The Bicycles and ITS Project

From data to wisdom: new technologies and possibilities on creating cycle datasets

Interreg
North Sea Region
BITS
European Regional Development Fund

EUROPEAN UNION

Kevin Mayne
Chief Executive
Cycling Industries Europe

Cycling Industries Europe

THE VOICE OF CYCLING BUSINESS IN EUROPE

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Bicycles and Intelligent Transport Systems

St. Margaret 1½
Ilk.
Bungay 3¾
All Saints 2
St. Margaret 1½
S. Elm.
ST PE

Cyclist Heatmap
High
Low
SPINNINGFIELDS
CHINATOWN
CASTLEFIELD
Manchester Crown Square Crown Court
Wood St
Mulberry St
Brazennose St
Queen St
Lloyd St
Jackson's Row
Bootle St
Atkinson St
Hardman St
Stanley St
Water St
New Quay St
Quay
Crimea St
Victoria St
Liverpool Rd
Potato Wharf
Rice St
Roman Gardens
Duke St
Mamucium
Great Northern
Midland Hotel
Manchester Central Convention Complex
Watson St
Great Bridgewater St
Lower Mosley St
Longworth St
Axis Tow
Platform 1
Hewitt St
Little Peter St
Tony Wilson Pl
First St
Medlock St
Cambridge St
Deansgate Square
Great Jackson St
City Rd E
Tib Ln
Bow Ln
Kennedy St
Booth St
Concert Ln
George St
Major St
Richmond St
Canal
Sackville Gardens
Sackville Street Building
Granby Row
Manchester Metropolitan University — Aitoun Campus
Hope St
Roby St
Piccadilly
Dale St
Ducie St
Bloom St
Minshull St
Parker St
Gardens
China Ln
Assurance Building
Circle Square
Manchester Institute of Biotechnology
University of Manchester — North Campus
Lower Albion St
Mancunian Way
John Dalton Building
Image credit
See.Sense

Mobility as a Service

Multi-modality

Collaborative systems

Intelligent transport systems

Standardised data

Digitalisation

Sharing economy

Autonomous vehicles

Internet of things

Big data

Smart grids

You are riding a gobike
Speed
0.0 km/h
9:31

06. FEB 14
16:20
HEJ CYKLISTI
Du er nummer
6244
I DAG
og nummer
244755
I AR
der cykler forbi her
GOD TUR
og tak fordi du cykler i byen!

Nørreport
Trængsel
Frederiksborggade

9:41 AM
100%
Jane's bike
Location

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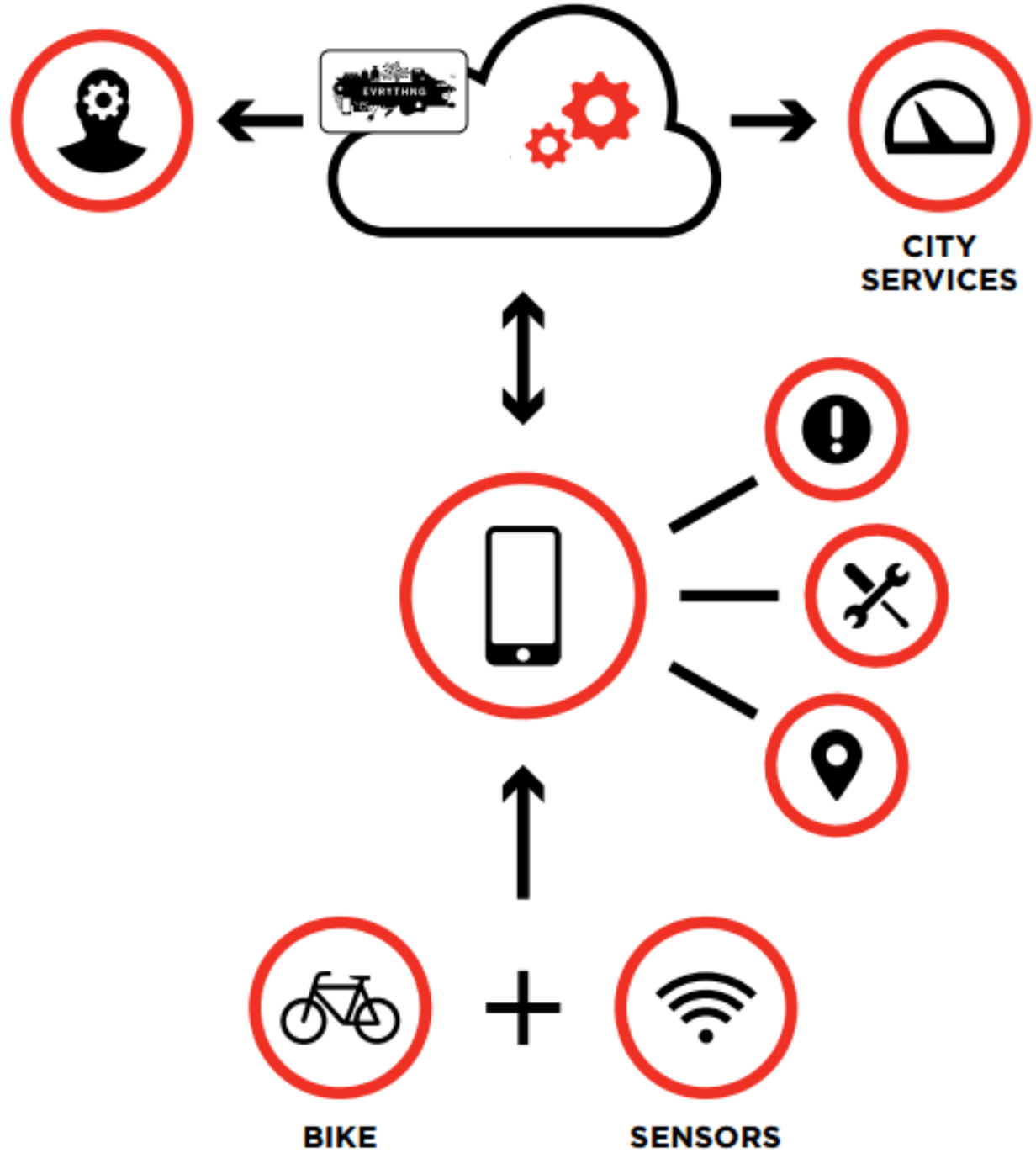
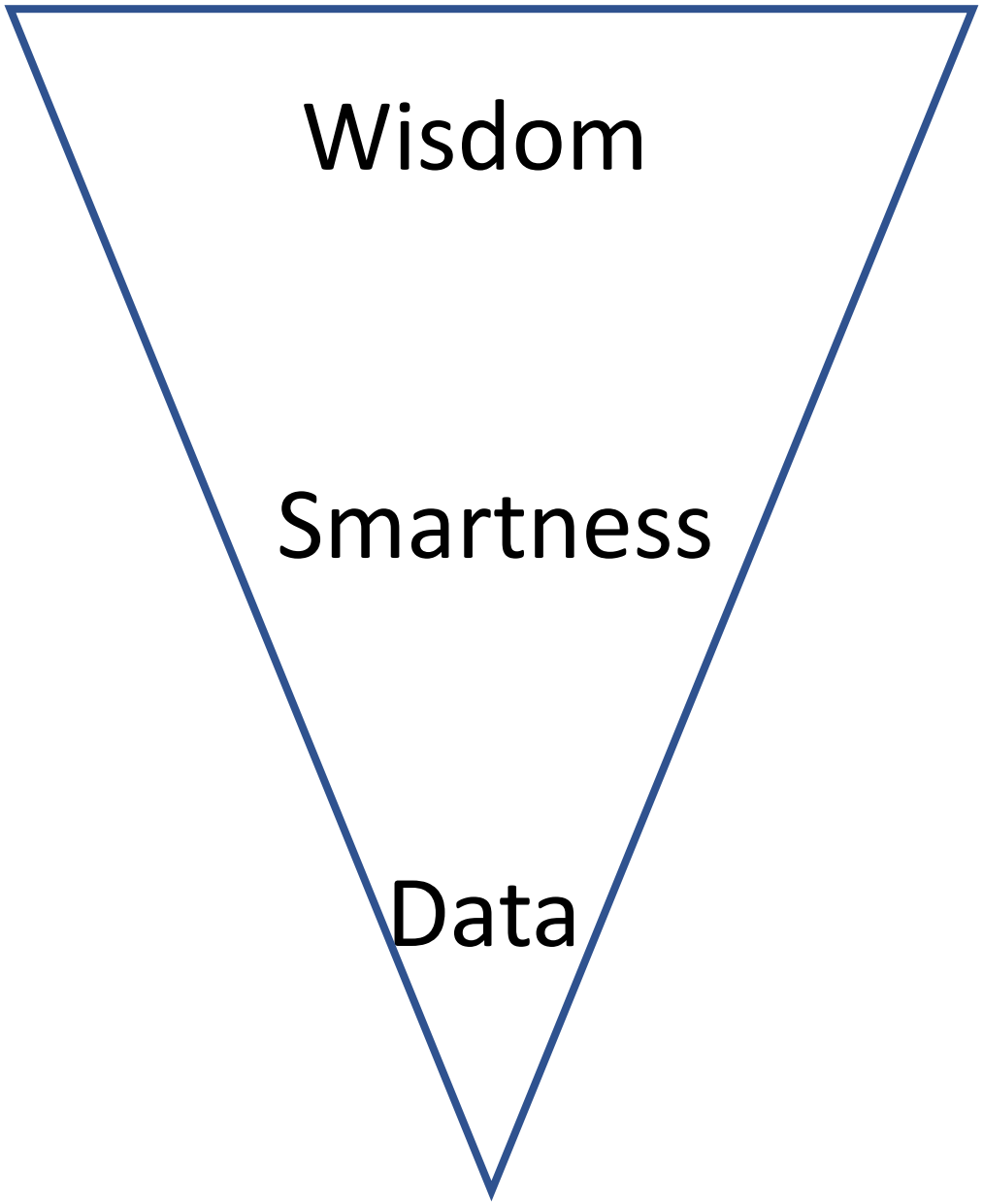
I am lost ……

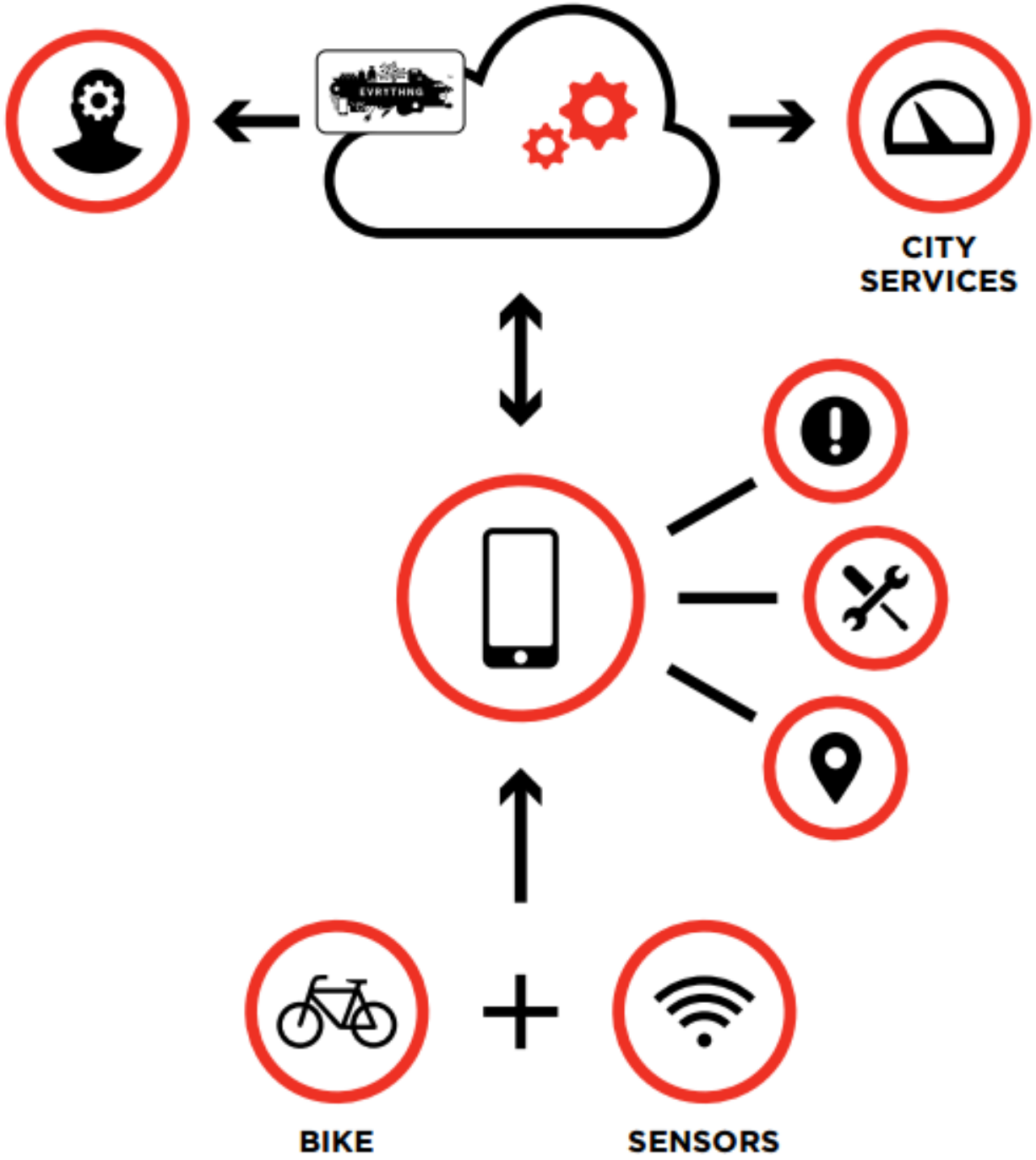
……but I know where I want to go

I may not understand the jargon……

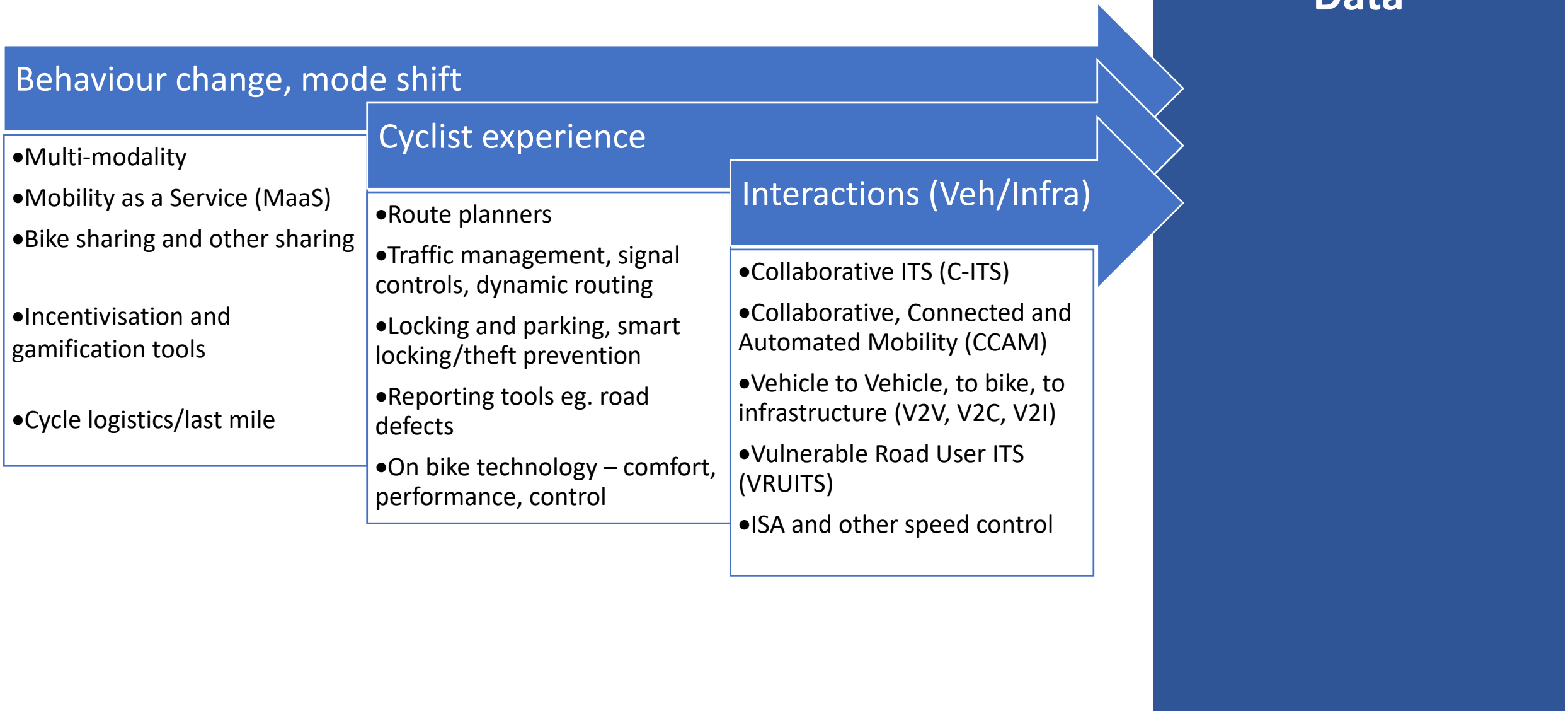
……but I can understand the need and potential


EVRYTHNG
CITY
SERVICES
BIKE
SENSORS


Wisdom
Smartness
Data


EVRYTHNG
CITY SERVICES
BIKE
SENSORS

Cycling ITS
Typology >> Framework >>Roadmap?



Cycling ITS
Typology >> Framework >>Roadmap?

Behaviour change, mode shift

- Multi-modality
- Mobility as a Service (MaaS)
- Bike sharing and other sharing
- Incentivisation and gamification tools
- Cycle logistics/last mile

Cyclist experience

- Route planners
- Traffic management, signal controls, dynamic routing
- Locking and parking, smart locking/theft prevention
- Reporting tools eg. road defects
- On bike technology – comfort, performance, control

Interactions (Veh/Infra)

- Collaborative ITS (C-ITS)
- Collaborative, Connected and Automated Mobility (CCAM)
- Vehicle to Vehicle, to bike, to infrastructure (V2V, V2C, V2I)
- Vulnerable Road User ITS (VRUITS)
- ISA and other speed control

Data

BIG Data

Data for infrastructure planning, commissioning and funding proposals

Privacy, data security, ownership (GDPR)

EU's National Access Points (national data sets)

Counting, measuring, aggregation

Research & market intelligence

"Propensity to cycle"

Cycling industry - sales and use

Cycling ITS
Typology >> Framework >>Roadmap?

Data

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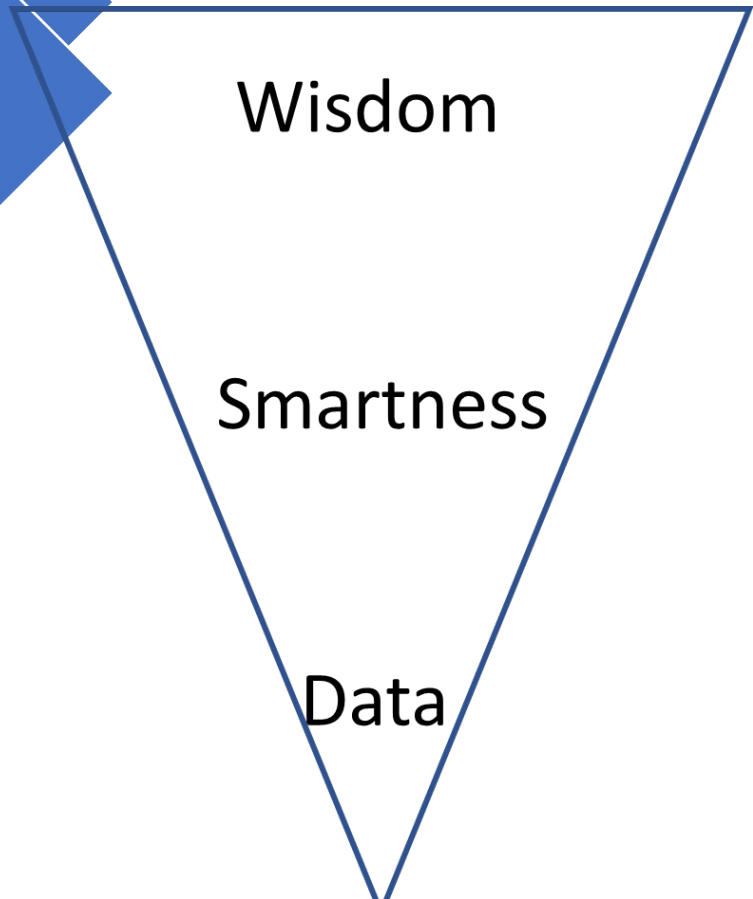

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- A data sharing strategy for cycling ITS
  - Why?
  - What?
  - How?

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- A data sharing strategy for cycling ITS
  - Complete, Smart
  - Wiser - better informed, more influential, more human centred

47
GROENE GORDEL
LF 6
Vlaanderen
Fietsroute

Nivelles 8
Baulers 5
Ottignies 15
Vieux-Genappe 1.8
RAVeL
Ligne 141

Contact CIE

- If you have a business solution for cycling, innovations, applications and software to share with the BITS Project and other like-minded companies
- To join Europe's network for Cycling and ITS businesses

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