



Van Sensor naar Service!



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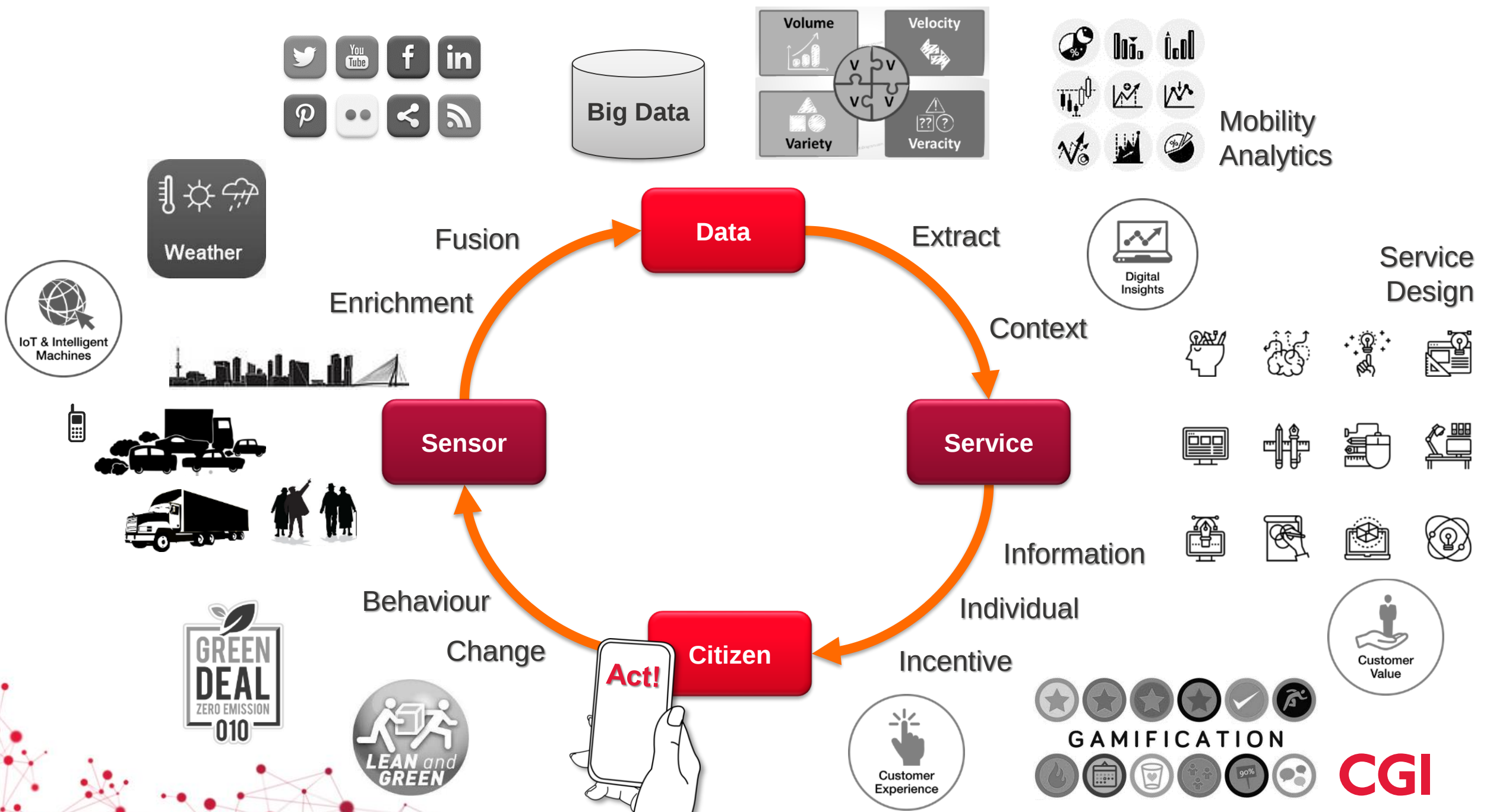


Welke dienst zou jij bedenken op basis van Pokemon Go data?



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Big Data uit een truck

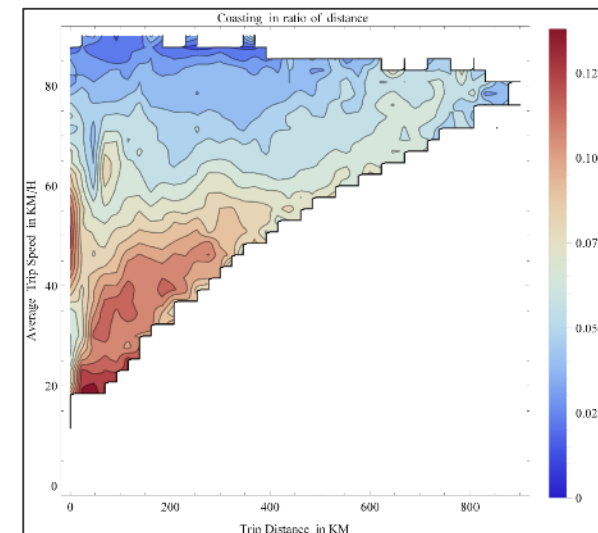
Fleet Management System



In-Vehicle Sensors



- Wind speed
- Temperature
- Traffic Conditions
- Origin
- Destination
- Logistic Type
- Vehicle Type
- Motor Type
- Trailer Weight



$$\text{Fuel Consumption} = f(\text{Data})$$

- **Cruise Control**
- **Coasting**
- **Idling**
- **Braking**
- **RPM**
- **Accelerating**
- Distance
- Speed
- Fuel

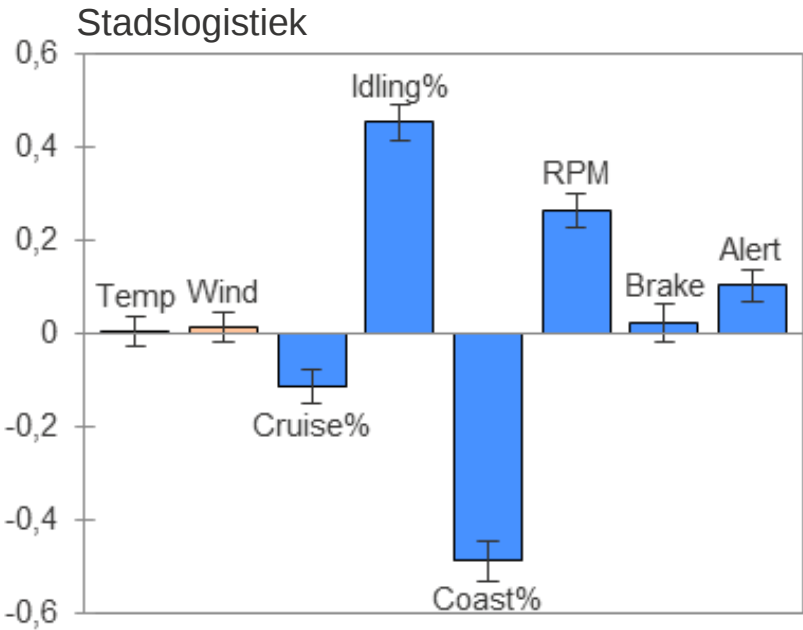
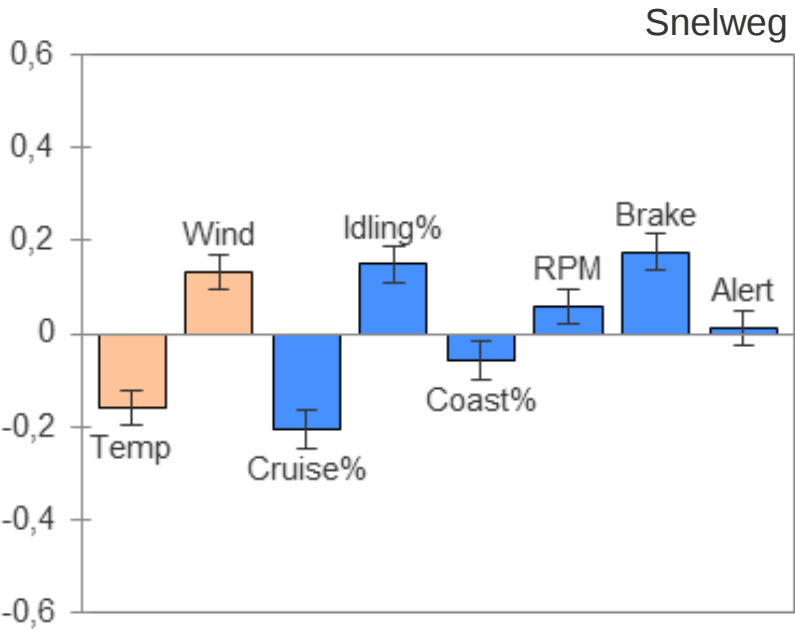
Standardized Coefficients Driver Parameters per Cluster

Average Trip Speed	Cruise	-0.265481	Cruise	-0.277933	Cruise	-0.21476
	Idle	0.228938	Idle	0.251613	Idle	0.158255
	Accel	-0.238875	Accel	-0.0885218	Accel	-0.0033401
	RPM	0.244886	RPM	0.136803	RPM	0.0402766
	Brake	0.0645393	Brake	0.0516138	Brake	0.131255
	Coast	0.0608609	Coast	0.125062	Coast	0.0294938
	Cruise	-0.156465	Cruise	-0.290527	Empty	
	Idle	0.442061	Idle	0.304515		
	Accel	-0.145792	Accel	-0.170144		
	RPM	0.101052	RPM	0.149962		
	Brake	0.063519	Brake	0.0795932		
	Coast	0.0545882	Coast	0.0958709	Empty	
	Cruise	-0.223597	Empty			
	Idle	0.406695				
	Accel	-0.105896				
RPM	0.247509					
Brake	0.0378264					
Coast	0.0650615					
Trip Distance						

Trip Distance

Context om gedrag te kunnen beoordelen

Meer brandstof gebruik
↕
Minder brandstof gebruik



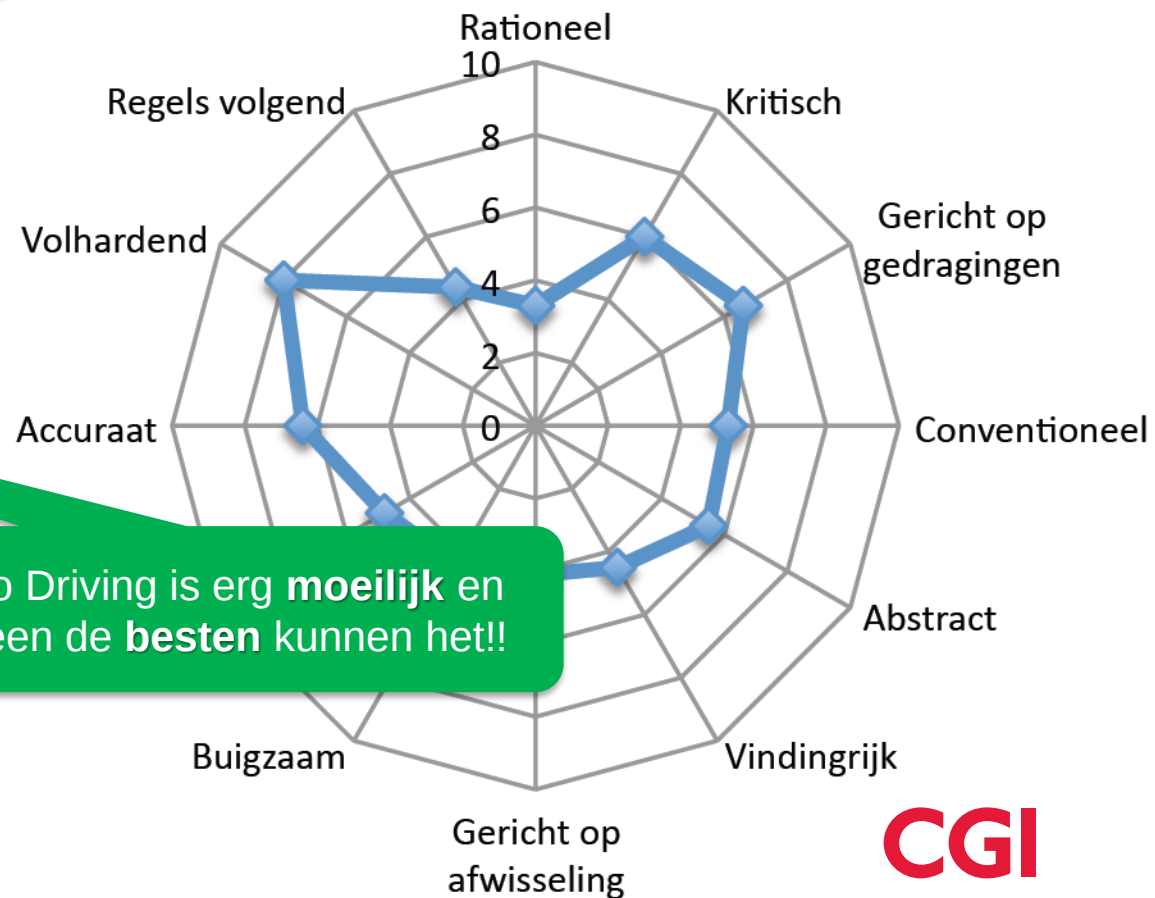
De juiste motivatie!



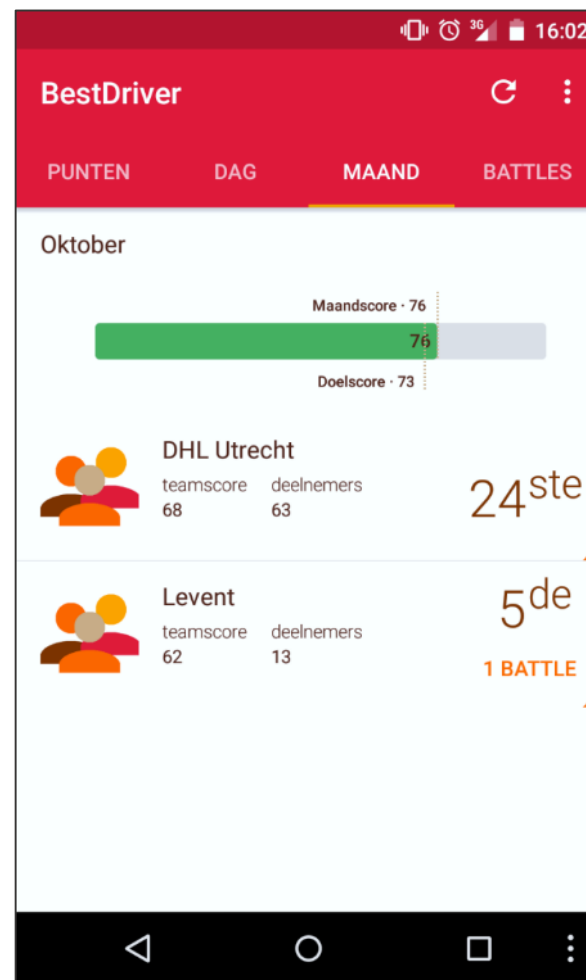
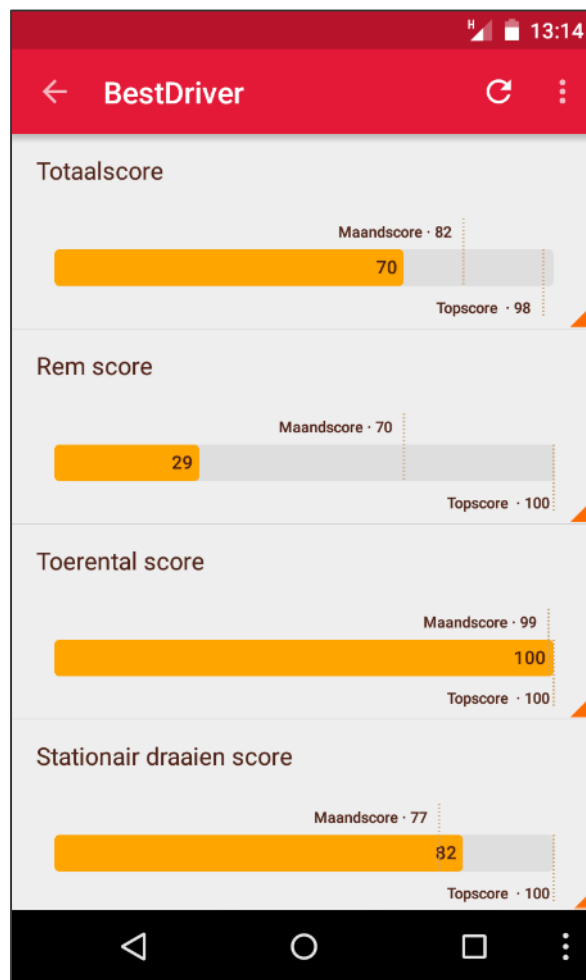
Eco Driving is **eenvoudig**
en bespaard kosten!

Eco Driving is **eenvoudig**
en goed voor de planet!

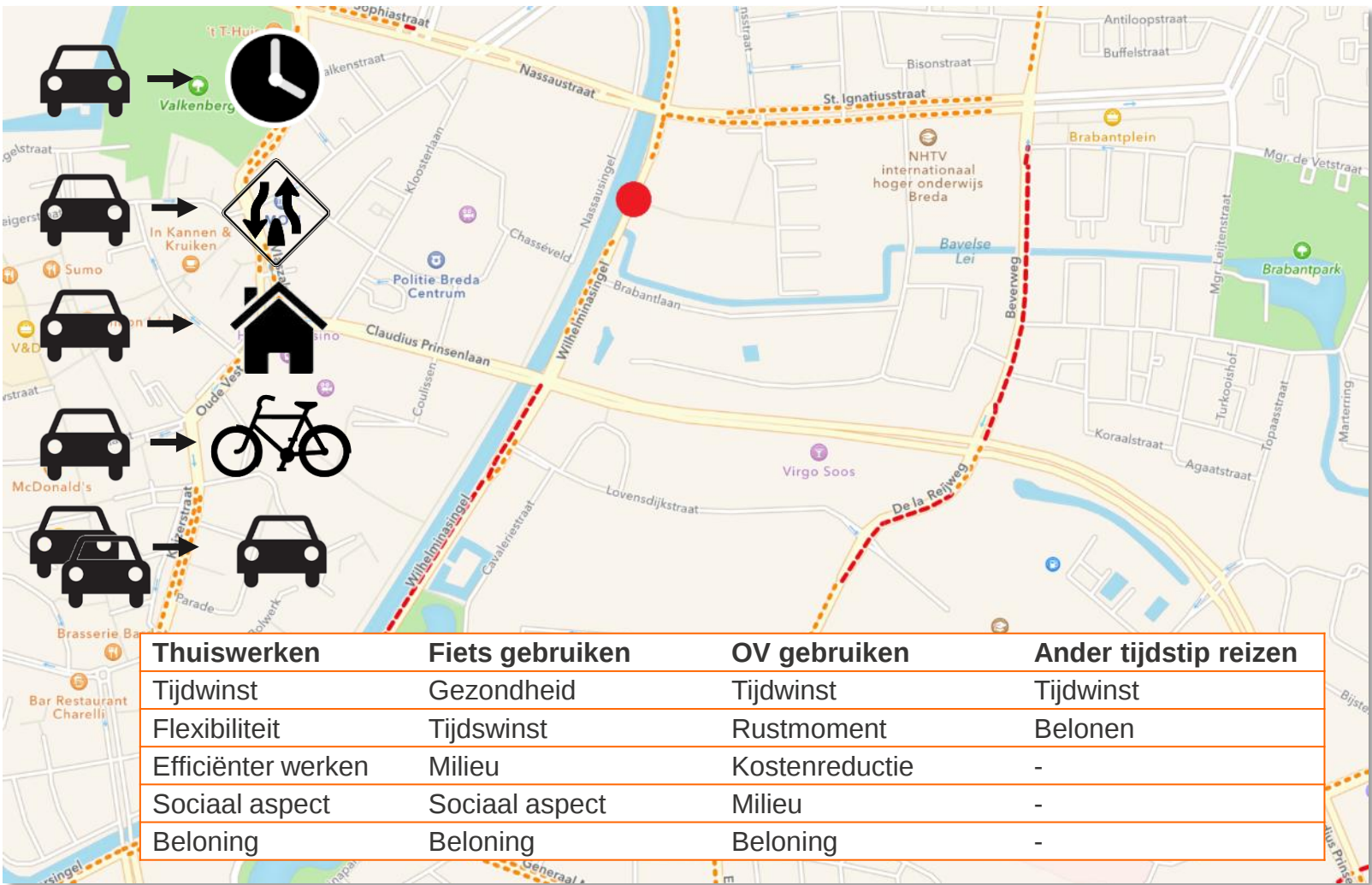
Eco Driving is erg **moeilijk** en
alleen de **besten** kunnen het!!



App om een betere chauffeur te worden!



De *in beweging* aanpak



Onderneemster
maakt steeds de
slimste keuze



MAAIKE

ZZP-er
reist heel divers en
veel



MICK

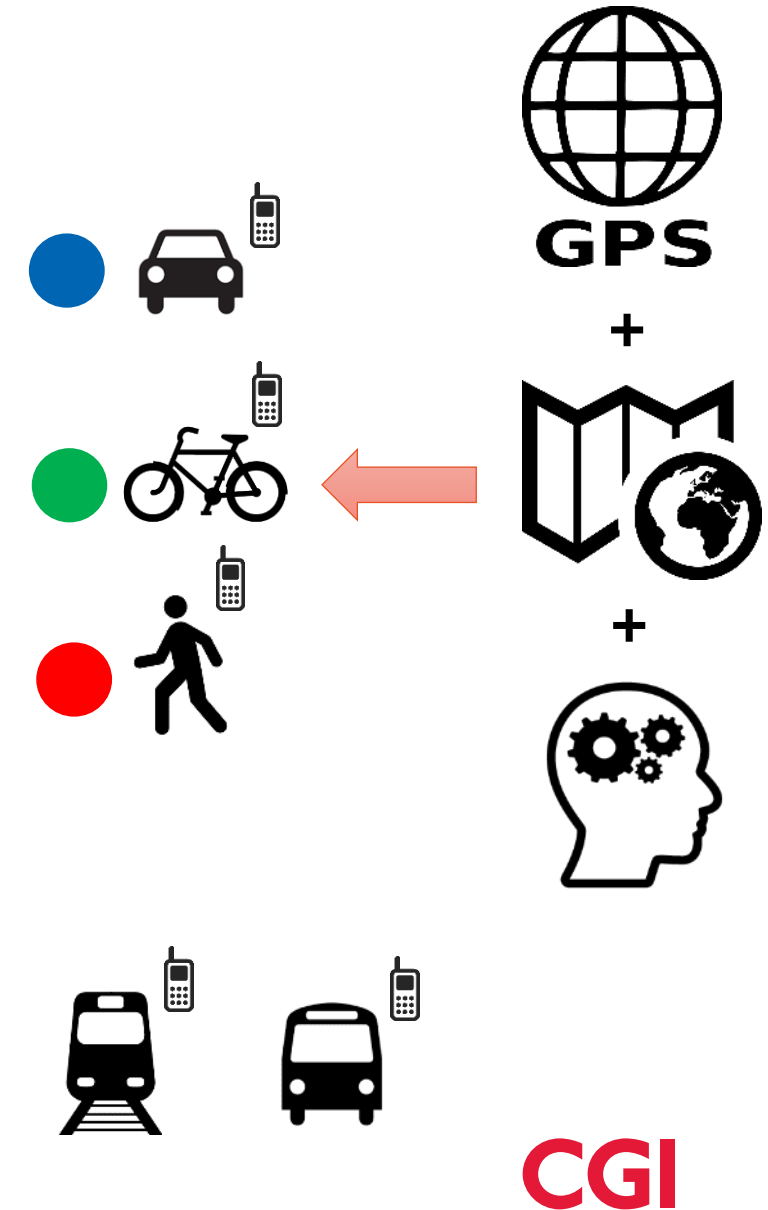
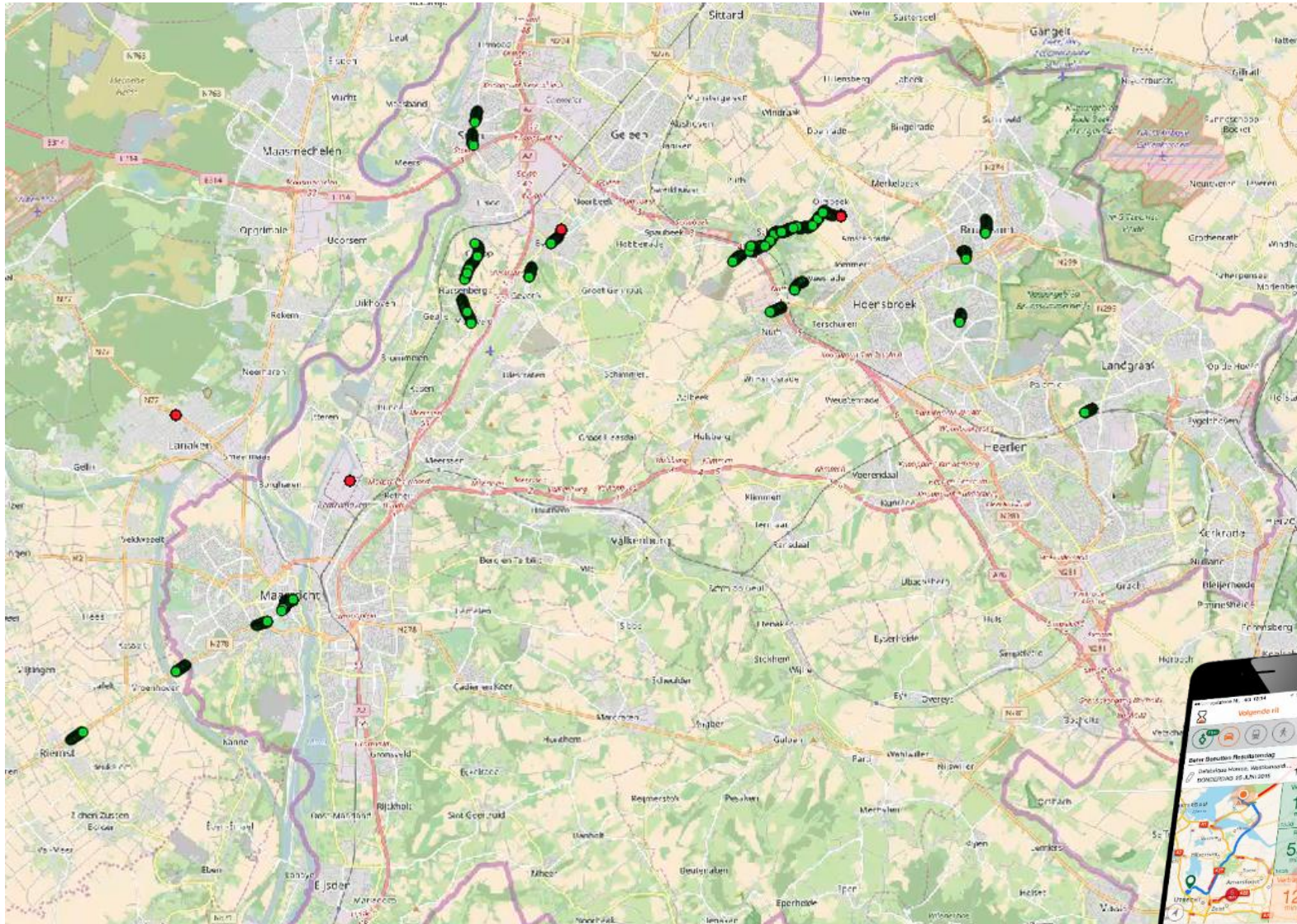
net student af, heeft
geen eigen auto,
maar wil er wel één



JAN



De telefoon als monitor tijdens de reis

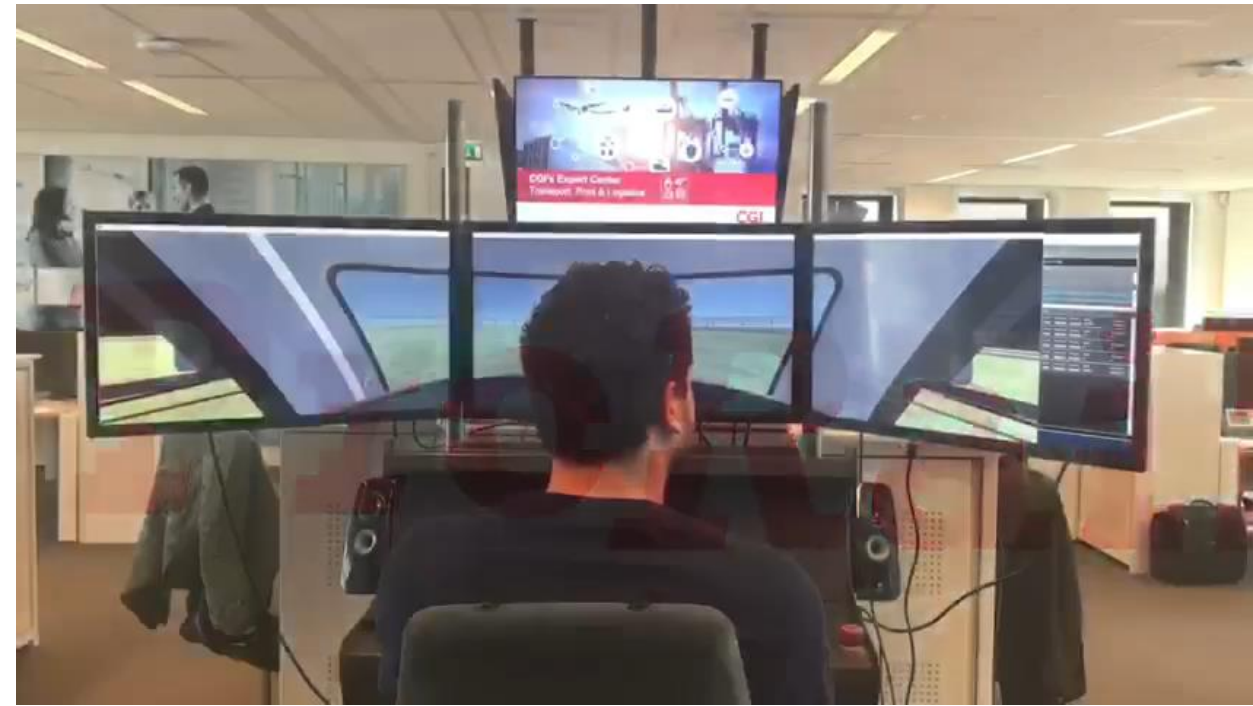


in beweging

3D Simulaties



CGI



SIGMA

De absolute spoorgeometrie
in één database
en één integraal model

ProRail **CGI**





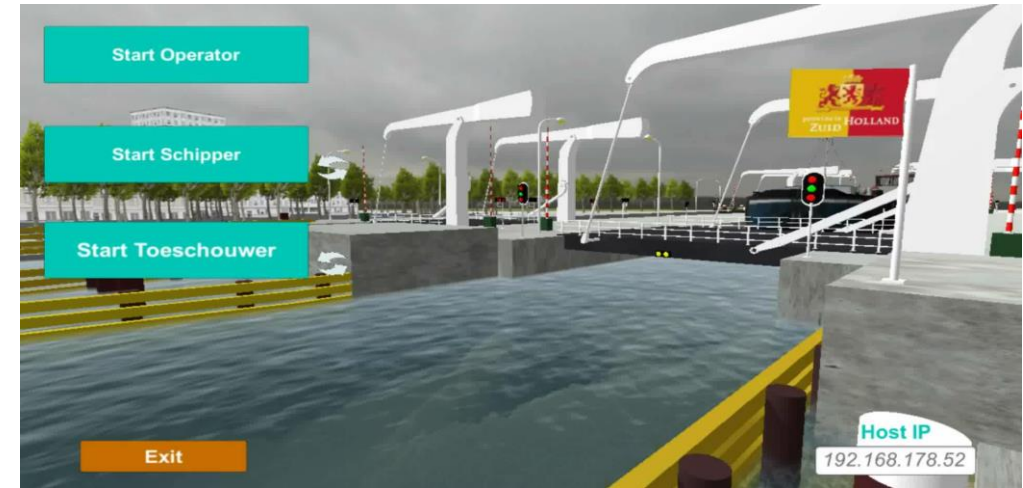
Zo 'vaart' de brugwachter ook eens met container over de Gouwe bij Waddinxveen. (Afbeelding provincie Zuid-Holland/CGI)

Brugoperators Gouwe virtueel op stuurstoel schipper

Serious Gaming

Door Dick den Braber

De afstemming tussen (vaar)weggebruikers en brugbedieningscentra kan beter, vindt de provincie Zuid-Holland. Te beginnen bij de drukbevaren Gouwe tussen de overslagterminal in Alphen aan den Rijn en de Julianasluizen bij Gouda. Een speciaal ontwikkelde vaarsimulator moet uitkomst bieden.



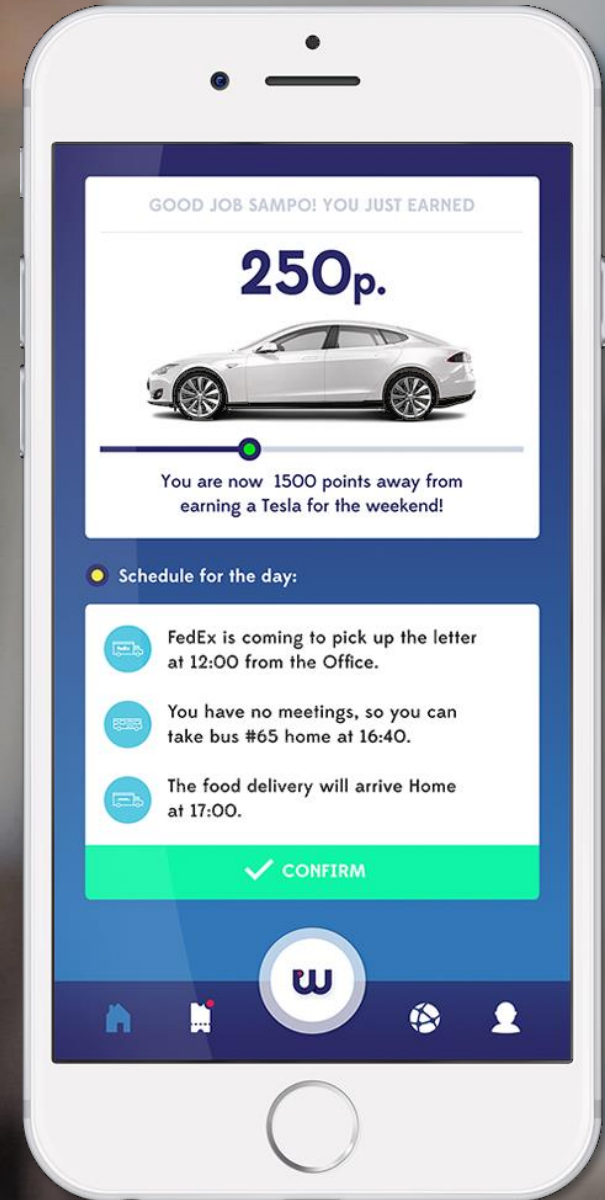
provincie
ZUID HOLLAND **CGI**



From Ownership to Experience

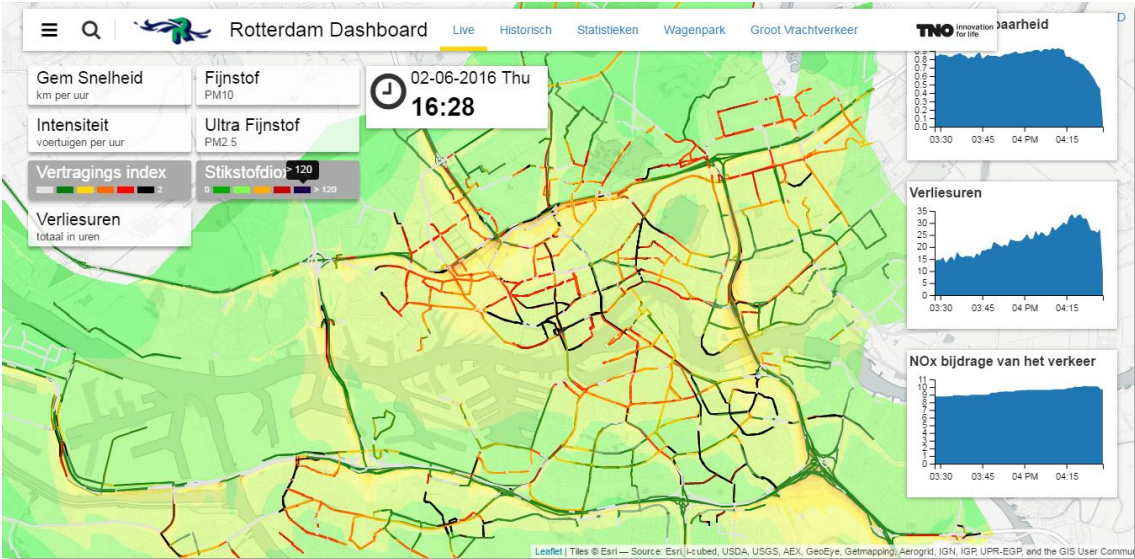
WHY OWN AND DRIVE AN OLD CAR –
WHEN YOU COULD USE A BRAND NEW
ONE, WHENEVER YOU NEED?

Whim, binnenkort ook
beschikbaar in Regio
Amsterdam!



Dashboards en Simulaties

STADSDASHBOARD



MIT BIG DATA CHALLENGE
VIEW 2 - TAXI SUPPLY AND DEMAND
Pickups in teal
Dropoffs in pink
Day: Sunday
Time: 16:00 - 18:00

Taxi Service Trajectory
Prediction Challenge @ ECML PKDD 2015



**Delivery costs and
service areas update in real time**

SAV2008
Last Mile Network Design

2013 Delivery Data
9 Deliveries
Population Value
276 HOUSEHOLDS
Demand Probability
0.000
Cost Per Delivery
NO DATA
Total Delivery Cost
0.000

Demand Probability
Source: 2013 U.S. Census
10 miles
15 miles
4.1 km

Smart Digital Delta

Everything that the region needs to increase data productivity and take the step towards a digital economy: better digital connections, networks, platforms and big data.



Smart Energy Delta

Everything required to set up an infrastructure for renewable energy: smart networks, new clean energy sources, CO₂ storage, conversion and storage technology.



Circular Economy

Everything related to using and recycling resources and residual materials in the region.



Entrepreneurial Region

All the building blocks for the good, pioneering entrepreneurial climate required to facilitate the transition to a new economy: new business models, products and services, new cooperative forms, the development and support of start-ups, new legislation.



Next Society

The actions required to shape the inclusive society of the (near) future: developments in the labour market and education, cooperatives, popular movements and new forms of social entrepreneurship and ownership.



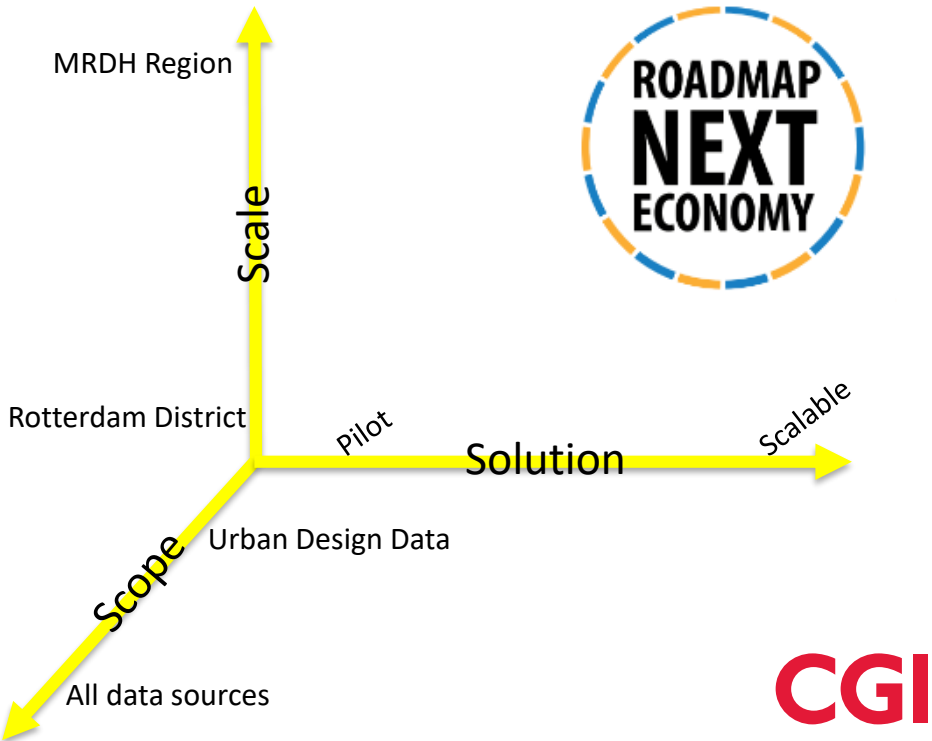
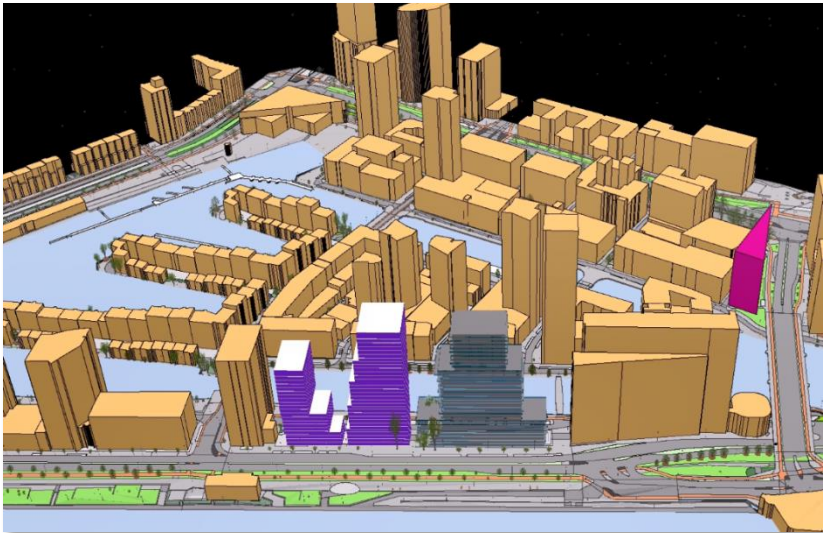
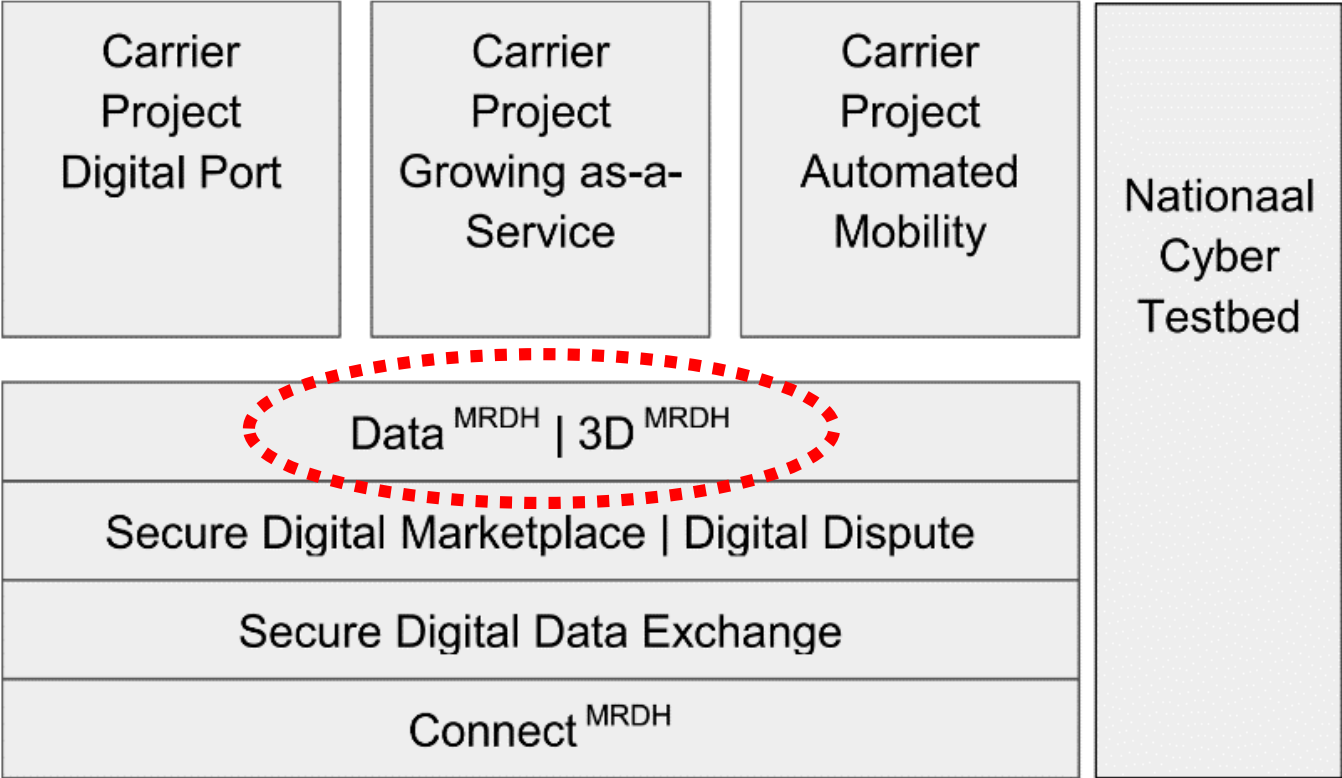
The Rotterdam The Hague Metropolitan Area (MRDH) is a voluntary association of 23 municipalities in a polycentric metropolitan network with approximately 2.3 million inhabitants. The region comprises two center cities and various middle-size and small cities.



Large scale, EU Funded, regional redevelopment program



RNE project: 3D Data^{MRDH}





A NEWLY PLANNED BUILDING RAISES MANY QUESTIONS

Our vision: A virtual, interactive 3D model that answers all of them!

How much energy can this building generate?

Does this building conform to the city's long-term urban plans?

What are the mobility needs of the future occupants?

Will my room receive enough sunlight?

How can goods be delivered to the building with minimal impact?

How many people currently occupy this building?

Does this building suit my company's needs?

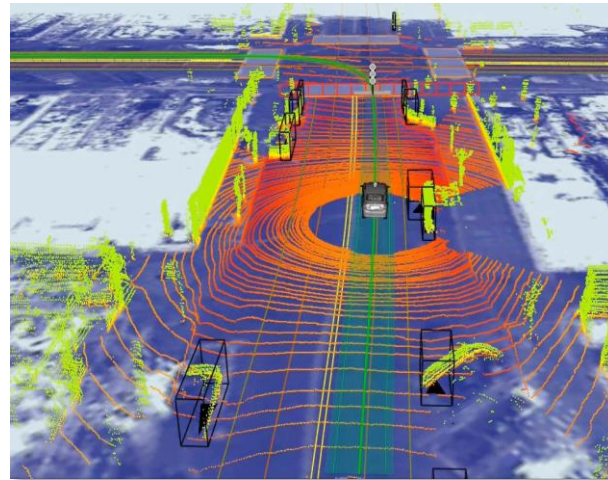
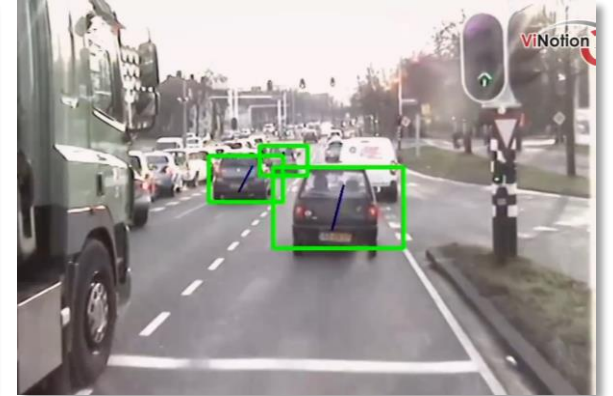
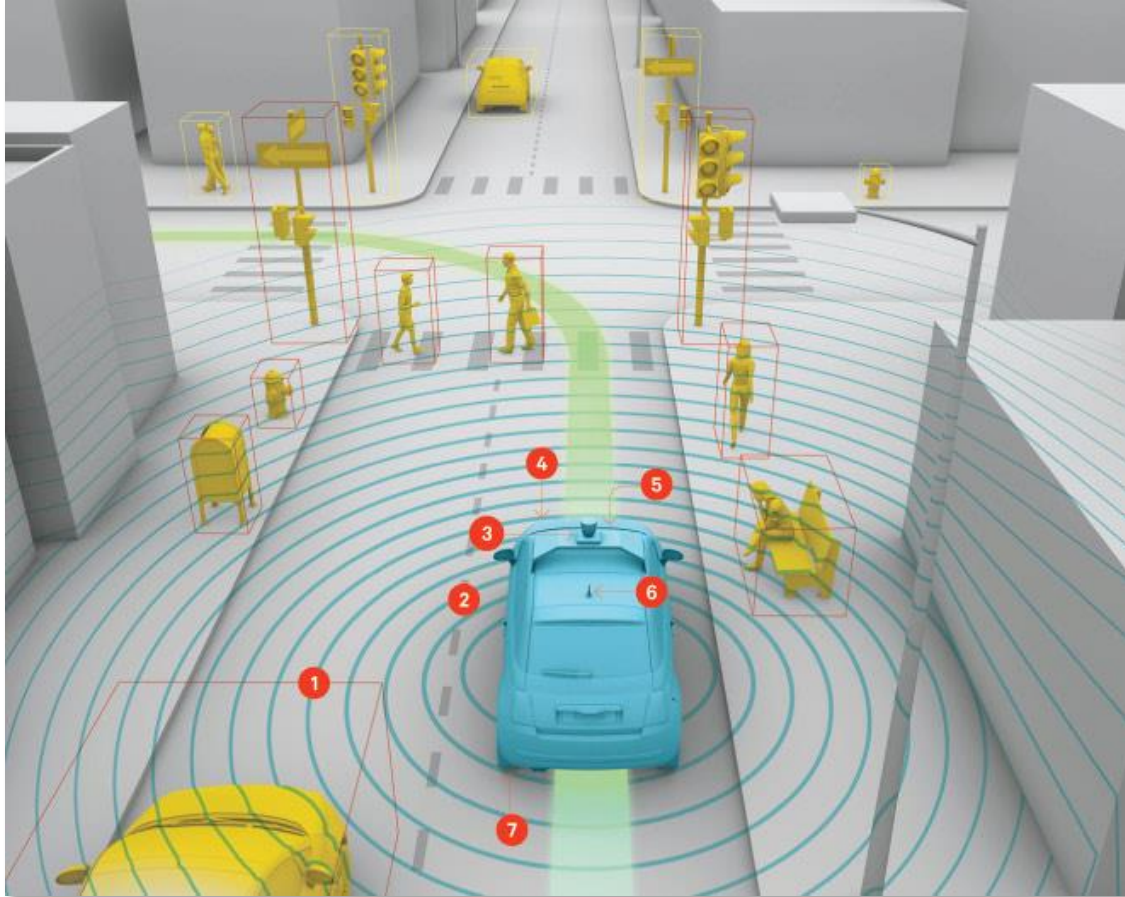
Can the transport network meet the mobility demands of the occupants?

How much of the garbage produced by this building is recyclable?

How can we secure the safety of the occupants in case of emergencies?

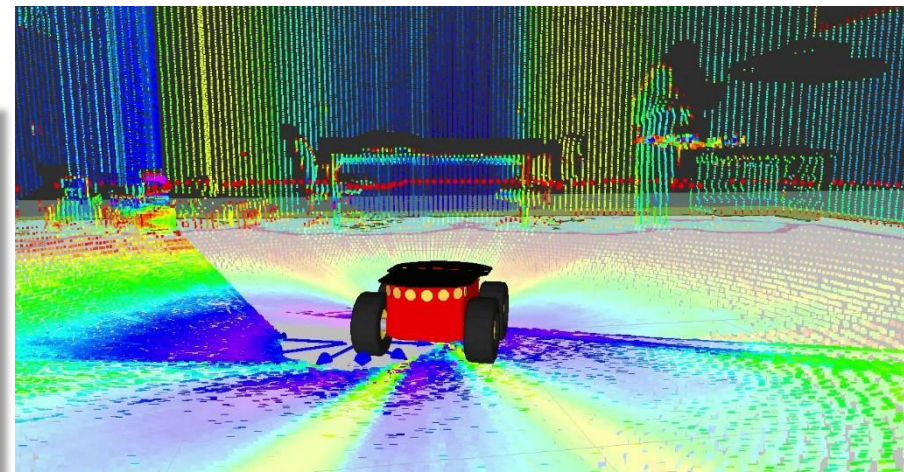
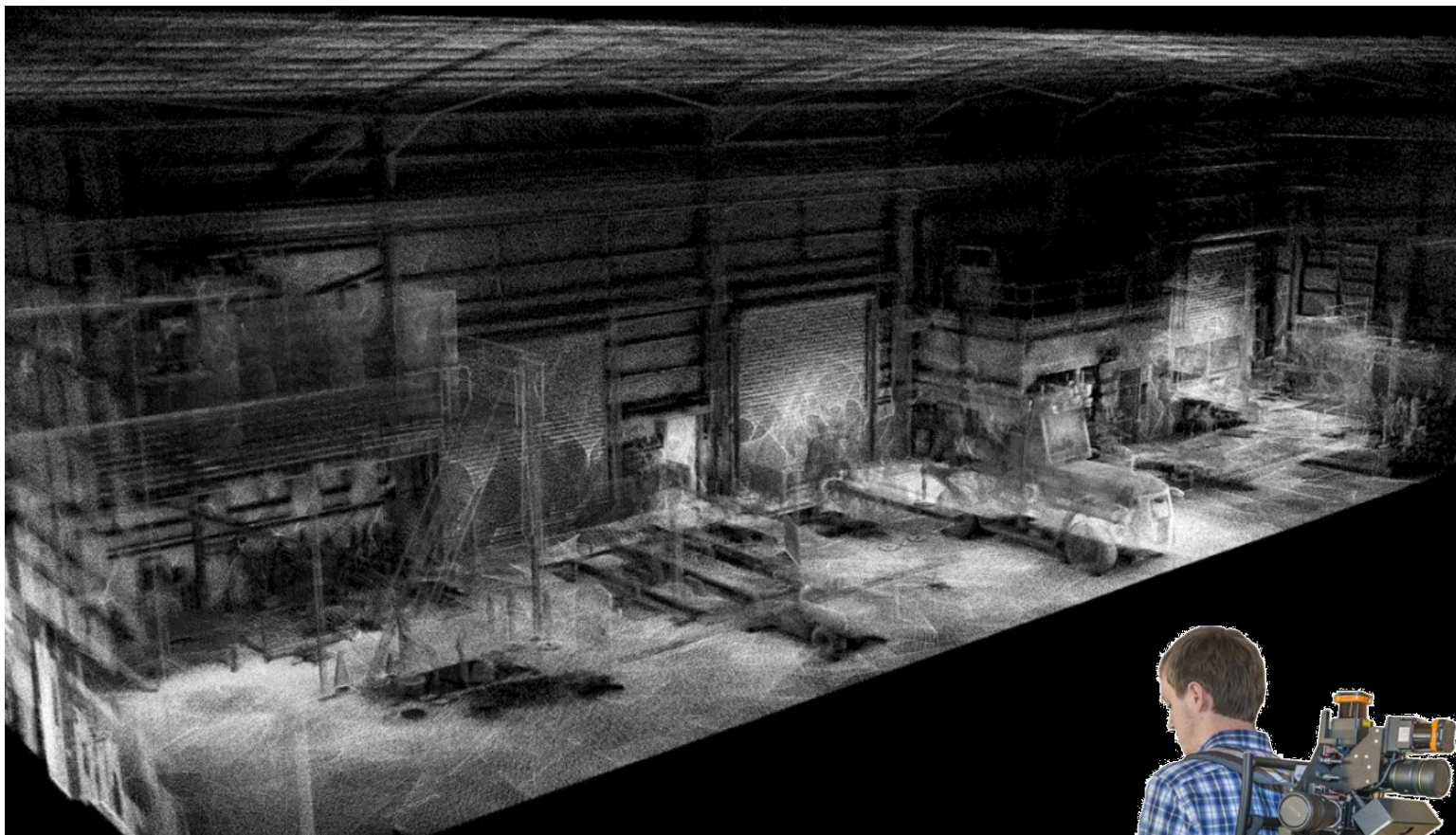


Automatisch rijden



Self-driving cars could create 1GB of data a second

Using sensors for indoor scanning





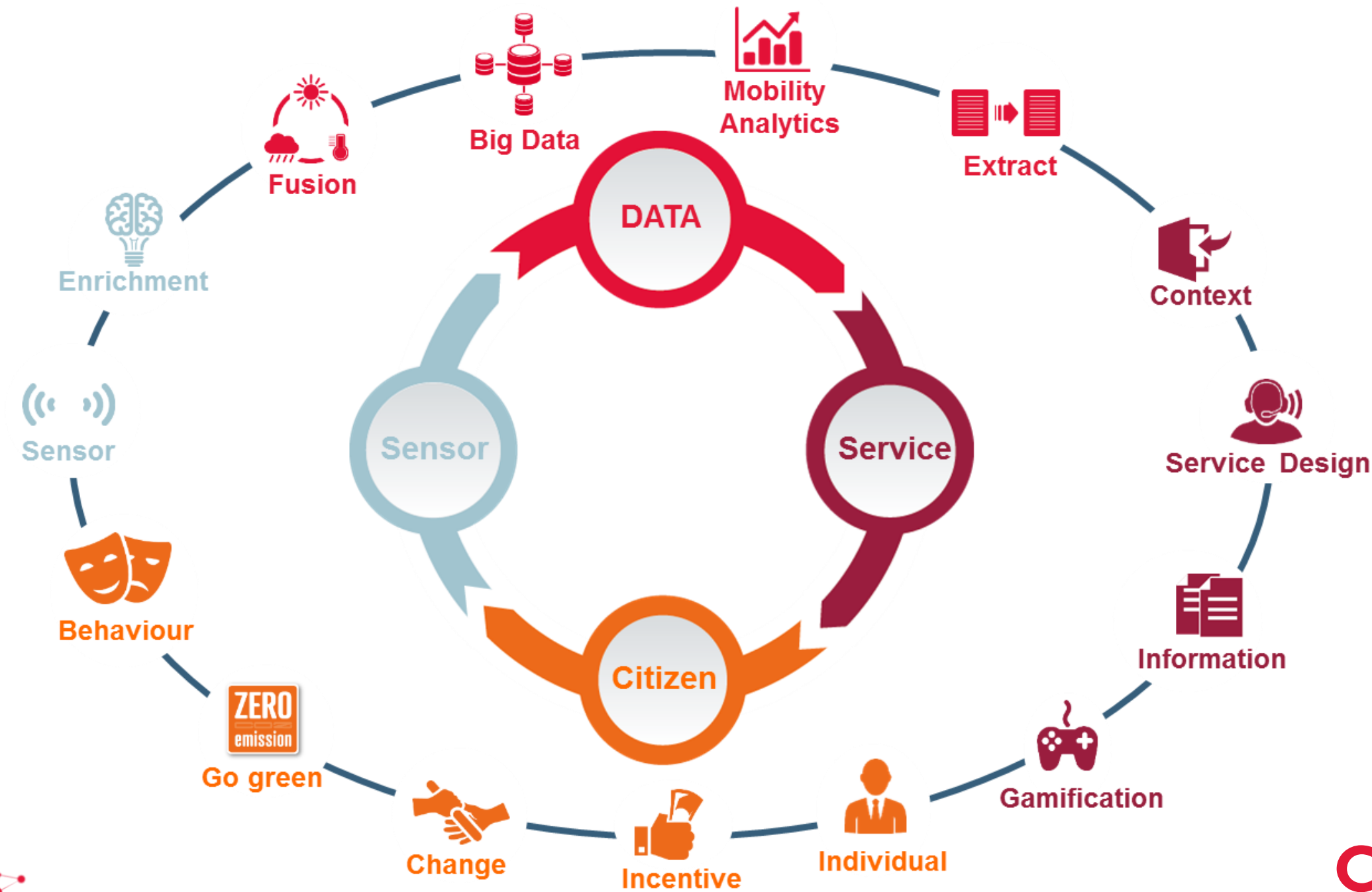
De Stad van Morgen



There are

4

times as
many parking
spaces as
cars in
America.



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