# Drone Deliveries to Driverless Cars – Your Village in 2027

**Daniel Heery** 

Cybermoor

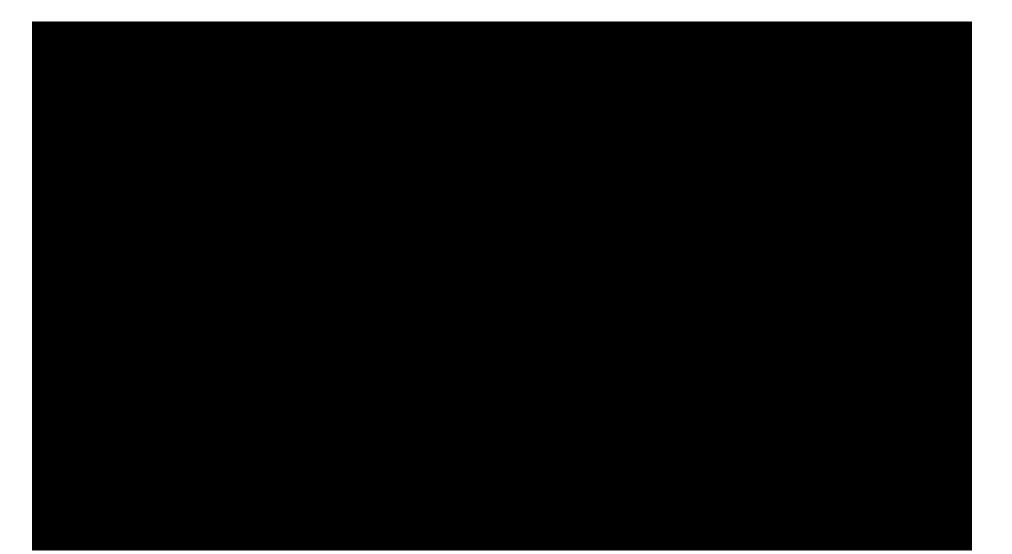
# Technology Trends

- Drones
- Electric Vehicles
- Autonomous vehicles
- 5G & Full Fibre

## Overview of the session

- Look at the technologies
- Who are the rural winners?
- Who are the rural losers?
- What are the mitigations for the losers?

#### Drone deliveries



#### Electric Vehicles

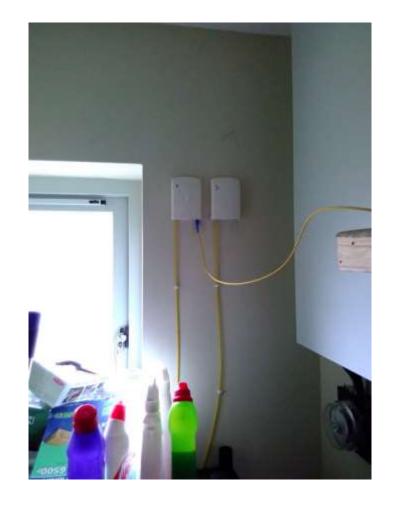


#### Autonomous Vehicles



# Connectivity – Fibre & 5G





#### Winners and Losers

- Drones
- Electric Vehicles
- Autonomous vehicles
- 5G

## **Drone Deliveries**

- Who will decide on drone highway networks?
- Do you want local drone fulfilment centres?
- Will this increase isolation?
- Winners
  - Amazon, online delivery companies, fewer vans congestion, some customers, businesses, jobs in fulfilment centres, farm buildings converted to fulfilment centres
- Losers
  - Local shops & producers, residents (noise, privacy)

## Electric Vehicles

- Will we see the mass adoption of electric vehicles in rural areas?
- Positives
  - Diesel / petrol price discussions.
  - Link with renewables could make some people fuel self sufficient
  - Village halls could use their car parks for electric vehicle charging points for those people with no driveway
  - Battery back-ups for villages, providing off grid power at night, stored from renewables
- Negatives
  - High cost
  - Loss of jobs in garages
  - Loss of control of vehicle maintenance

## Autonomous vehicles

- Will autonomous vehicles be available on demand in a village?
- Positives
  - Help to young and elderly rural citizens be more mobile without the need for their own cars
  - No need for drink driving good for rural pubs
  - Improved safety
- Negatives
  - Who will pay for them?
  - Rural bus services & taxis
  - "no coverage areas" remote places, single track lanes

## Connectivity

- Will much better connectivity improve rural areas or leave them stranded in the internet slow lane?
- Positives
  - More access to better entertainment, ability to run businesses etc
  - Improve chance for people to locate in rural areas
- Negatives
  - Rural vs Urban divide if networks are not developed.
  - Access to fibre infrastructure
  - Internet behemoths suck revenue out of rural communities

## Summary

- Each technology will create rural winners and losers
- Consider the costs and benefits now
- Have an informed debate and work out your approach
- Manage expectations

#### Contact Details

- Daniel Heery Cybermoor Alston Town Hall Alston CA9 3RF
- E-mail <u>daniel.heery@cybermoor.org.uk</u>
- Phone 01434 382 808