THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# AI & DATA 4 GOOD

**Webinar:**
UK Authority

MEET THE SPEAKER


## Matt Wicks

THE VIRTUAL FORGE CO-CEO

# Our clients & offices

## PUBLIC SERVICE CLIENTS

BBC NHS NetworkRail

## PRIVATE CLIENTS

JAGUAR LAND ROVER Ford VOLVO MAGNAFLUX ITW bam nuttall

KELDA dynamics LUMON Delta Capita wsd... POOL Re canopius

Ketchum IN THE STYLE logitech NIGHTCAP teampeople ABInBev

DREAMTEK fisco Sterling GT GARDINER &THEOBALD Meta SEGA

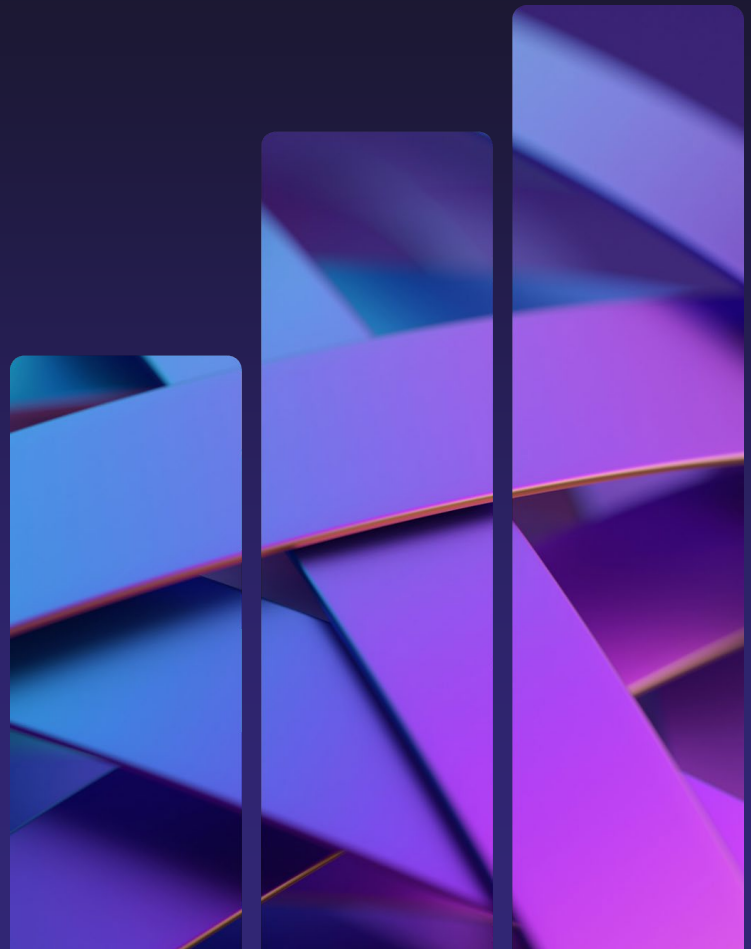
Google PEUGEOT COMMERZBANK CITROËN Adobe

## OUR OFFICES

LONDON | BATH | LISBON | PHILADELPHIA

THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# WHAT IS
# “ THE DATA PROBLEM ” ?



THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# Data Problems: Making them your own

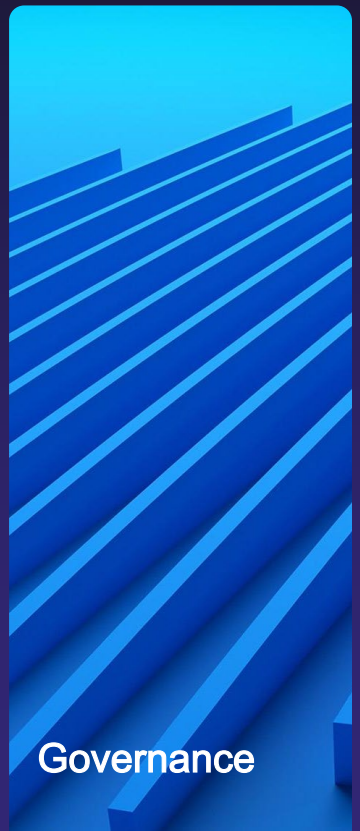
Solving problems with data in the public sector requires layers of collaboration across agencies and departments.

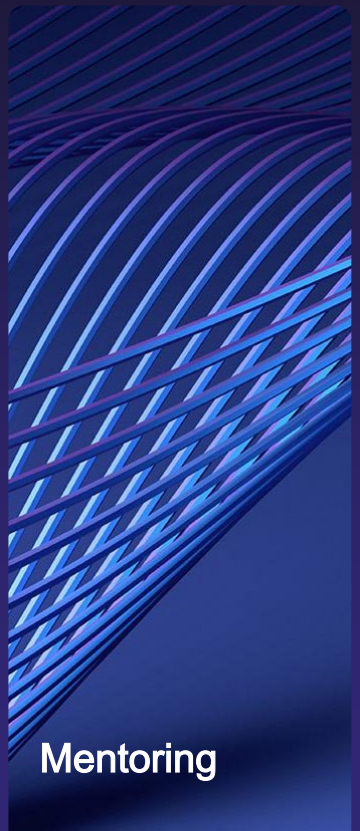
It's a cliche but its a ‘people problem’ as much as a technical problem.

**IT ALL STARTS WITH PEOPLE**

THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# Our Approach

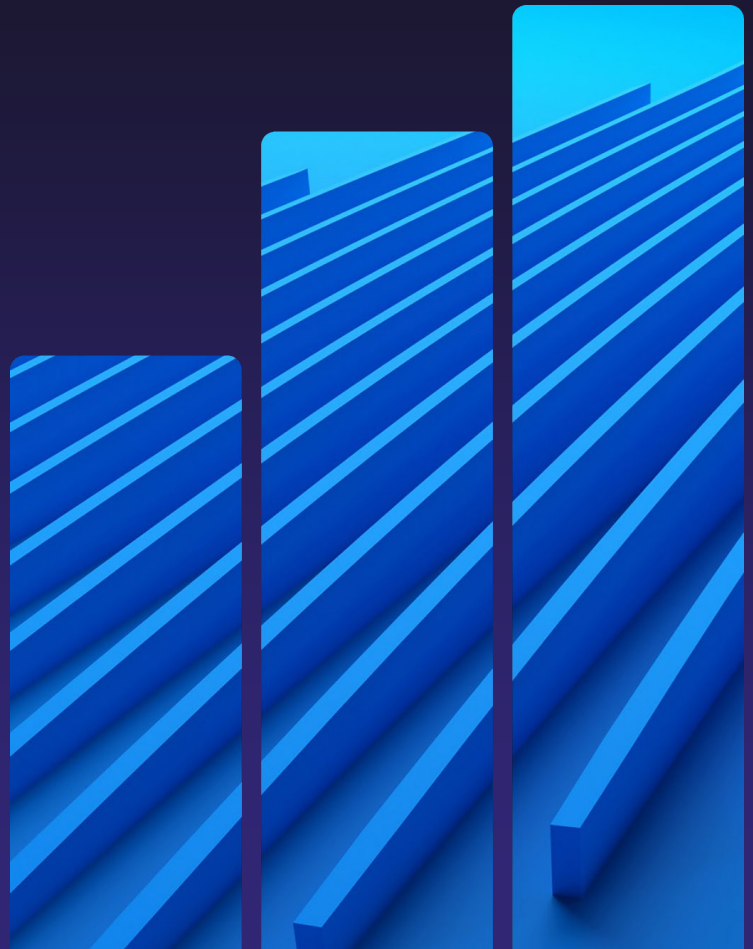




THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# Governance

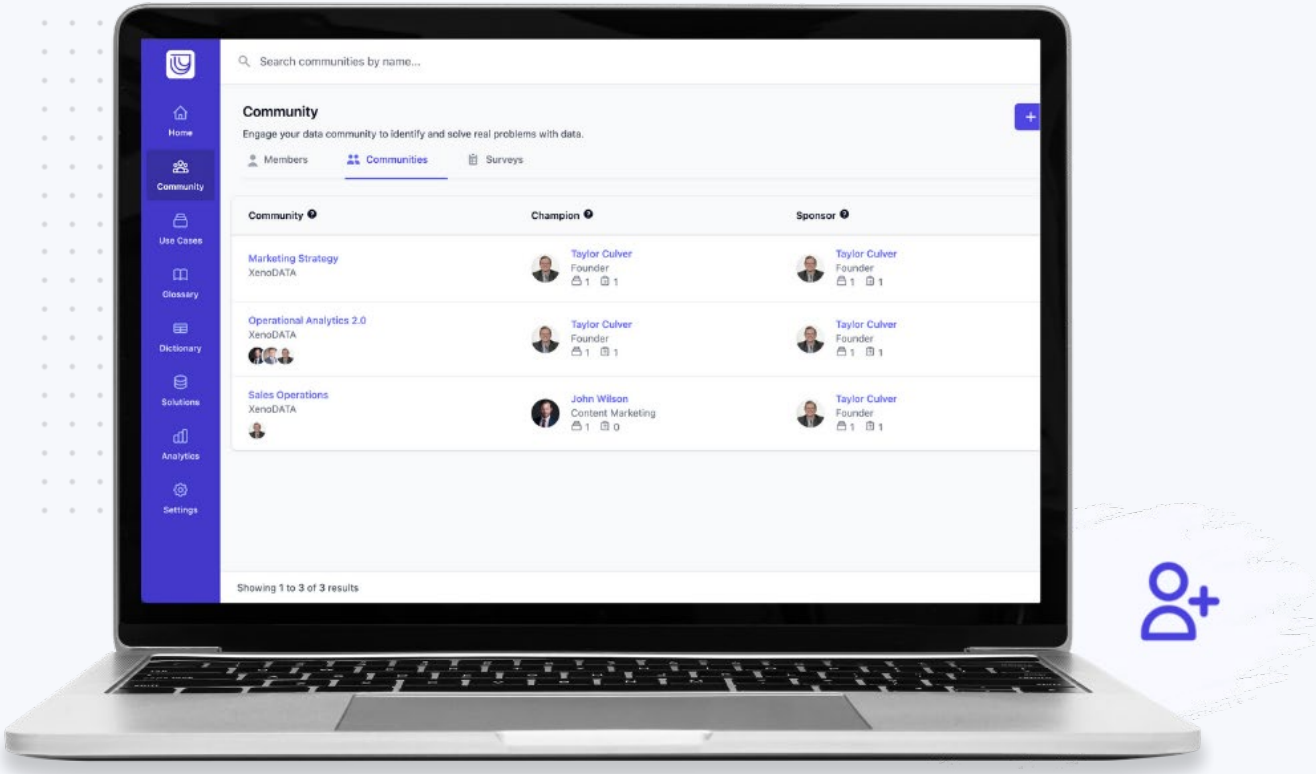
Allows you to identify proper use cases, link these to communities and specific data elements and assign responsibilities to data owners at a granular level



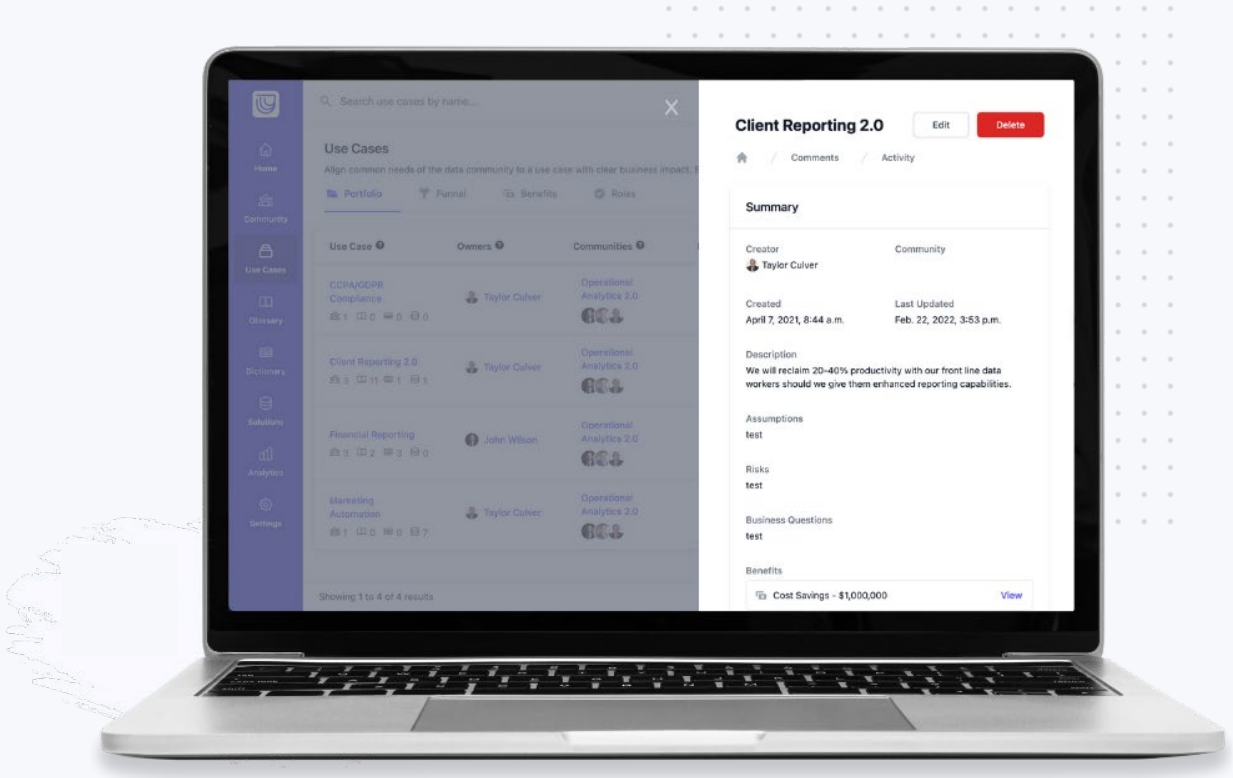
DataWorkbench

https://xenodata.com/

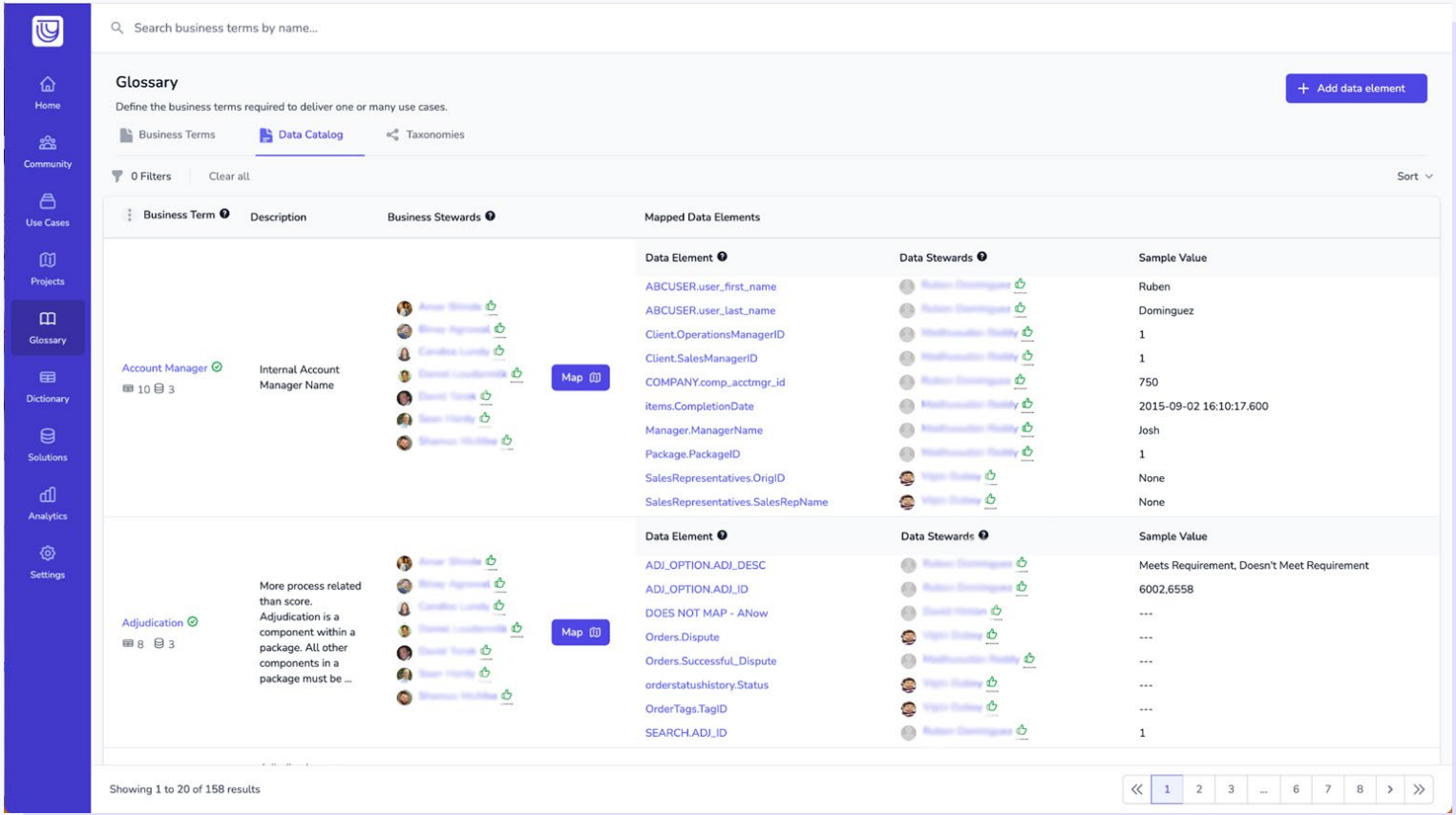
# Governance


Search communities by name...
Home
Community
Use Cases
Glossary
Dictionary
Solutions
Analytics
Settings
Community
Engage your data community to identify and solve real problems with data.
Members
Communities
Surveys
Community
Champion
Sponsor
Marketing Strategy
XenoDATA
Taylor Culver
Founder
Taylor Culver
Founder
Operational Analytics 2.0
XenoDATA
Taylor Culver
Founder
Taylor Culver
Founder
Sales Operations
XenoDATA
John Wilson
Content Marketing
Taylor Culver
Founder
Showing 1 to 3 of 3 results

# Use Case Management



# Data Catalog

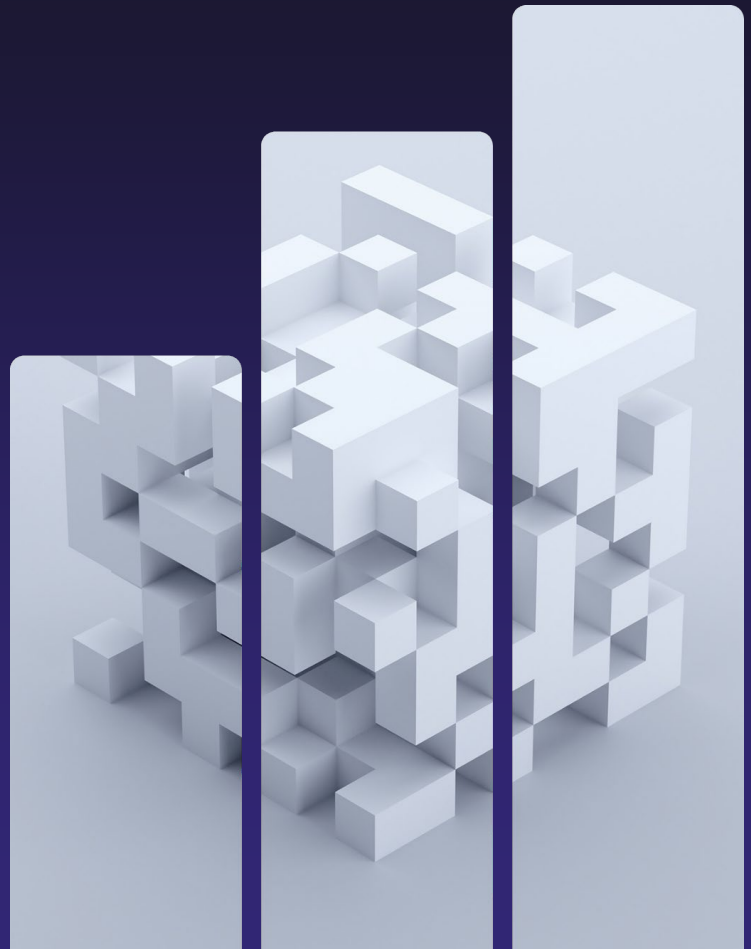


THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

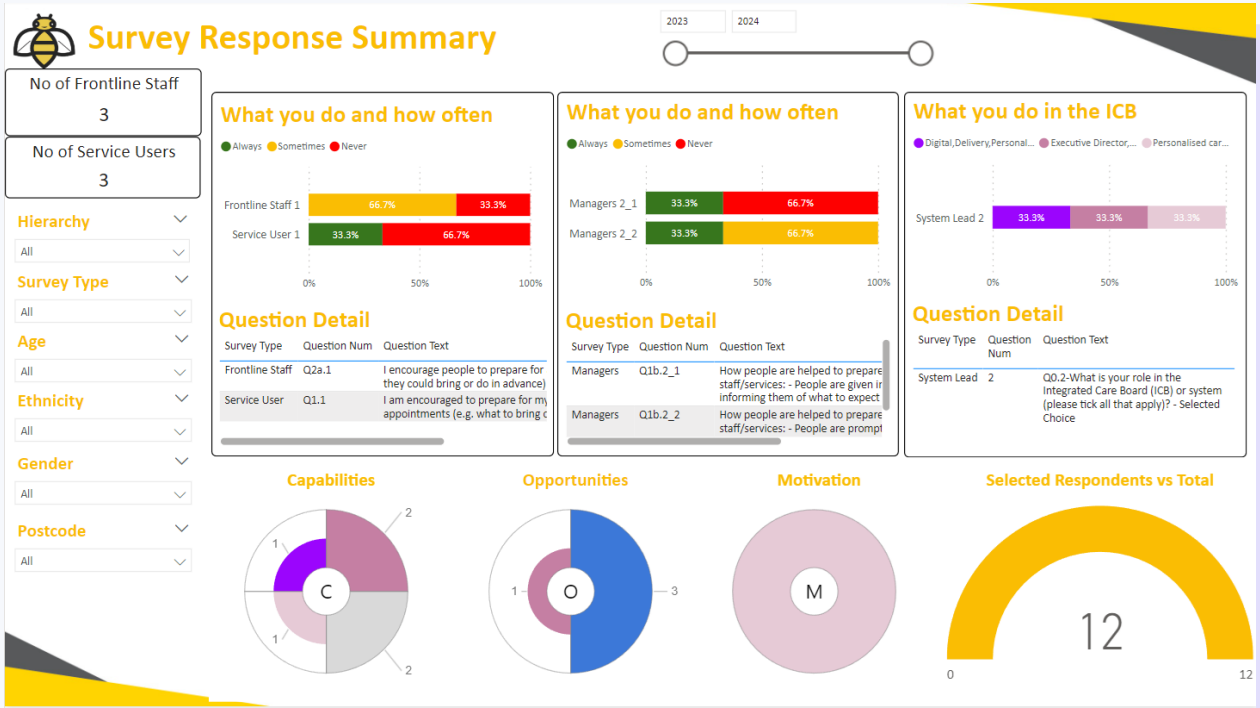
# Enablement

Understanding how your data maps to results is key to success, but so is making the data approachable and comprehensible.

Often overlooked is consistency in delivery of reports.

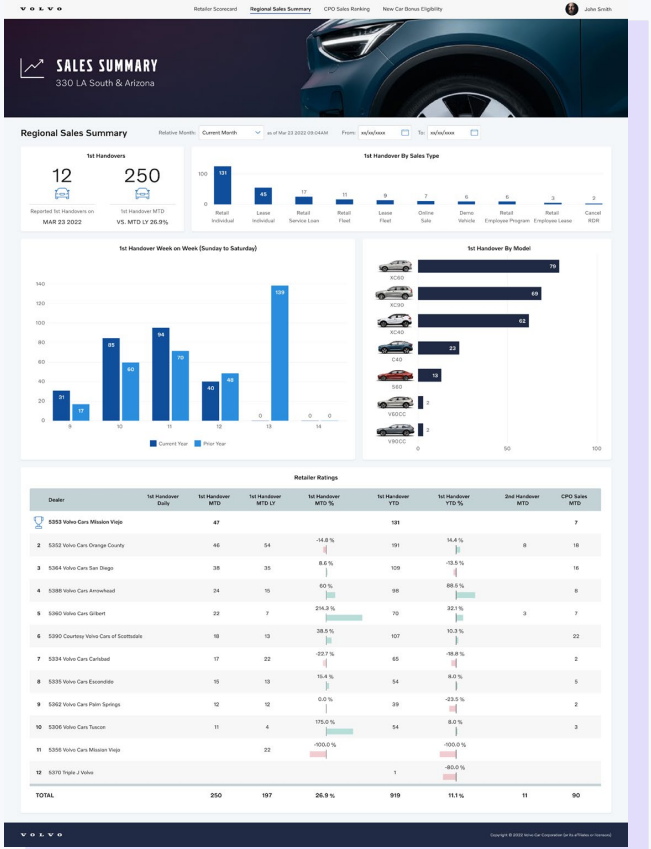


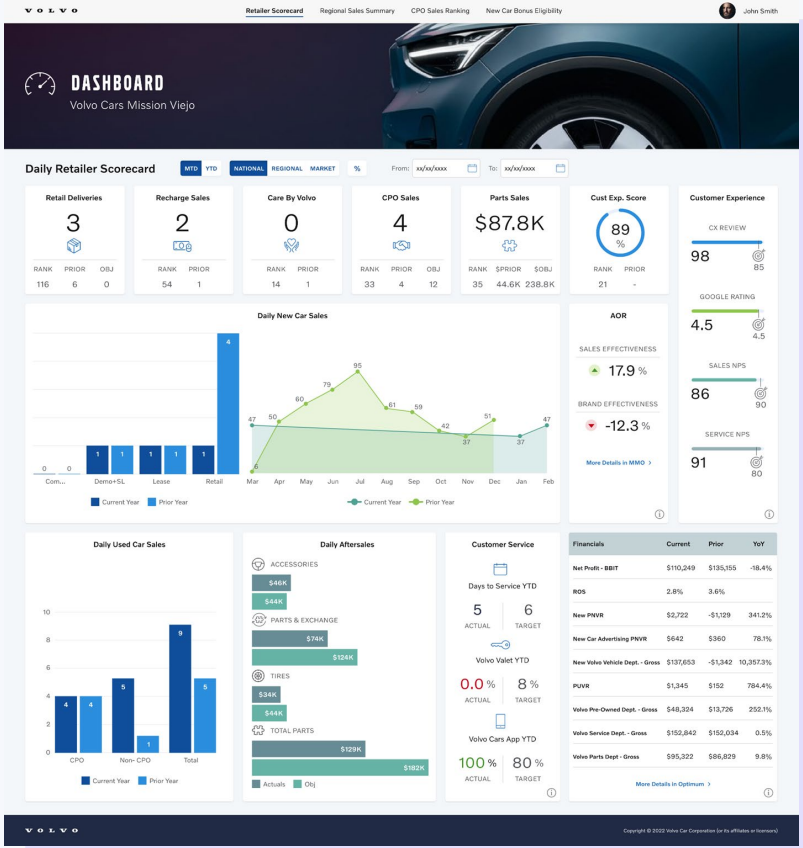
NHS


Survey Response Summary
2023
2024
No of Frontline Staff
3
No of Service Users
3
Hierarchy
All
Survey Type
All
Age
All
Ethnicity
All
Gender
All
Postcode
All
What you do and how often
Always Sometimes Never
Frontline Staff 1
Service User 1
66.7%
33.3%
33.3%
66.7%
0%
50%
100%
Question Detail
Survey Type
Question Num
Question Text
Frontline Staff
Q2a.1
I encourage people to prepare for they could bring or do in advance)
Service User
Q1.1
I am encouraged to prepare for my appointments (e.g. what to bring
What you do and how often
Always Sometimes Never
Managers 2_1
Managers 2_2
33.3%
66.7%
33.3%
66.7%
0%
50%
100%
Question Detail
Survey Type
Question Num
Question Text
Managers
Q1b.2_1
How people are helped to prepare staff/services: - People are given ir informing them of what to expect
Managers
Q1b.2_2
How people are helped to prepare staff/services: - People are prompt
What you do in the ICB
Digital,Delivery,Personal...
Executive Director,...
Personalised car...
System Lead 2
33.3%
33.3%
33.3%
0%
50%
100%
Question Detail
Survey Type
Question Num
Question Text
System Lead
2
Q0.2-What is your role in the Integrated Care Board (ICB) or system (please tick all that apply)? - Selected Choice
Capabilities
C
1
2
1
2
Opportunities
O
1
3
Motivation
M
Selected Respondents vs Total
12
0
12

THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# We can build beautiful reports



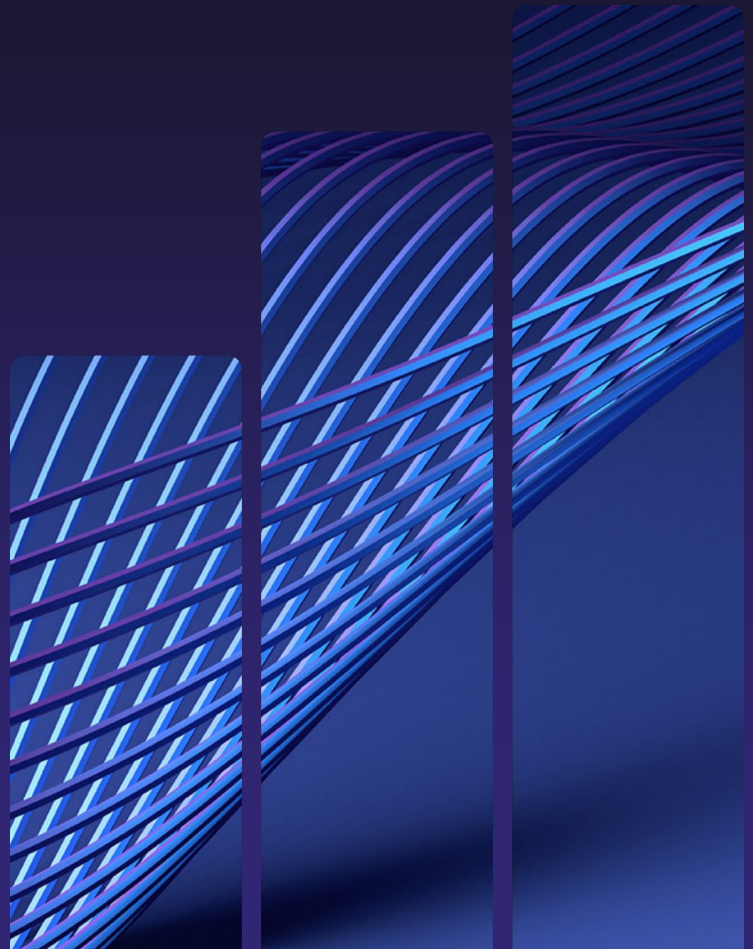



THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# Mentoring:
# Building sustainable in-house skills

Having a trusted partner to lean on in order to help is important. We have mentoring programmes that we run which focus very much on “what works”.

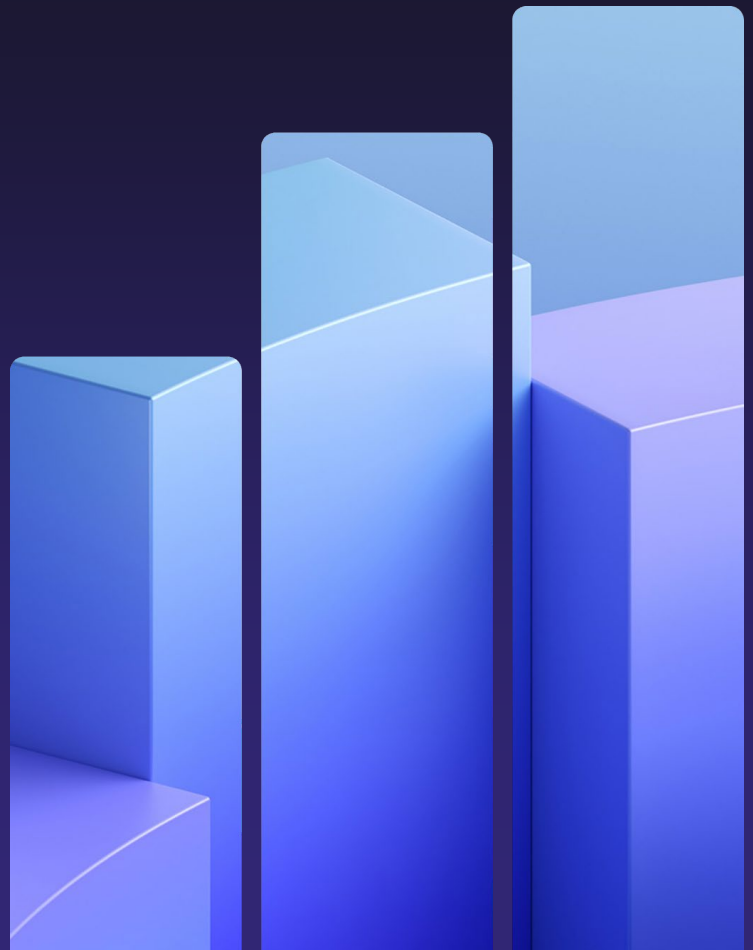
Sometimes these are an hour every few weeks, sometimes these are a burst at the start to get you going and then a supporting person you can ask questions of.



The Power in BI - Building Better Reports with Better (Best) Practices
Watch later
Share
EPISODE 1
Building Better Reports with Better (Best) Practices
Incorrect CALCULATE w/ Variables =
VAR _sales = SUM ( Sales[Sales] )
VAR _currentsales =
TOTALMTD (
_sales,
'Calendar'[Date]
)
RETURN
_sales
$32.5M
Revenue by Category
Revenue by Country
Revenue by Month
THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE
Watch on YouTube

THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# Custom Model Advice



THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# Dynamic Parking

Our client wanted to be able to adjust pricing based on factors such as weather, emission levels of the car, traffic, resident status, etc. We built a model which they implemented to allow them to do dynamic pricing for parking locations across the city.

Haringey LONDON

## Resident parking permit pricing across London boroughs

| | Factors used for resident parking permit pricing | | | | | | |
|---|---|---|---|---|---|---|---|
| | CO2 | # CO2 bands | Engine Size | Electric/green | Diesel | Multi-vehicle | Location |
| Barking and Dagenham | X | 7 | X | | X | X | |
| Barnet | X | 14 | X | | X | X | |
| Bexley | | | | | | | X |
| Brent | X | 3 | X | | X | X | |
| Bromley | | | | | | | X |
| Camden | X | 5 | X | | X | X | |
| Croydon | X | 5 | X | | X | X | |
| Ealing | X | 4 | X | | X | X | |
| Enfield | | | X | | | | |
| Greenwich | | | | | | X | X |
| Hackney | X | 5 | X | | X | | |
| Hammersmith | | | | | | X | |

### Illustrative example

Vehicle

Model: MINI Hatch 3Dr Cooper S 2.0SD 170 DPF StopStart EU6 6Spd

Manufacture year: 2014

Gross weight: 1655kg

Dimensions: 7.44$m^2$

Fuel type: diesel

Euro rating: Euro 6

$CO_2$: 106 g/km

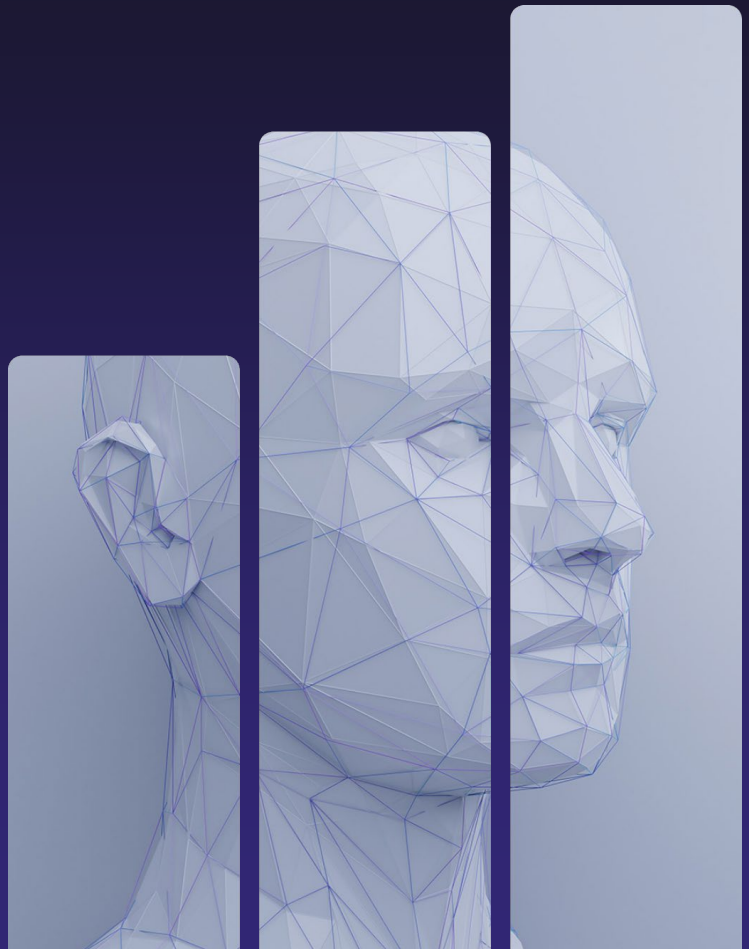
Sample pricing mechanism

- Maximum permit price: [redacted]
- 20% weight for each of $CO_2$, manufacture year, dimensions, weight, fuel type
  - maximum charge of [redacted] for each attribute ([redacted]% x [redacted])
- Weight limits: (1500, 2500)
- Dimension limits: (6.0, 9.0)
- $CO_2$ upper limit: 150
- Year limits: (2005, 2020)

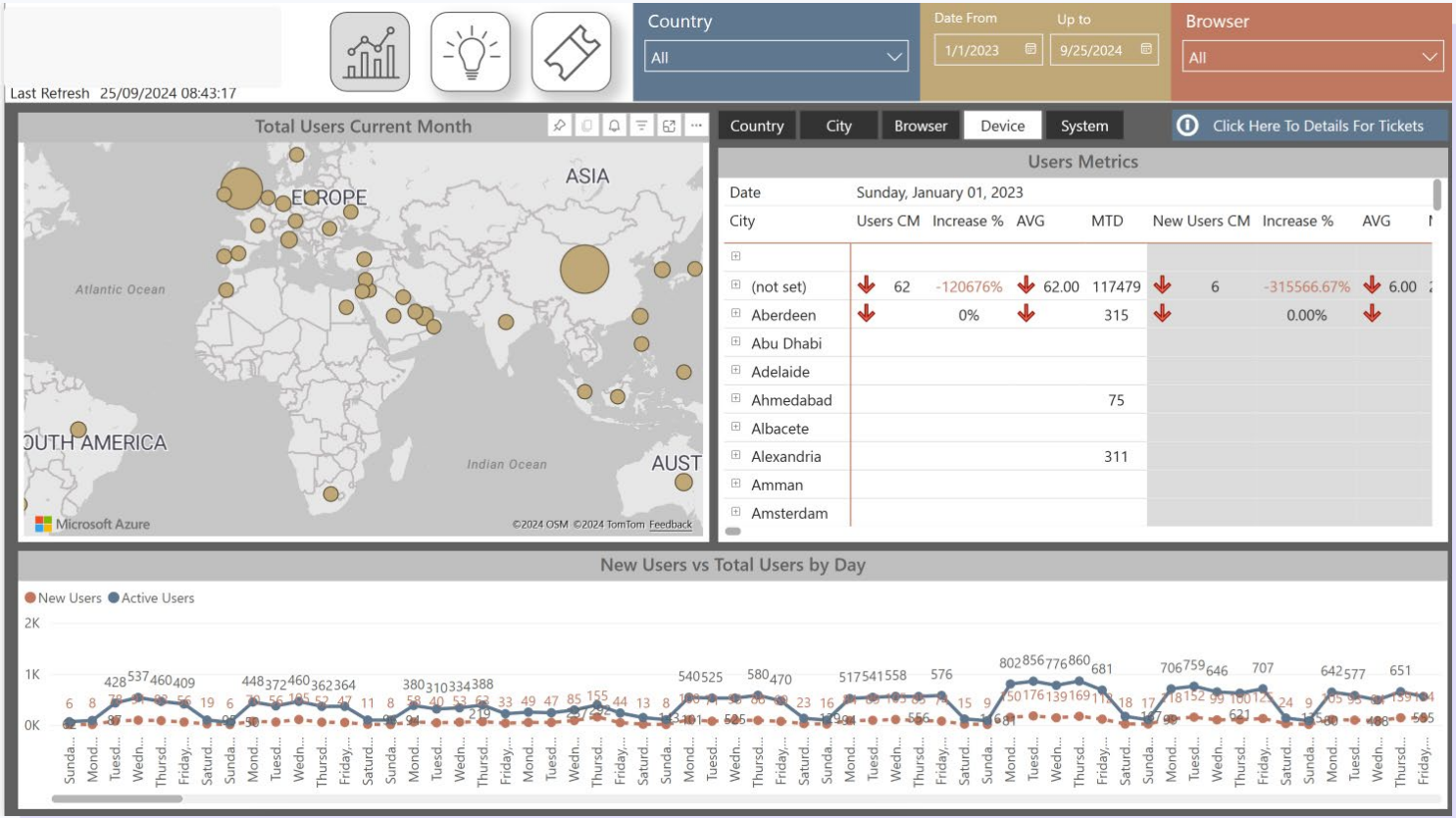
THEVIRTUALFORGE®
DATA-DRIVEN SOFTWARE

# DIY Data

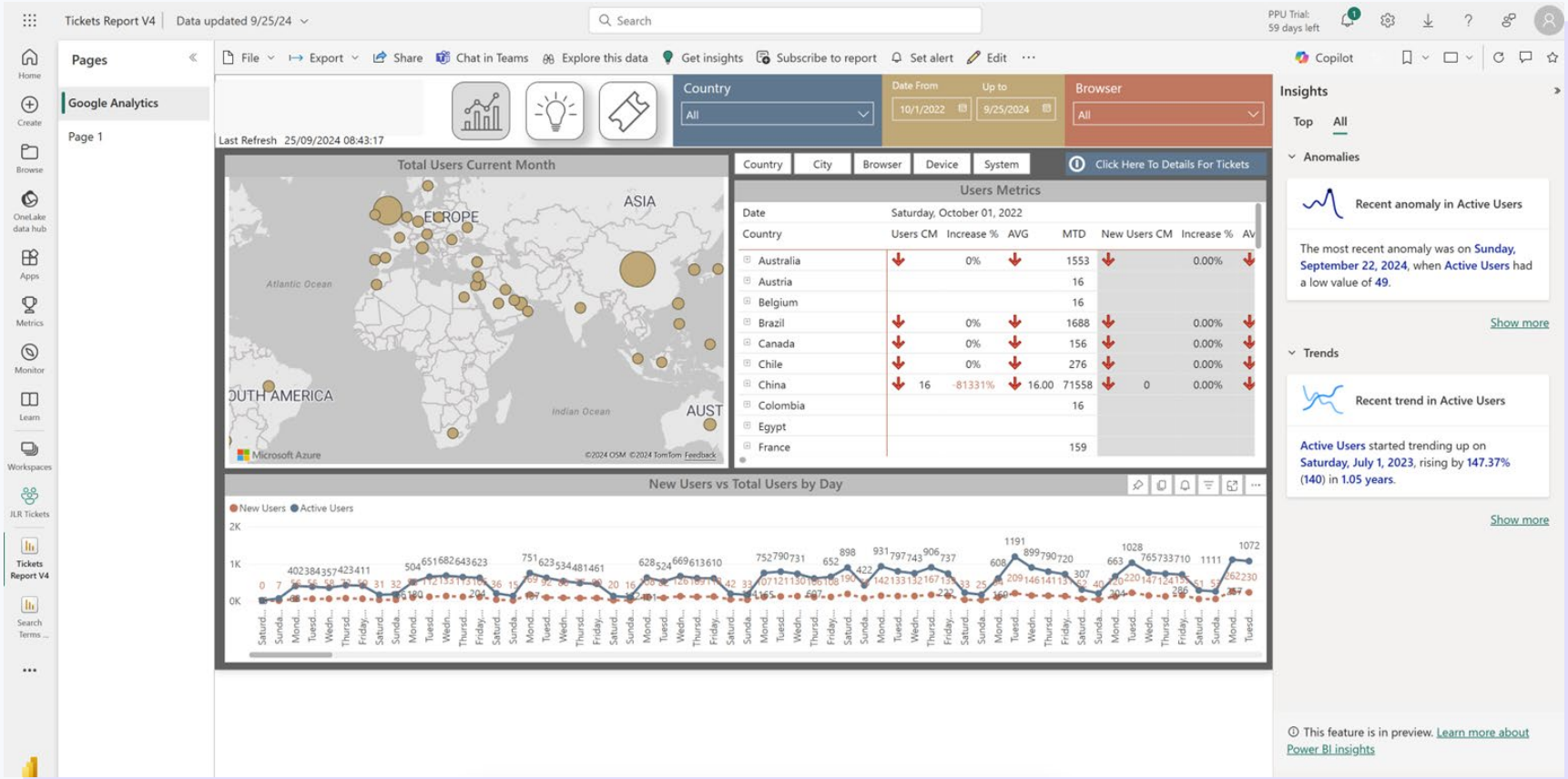
## BUT WE DON'T HAVE A DATA SCIENTIST !



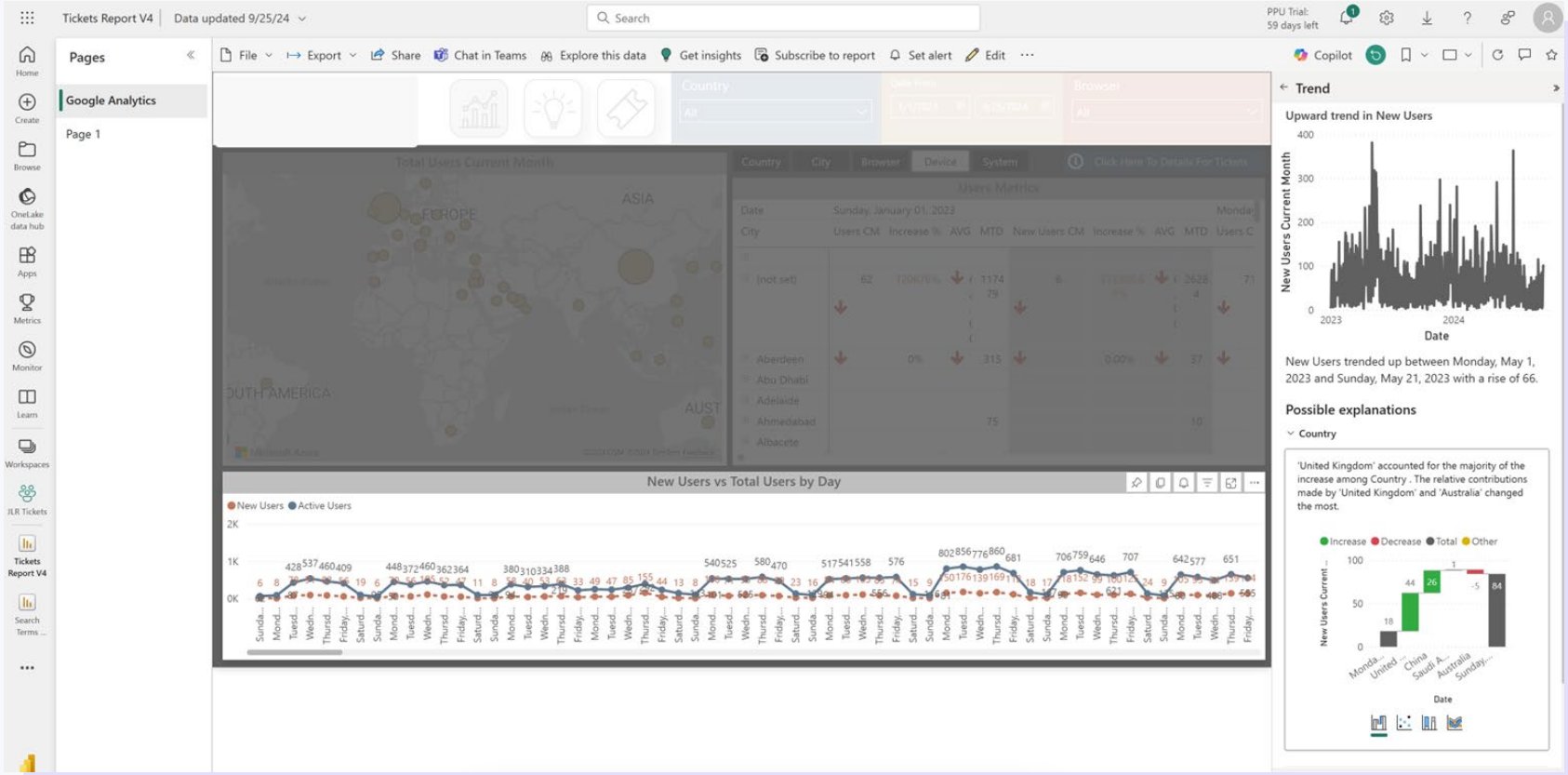
# Power BI Built in Tools



# Power BI Built in Tools

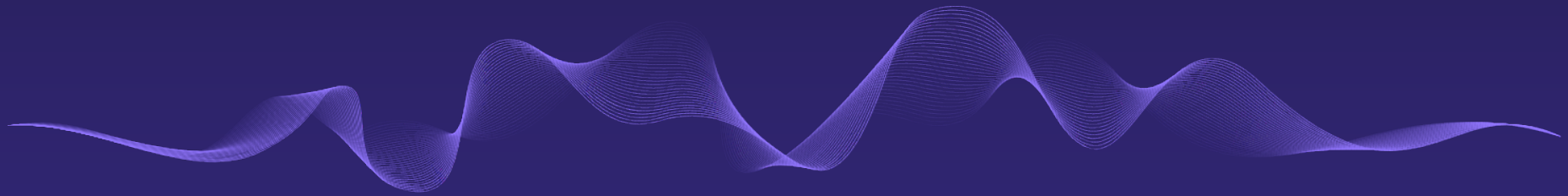


# Power BI Built in Tools



THEVIRTUALFORGE®

DATA-DRIVEN SOFTWARE

# Thank You.

connect@thevirtualforge.com | www.thevirtualforge.com