FMCI & Software Defined Vehicles
FMCI: Creating a Vehicle Architecture that is Software Defined

- **Focus on software**
- **Organisational Change:**
  *From Car Company to Tech Company*
- **Business Model Change:**
  *Focus on Recurring Revenues*

- FMCI – We want to allow different researchers and organisations to test various computer platforms within our vehicles
- Open Vehicle Platform – Focus on open hardware and open software testing
- FMCI Data Center: We provide an in-house data center for both data capture and as well as management
SMART CITY: HIGHLY CONNECTED ROAD NETWORK

DEDICATED TESTING AREA

ADVANCED AERIAL MOBILITY HUB

FMCI CONTROL CENTRE

IRELAND'S FIRST TESTBED FOR FUTURE MOBILITY
Open Vehicle Platform:

- Multiple Compute Platforms
  - NVIDIA DGX Orin
  - Open Compute Platform (Linux)
- Logger/Processing: NI – PXIe1095
- Storage: Seagate Lyve 46TB
- Ethernet Switch: Cisco IE5000
- Router: Cisco IR1835
- Power Supply: Vehicle battery or Automotive Power Processor + Auxiliary battery
- Vehicle BUS Access (CAN, FLEX etc)

Sensing:

- LiDAR 360°: Hesai Pandar64
- GNSS/Inertial Navigation: OxTS RT1003
- Front Radar: Provisio 5D perception
- Corner Radars: Provisio 5D perception