



# DATAFICATION

Fraser King  
Head of Location Insight & Mobile Identity  
Vodafone Enterprise

data is an essential resource  
for economic growth, job  
creation and societal  
progress.

*“Transportation is among the top barriers to managing a successful city in the developing world.*

*It’s the thing you have to get right if you’re going to be able to do anything else, and we’ve just deployed **the best transportation sensing network in the history of mankind**, completely by accident.”*

– he is referring to mobile phones.

Anthony Townsend, senior research scientist at the Rudin Centre for Transportation Policy and Management at New York University



# BIG DATA IS THE 'NEW OIL'...

Privacy (GDPR Compliance) & Data Security Policies are the governing functions at the heart of any DATA SOLUTION.

## OPPORTUNITY



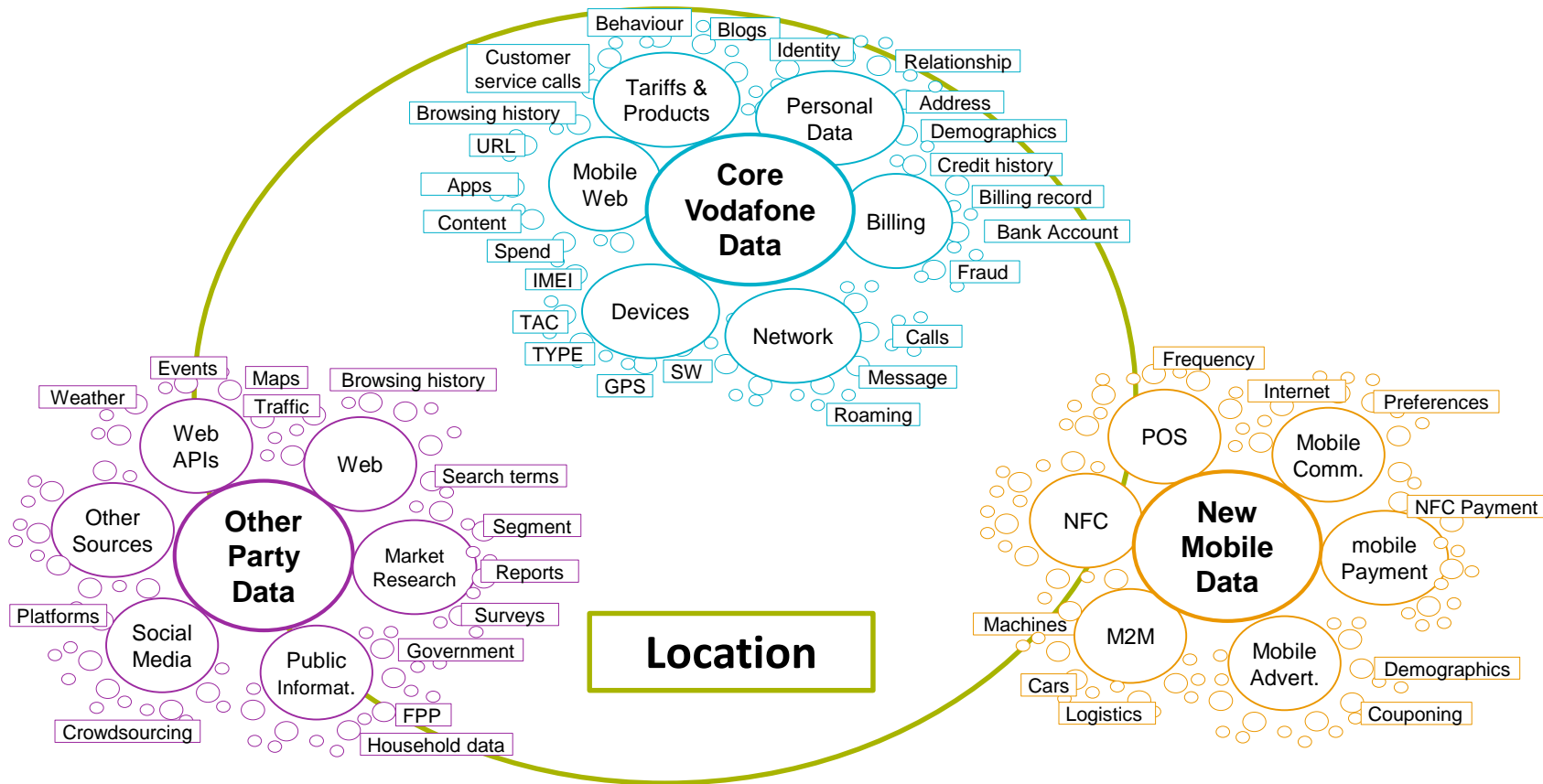
EAST TEXAS OIL FIELD

## RISK



DEEPWATER HORIZON

# WHAT'S IN THE TIN



# Improving the core business with data and analytics unlocks significant business value and new revenue

## CORE BUSINESS VALUE

### Taking data to operations

Improved performance driven by cross-functional initiatives across the core business:

- CVM
- Cost Optimisation
- Fraud Reduction
- Network Optimisation
- Customer operations & Retail Strategy

KPI uplift 18 - 24 months

## NEW PRODUCTS

### Data Services to Customers

#### Vodafone Location Insight

New products and services:

- Mobile Identity
- Footfall Analytics
- DoC
- IoT analytics
- Usage based insurance
- Connected Home

## DISTRIBUTION & LICENCING

### Data via 3<sup>rd</sup> parties

Partnerships to resell insights:

- Mott MacDonald
- Citi Logik
- TomTom

Revenue uplift 24->36 months  
@50%EBITDA





**H**ighest  
**P**aid  
**P**ersons  
**O**pinion

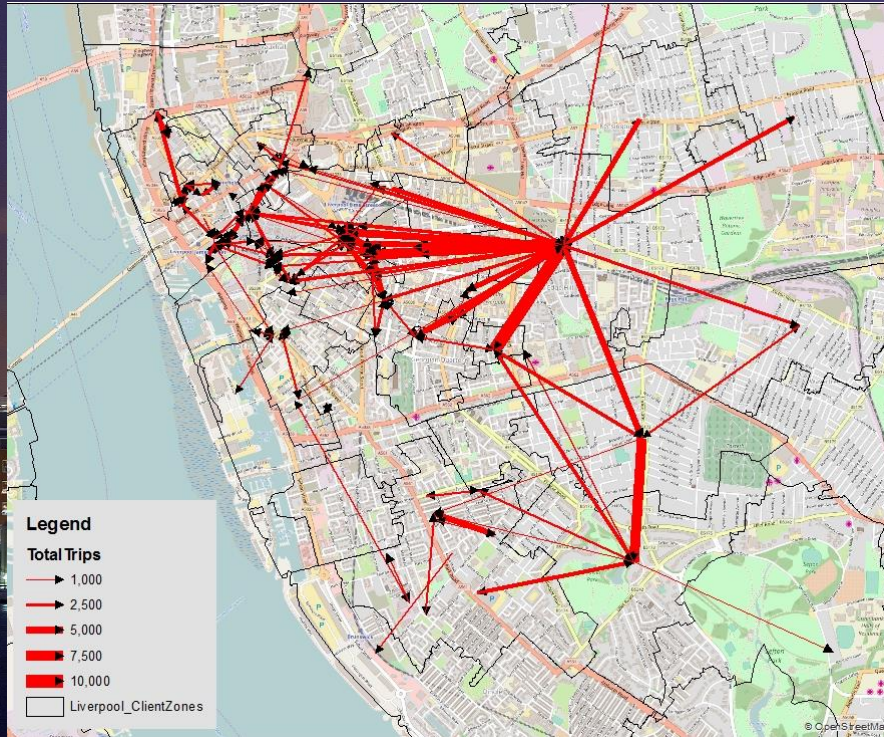
**BIG PROBLEMS NEED BIG DATA**





# LIVERPOOL CITY CENTRE - CONGESTION STUDY

Liverpool City Council wanted to understand travel patterns to and from Liverpool City Centre.



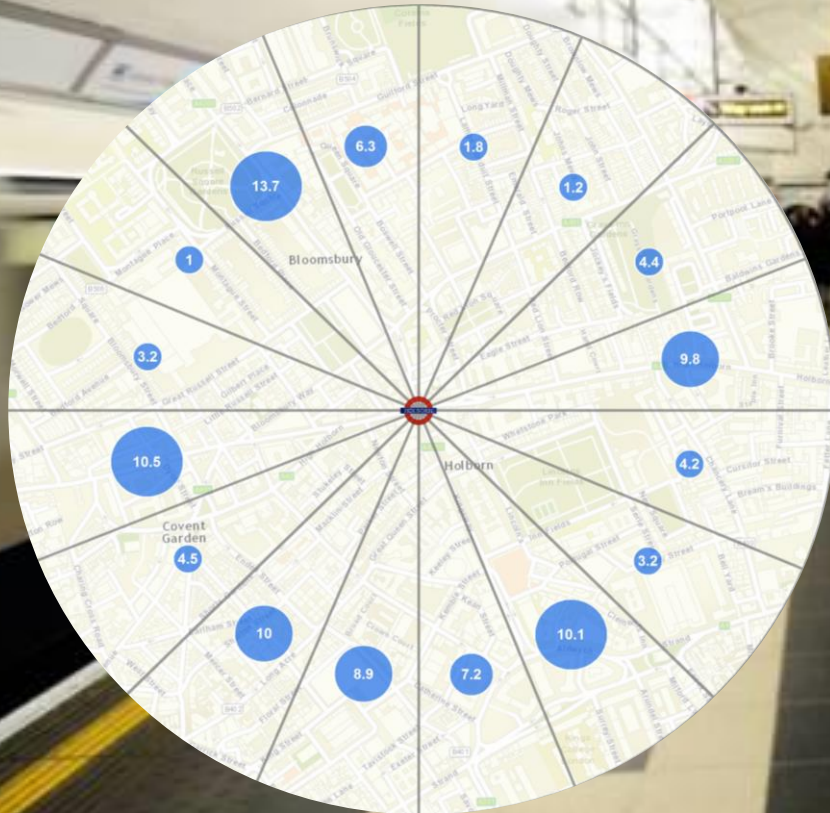
**Exam Question:** understand routes and modes of transport, including assessing how travellers reach their end destination from the various car parks and rail stations in and around this urban environment.

**Outcome:** congestion is caused by people trying to reach the car parks in the city centre. By changing car park locations, re-routing, or providing alternative parking / park-and-ride / public transport options, congestion in the City Centre would be greatly reduced.



# LONDON UNDERGROUND – PEDESTRIAN STUDY

London Underground wanted to redesign the Holborn Tube Station to meet the demands of commuters and reduce the number of people crossing the road.



**Exam Question:** Measure commuter interaction & direction of travel to and from the station.

**Outcome:** as the majority of commuters interacting with Holborn travel to/from Southern areas. The station entry remained on the south side of the intersection.

# UPDATING THE CENSUS

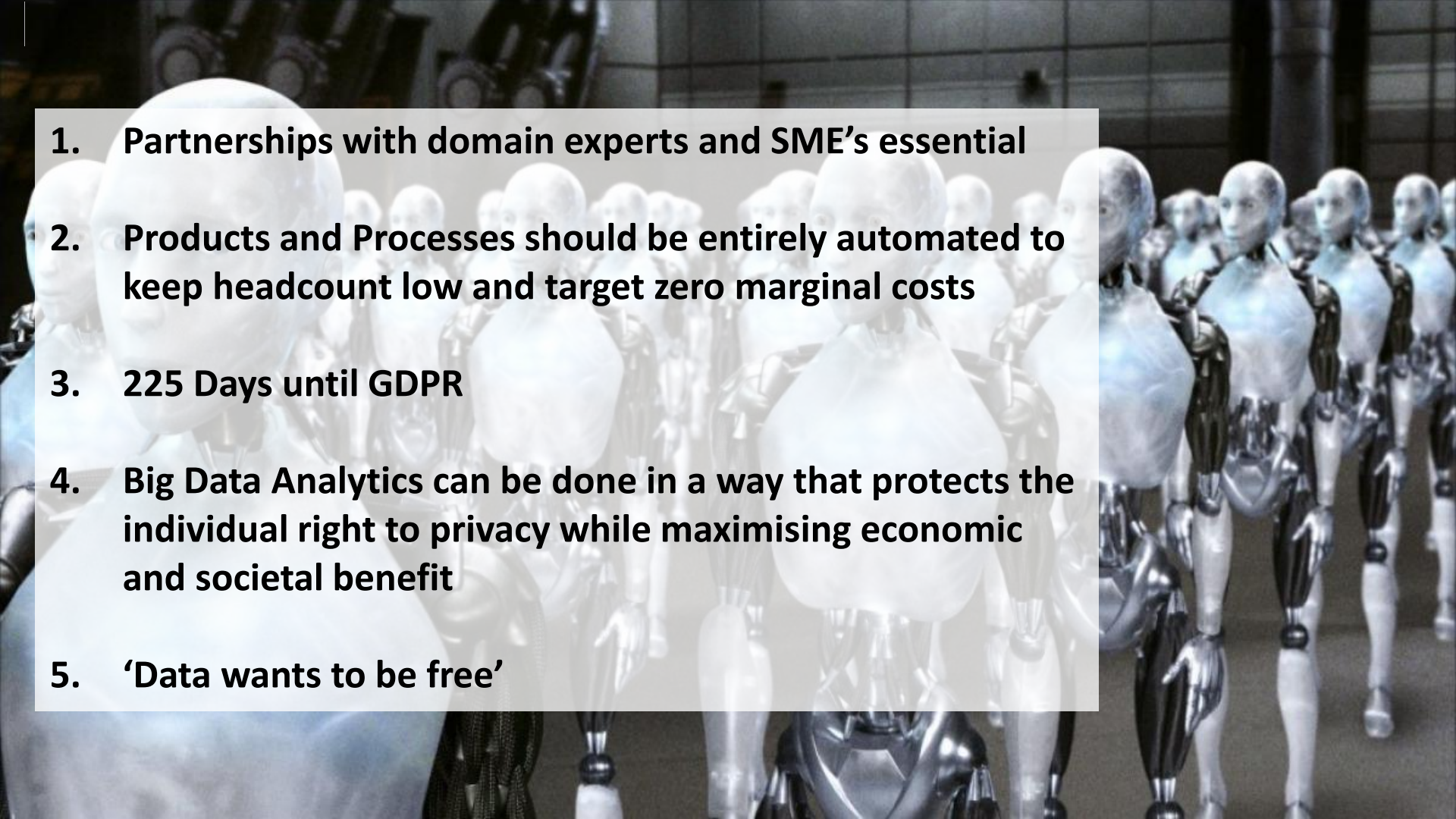
ONS (Office for National Statistics) is exploring the potential for aggregated anonymised mobile network data to better inform national policy making.

The short term goal is to showcase how new sources of data can support the statistical community and ultimately unlock new capability and insights for all of us.

ONS aims to use these data sources more frequently to augment or potentially even replace existing approaches.

<https://www.ons.gov.uk/methodology/methodologicalpublications/generalmethodology/onsworkingpaperseries/onsmethodologyworkingpaperseriesno8statisticalusesformobilephonedataliteraturereview>



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1. Partnerships with domain experts and SME's essential
2. Products and Processes should be entirely automated to keep headcount low and target zero marginal costs
3. 225 Days until GDPR
4. Big Data Analytics can be done in a way that protects the individual right to privacy while maximising economic and societal benefit
5. 'Data wants to be free'