
Internet of Things Food Farms and the rest
"Just another data stream"
Antoine van den Oever
Wageningen, Juni 2018
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Race against the clock
kpn


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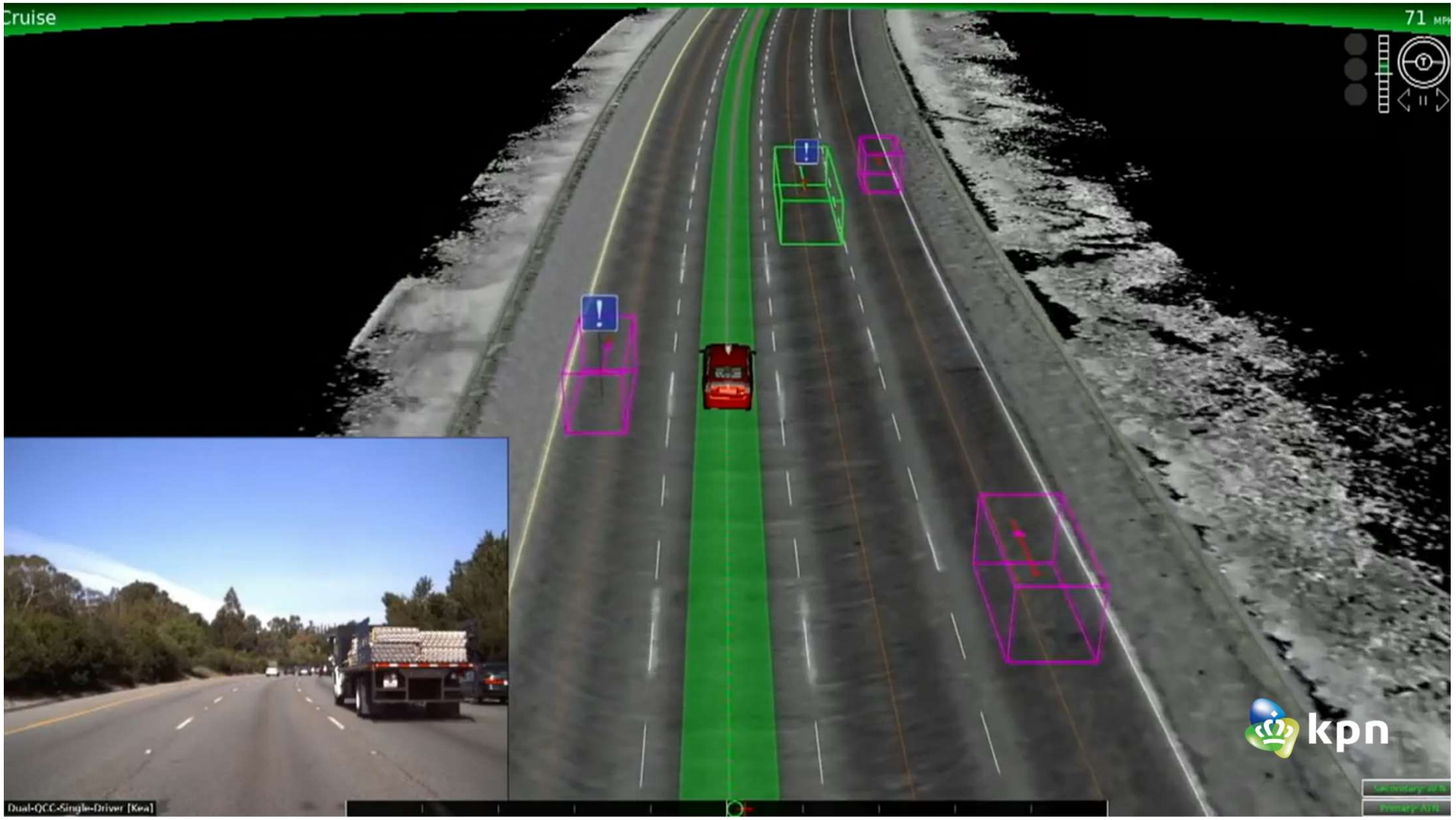
Boston Dynamics


kpn
KNIGHT RIDER


Google
kpn

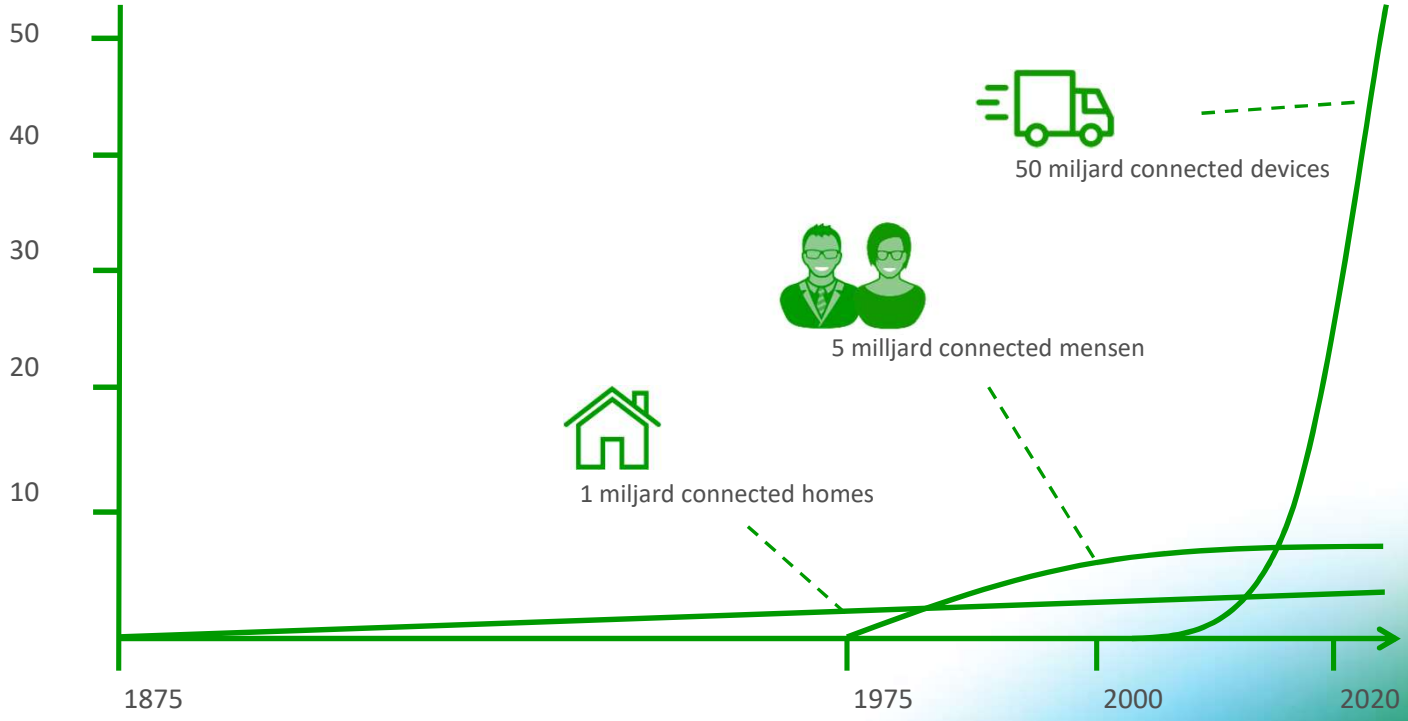

Cruise
71 MPH
Dual-QCC-Single-Driver [Kea]
kpn

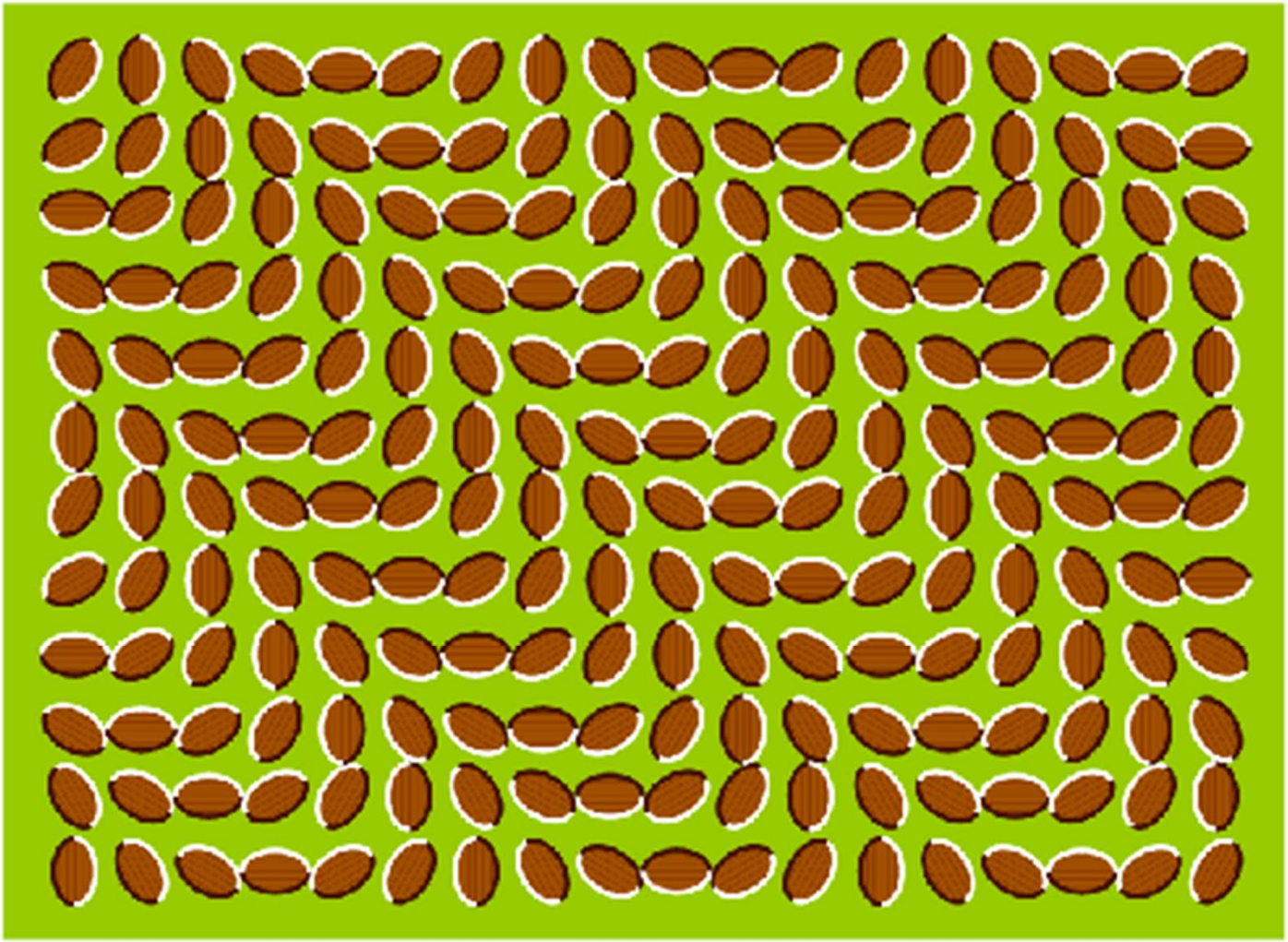
Precision farming

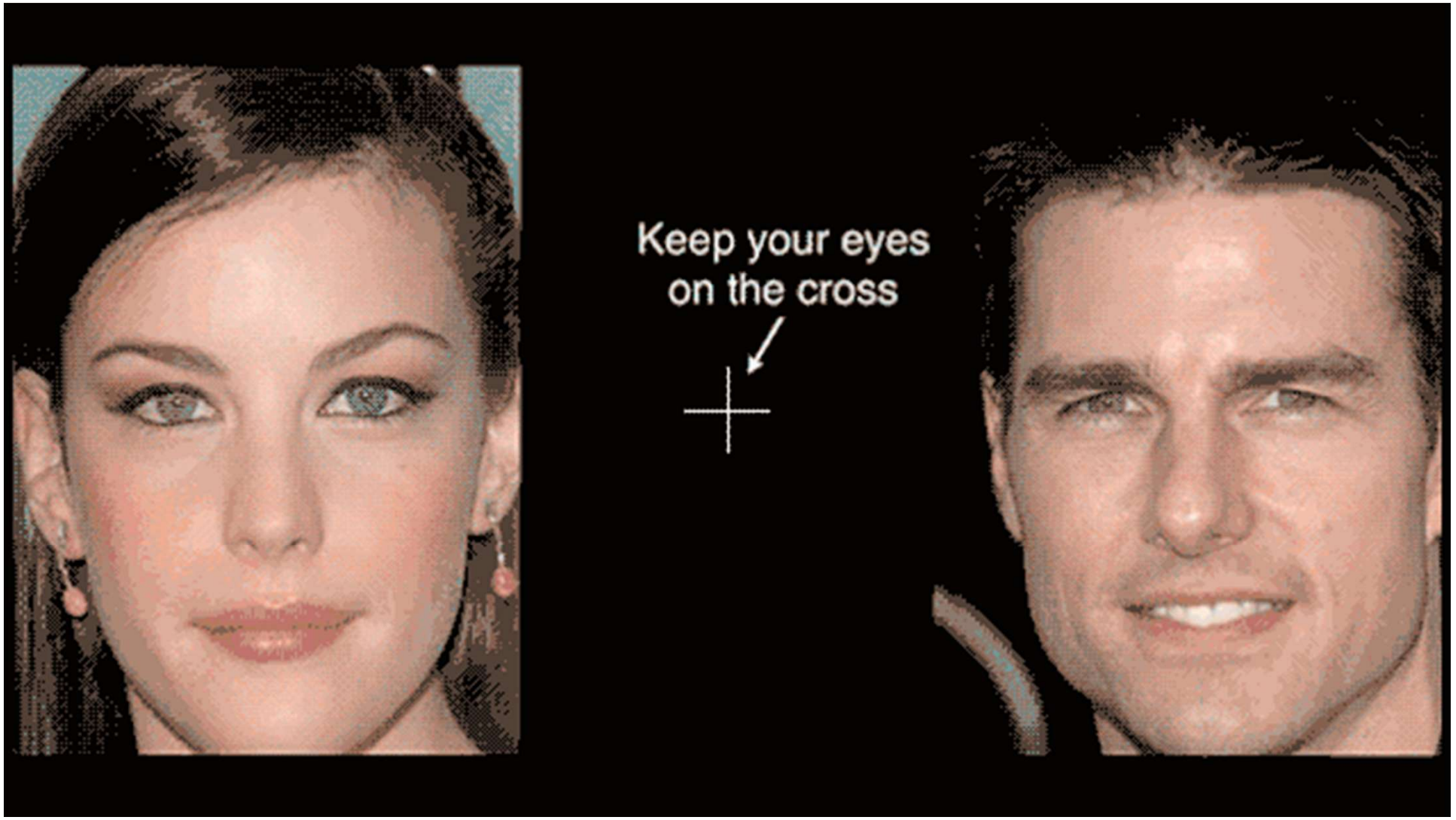

kpn

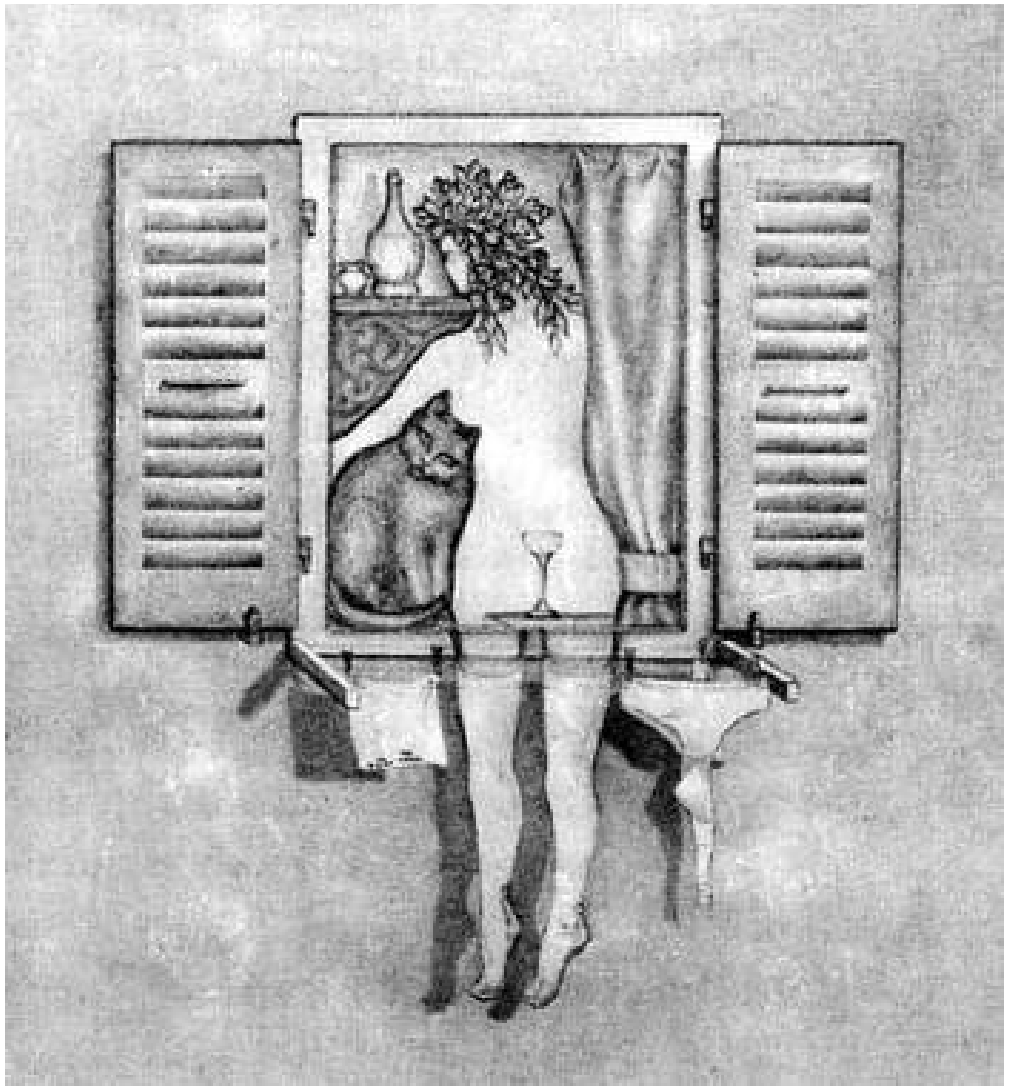
De groei van IoT

50 miljard devices zijn verbonden in 2020

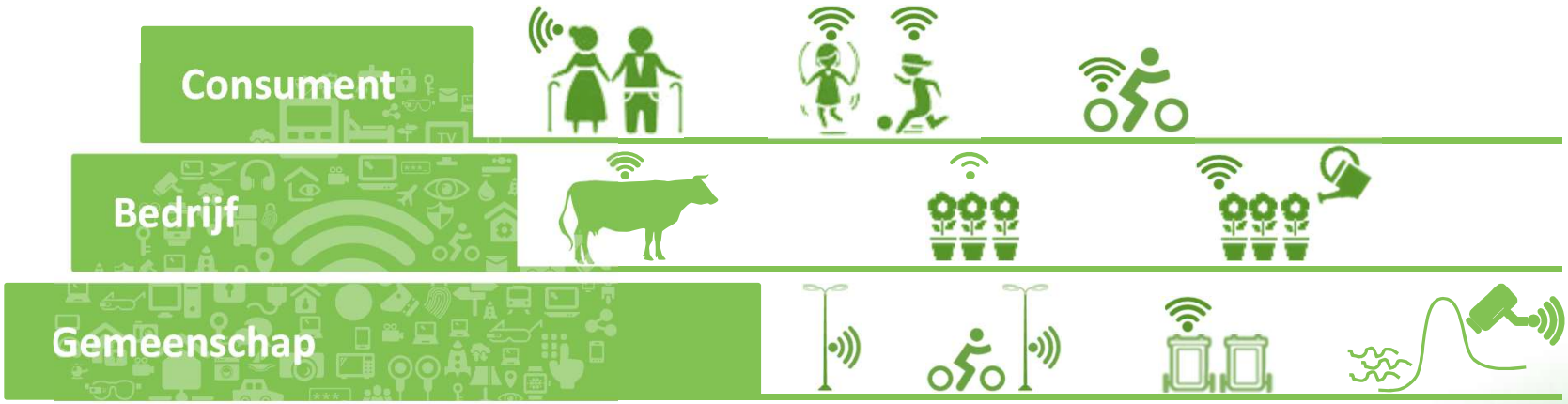





Keep your eyes
on the cross



IoT heeft impact



KPN claims full national covarage for its LoRa LPWAN network.

TELECOM TV

KPN completes first nationwide network Internet of Things.

nu

First nationwide network Internet of Things

De Telegraaf

The Netherlands is the first country to have nationwide LoRa IoT network coverage

KPN will connect 1.5 million devices to LoRa nationwide network

tweakers

Netherlands gets first nationwide 'Internet of Things'.

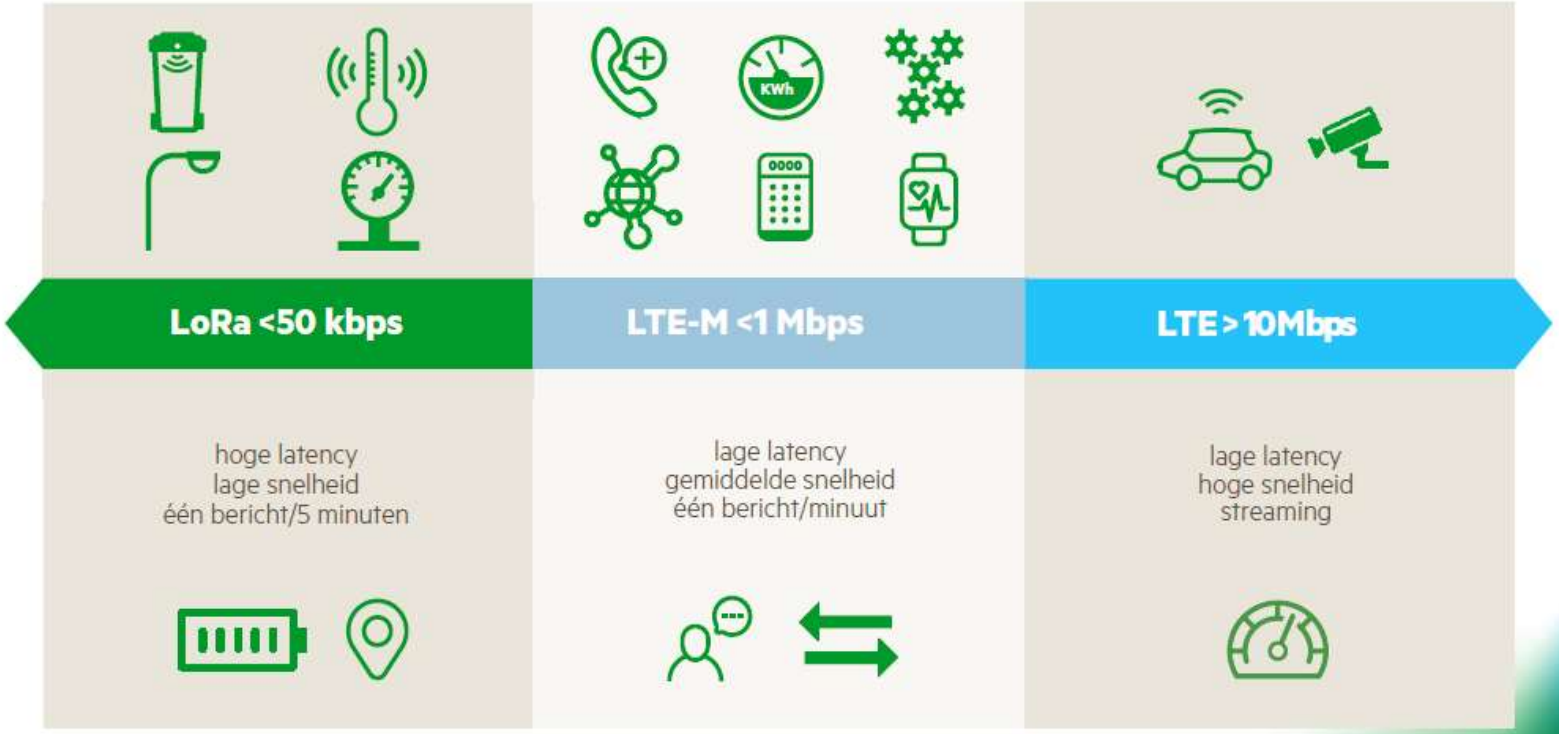
THE STAR ONLINE

KPN has completed nationwide network for Internet of Things

NOS

kpn

Toepassing bepaalt technologie



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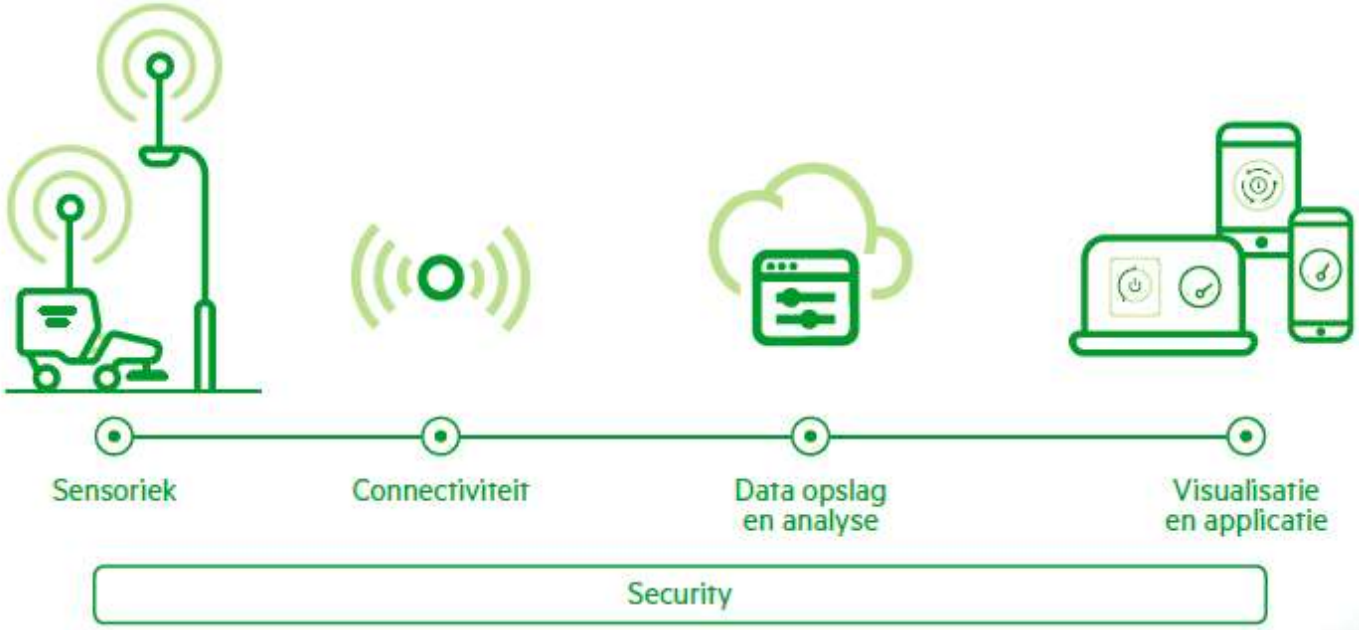
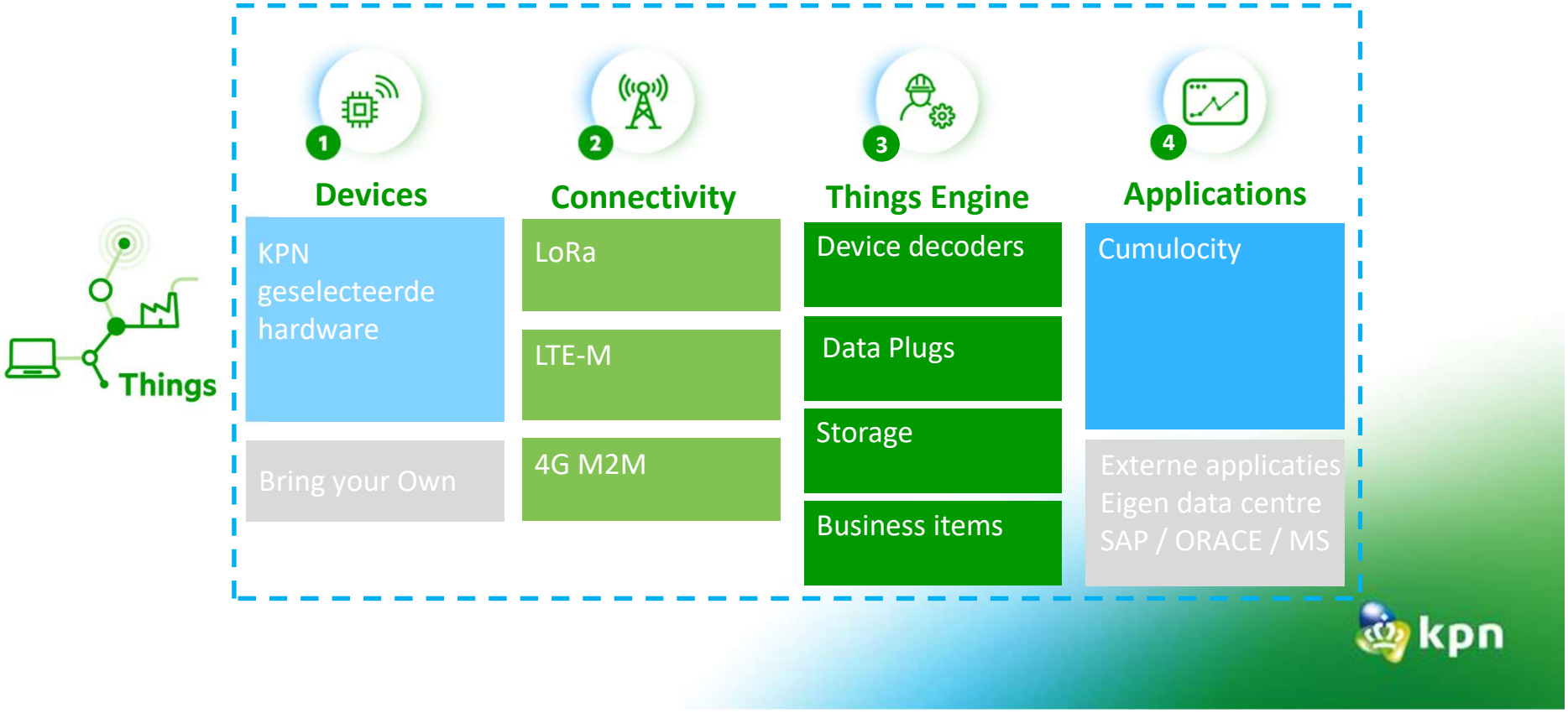
IoT keten


Sensoriek
Connectiviteit
Data opslag
en analyse
Visualisatie
en applicatie
Security

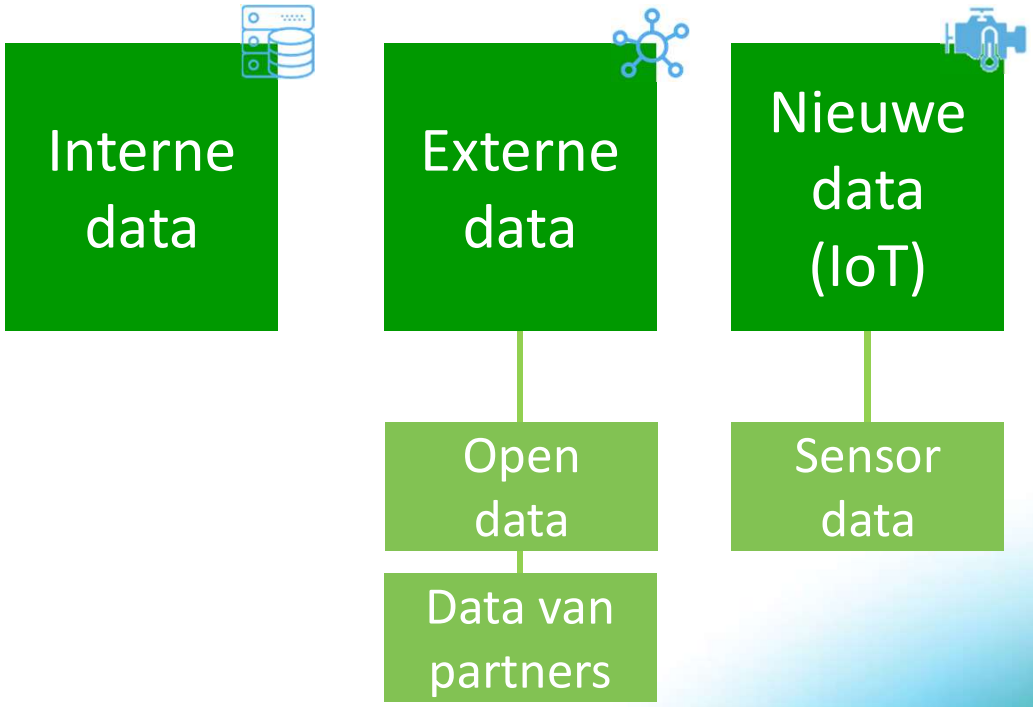
Vereenvoudigen van IoT

Met End 2 End solutions of modulaire bouwblokken

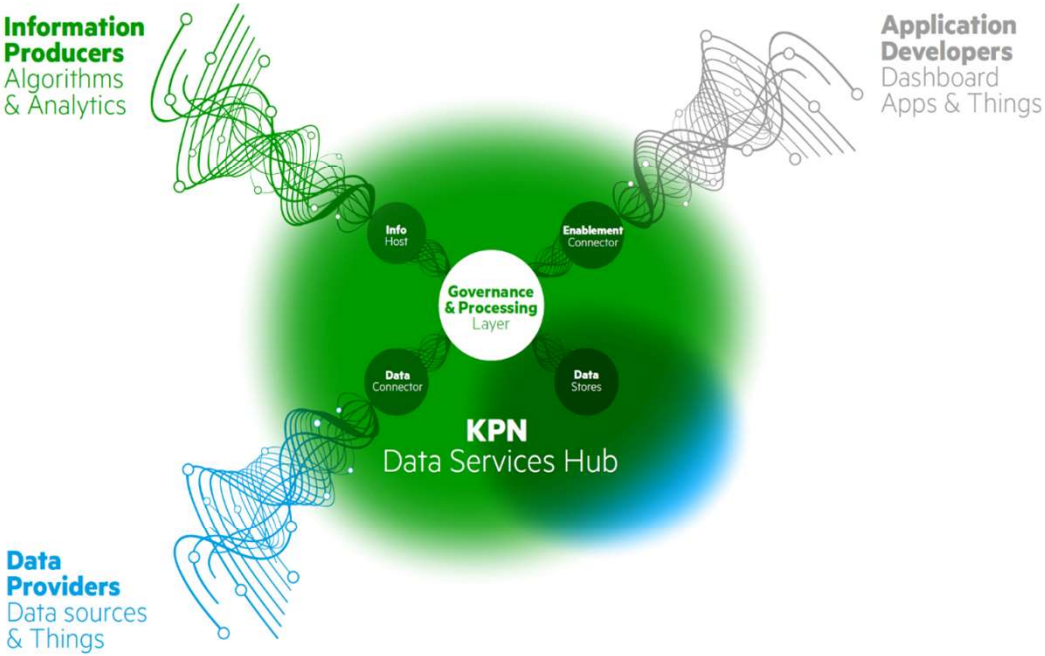


Het draait om waarde uit beschikbare data

Combineer **interne, externe** en **nieuwe** data voor de gewenste inzichten



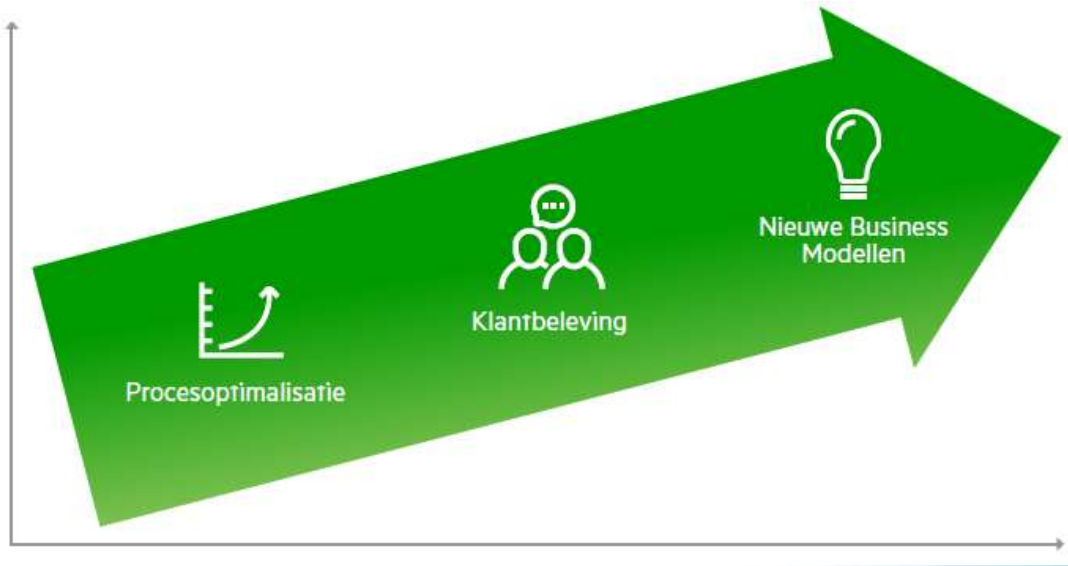
Data Services Hub functional architecture



- **Eco system owners**
  Optimise the processes in your chain by improving the way data is delivered.
- **Information producers**
  Translate multiple data flows into information you can use. The information products are hosted in a container on the DSH.
- **Data providers**
  Supply a data flow and choose which information products and parties may use this data flow and under what conditions.
- **Application developers**
  Display the information products in an application that can be used by end users.

Business Drivers

Waarom Internet of Things




Smart
Farming
IoF 2020
kpn

Internet of Food & Farm in Akkerbouw

Hoe gegevens van verschillende soorten sensoren (bodemvocht, organische stof in de bodem, klimaat, enz.) Kunnen worden gebruikt om opbrengsten te voorspellen, beheer zones te definiëren en taakkaarten voor landbouwmachines op te stellen.

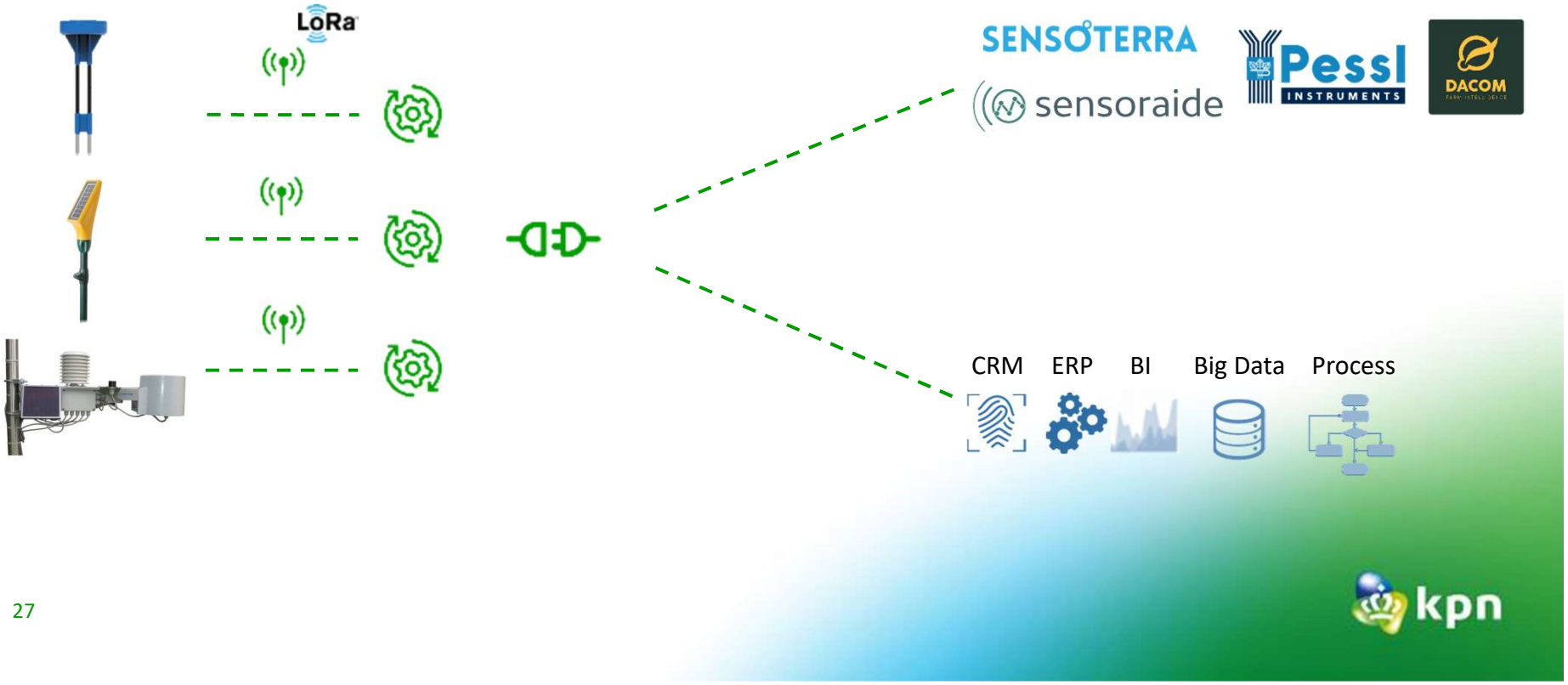
Deelnemende pilot farms in IoF2020

Forward Farm Bayer
Locatie: Abbanes
Jasper Roubos

Van den Borne Aardappelen
Locatie: Reusel
Jacob van den Borne

Beschikbaar stellen van sensor data

Welke zijn te gebruiken voor diverse doeleinden



Slimme Mobiliteit

Talking Traffic


Making our infrastructure more free, more fun and easier to use
Always a green light
10% less travel time in rush hour
20% less traffic jams
NITROGEN
TEL. +32 3 561 61 11
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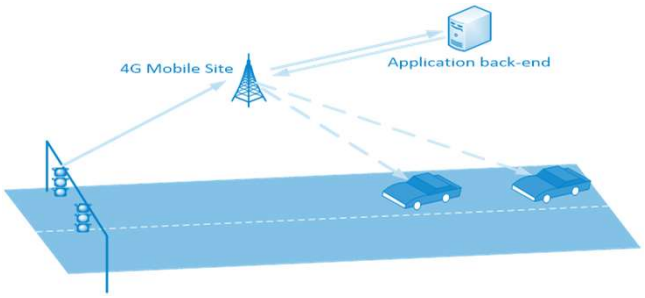
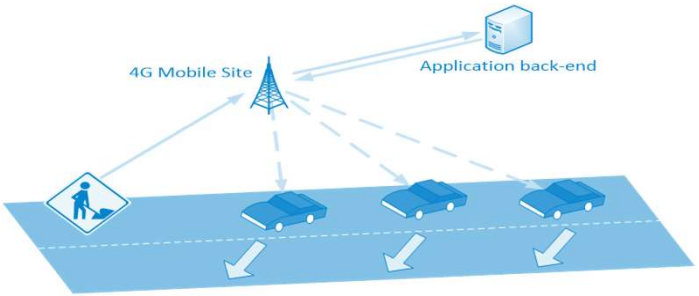
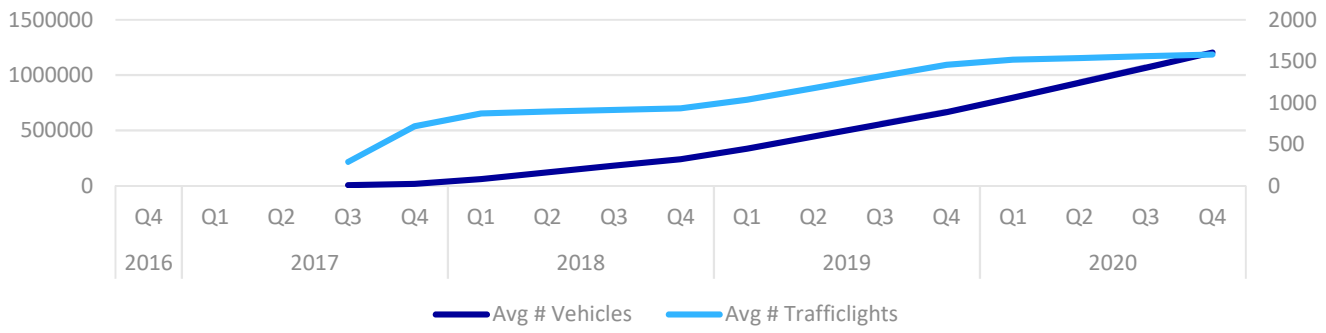
Time to green and roadwork warnings

Examples of use cases and adoption is projected up to 2020





Growth in connected vehicles and traffic lights



Source: Talking Traffic tender, Dutch Ministry of Infrastructure and Environment


Een IoT oplossing
tegen ongedierte
Slimme plaagdier
bestrijding
kpn


Asset
Management
Van Happen
Containers
kpn


Slimme
wissels
ProRail
1298
kpn

Kathodische Bescherming

Slimme monitoring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