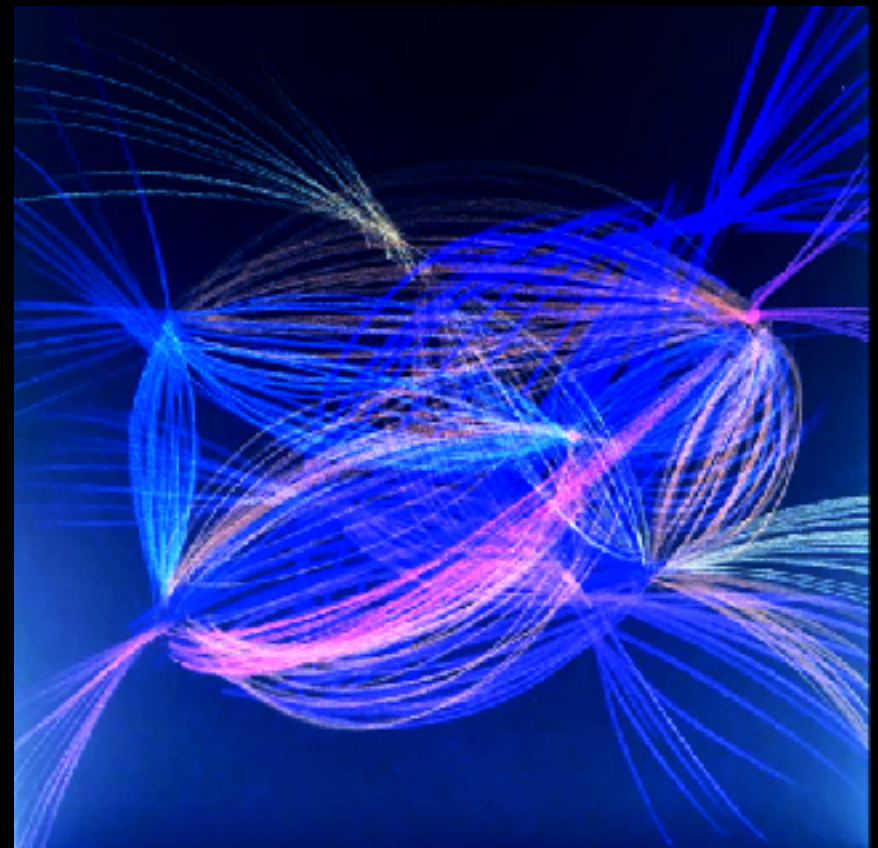


# DATA VISUALIZATION

## @NEW & OLD TRANSIT

.....



Why is Car sharing?

Sharing Mobility service is **everywhere.**

# Power of Data reveal

Pattern discovery

Data consumption

Storytelling

inspector to problems

# WorldBank Contract Awards 2017



<http://d3.artzub.com/wbca/>

# ELEMENTS OF car sharing

## Variable

## Data Type

Potential Users

Colour Hue / Shape

Purpose of Trip

Colour / Shape

Density of OD (original to destination)

Length / Orientation / size

Degree of Purpose Overlap

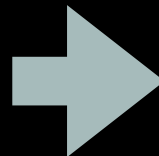
Opacity / Colour Saturation

Residence Area Distribution

Map shape / colour / position X&Y

Rental time

Position X&Y



## *Schedule column*

**Data collection**

Open Source  
Make up

**Visual Analytics**

AHP analysis  
GPS

**Mapping &  
visualize**

**Storytelling**

# Data Collection

<https://www.zipcar.com/find-cars>

<https://api.zipcar.com/v0/directory?country=US&embed=vehicles>

<https://www.mapbox.com/maps/light-dark/>

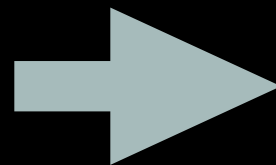
car sharing / Map API will provide up-to-date information on which vehicles are available, places to park, and local gas stations.

# Visual Analytics

## AHP

A structured technique for organizing and analyzing complex decisions, based on mathematics and psychology. The goal is to help decision makers to find a best solution that best suits their goal and understanding of the problem and target.

vehicle flow rates  
rental hotspots  
frequency of routes



**Best trip experience**





# Mapping & Visualize

## Mapping the Geography

D3.js, Processing, P5.js

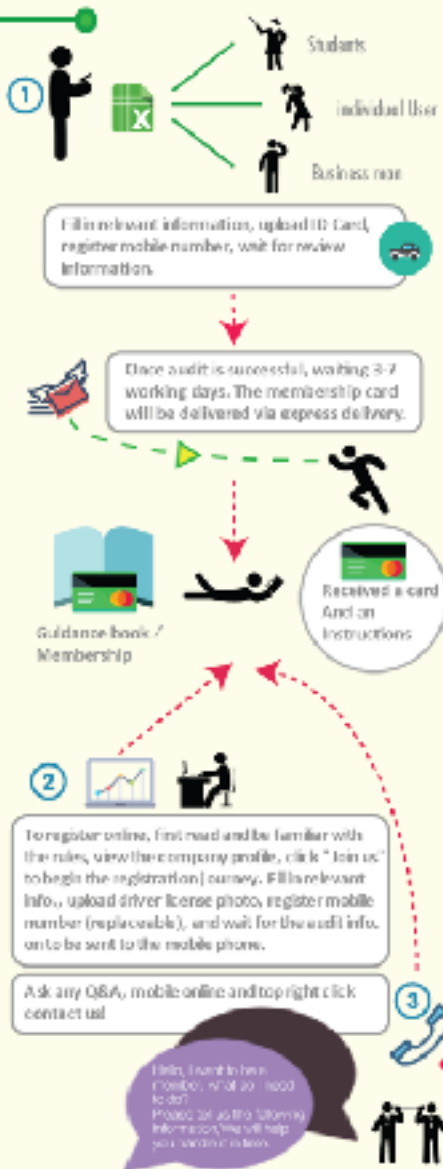
**More artistic and fun visual reveal to display the hotspot Route and Parking map**



Dynamic flow map

# THE JOURNEY OF ZIPCAR

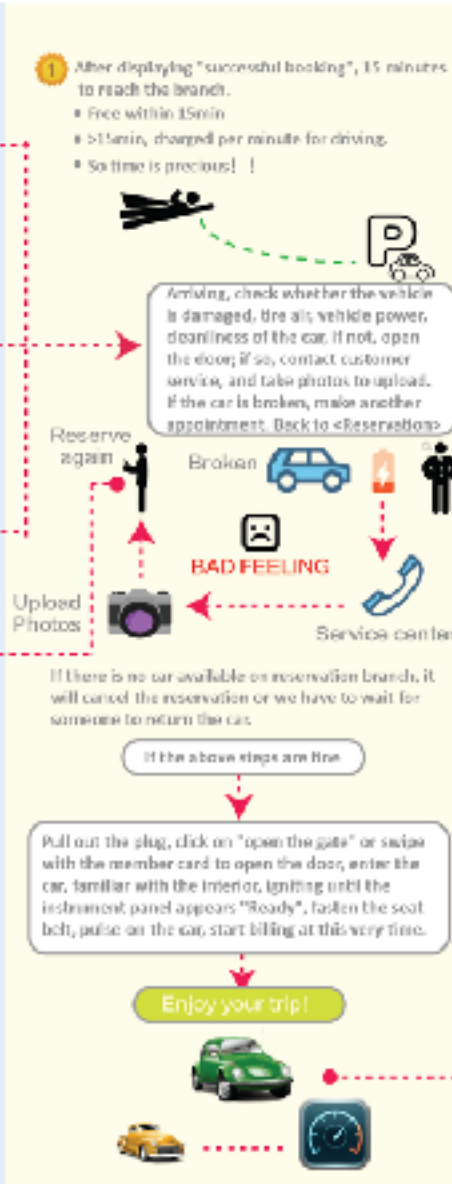
## REGISTER



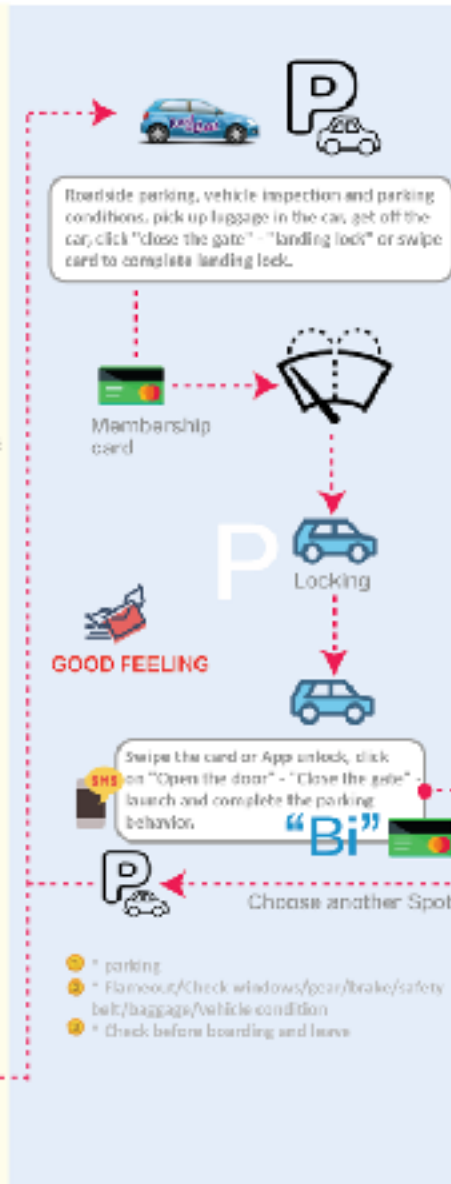
## RESERVE



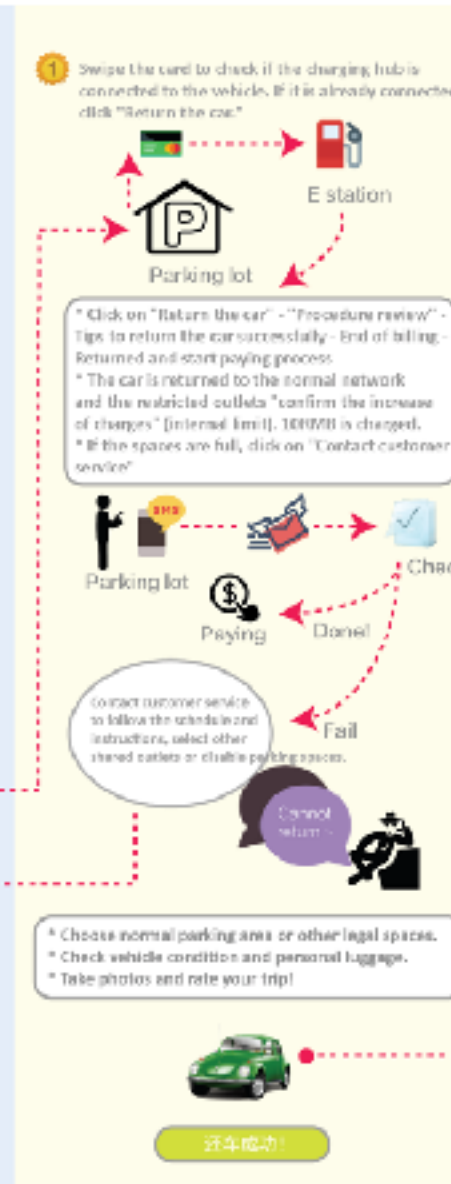
## GET THE CAR



## STOP



## RETURN

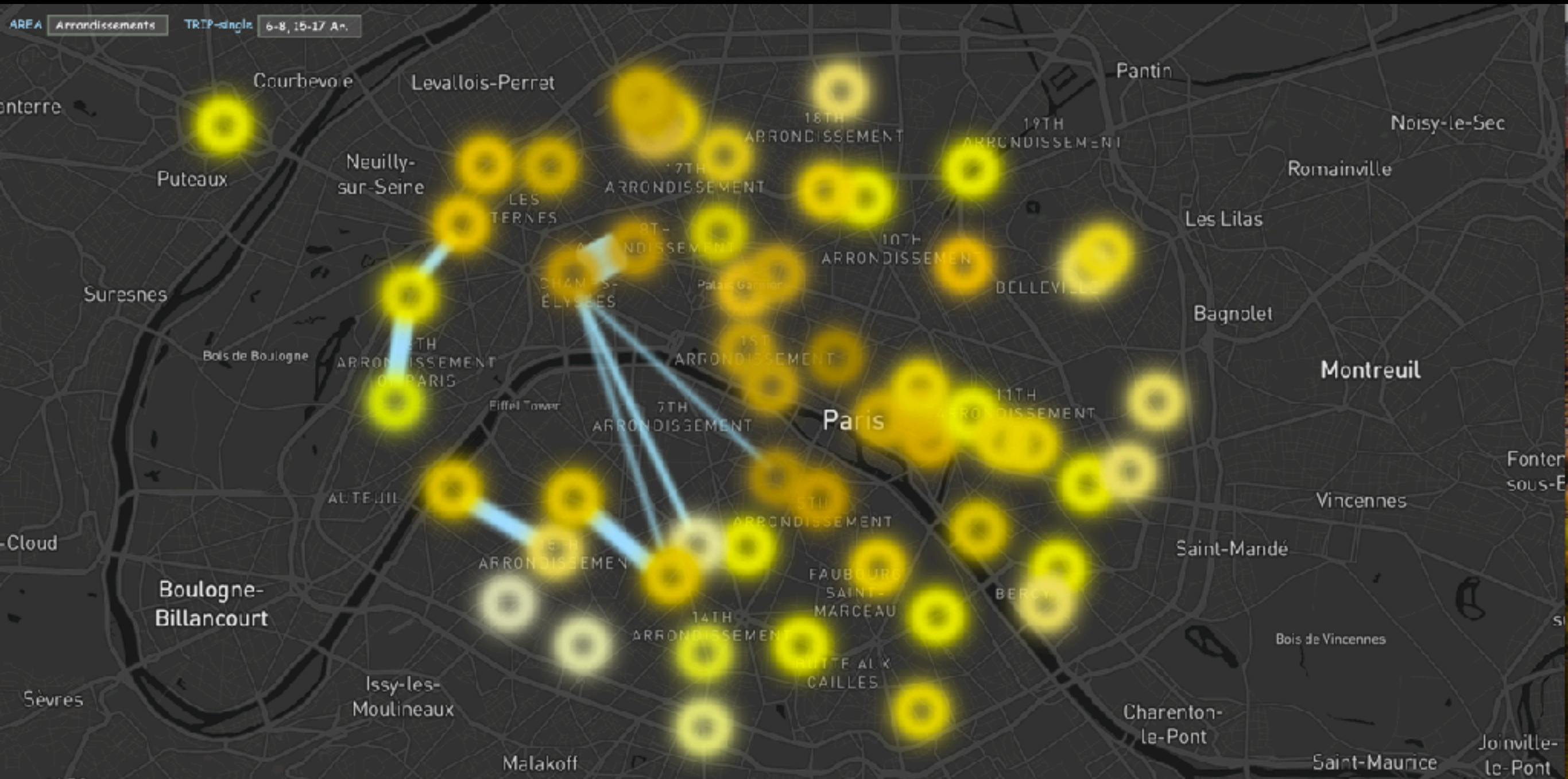


## PAY





# Zipcar in Paris



# Conclusion

tell the story of. . .

1. **Tell users' story of using car sharing**
2. **Customize** the parking lot area and amount of parking spaces at each branch
3. **Bypass parking lots** by setting some sub-branch area around the main one.

Thank you for watching!