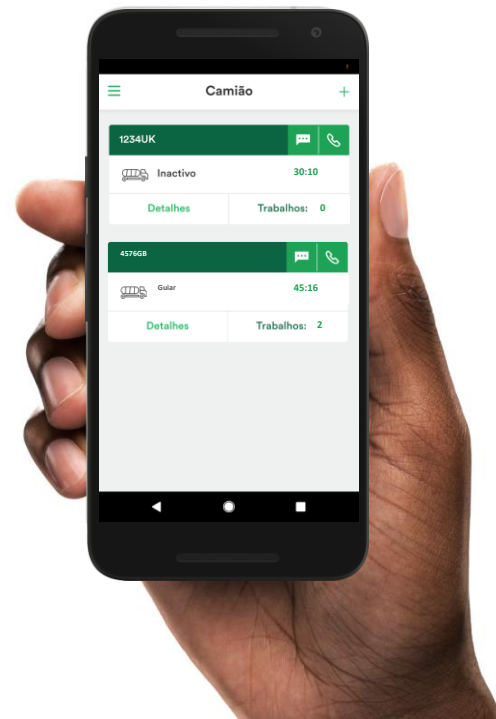


Pula

An app for Vacuum Tanker Businesses

A business-to-business app designed to support faecal sludge collection services and generate data for local sanitation authorities.



Background

Most People are not connected to the sewer system



Background

Independent Vacuum Tankers empty toilets



Starting Point

Data gap of government

Authorities



Lack of Data to adequately plan
and evaluate interventions

Starting Point

Data gap of government

Vacuum Tank
Businesses



Data



What can we offer Vacuum Tank
Businesses in return for their data?



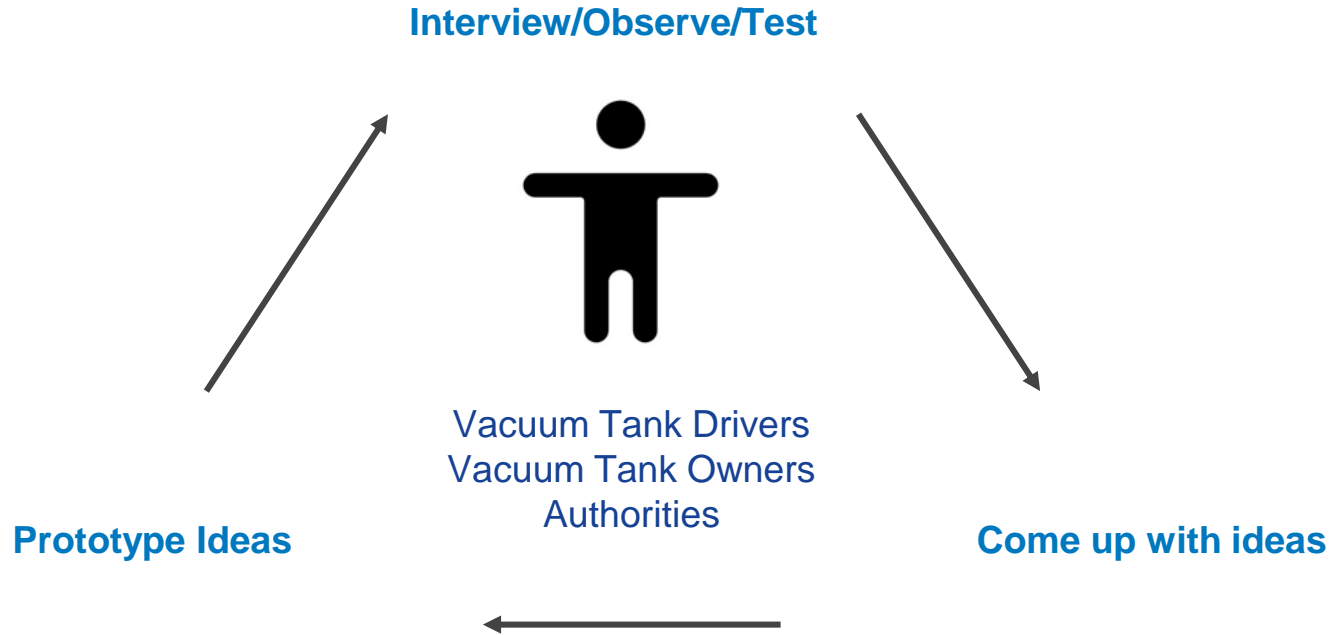
?

Authorities



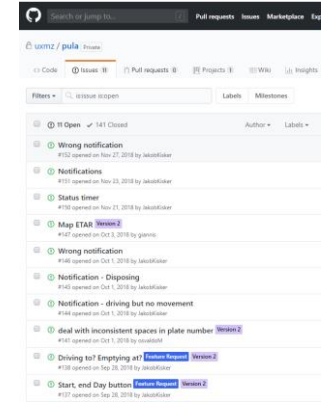
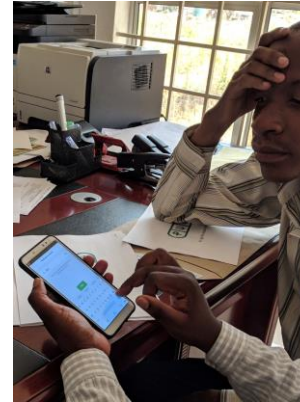
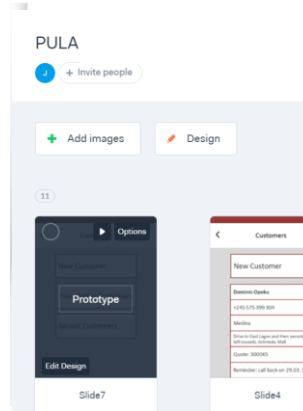
Approach

Human Centered Design



Process

An adjusted Design Sprint Process



Interviews

Ideate

Prototype

Test

Adjust

3 weeks, 4 people, 100% of their time

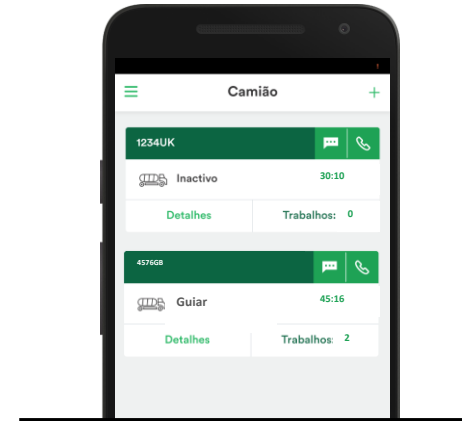
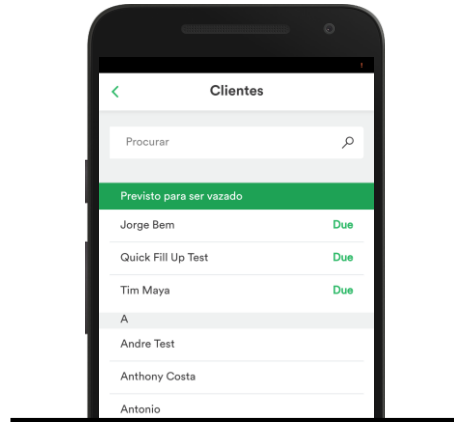
Two main Features

Problems identified and app features developed in response

Problem	Low demand in dry season	Drivers doing side business
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Two main Features

Problems identified and app features developed in response

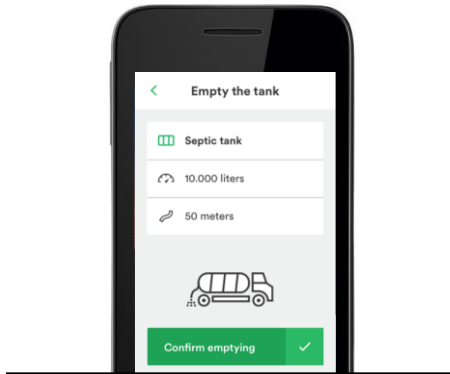


Problem	Low demand in dry season	Drivers doing side business
Feature	Address Book Pula stores all customer details and predicts when a customer is due for the next emptying	Truck Overview The owner is updated on the driver's activities via GPS signals and status updates

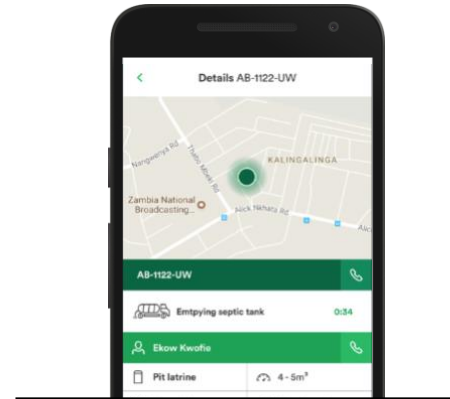
Truck Overview

Two applications that are linked with each other

Driver



Supervisor/Owner

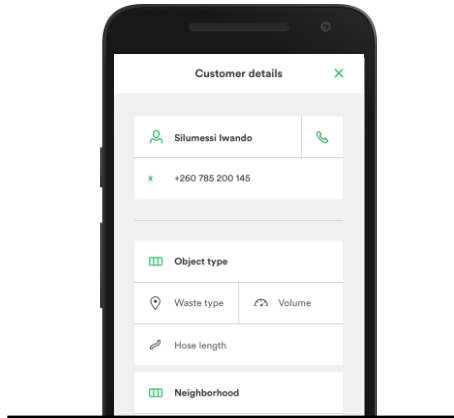


The mobile phone of the driver is connected to the mobile phone of the owner.
The location and status of the tanker is tracked through the mobile phone.

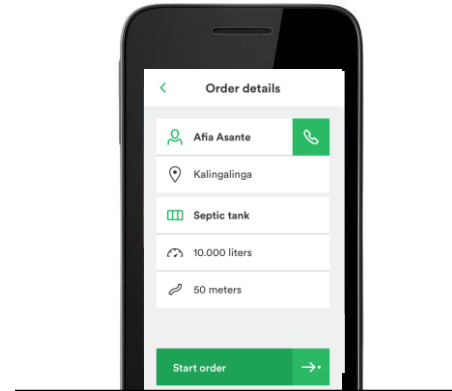
Address Book

Save Customer details and assign job to driver

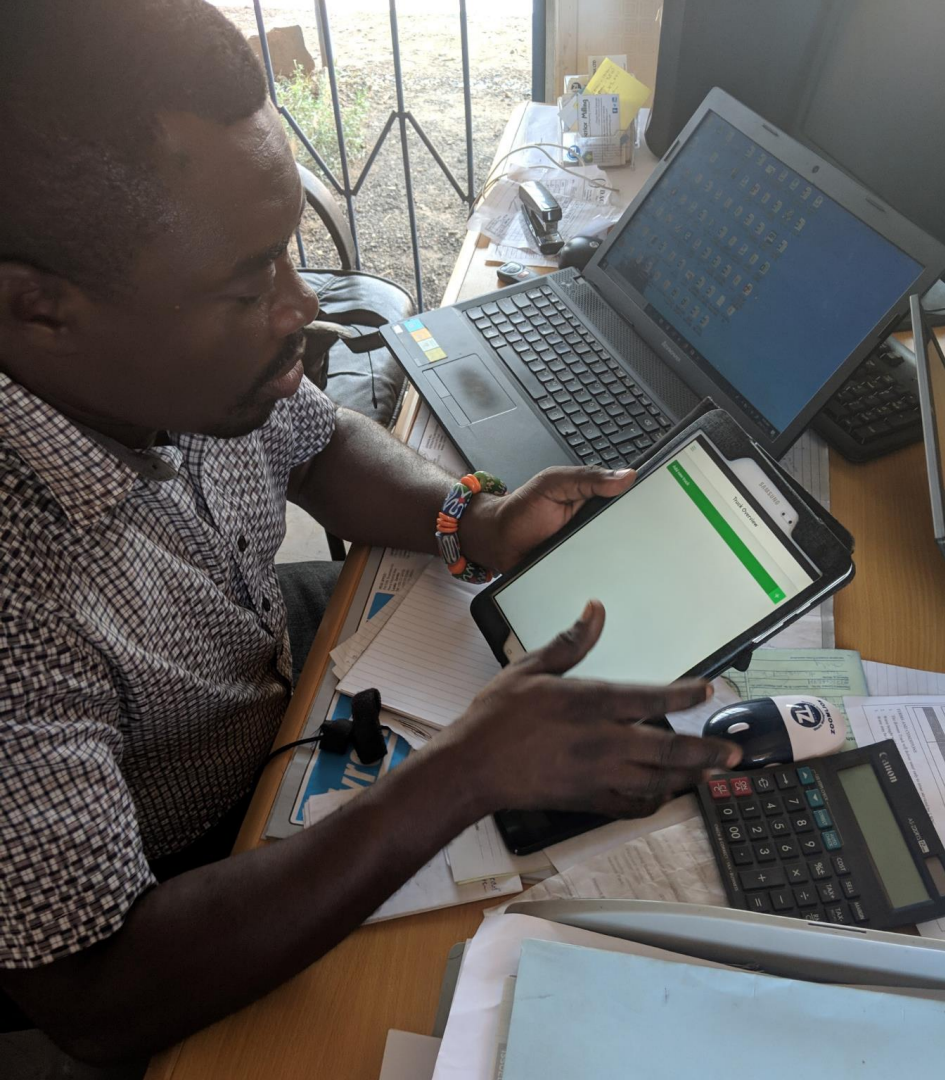
Supervisor/Owner



Driver

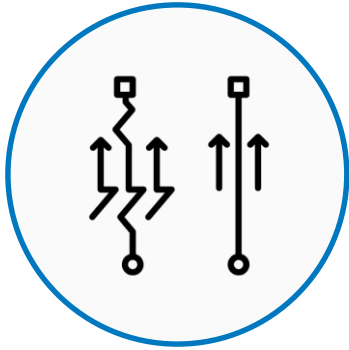


The supervisor/owner fills out customer details and sends the details through the app to the driver.



What we have learnt

The 4 main lessons we learnt when developing Pula



Reduce complexity



Have a hero user



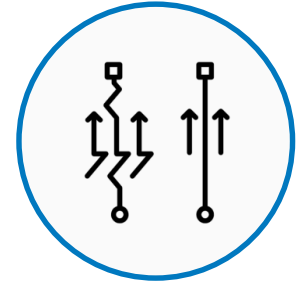
Get real asap



Focus on one market

What we have learnt

Reduce Complexity



What we did

We had a lot of ideas for features and prototyped several. Our final app has 2 main functionalities. This made the app too complex for the target user.

What we recommend:

Focus on one core feature and ensure this is fit for purpose. Complexity creates space for things to go wrong.

What we have learnt

Have a hero user



What we did:

Multiple vacuum tanker businesses included in design research, prototype assessment and testing of the final app.

What we recommend:

Establish a relationship with one Vacuum Tank Business, allowing the product to be tested over longer periods.

What we have learnt

Get real asap



What we did:

In each country we developed non-working prototypes (Marvel App) and tested them with target customers. We learnt that the prototypes were not tangible enough to give us accurate feedback.

What we recommend:

Develop prototypes that are as tangible and close to the final product as possible. Customers are only able to give you real feedback if they can use the product.

What we have learnt

Focus on one market



What we did:

Design sprints were conducted in 4 countries, attended by a business specialist, designer, design researcher and a market expert.

What we would recommend:

Focus on developing a product tailored to a single market which can then be adapted for new markets as required. Include a software developer in the core team to ensure the concept responds to the imitations in the chosen market.

What's Next?

Where is Pula going

We have a clear idea of what needs to be adjusted:

- Reduce complexity (we have already outlined a simple Pula)
- Make coding more robust

We believe that Pula has potential and we are keen to develop it further:

- Step 1: Develop and test a “simple Pula”
- Step 2: Launch in a single market