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GRUPO DE INVESTIGACIÓN EN
INSTRUMENTACIÓN Y
ACÚSTICA APLICADA

Towards the assessment of community response to environmental issues through social media

Luis Gascó Sánchez
Bachelor Degree in Telecommunications Engineering. Major in Sound and Image (Universidad Politécnica de Madrid)
MsC in Acoustic Engineering in Industry and Transport (Universidad Politécnica de Madrid)
Master in Business Intelligence and Big Data (Escuela de Organización Industrial)

7600 million people

4200 million people

3030 million social media users

5.54 social media accounts

121 million per quarter in 2017

The Futurium

Policy Making 3.0

Crowdsourcing issues

Engagement
Channels
Activists
Lack of iterations

Brain crowding

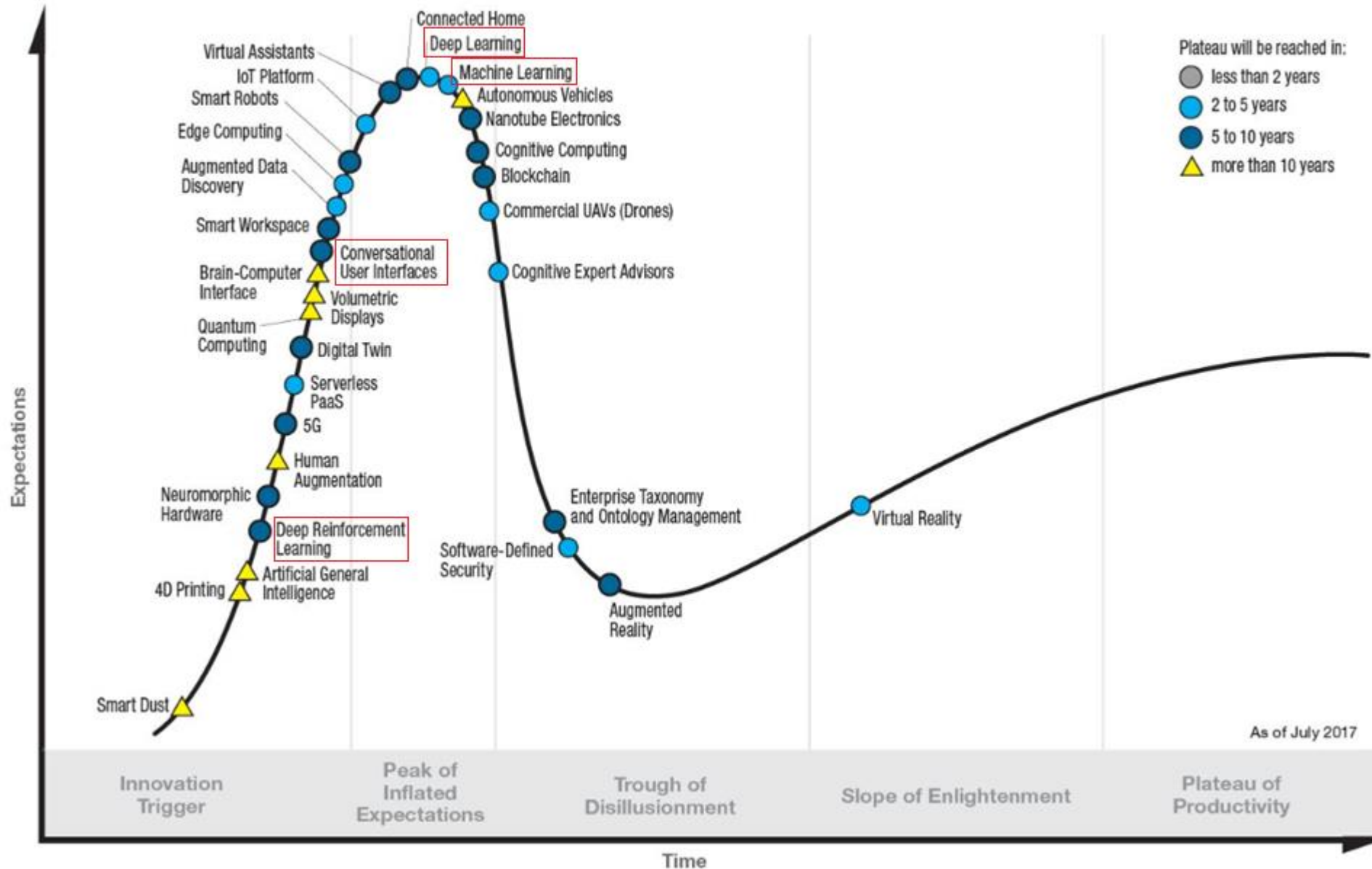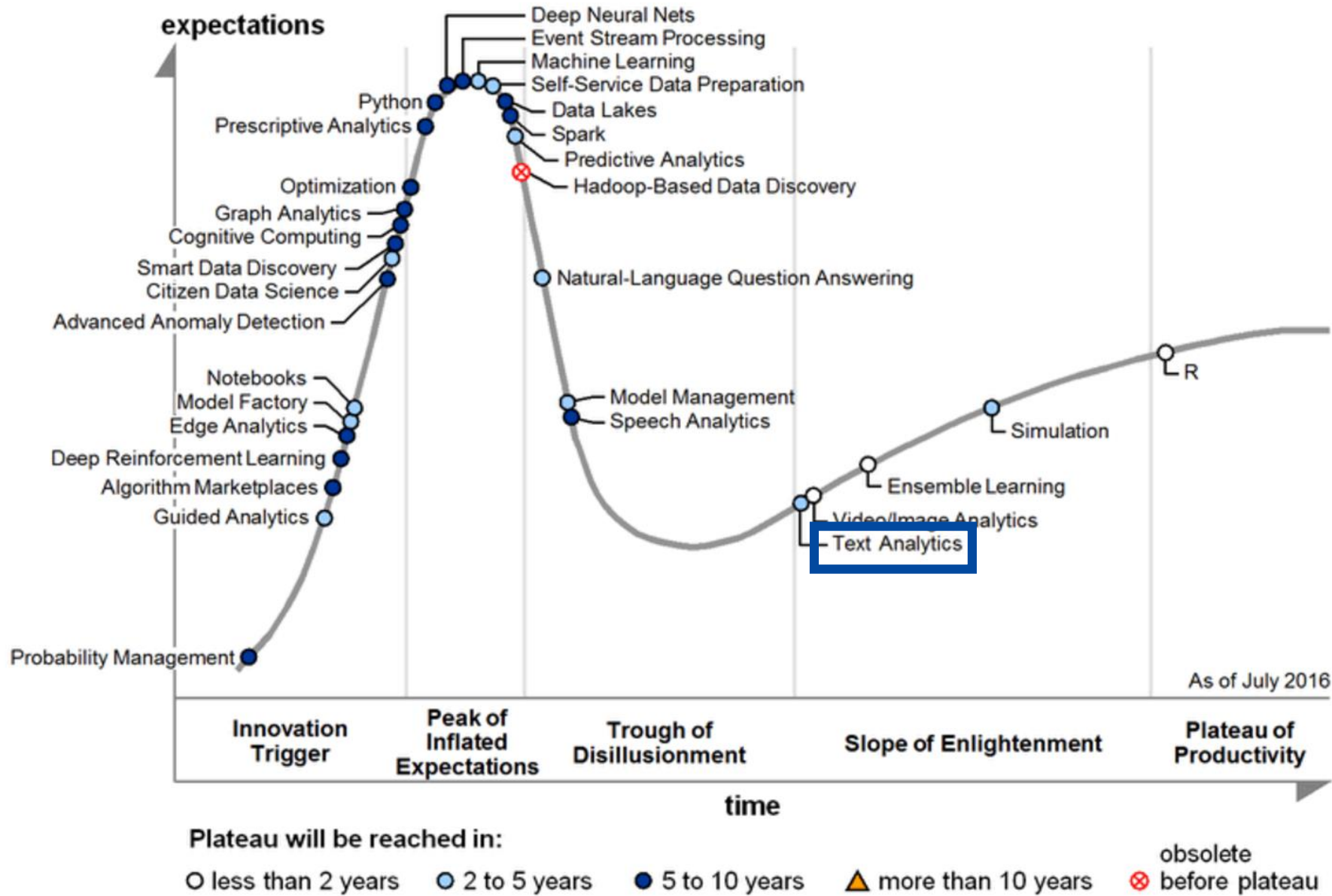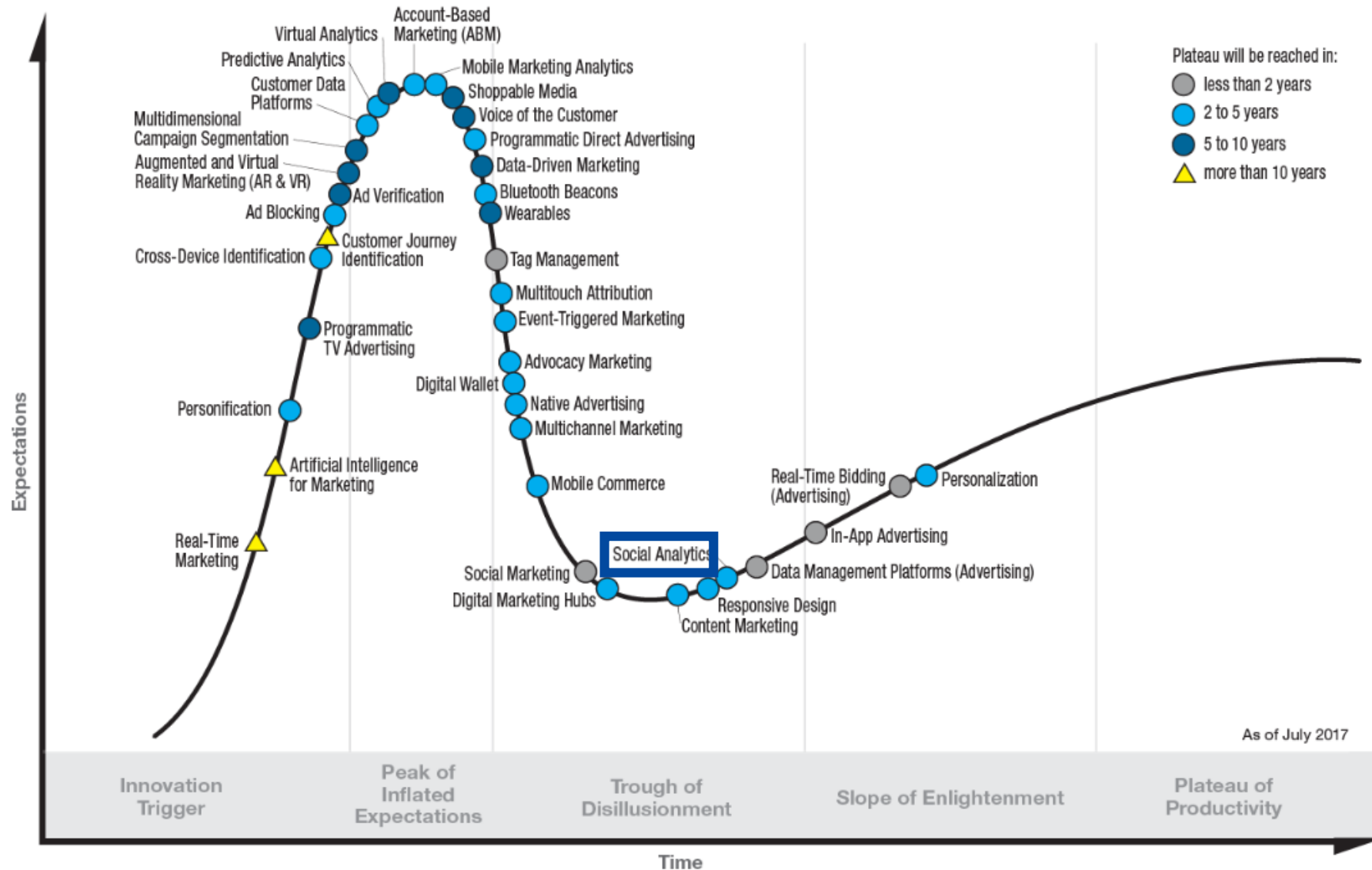Gartner Hype Cycle for Emerging Technologies, 2017

Figure 1. Hype Cycle for Data Science, 2016

Source: Gartner (July 2016)

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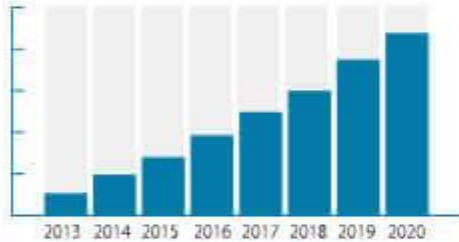Hype Cycle for Digital Marketing and Advertising, 2017

Global Text Analytics Market

Segmentation and Forecast, 2013 - 2020

Global Text Analytics Market

Global Text Analytics Market is Expected to reach **$6.5 Billion** by 2020

2013 2014 2015 2016 2017 2018 2019 2020

Growing at a CAGR of **25.2%** (2014-2020)

GLOBAL TEXT ANALYTICS MARKET BY END USER

Fast Moving Consumer Goods (FMCG)

Banking Financial Services and Insurance (BFSI)

Healthcare and Pharmaceuticals

Telecommunication

Government

Retail

■ The comprehensive view on the % share of End user segment (2020)

GLOBAL TEXT ANALYTICS MARKET BY GEOGRAPHY

North America is expected to be highest revenue generating region by 2020

Asia Pacific, Europe, LAMEA

GLOBAL TEXT ANALYTICS MARKET BY APPLICATIONS

Competitive Intelligence

Customer Relationship management

Predictive Analytics

Fraud detection

Brand Reputation

■ The comprehensive view on the % share of application segment (2020)

☞ For More Details See Table of Contents

GLOBAL TEXT ANALYTICS MARKET BY DEPLOYMENT MODEL

On-Premise Model

Cloud Based Model

■ The comprehensive view on the % share of Deployment model segment (2020)

TOP IMPACTING FACTORS

Social Media analytics drives text analytics market

Big Data and text analytics getting popular amongst vendors

Big data analytics would Continue to grow in future

Cloud is gaining traction in text analytics

Linguistics analytics would provide opportunities for the market to grow

Text analytics capability to deal with large amount of data

Misuse of the information is threat to market

Text analytics beyond sentiment analysis

High cost analytics software

Low awareness as text analytics is emerging technology

■ 2013   ■ 2020

Our case
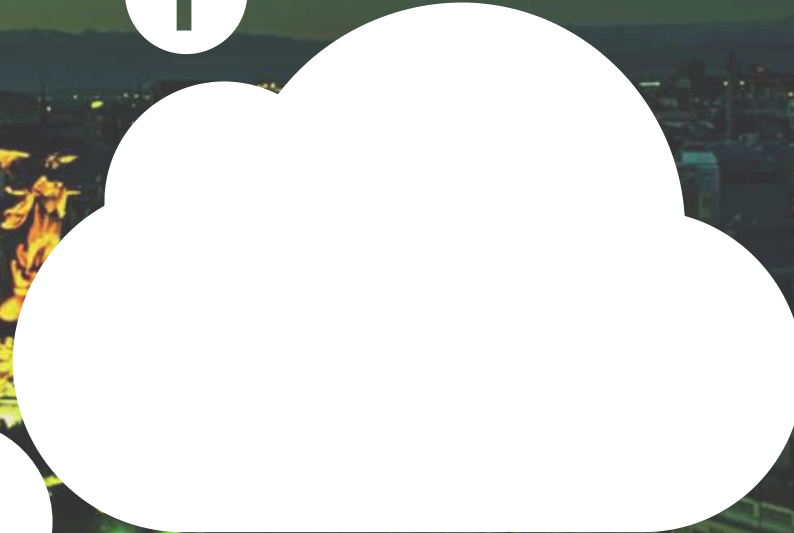
~500 million people

25%

We live in a connected world

Online Social Networks

Open data platforms

Noise data
Complaints data

Present

Crowdsourcing

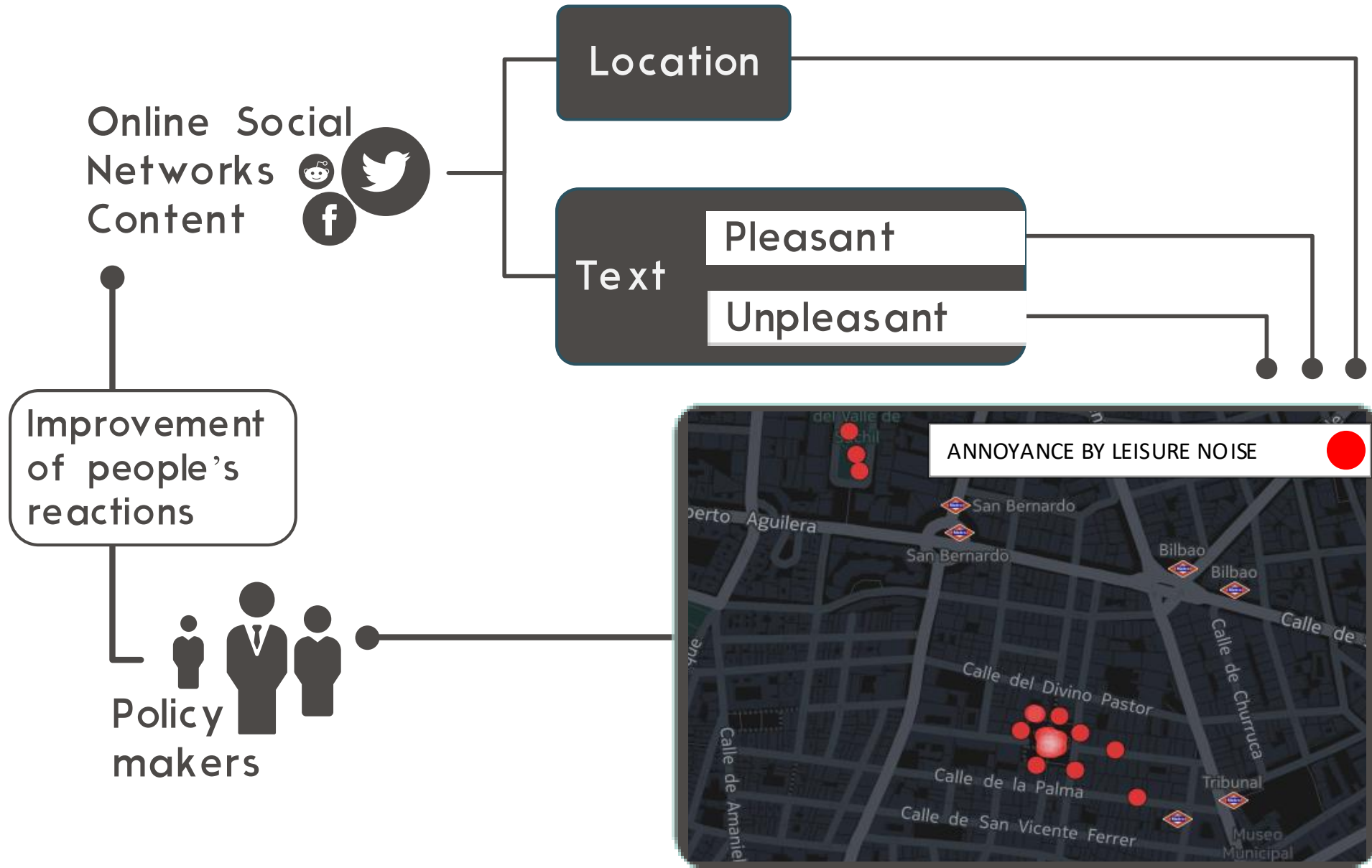*People act like human sensors voluntarily*

Surveys

Future?

Social computing

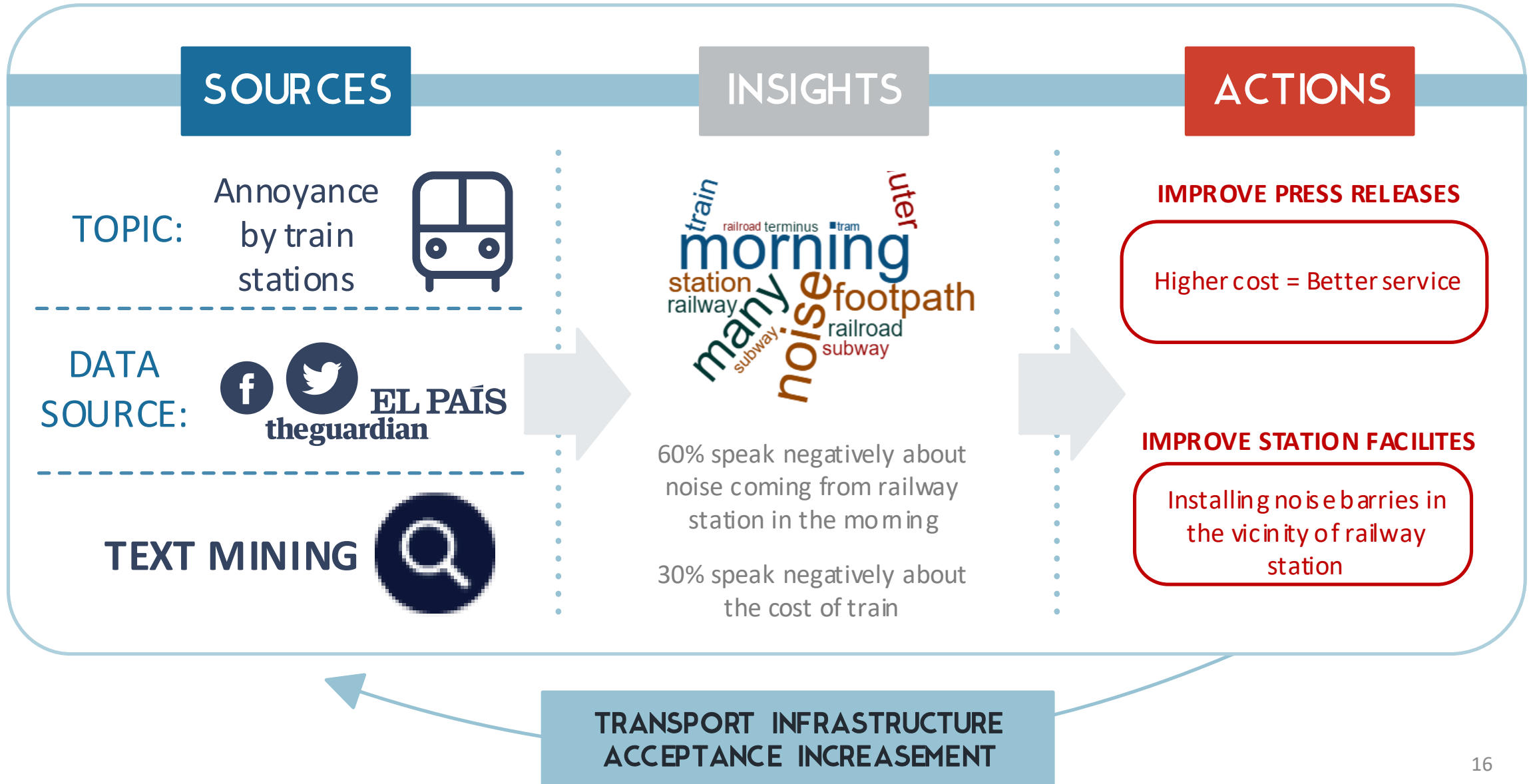*People express their feelings directly on Social Media*

Collective intelligence

Noise annoyance monitoring

Online Social Networks Content

Location

Text
- Pleasant
- Unpleasant

Improvement of people's reactions

Policy makers

ANNOYANCE BY LEISURE NOISE

Transport infrastructures

SOURCES

TOPIC: Annoyance by train stations

DATA SOURCE: EL PAÍS theguardian

TEXT MINING

INSIGHTS

train railroad terminus tram uter morning station many footpath railway subway noise railroad subway

60% speak negatively about noise coming from railway station in the morning

30% speak negatively about the cost of train

ACTIONS

IMPROVE PRESS RELEASES

Higher cost = Better service

IMPROVE STATION FACILITES

Installing noise barries in the vicinity of railway station

TRANSPORT INFRASTRUCTURE ACCEPTANCE INCREASEMENT

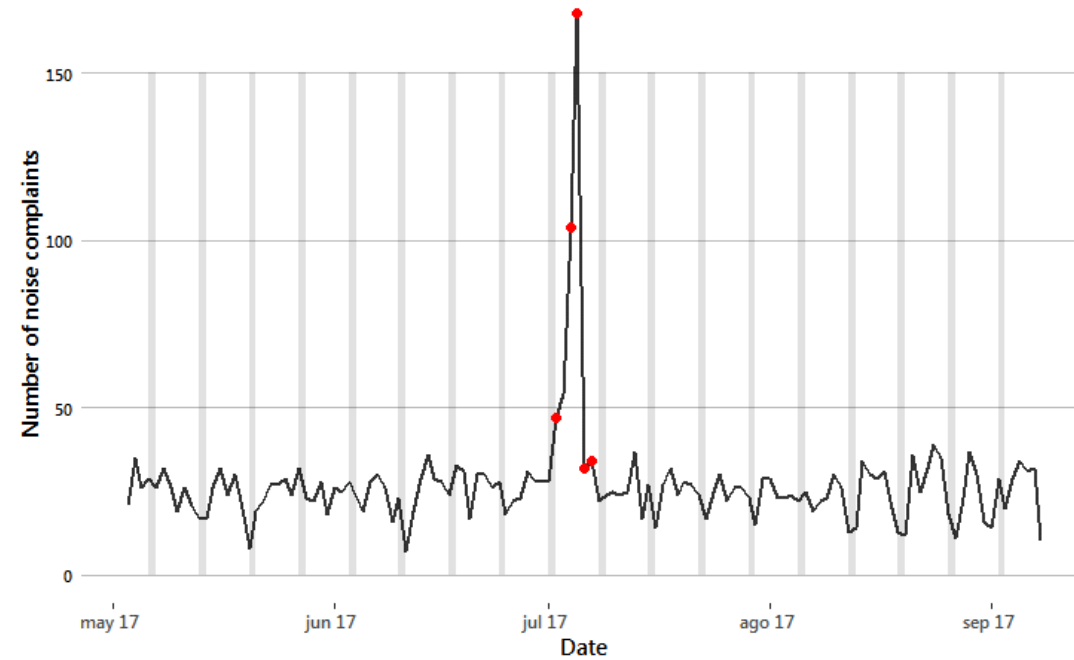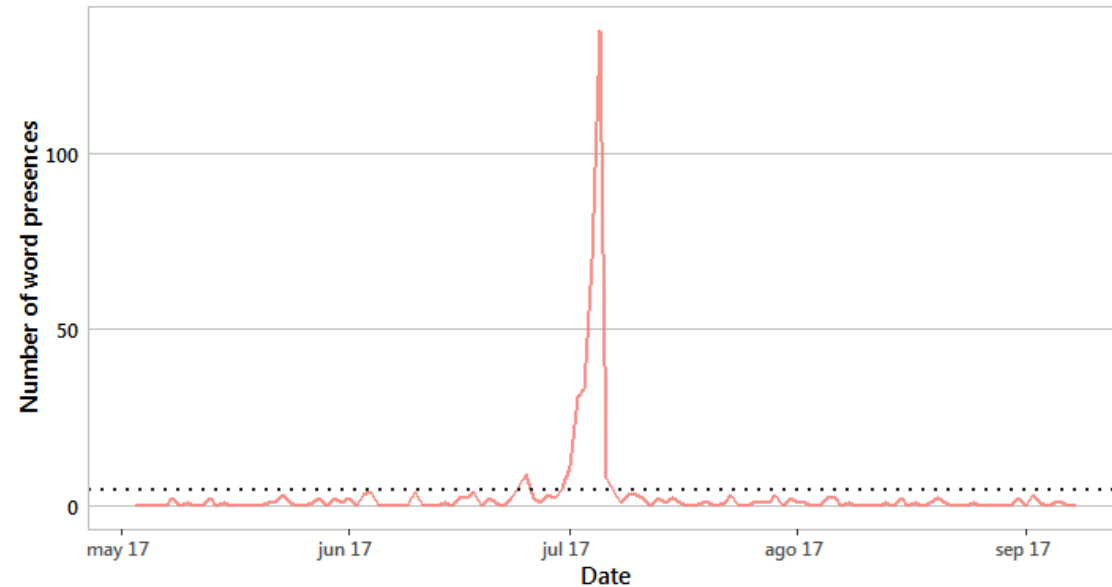# Our method

Complaint trend analysis

- Effect of noise policies

- Noise attitude to noisy events

Alarms

- Based on word analysis

- Combination with trend analysis

Conclusions

- Social media is a significant source of data which we can use to get valuable information for policy makers and city managers.

- Citizens are using social media as a channel to express their opinions about different topics, from politics to environmental issues.
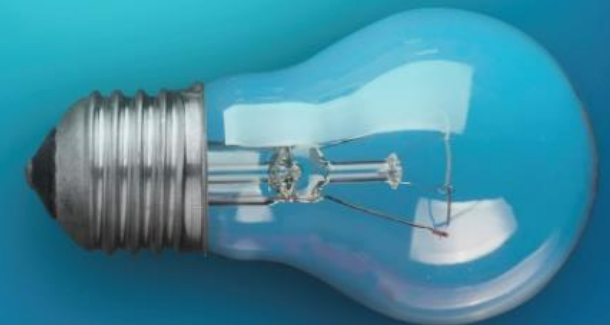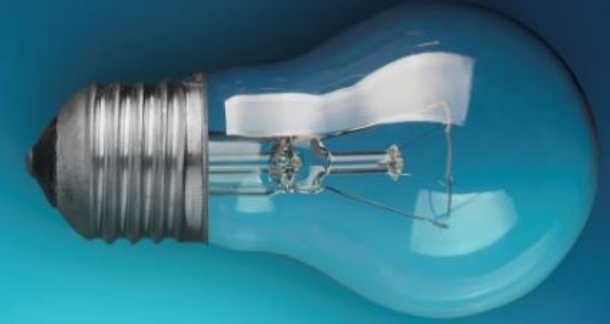
Facebook
249,998,400
Likes

Instagram
174,999,600
Likes

Twitter
26,107,200
New tweets

Youtube
451,461,600
Video views

Pinterest
583,200
Articles pinned

Tumblr
14,400
New users

Airbnb
43,200
Bookings

Booking
43,200
Unique visitors

TripAdvisor
237,600
Reviews

Twitter: @LuisGasco

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Luis Gascó Sánchez

luis.gasco@i2a2.upm.es / luisgascosanchez@gmail.com

https://www.linkedin.com/in/luisgascosanchez/

https://www.researchgate.net/profile/Luis_Gasco_Sanchez

@luisgasco

http://luisgasco.es/