

Chair's Introduction

Dr. George Economides

CAV Team Leader – Oxfordshire County Council

CAM Seminar Hall Sponsor

ZENZIC²

SELF-DRIVING REVOLUTION



Trialing CAVs: A Local Authority Perspective

Dr George Economides

Team Leader for Connected and Autonomous Vehicles



Who Are We

Oxfordshire County Council:

- Highways
- Land Use & Waste
- Public Health & Social Care
- Fire Service & Emergency Planning
- Consumer Protection
- Education, Libraries & Museums

Responsible for:

- £700m annual budget
- 667K people (+10% y-o-y)
- 3K miles of road (£4Bn worth)



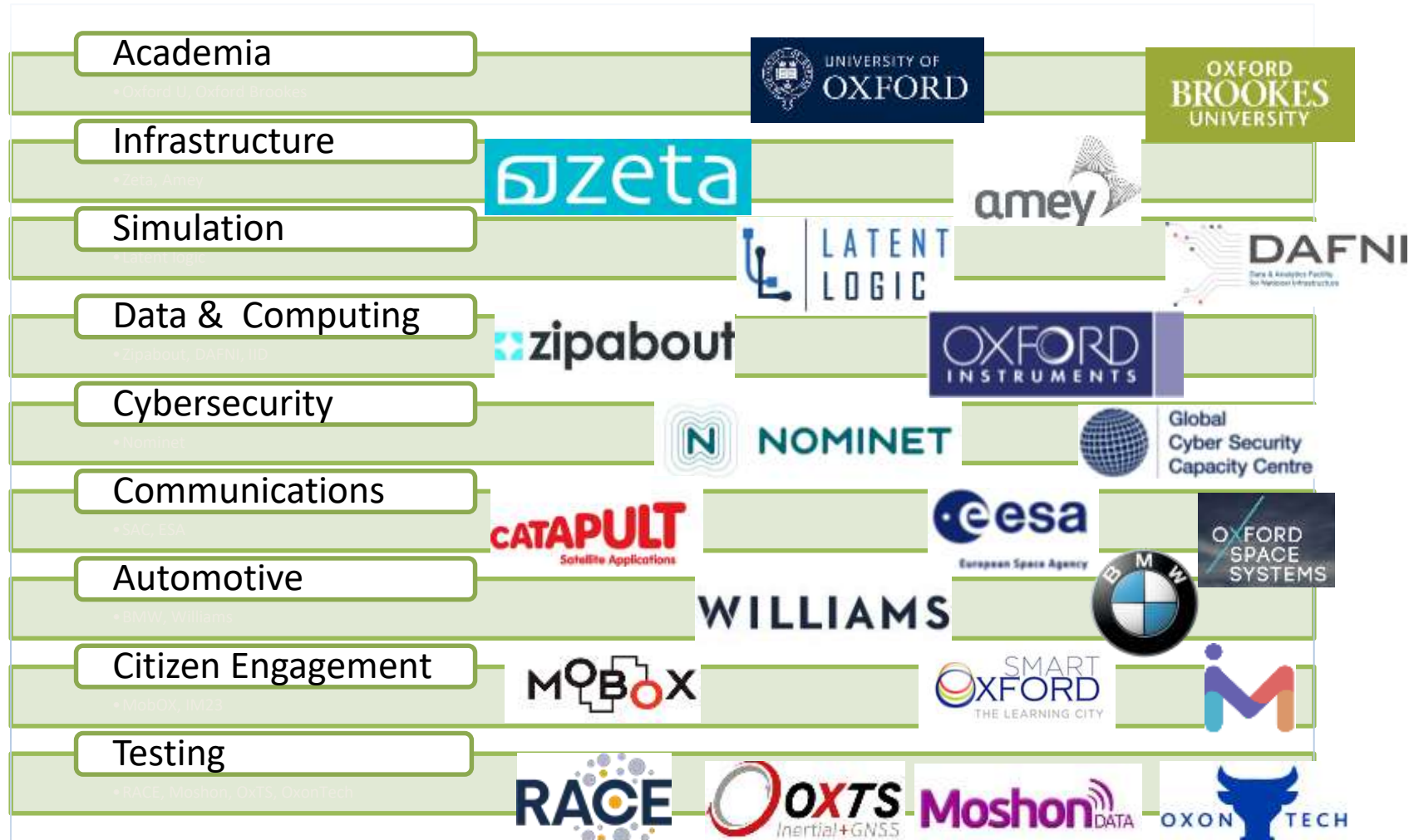


Dynamium





Complete Ecosystem





Multiple Timescales

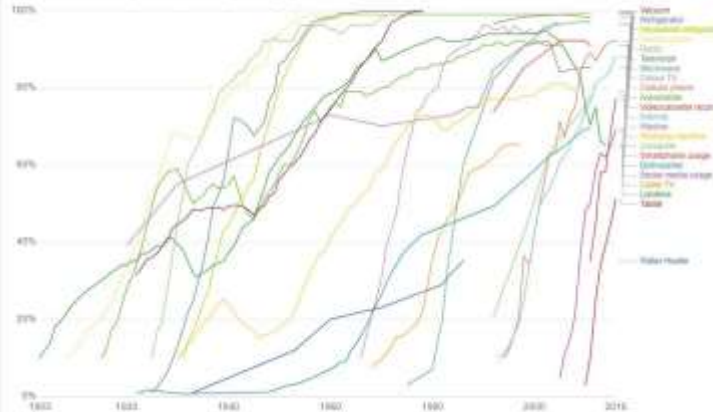
Easter morning 1900: 5th Ave, New York City. Spot the automobile.



Source: US National Archives.

Technology adoption by households in the United States

Technology adoption rates, measured as the percentage of households in the United States owning or using a particular technology. See the sources list for definitions of household adoption, or adoption rates, by technology type.



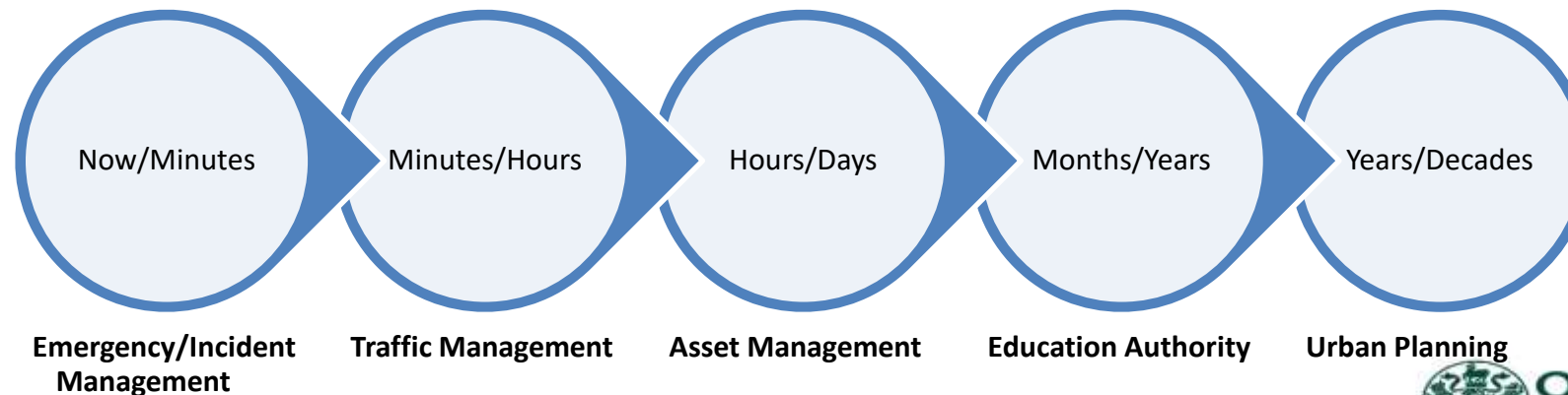
Source: Census and Hodge (1980) and others.

Source: Oxford egyptology website (2014).

Easter morning 1913: 5th Ave, New York City. Spot the horse.



Source: George Grantham Bain Collection.



Multiple Domains

Urban

- Many varied interactions, low speed, high infrastructure

Peri-Urban

- Fewer and varied interactions, low speed, low infrastructure

Highways

- Many homogeneous interactions, high speed, high and predictable infrastructure

Rural

- Few but varied interactions, high speed, low and variable infrastructure

OXFORDSHIRE
>SMART
>COUNTY



A New Approach

Predict and Provide



Decide and Provide

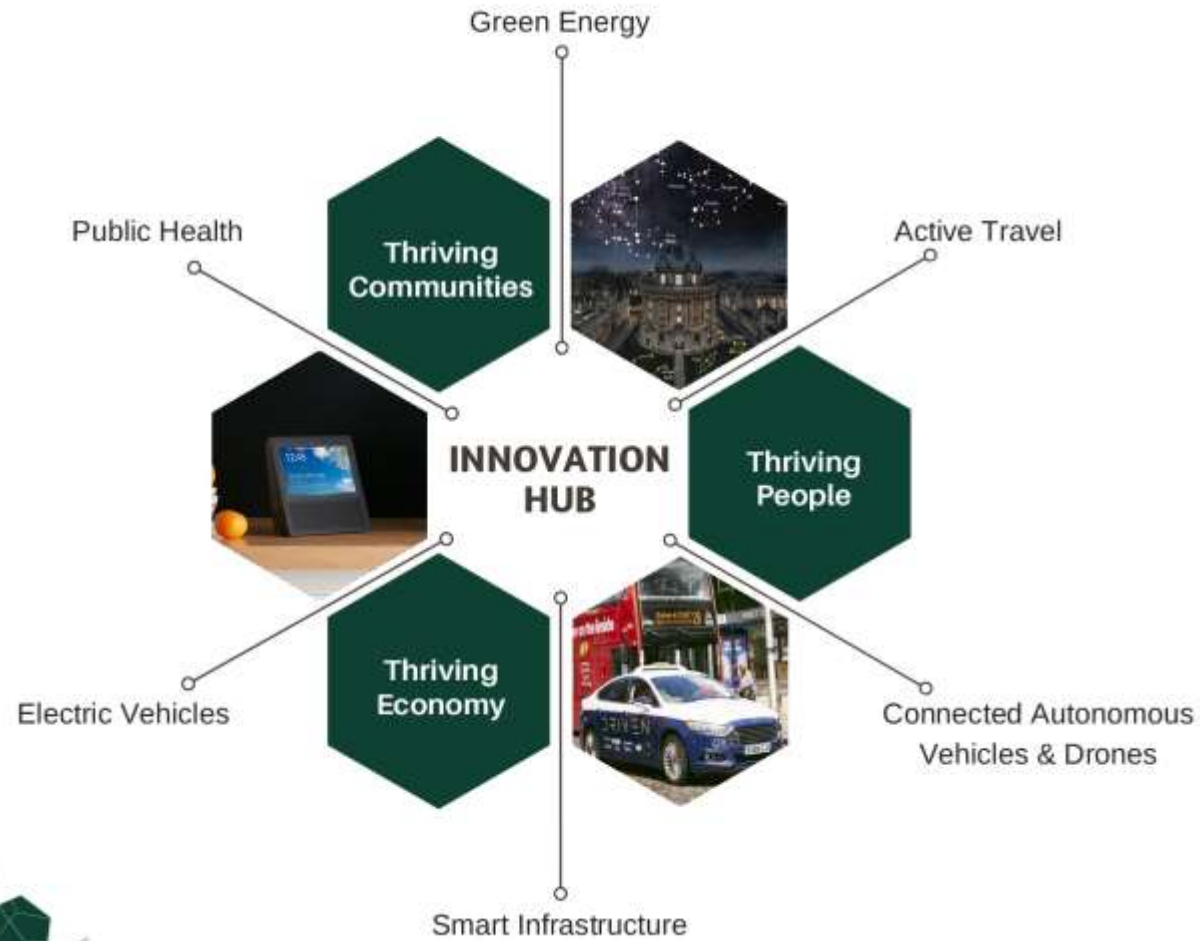


Iterate and Adapt





OCC Innovation HUB





OCC CAV Team

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- Trials
- Standards
- Planning
- Communications
- Network Management
- Infrastructure
- Simulation/Modelling
- Education
- Strategy & Policy
- Drones



OCC CAV Projects

DRIVEN
Fleet of 6 CAVs performing in Oxford & London

Air.Car
Air Quality monitoring

MaaS:CAV
Merging CAVs in a seamless mobility offering

MultiCAV
Multimodal journey incl. CAVs

Traffic Prediction
Traffic flow prediction

CAVL4R
Street Asset management through CAVs

OmniCAV
AI Simulation Package for CAVs readiness

HARMONY
Traffic Modelling that for new mobility

NM^2
Network Management for New Mobility

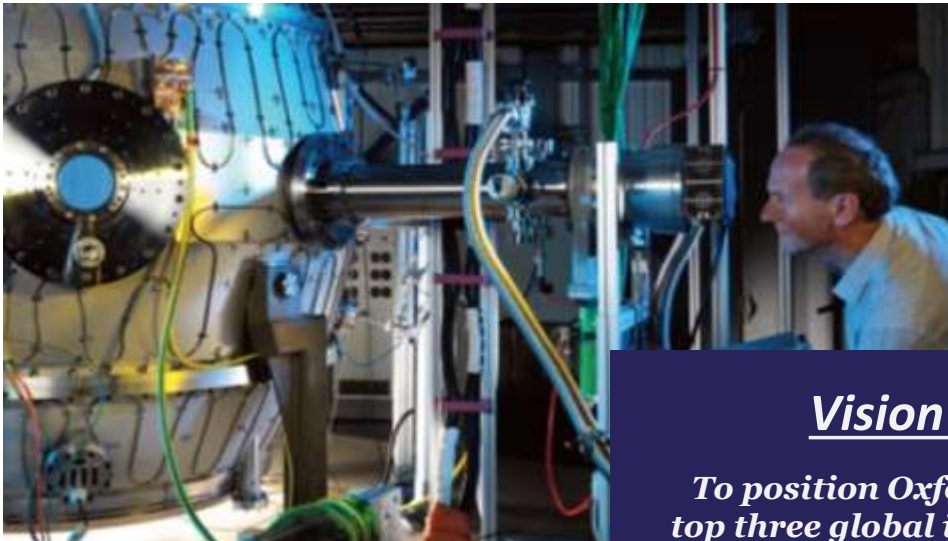
5G Heart
5G use cases for transportation

Congestion Tool
Congestion planning and responding

NEFVMA
Traffic Management for AQ



Oxfordshire Living Lab



Vision Statement

To position Oxfordshire as one of the top three global innovation ecosystems by 2040, building on the region's world leading science and technology clusters to be a pioneer for the UK in emerging transformative technologies and sector





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