

The future of infrastructure – is it for Geeks or is it a business?

Asif Ghafoor

June 2019

Engineering
Facilities
Environment
Utilities
Transport
Defence
Justice
Better Places

Creating **better places** to live, work and travel

Putting People First | Delivering Great Service | Creating Better Solutions











Asif Ghafoor

Amey Investments

Our services

You're one of 66 million people who's used a service we support today.

Engineering	Facilities	Environment	Utilities	Transport	Defence	Justice	Investments
<ul style="list-style-type: none"> Rail and metro Roads Airports Utilities International 	<ul style="list-style-type: none"> Education Workplaces Hospitals Social housing Defence 	<ul style="list-style-type: none"> Collecting waste Clean streets Grounds maintenance Recycling Waste treatment Commercial waste 	<ul style="list-style-type: none"> Water Power Metering 	<ul style="list-style-type: none"> Rail Road Airports 	<ul style="list-style-type: none"> Engineering plant and equipment Estate maintenance and improvement Service housing Estate FM 	<ul style="list-style-type: none"> Community rehabilitation Secure prisons FM Prisoner escorting Youth transportation Youth offending 	<ul style="list-style-type: none"> Funding finance solutions Investment portfolio management Special purpose vehicle/company management
							



geomey

geomey

PO11 0WV

Capita profits still falling

investors
CHRONICLE

Interserve rescue plan knocks 58 pct off shares  REUTERS

Corbyn's threat to nationalise UK infrastructure will scare off investors who are here to help

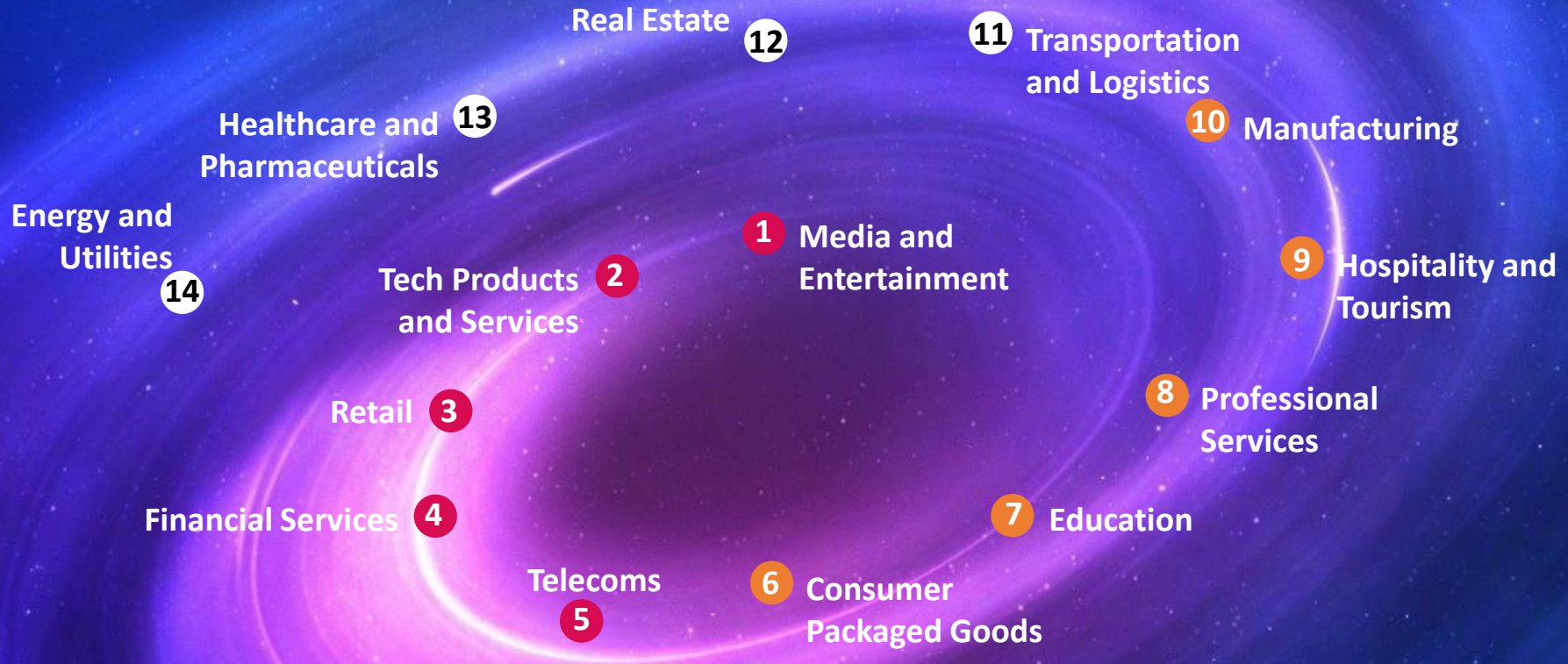
The Telegraph

Babcock shares sink as one-off costs torpedo defence giant's profits

CITYA.M.

Kier profit warning sends shares tumbling 40%

FT FINANCIAL
TIMES





“SOFTWARE IS EATING THE WORLD, IN ALL SECTORS.

“IN THE FUTURE EVERY COMPANY WILL BECOME A SOFTWARE COMPANY.”

- MARC ANDREESSEN
- FOUNDER OF NETSCAPE AND RENOWNED VENTURE CAPITALIST ANDREESSEN-HOROWITZ



amey



RACE

UK Atomic
Energy
Authority

amey
Part funded by
Innovate UK

RACE
Centre for Connected
& Autonomous Vehicles

Connected Autonomous
Sensing Service Delivery
Vehicle





Amey Investments

Raised over £4bn



Run multiple businesses



Team of technical experts



Invested £200m of equity



Amey Group service

Electric Vehicle Charging Infrastructure

Role of **Amey's core business...**

➤ **Installation**

**Carried out by our Highways and
Utilities Business Units**



Electric Vehicle Charging Infrastructure

Role of **Amey Investments**...

➤ **Strategic development of the business**

- Partnerships
- Commercial offerings
- Complex structural delivery models
- Financing



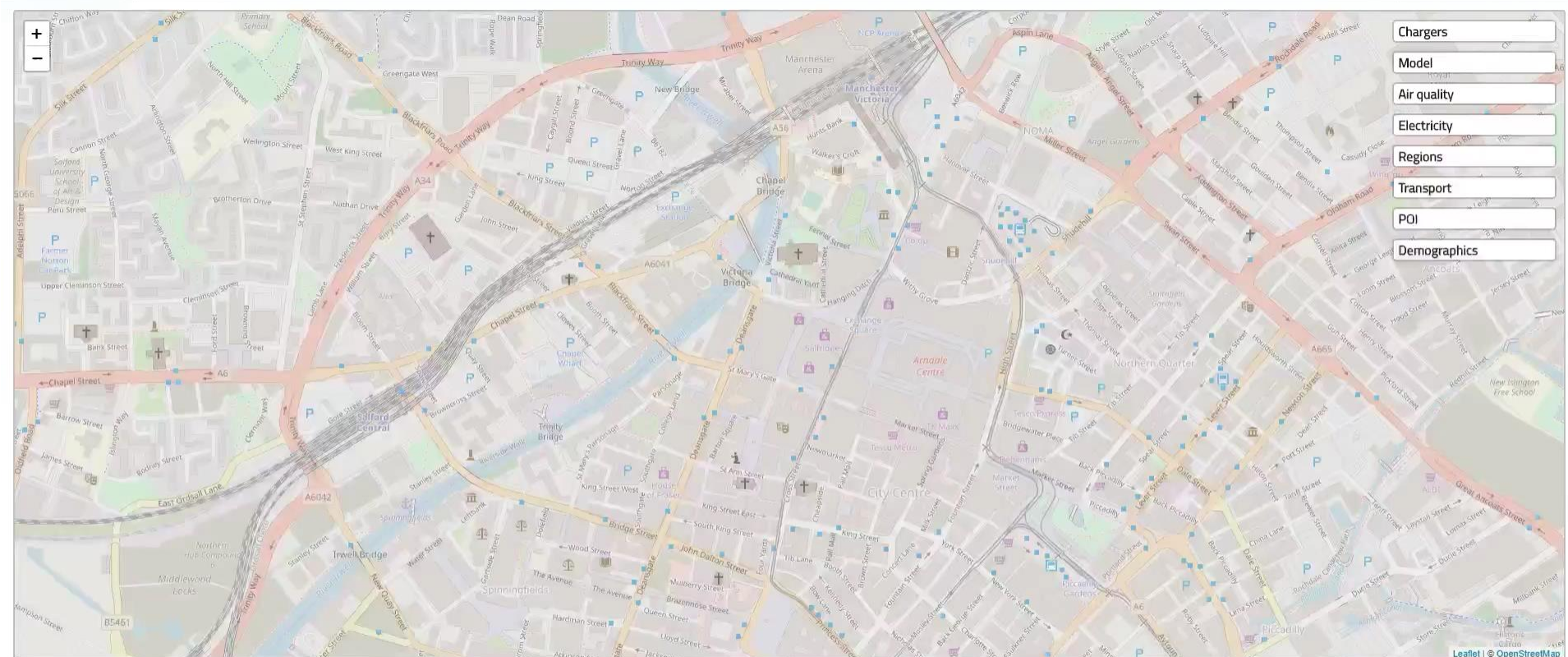
Electric Vehicle Charging Infrastructure

Role of **Amey Strategic Consulting**...

➤ **Data Analytics**

- Site Location Tool
- Social inclusion analytics
- District Network Operator analytics





- Chargers
- Model
- Air quality
- Electricity
- Regions
- Transport
- POI
- Demographics

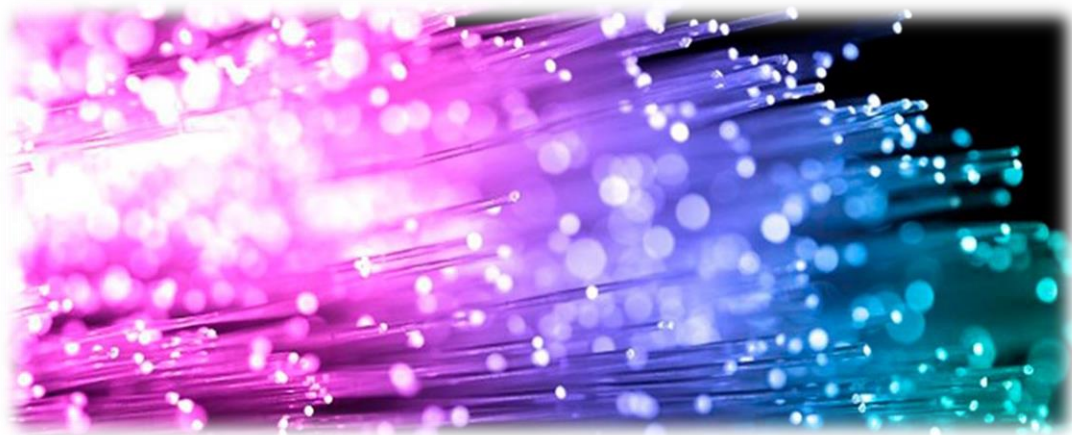
Refresh view

5G

Role of **Amey's core business...**

➤ **Fibre rollout**

**Delivered by our Utilities Business
Unit**



5G

Role of **Amey Strategic Consulting...**

➤ **Insights**

- Clean Air Zone sensors
- 5G antenna location analytics
 - E.g. service offering inside a sports stadium/facility



The Environment

Role of **Amey's core business...**

➤ **Energy generation**

- Energy from Waste plants creating the electricity needed for our infrastructure future



The Environment

Role of **Amey Investments**...

➤ **Management services**

- Management Services Agreement
- Strategic development of our assets
- Investment management
- Funding



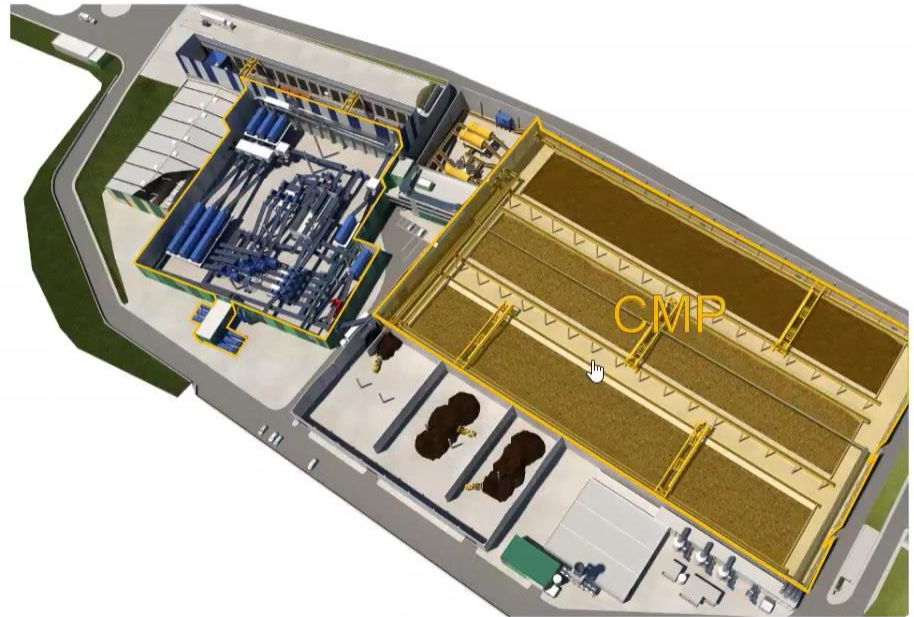
Assets

 [Grid Icon] [Print Icon]

Location	Type	Name
CMP	Tripper	CMP Tripper TPP-01
PTR	Abrebolsas	PTR Abrebolsas ABR-A01
PTR	Abrebolsas	PTR Abrebolsas ABR-B01
PTR	Abrebolsas	PTR Abrebolsas ABR-C01
PTR	Cuadro De Control	PTR Cuadro De Control CCM2
PTR	Separador Balistico	PTR Separador Balistico SBA-F01
PTR	Separador Balistico	PTR Separador Balistico SBA-F02
PTR	Separador Balistico	PTR Separador Balistico SBA-F03
PTR	Separador Balistico	PTR Separador Balistico SBA-F04
PTR	Tromel Resto	PTR Tromel Resto CRT-A02

Showing 1 to 10 of 12 rows 10 rows per page

Map Locations Faults



Recent Events

 [Grid Icon] [Print Icon]

Date	Asset	Description
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UTILITIES



TRANSITION TO FUTURE

TRANSITION TO FUTURE

JOIN UP DATA (PREDICTIVE BURST)

- CAPEX VS OPEX
- NETWORK MODELLING

INCREASED FOCUS ON SOCIAL VALUE

SEWAGE SLUDGE

5G EVOLUTION

- VODAFONE & O2 PARTNERSHIP

PR 19 - BREAK UP OF ASSET OWNERSHIP VIA DPC OR SPV/CATO

NEW TYPES OF PRIVATE INVESTMENT

BREAK UP OF NATURAL MONOPOLIES

CITIES BECOMING COMPANIES/ ASSET OWNERS/ ENERGY RETAILERS

INTERCONNECTED GRIDS

SMART CITIES CREATE WEALTH FOR SUSTAINABILITY FROM ASSETS

MATCHWORKS RETAIL OPERATIONS? SEPARATION OF WATER

WAYRA

CUSTOMER EXPERIENCE AND SOCIAL VALUE CRITICAL

MICRO GRIDS PRIVATE NETWORKS

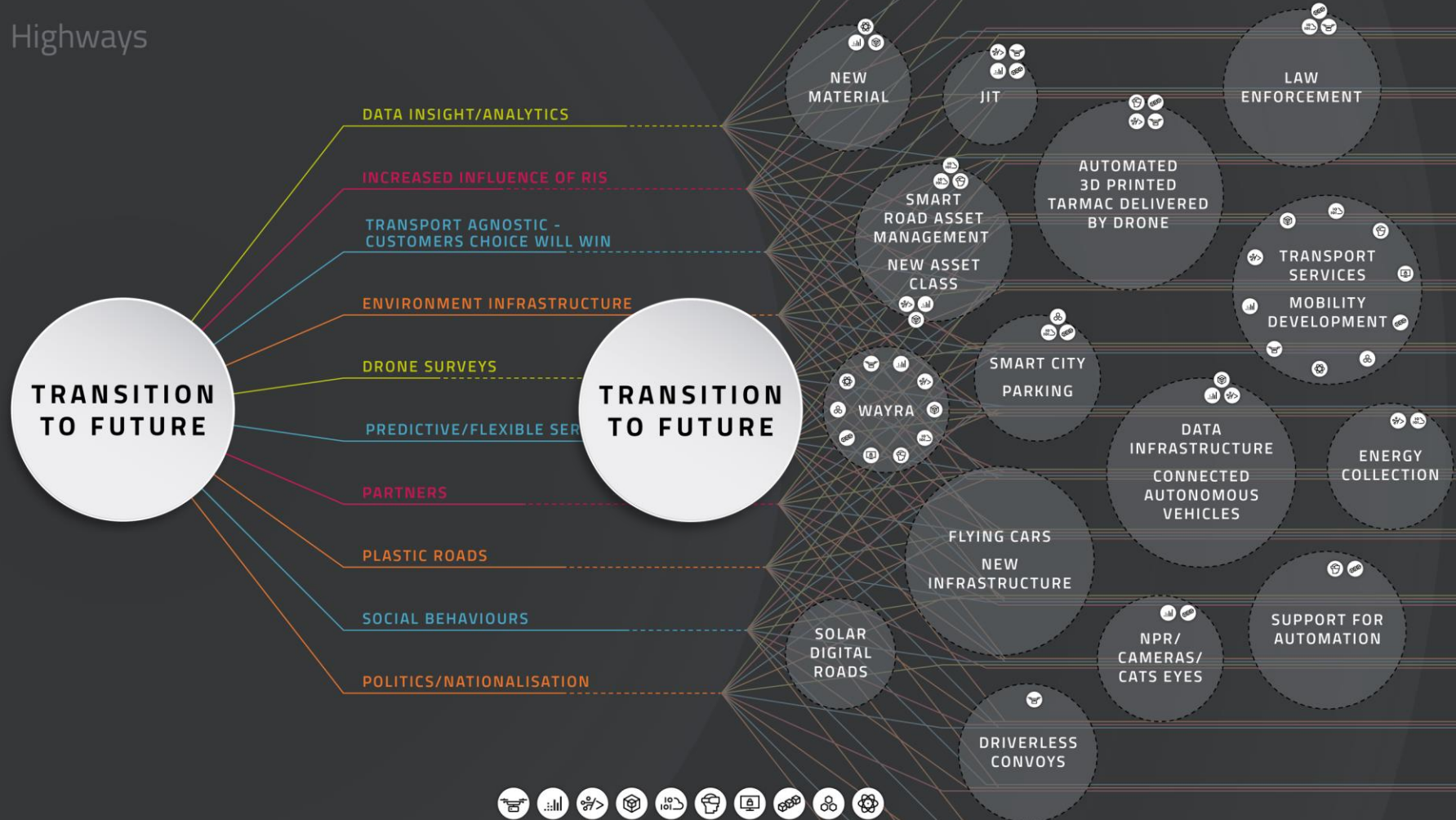
PRODUCT AGNOSTIC

MICRO ASSET OWNERSHIP



HIGHWAYS





TRANSITION TO FUTURE

TRANSITION TO FUTURE

DATA INSIGHT/ANALYTICS

INCREASED INFLUENCE OF RIS

TRANSPORT AGNOSTIC - CUSTOMERS CHOICE WILL WIN

ENVIRONMENT INFRASTRUCTURE

DRONE SURVEYS

PREDICTIVE/FLEXIBLE SERVICE

PARTNERS

PLASTIC ROADS

SOCIAL BEHAVIOURS

POLITICS/NATIONALISATION

NEW MATERIAL

JIT

LAW ENFORCEMENT

SMART ROAD ASSET MANAGEMENT
NEW ASSET CLASS

AUTOMATED 3D PRINTED TARMAC DELIVERED BY DRONE

TRANSPORT SERVICES
MOBILITY DEVELOPMENT

SMART CITY PARKING

WAYRA

DATA INFRASTRUCTURE
CONNECTED AUTONOMOUS VEHICLES

ENERGY COLLECTION

FLYING CARS
NEW INFRASTRUCTURE

SOLAR DIGITAL ROADS

DRIVERLESS CONVOYS

NPR/ CAMERAS/ CATS EYES

SUPPORT FOR AUTOMATION



WASTE



Threats



FAKE NEWS

it works...





Amey's business idea







