

TidySantCugat

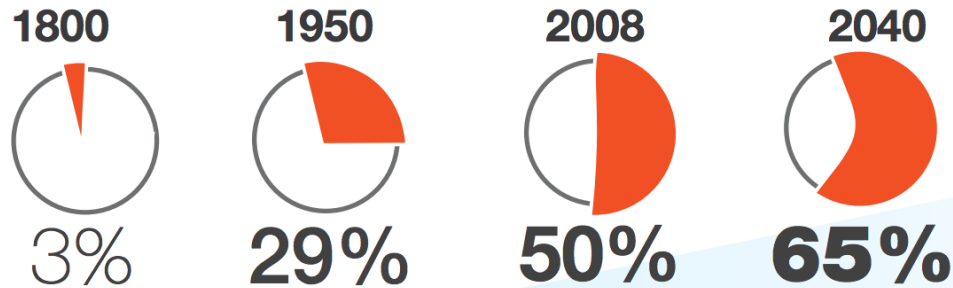
Cleaning the city with Big Data

The team

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- Adriana Freitas
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The reality, and what is coming

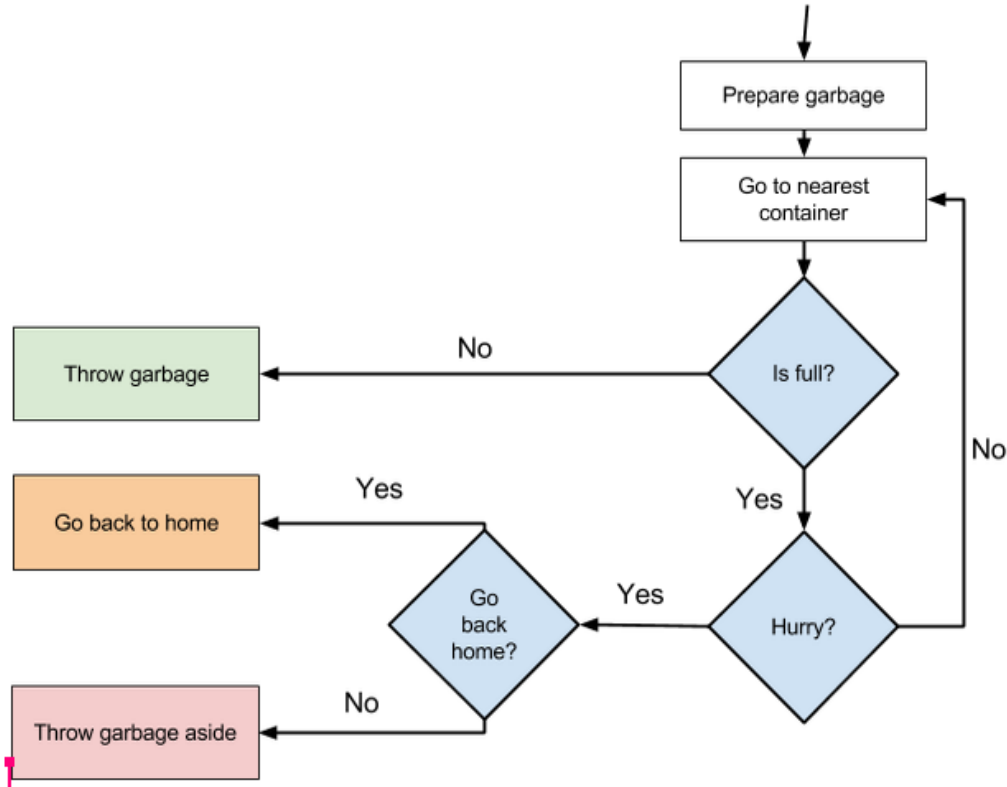
Population living in cities



“The 19th century was a century of empires, the 20th century was a century of nation states. The 21st century will be a century of cities.”

Wellington E. Webb, Former Mayor of Denver

The user journey of garbage



The problem of traditional way

Users do not know
about garbage
container status

Garbage Collectors
still with rigid logistic
plans

The Idea

Provide information of container status to users and administration as better as possible.

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Provide information of container status to users and administration as better as possible.

So the chance of the scenario for user “The garbage is full!” would be less frequent.

Strategic advantages

- High rate of smartphone per citizen
- Democratization of geodata visualization
- Internet of Things applied to garbage collection industry

Product design

The four magical phases of data products

1. What happened?
2. Why happened?
3. What shall happen?
4. What should do to success?

Phase I, What happened?

Goals:

- Notify users when the nearest container is full and empty
- Notify administration when the containers are full

Phase II, Why happened that?

Goals:

- Issues in the garbage collection plan → notify users
- Change of user's behaviour → modify collection plan

Phase III, What shall happened?

Goals:



- Forecast the fill rate of containers → fill rate prediction for users
- Inform administration of the fill rate of all containers at future hours

Phase IV, What should do to success?

Goals:

- Suggest users best moment for throw the garbage
- Automatic collection plan update

The prototype: The mobile app



Carrier  4:10 PM 

Els meus llocs

Casa
2.783,4.234

Treball
2.783,4.234

Casa Marina
2.783,4.234

Carrier  4:11 PM 

Enviar notificació

Your latitude
2.27

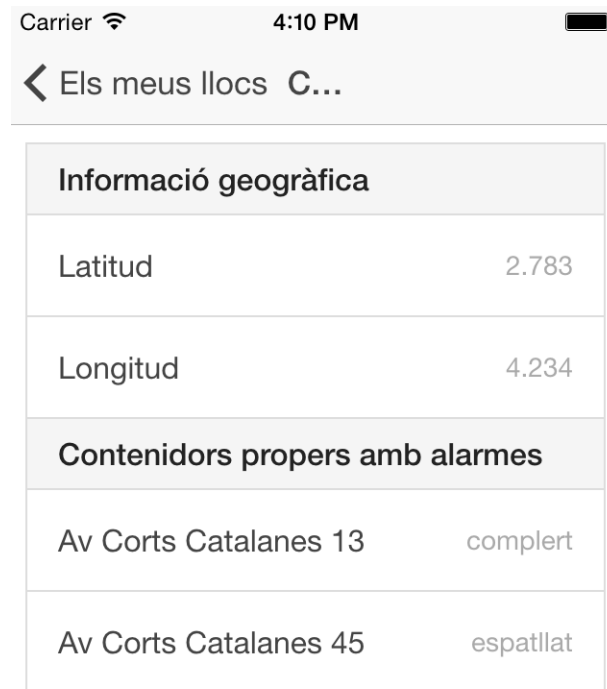
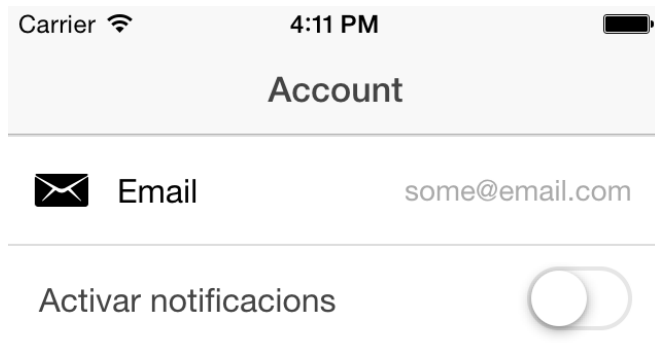
Your longitude
4.12

Notificació Altres ▼

Tipus contenidor Orgànic ▼

Enviar notificació

The prototype: The mobile app



The prototype: maps for visualization

<http://tidysantcugat.tumblr.com/>

Still more ideas

- What about companies?
- What about extending the product to other cities?
- What about add data integration process of sensors in the application?

Thanks!

Questions?