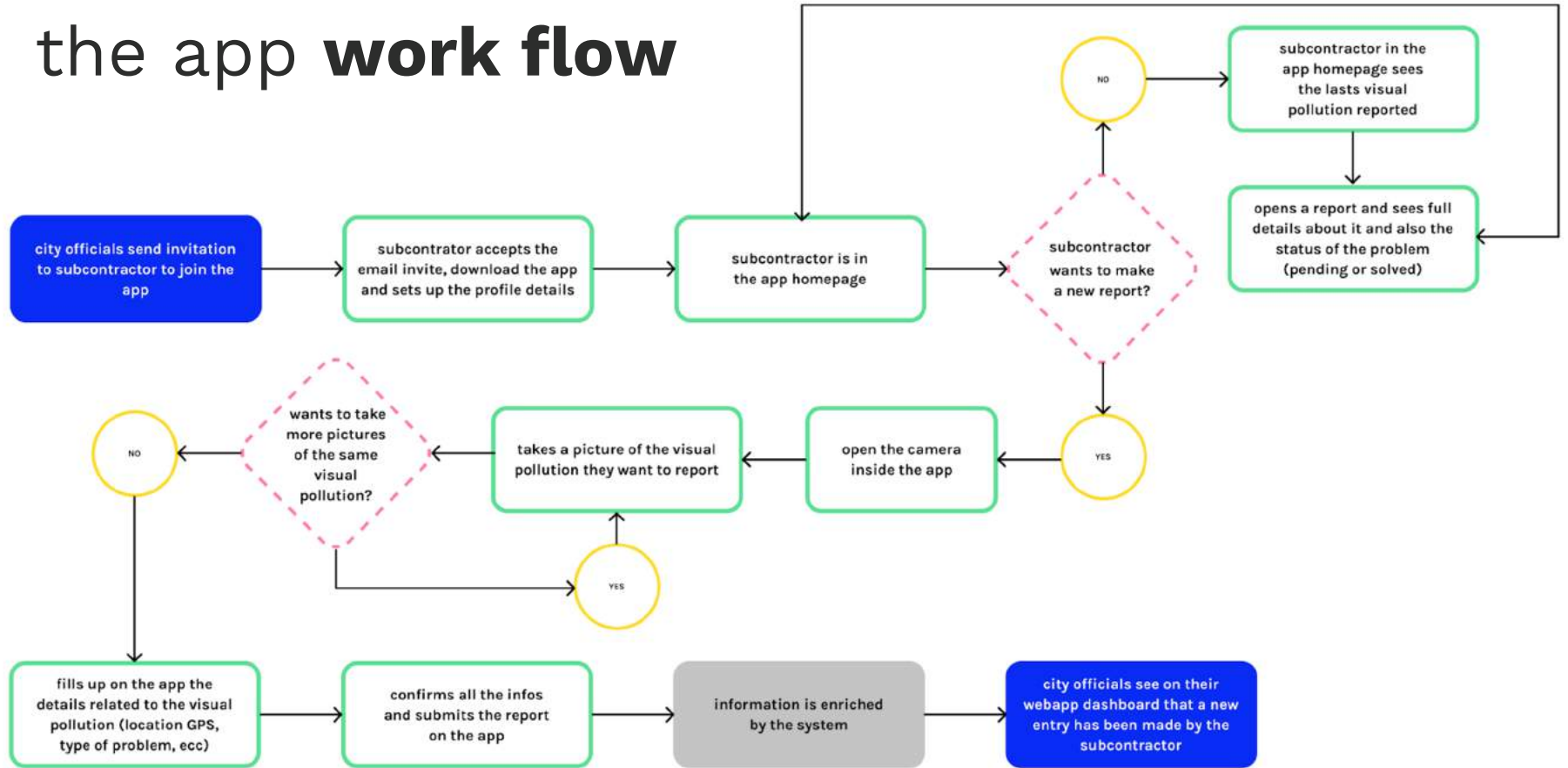
technology behind

the **technology**

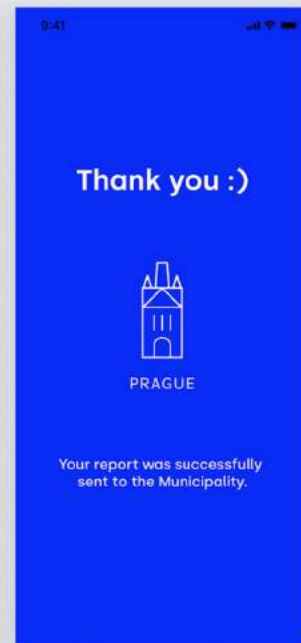
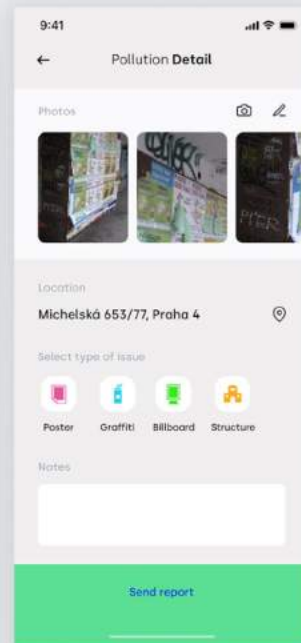
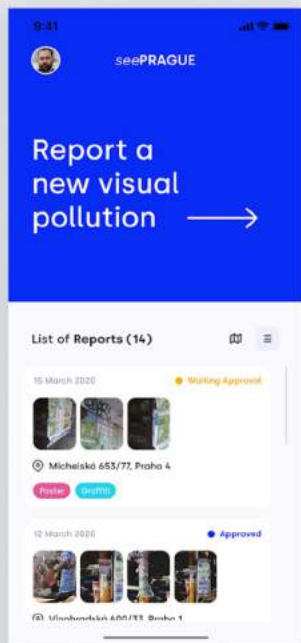
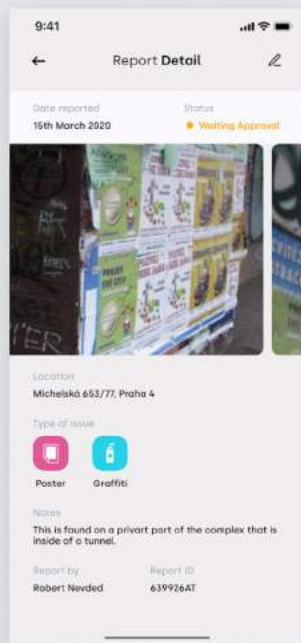
- ❖ an app for people signalling VP
- ❖ a webapp for officers
- ❖ a catalog of visual pollution (VP) data point
- ❖ we use **AI** in the roadmap to make it possible to understand and analyze VP by pictures



the app **work flow**



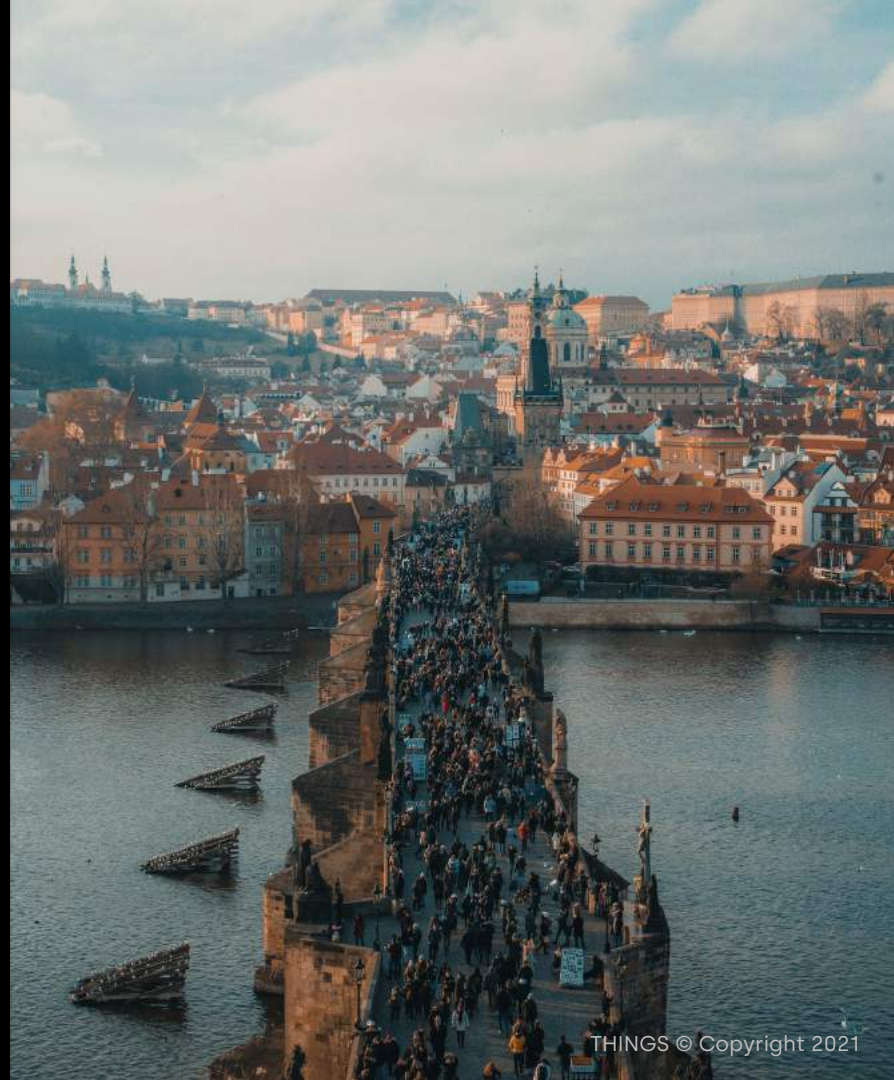
screens from the app



how do we make it real

how we make the solution **real**

- ❖ develop an app for the contractors to populate the VP DB and for city officers to follow the removal flow
- ❖ Create a POI database
- ❖ Create an automated data collection process
- ❖ Train the app for multiple use cases
- ❖ **SCALE !**

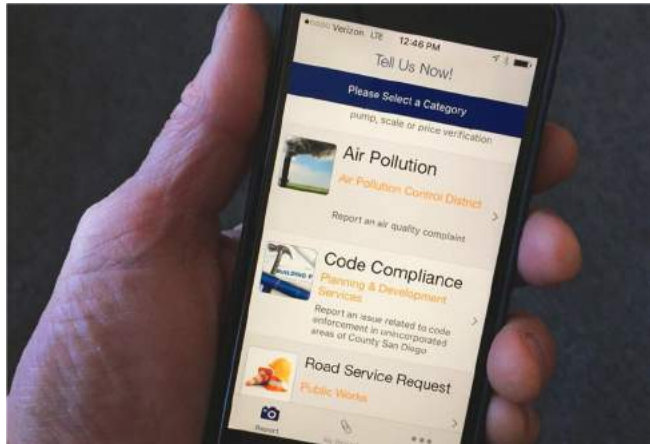


do we have competitors

the competitors

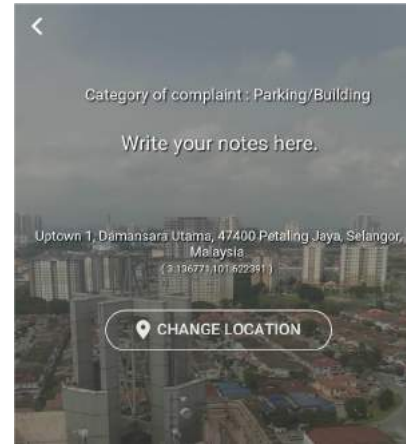
SD COUNTY - Tell us now

The public can submit complaints and questions immediately, when they see them, and directly into County computer systems. The app will also allow customers to track the progress of their complaints. App will also give County employees more information — and photos — to use to conduct investigations.



i-Tegur

connect public to local authorities particularly in filing complaints and bringing up issues related to their residential areas. Complaints are sent to city council. In addition to potholes and broken traffic lights, you can also file complaints related to parking, irresponsible disposal of garbage, drain blockage, open burning, and many more.



financial projections and key metrics

the **financial progressions**

25

Needed effort in MDs
(Data Scientist, Designers and
Developers)

100%

input into the POI
database

80%

cases solved using the
automated procedure after
initial training

5

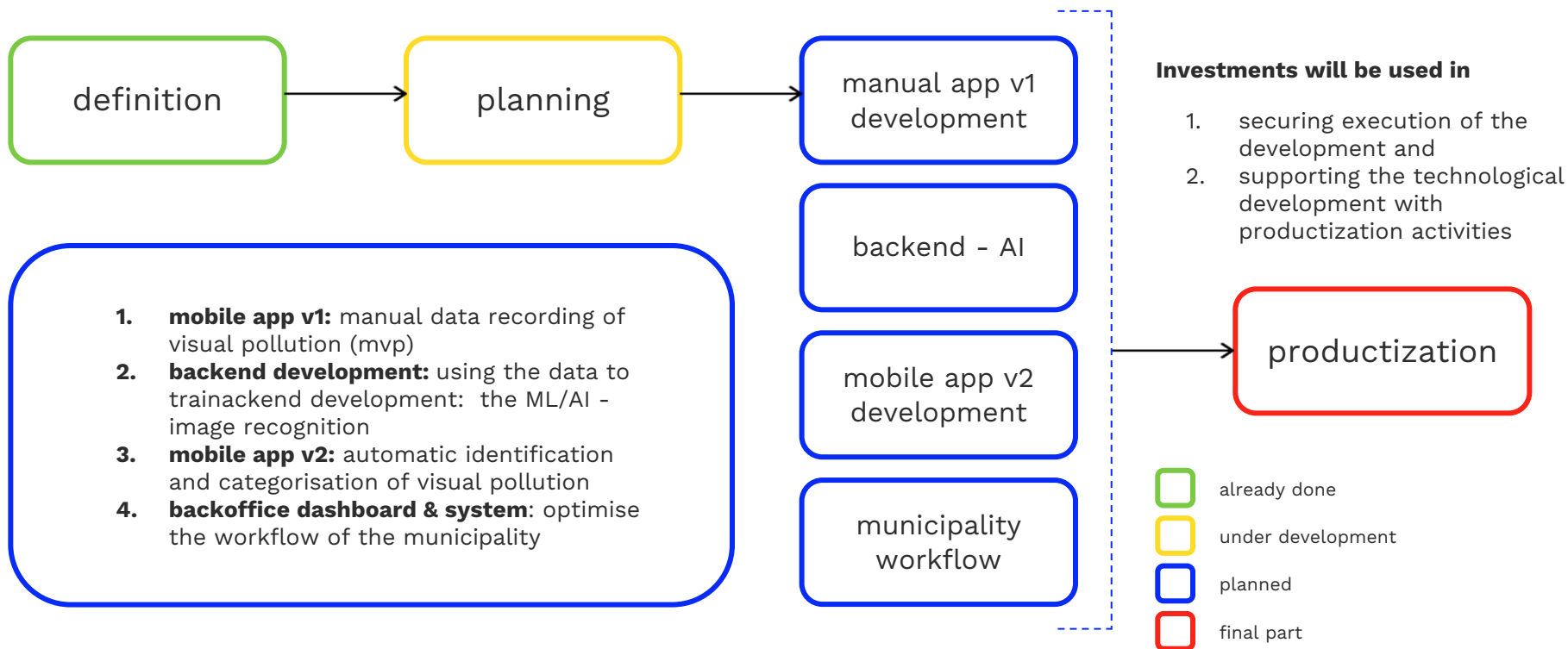
cities in europe that we
expect to sell the service
within one year of
productization

3

customers beyond
public administration
that will use the
system within one
year of productization

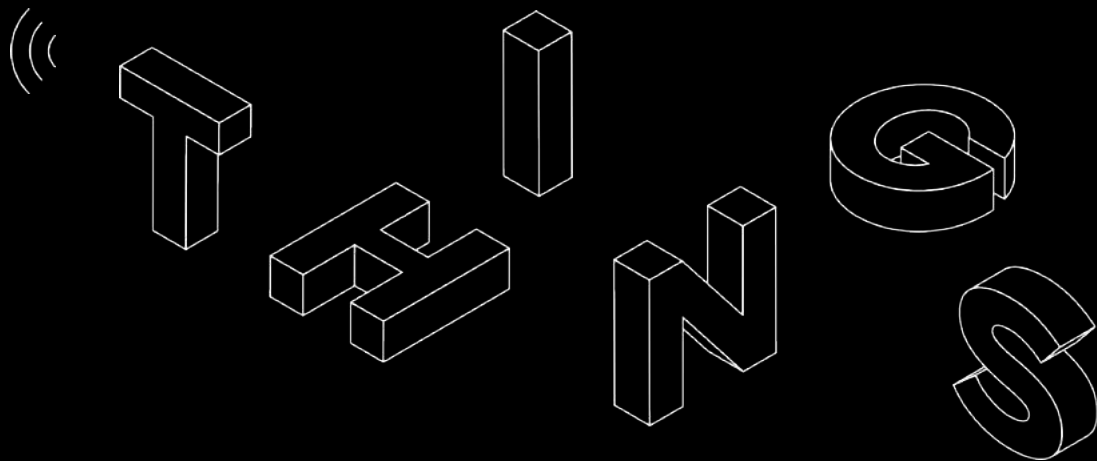
current status

the **current status** of the project



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Thank you.






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