

# Statistics for Data Science from the business perspective...in 2019!

1 Marzo 2019

UC3, CAMPUS DE PUERTA DE TOLEDO. A LAS 10:45H. Aula 0.A.02

uc3m | Universidad  
Carlos III  
de Madrid

 **innova**-tsn



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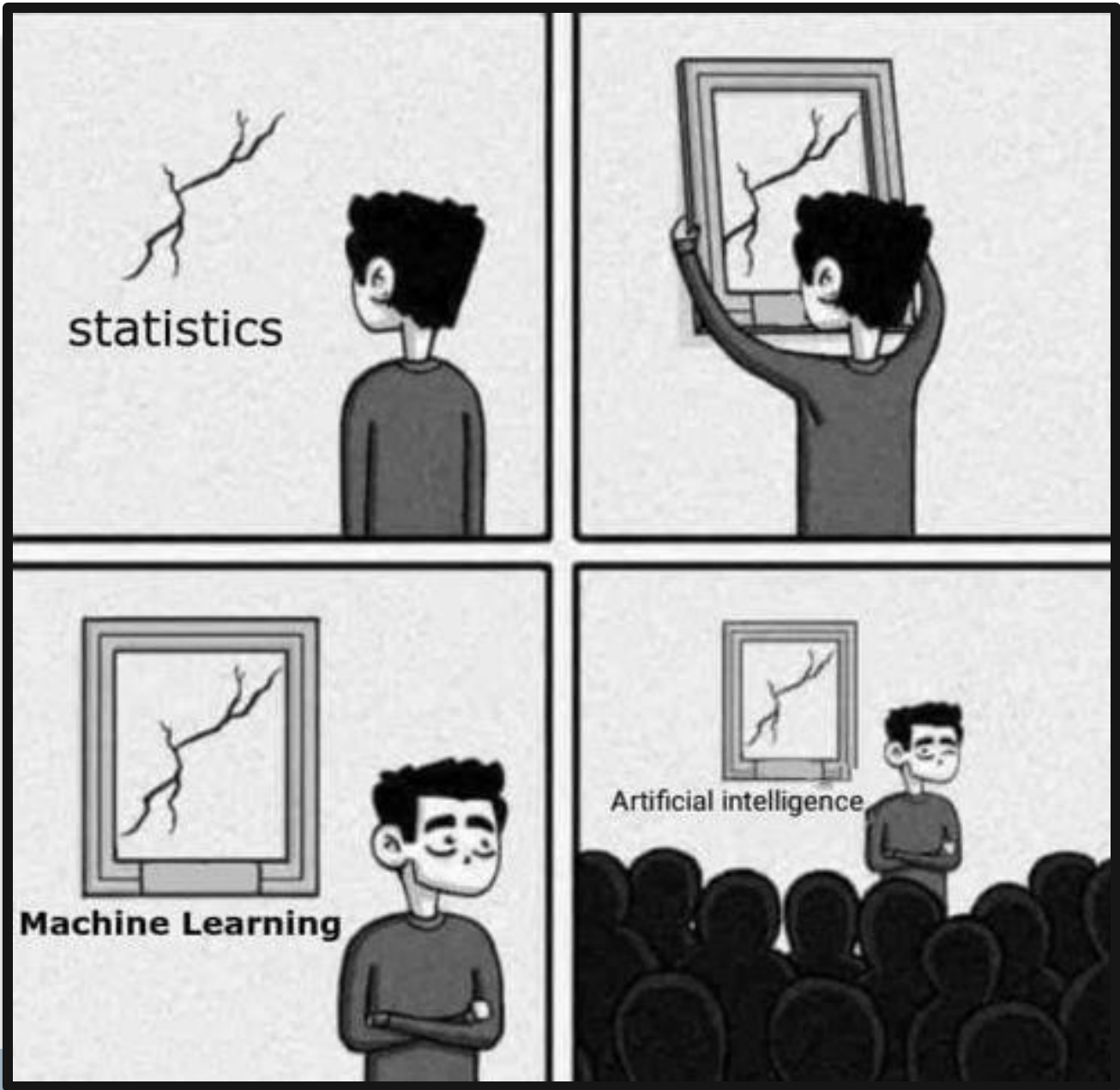
Estela Alvarez

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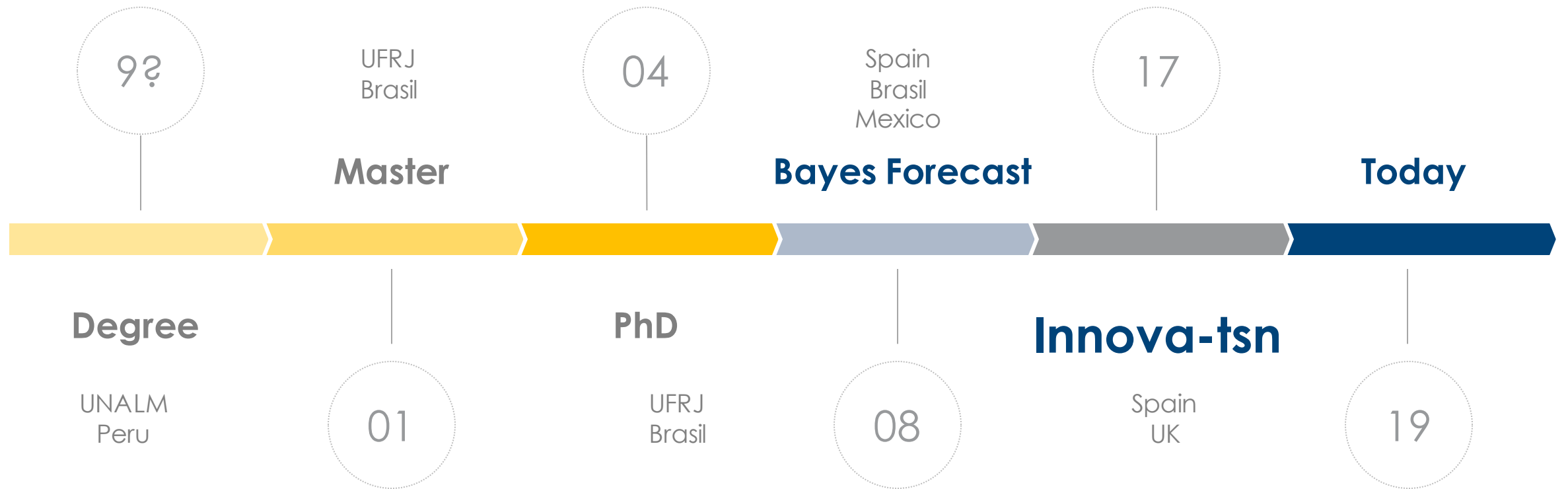
Laura Sierra

[Laura.sierra@innova-tsn.com](mailto:Laura.sierra@innova-tsn.com)



← LEARNING STATISTICS

EXPERIENCING STATISTICS →





# inno**va**-tsn



**15 years**

**3 cities**

**+220 consultants**

**Tailor-made solutions**

**+200 projects/year**

**5 cross areas**

- ✓ Solutions Architecture
- ✓ Client Intelligence & Digital Marketing
- ✓ Business Discovery
- ✓ Advanced Analytics & Big Data
- ✓ In Labs



**Analítica Avanzada y Seguro: perspectivas desde Dirección**

innova-tsn



**Regional Partner of the Year SE EMEA 2018**



**Premios Tecnología Siglo XXI 2019 INNOVA-TSN Business Intelligence**



**Halifax, Nova Scotia - Canada August 13-17, 2017**



**1º EMEA & 7º GLOBALLY**

Highway Tollgates Traffic Flow Prediction in China





### Fraud Detection

- Classification
- Gradient Boosting Machine
- SAS, R, Spark



### Flight Reservations

- Demand Forecasting
- GBM, k-NN, Quantile regression
- SAS, R



### Energy Demand

- Demand Forecasting
- ARIMA, Neural Networks, Clustering
- SAS, Python, Spark, AWS



### Audience Forecast

- Demand Forecasting
- GBM,
- SAS, R, H2O



### Optimal Price

- Demand Forecasting, Optimization
- ARIMA, GBM, Hill Climbing
- SAS, R



### Predictive Maintenance

- Classification
- Gradient Boosting Machine
- R, Qlik Sense



### Customer Experience

- Classification
- Gradient Boosting Machine
- SAS, R



### Up and Cross-Selling

- Topic Modelling
- Text Mining
- R



### Recommendation System

- Clustering
- k-NN
- Python, Spark



### Forms Classification

- Documents Classification
- Text Mining, Deep Learning
- Python

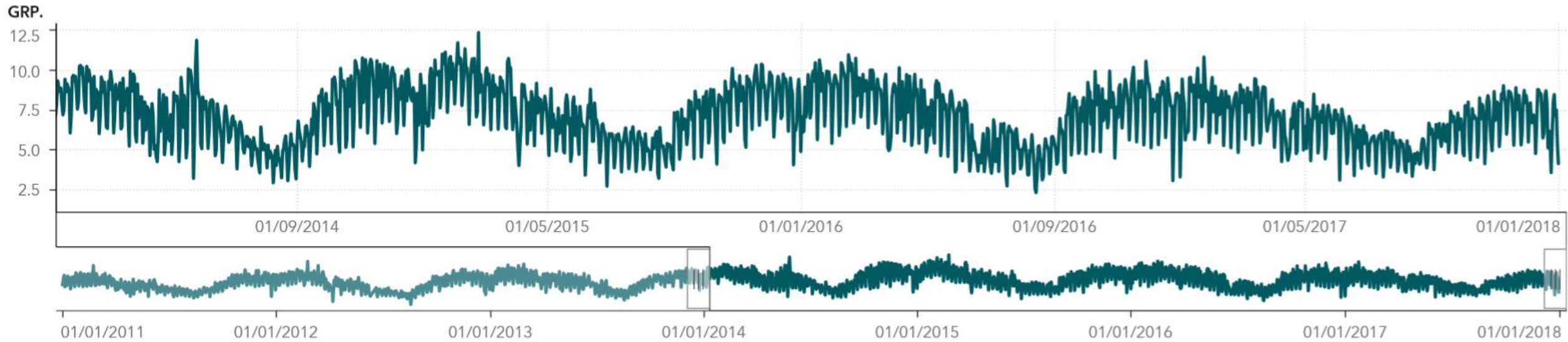
## Shaping ideas

“

Help our clients to make the best business decisions based on the information provided by our solutions.

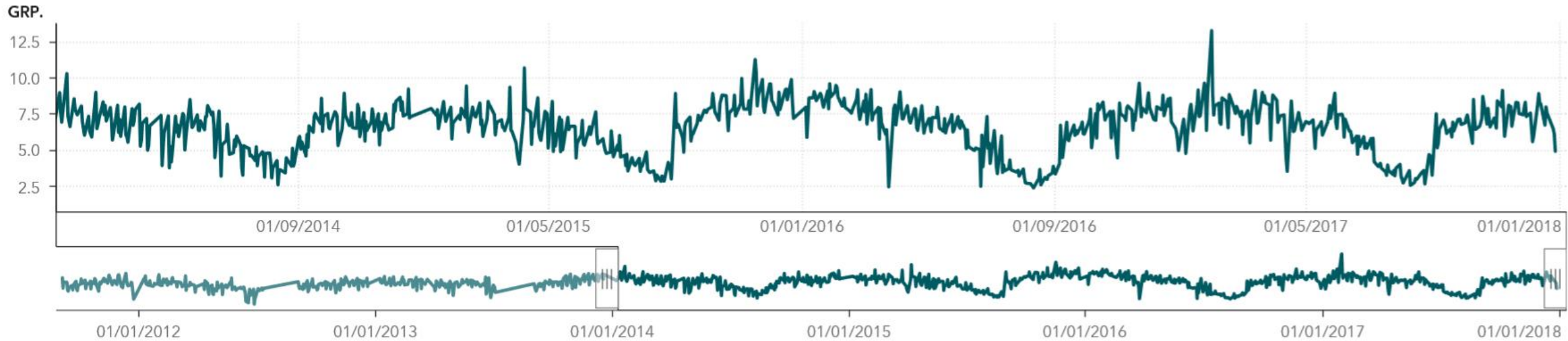


# AUDIENCE

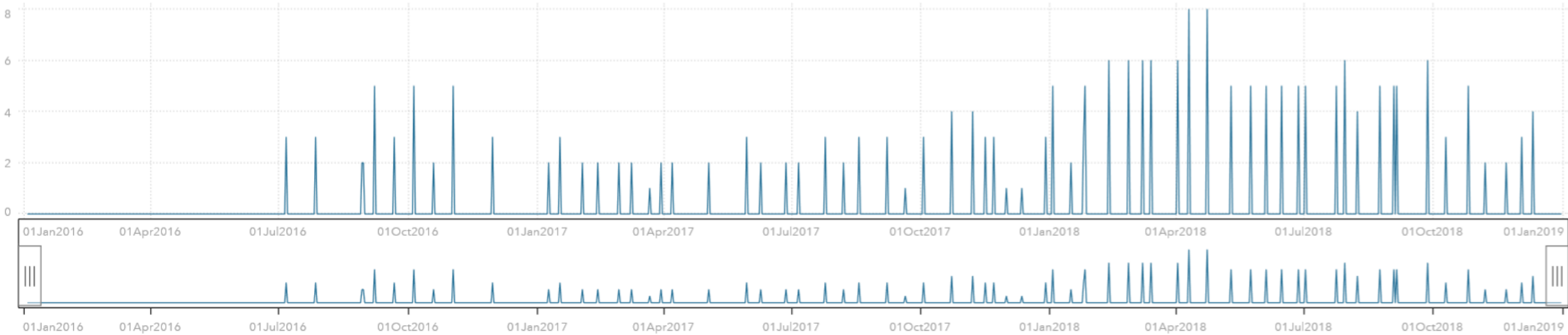




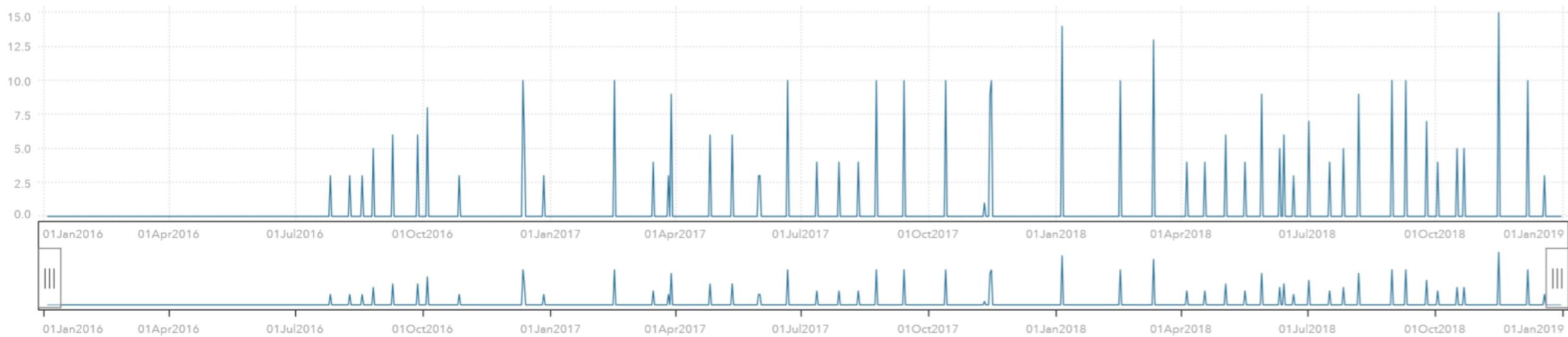
# AUDIENCE



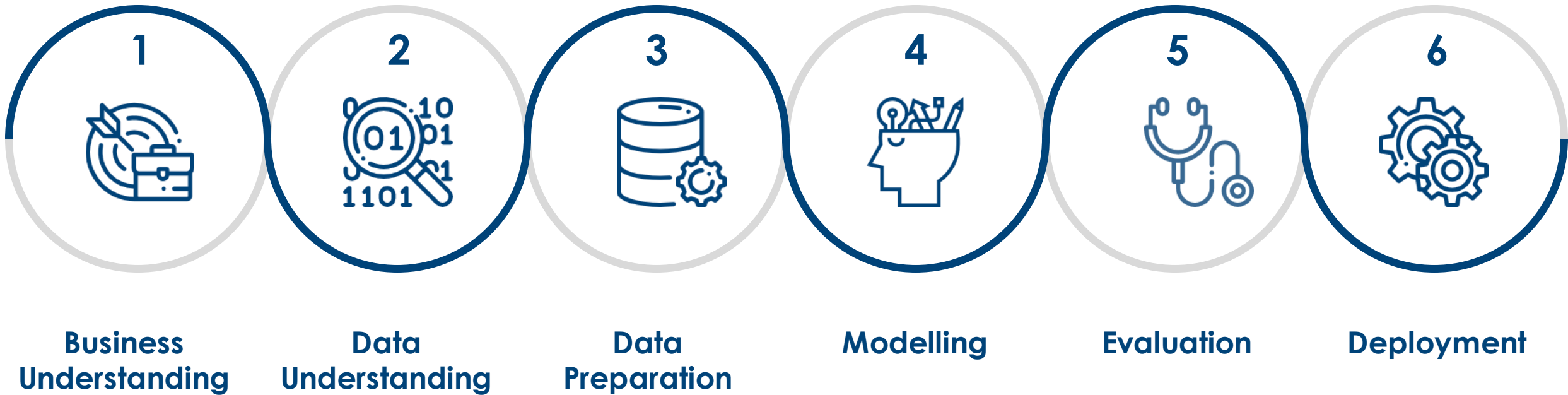
# drug



# drug

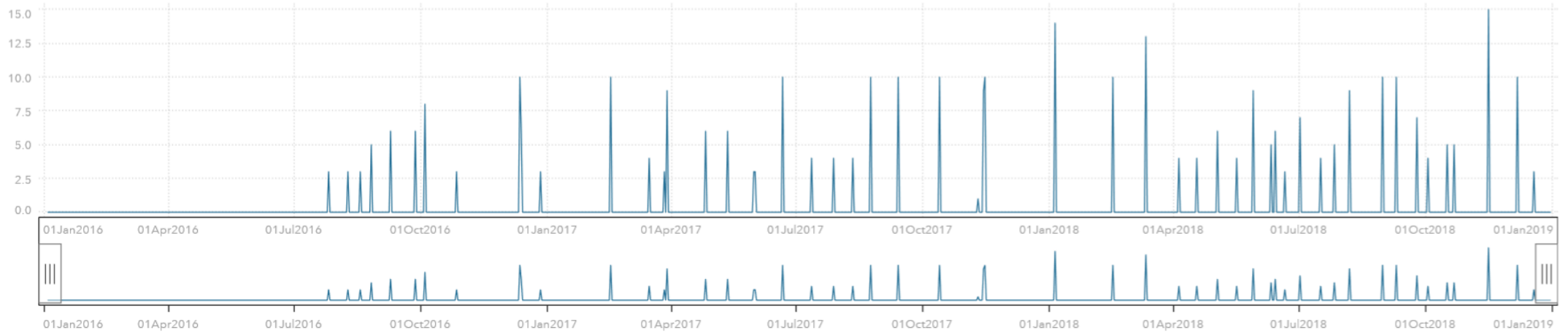
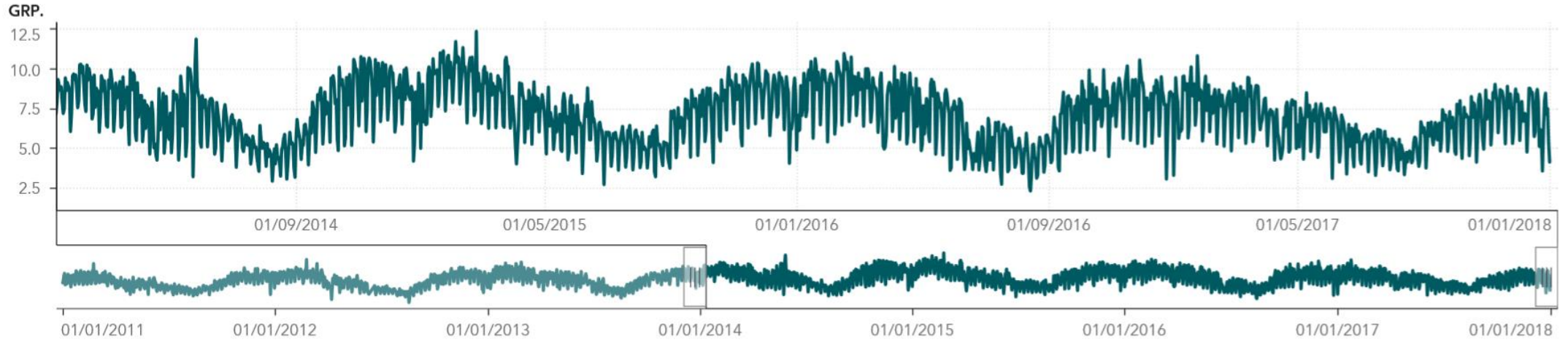


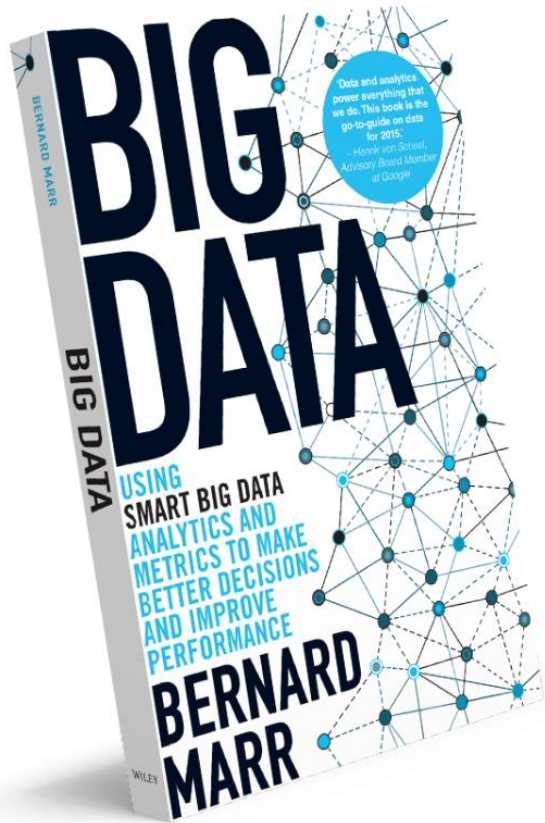
# A PROJECT ROADMAP



# Our role





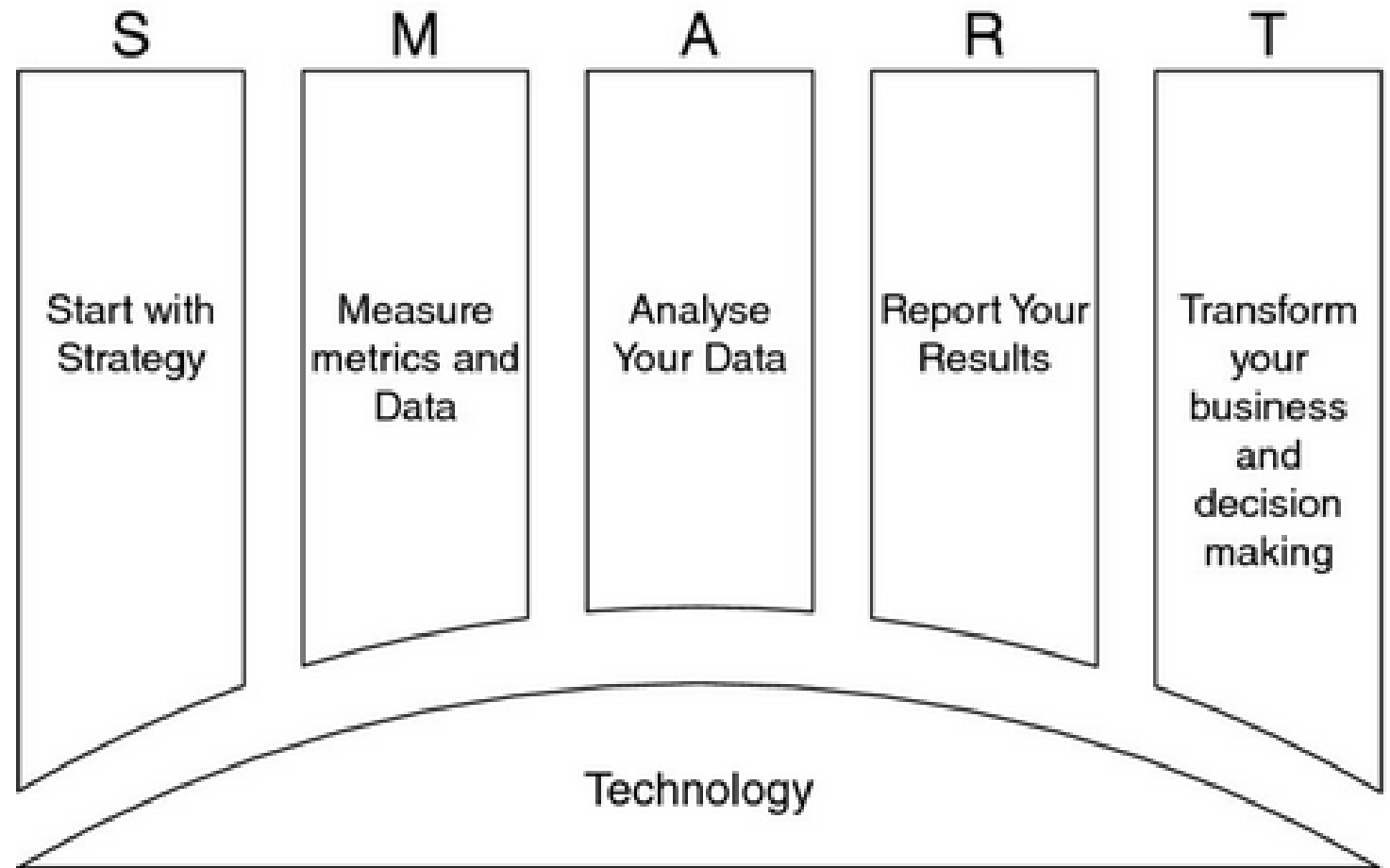


**Big Data: Using SMART Big Data, Analytics and Metrics To Make Better Decisions and Improve Performance**

Bernard Marr

ISBN: 978-1-118-96583-2

256 pages. January 2015



**STATISTICAL THINKING**





**PRESENT**



**FUTURE**





# #Estadistica, #InteligenciaArtificial y #MachineLearning

**20-27 febrero 2019**  
Fecha 

**178160**  
Tuits iniciales 

**6583**  
Tuits finales 



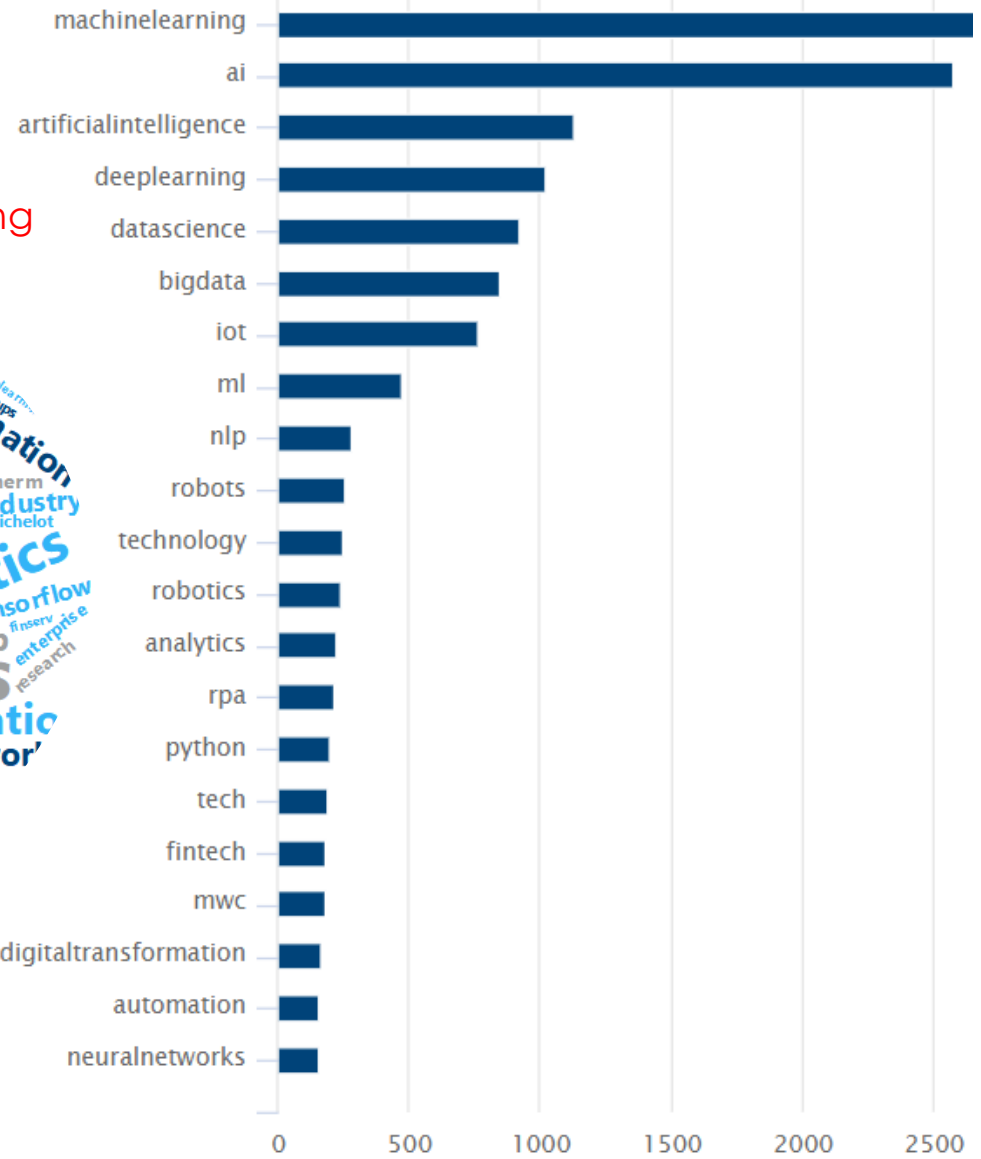
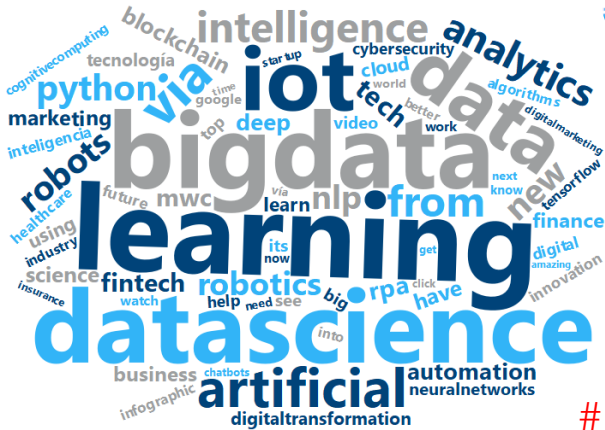
#Estadística



#MachineLearning



#InteligenciaArtificial





## TOOL



SAS<sup>®</sup> Viya<sup>™</sup>



H<sub>2</sub>O.ai



## TECNIQUE

### Classification

-Churn, Upselling, Maintenance-

### Text Analytics

- Customer Experience, NPS, Reputation -

### Demand Forecasting

- Intermittent demand, massive forecasts -

### Diagnosis and Follow-up

- Banking -

### Interpretability

- Client Management, Campaigns -

### Optimization

- Pricing, Fraud Detection, Campaigns -



## TO DO

End-To-End

### Seniority

- Experience! -

### New Data Sources

Open / External data

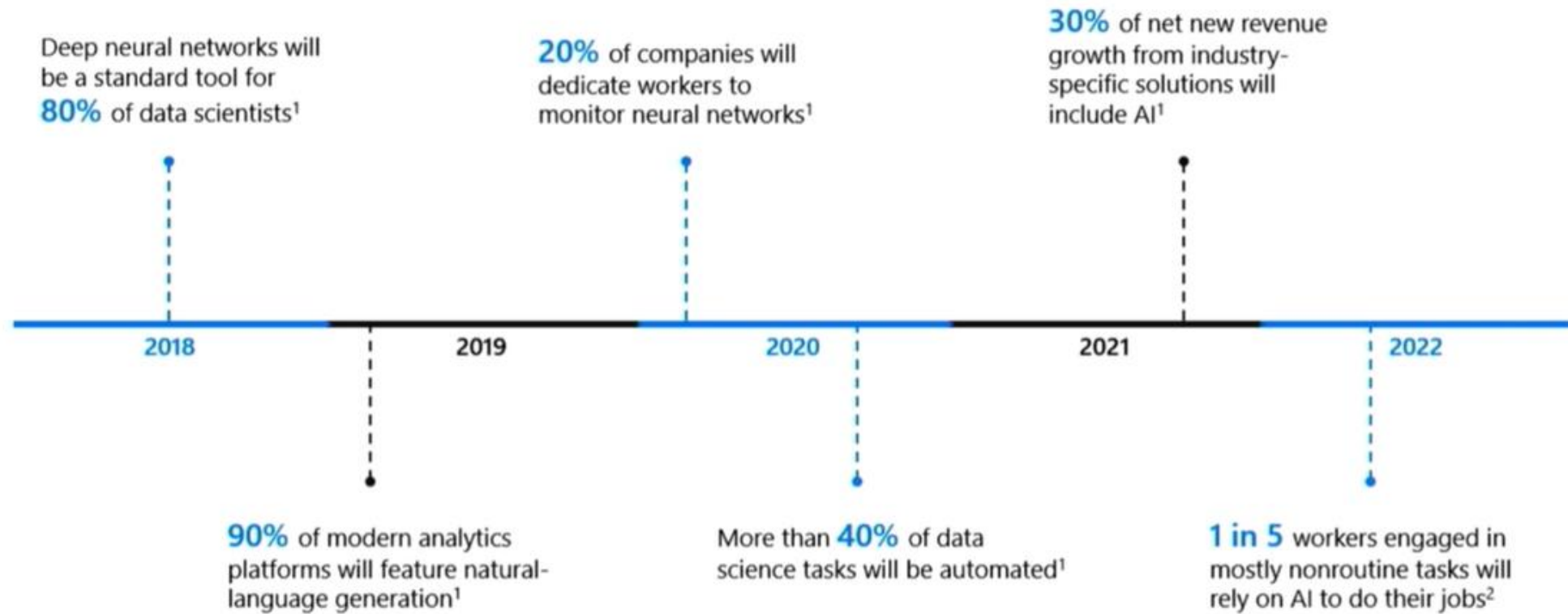
### Analytics Translators

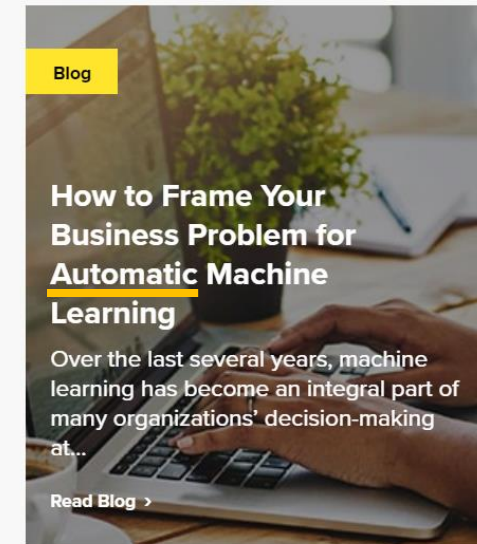
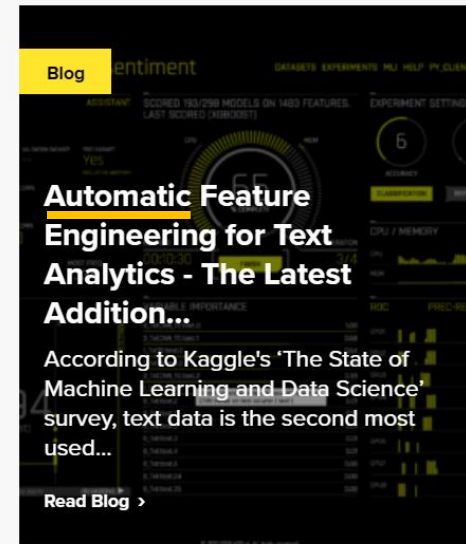
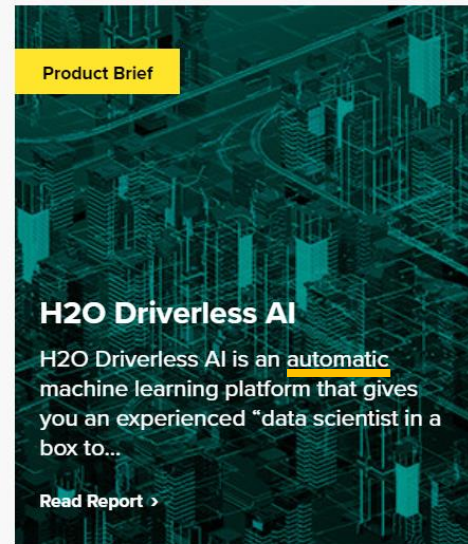
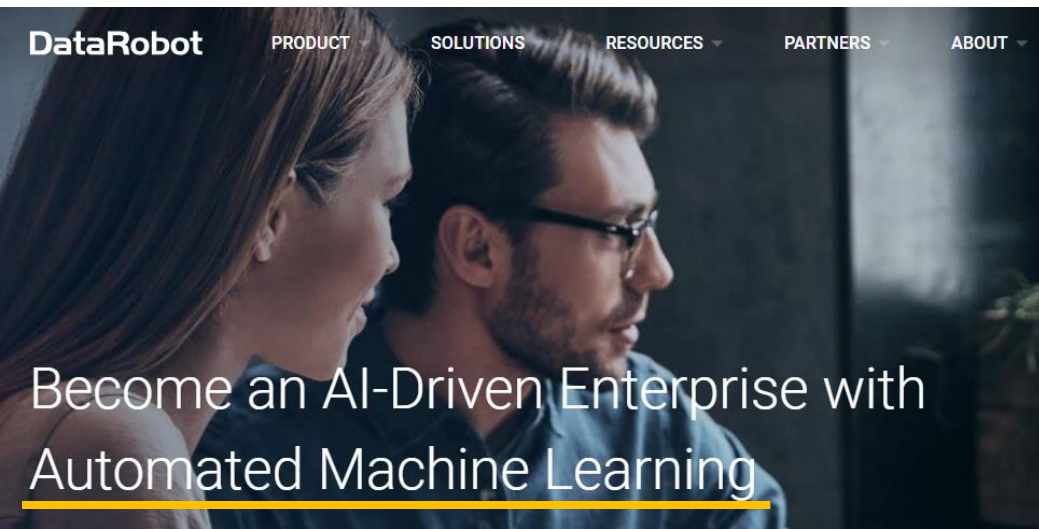
Business knowledge

# 100 Data and Analytics Predictions Through 2021

Published: 20 June 2017 ID: G00332376

## Advanced Analytics and Data Science





**H2O.ai is Democratizing Artificial Intelligence**



Amazon SageMaker

Gartner Magic Quadrant for Data Science and Machine Learning Platforms (Source: Gartner)



# Our mission



# Q & A





[www.innova-tsn.com](http://www.innova-tsn.com)



<https://twitter.com/innovatsn>



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[Canal YouTube Innova-tsn](#)

Si quieres formar parte de nuestro equipo, **envíanos tu CV**  
**[recruiting@innova-tsn.com](mailto:recruiting@innova-tsn.com)**







**Thank you**

**Living in Real Time**

Data followers | Solutions Leaders