



# Infrastructure Intelligence Dashboard

JAN 2024



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# MANAGEMENT TEAM

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# PROJECT DESCRIPTION

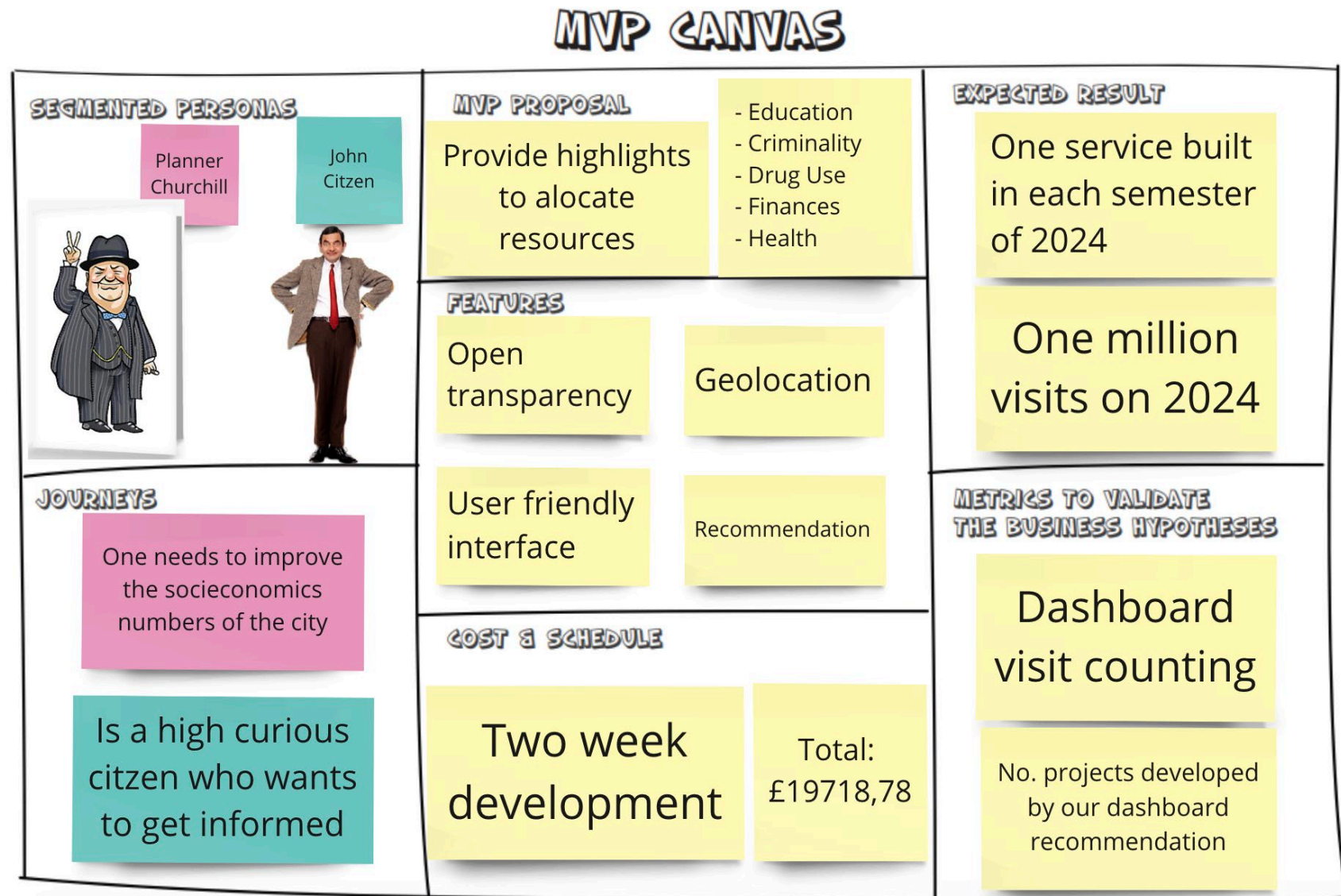
*Where would be the best location in London to allocate public resources?*

## As City Planner

*"I want To Have insights into criminality, education, financial well-being, health well-being, and drug use for each London borough so I can allocate resources in the necessary boroughs"*

## As citizen

*"I want To observe the behavior upon criminality, education, financial well-being, health well-being, and drug use for each London borough so I can be updated on the socioeconomic data of my city"*

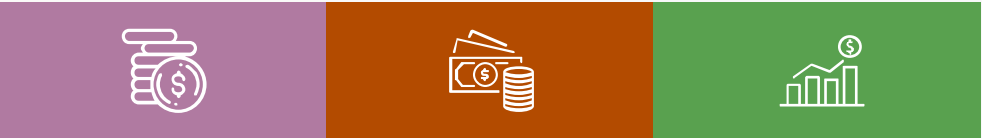


\*Caroli, P., 2017. Lean inception. São Paulo, BR: Caroli. org.

\*Villamizar, H., et. al, 2023. Identifying Concerns When Specifying Machine Learning-Enabled Systems: A Perspective-Based Approach.

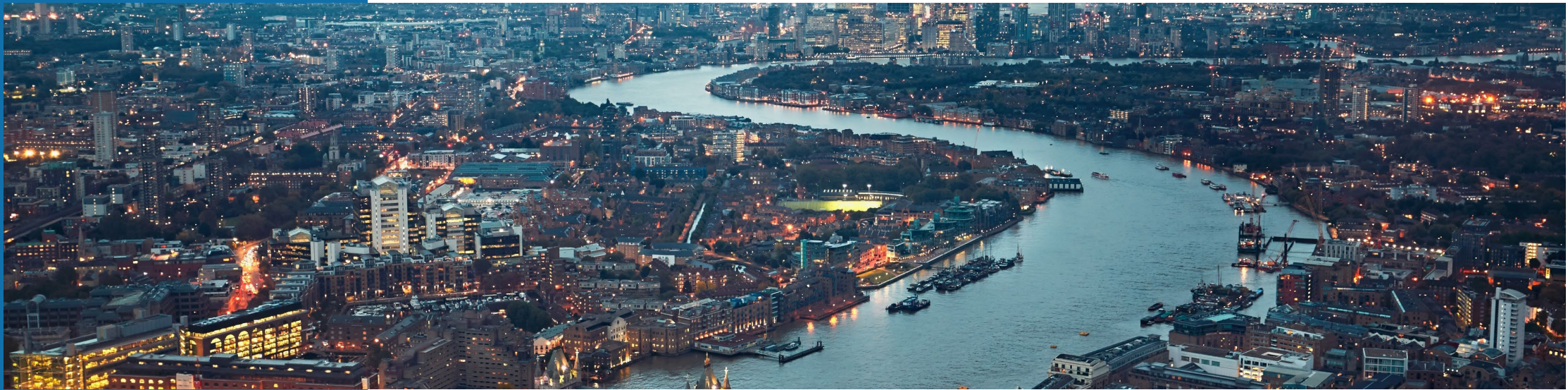


# PROJECT COST



Service category	Service type	Region	Description	Estimated monthly cost
Compute	Virtual Machines	UK South	1 B32ls v2 (32 vCPUs, 64 GB RAM) x 730 Hours (Pay as you go), Windows (License included), OS Only; 0 managed disks – S4; Inter Region transfer type, 5 GB outbound data transfer from UK South to East Asia	£847,74
Databases	Azure Database for MariaDB	UK South	General Purpose Tier, 1 Gen 5 (32 vCore) x 730 Hours, 5 GB Storage, 100 GB Additional Backup storage - LRS redundancy	£1.865,61
Compute	App Service	UK South	Standard Tier; 1 S3 (4 Core(s), 7 GB RAM, 50 GB Storage) x 730 Hours; Windows OS; 0 SNI SSL Connections; 0 IP SSL Connections; 0 Custom Domains; 0 Standard SLL Certificates; 0 Wildcard SSL Certificates	£285,43
Software	Data Vizualization Tableau		License	£720,00
Work Force				£12.000,00
Training				£1.000,00
Maintenance	Monthly			£1.000,00
Other costs				£2.000,00
		Total		£19.718,78





# DATASETS

London Datastore

01

## Health Wellbeing

Data regarding mental and physical health of Londoners

02

## Financial Security

Data regarding the financial situation of Londoners

03

## Education

Data regarding vocational qualification of Londoners

04

## Criminality

Data regarding crime rates around London

05

## Drug Use

Data regarding the type of drugs used around London



# DATA PREPARATION

Dashboard

## Premises

Organized by Borough

Time Range: 2016-2022

### Health Wellbeing

- Select London and Borough rows
- Split years
- Select the following indicators:
  - Good physical health (no long-term limiting illness or disability)
  - A worthwhile and satisfying life
  - Healthy behaviors - healthy weight (adults)
  - Healthy behaviors - physically active adults

### Criminality

- Create a total crime column
- Select Major Text, Borough, and Count columns
- Transport the table
- Aggregate historical dataset and 24 past months' dataset

### Financial Security

- Select the following indicators:
  - Rough Sleepers (%) - Calculated
  - Up-to-date with household bills
  - Unemployment rate
  - Reducing local income inequality (%)
- Estimate the years 2016 and 2017

### Drug Use

- Select the indicators: drug-misuse-borough
- Average and standard deviation calculation from the years 2006 to 2011.
- Project the years 2016-2022 for borough.

### Education

- Select London and Borough rows
- Used "Qualifications-of-working-age-NVQ" indicator
- Add the year column in the tab sheet from 2016 up to 2021
- Select the following indicators:
  - NVQ4+ - percent,
  - NVQ3 - percent,
  - NVQ2 - percent,
  - NVQ1 - percent,
  - NVQ0 - percent
- Estimate the year 2022.



# DATA MODEL

## Data sheet

Questions were addressed and included the following topics:

- Purpose and Origin
- Composition and Representation
- Data Characteristics and Labeling
- Ethical and Legal Compliance
- Collection Process and Validation
- reprocessing and Data Integrity
- Usage and Application
- Distribution and Accessibility
- Maintenance and Updates
- Preprocessing and Data Integrity



Datasheet.pdf

Criminality	
year	integer
<u>borough_name</u>	varchar
violent_crimes_cluster	integer
property_crimes_cluster	integer
societal_order_crimes_cluster	integer
individual_safety_crimes_cluster	integer
crimes	integer

DrugUse	
year	integer
<u>borough_name</u>	varchar
drug_users	double
cannabis	double
cocaine	double
other_drugs	double

Health	
<u>borough_name</u>	varchar
year	integer
exercices_perc	double
wellbeing_perc	double
mental_perc	double
obesity_perc	double
cronic_deseases	double

Borough	
<u>borough_name</u>	varchar

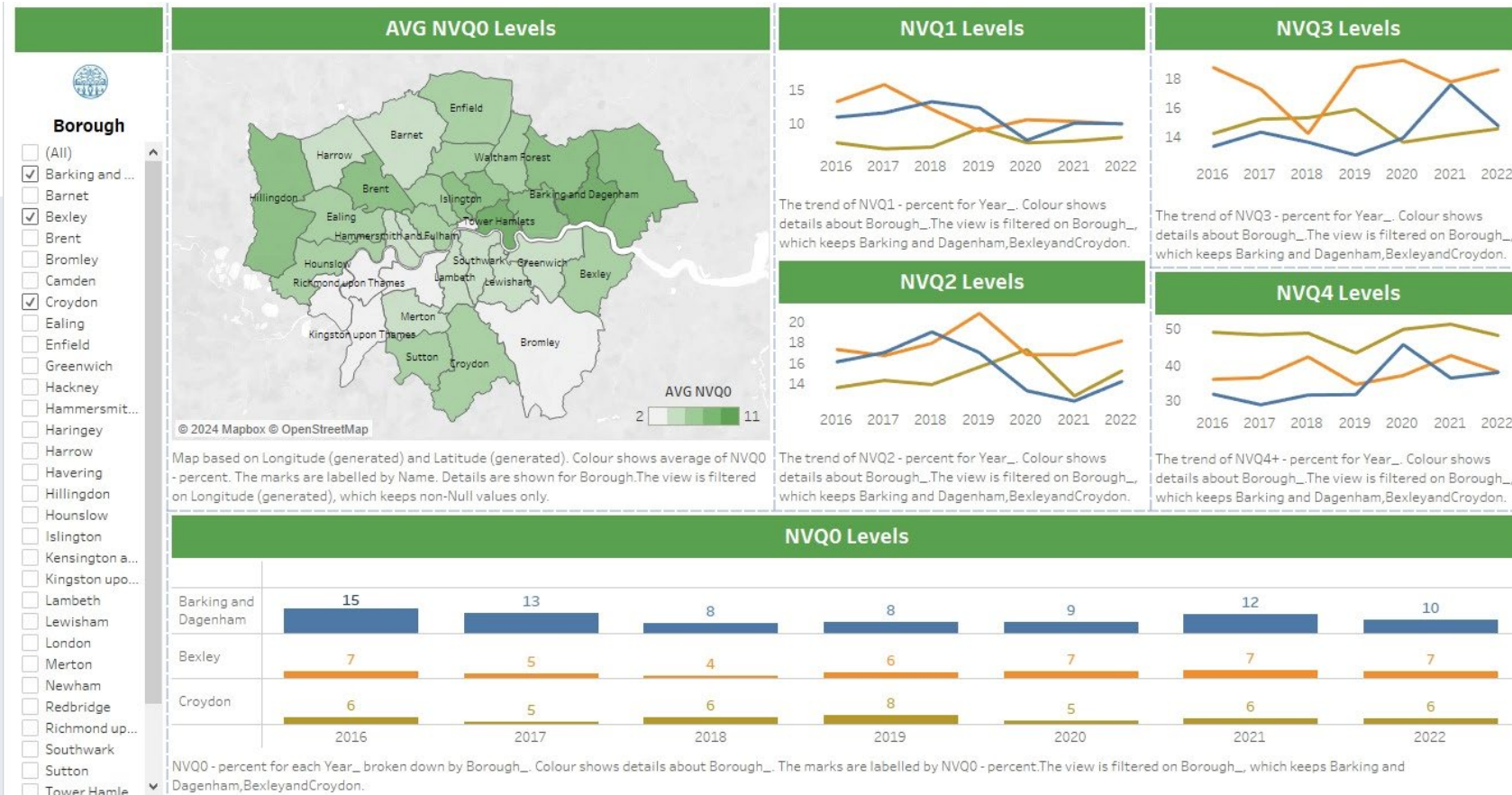
Financial	
year	integer
<u>borough_name</u>	varchar
rough_sleepers	integer
rough_sleepers_per	double
up_to_date_with_household_bills	double
unemployment_rate	double
reducing_local_income_inequality_perc	double

Education	
<u>borough_name</u>	varchar
year	integer
NVQ4_plus_perc	double
NVQ3_perc	double
NVQ2_perc	double
NVQ1_perc	double
NVQ0_perc	double





# DASHBOARD



## 5 views

- Health Wellbeing
- Financial Security
- Education
- Criminality
- Drug Use

## Accessibility

- Color blindness

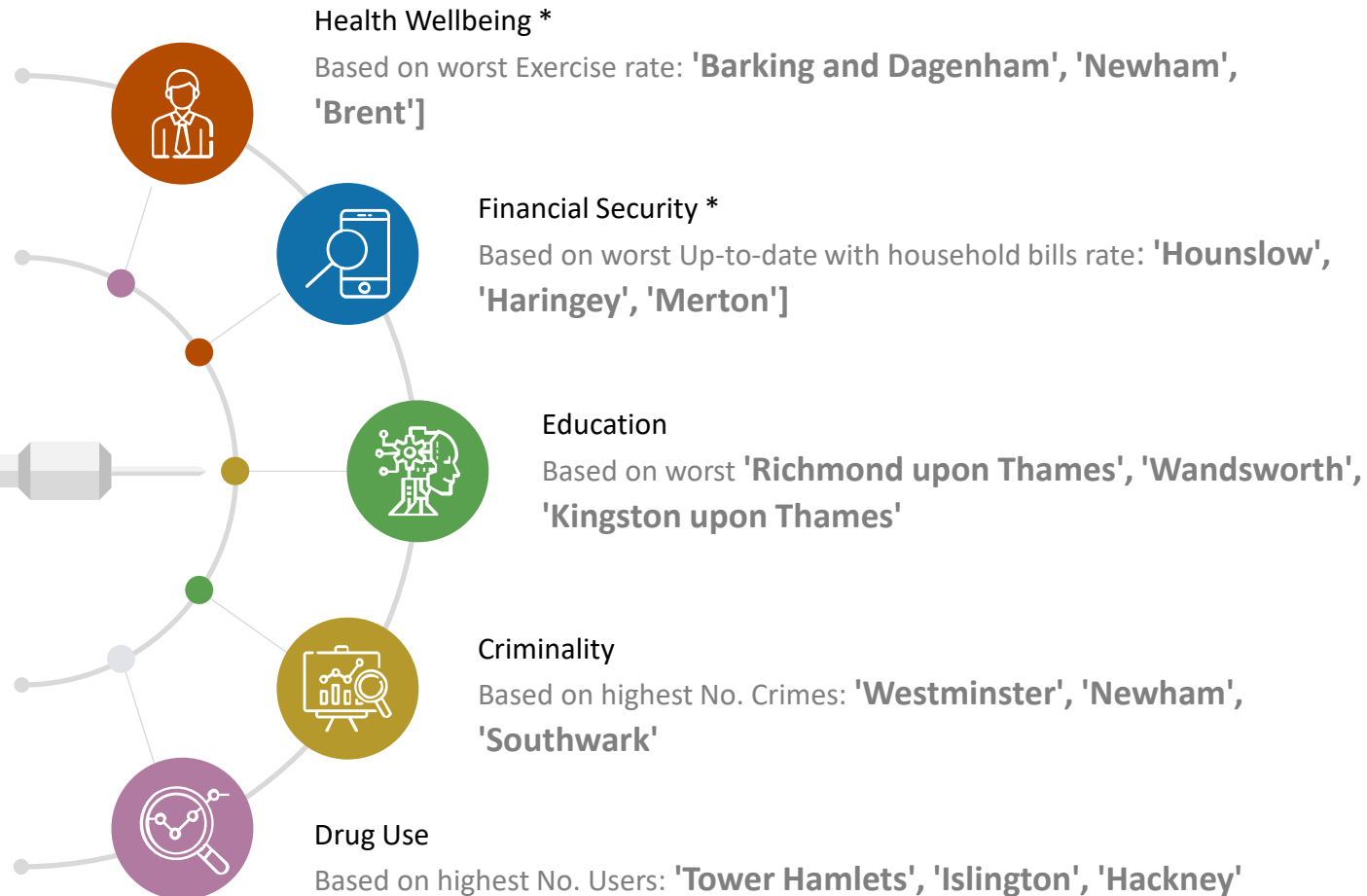


- Chart Descriptions
- Reading Experience



# RECOMMENDATIONS

*\* Correlation analyses*

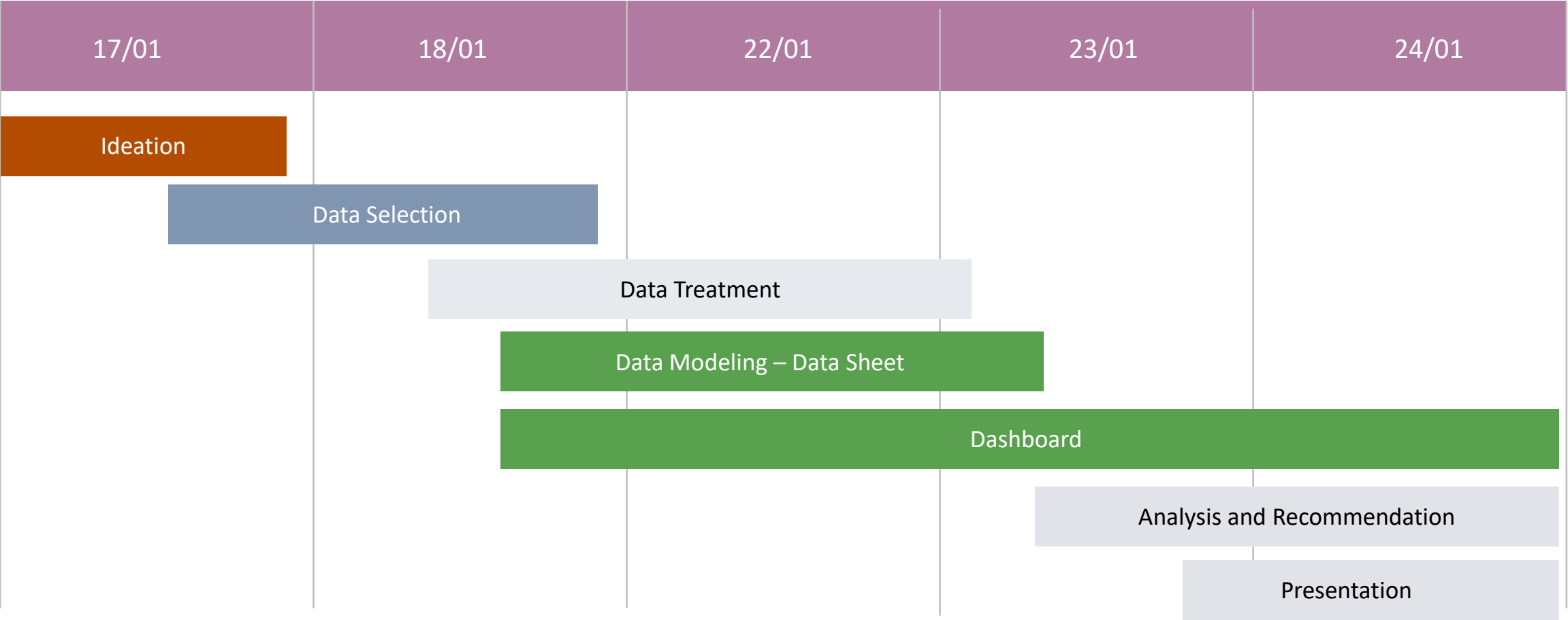




# OUR WORK

Agile Team

- *Daily Meetings*
- *Working in Pairs*





T H A N K   Y O U