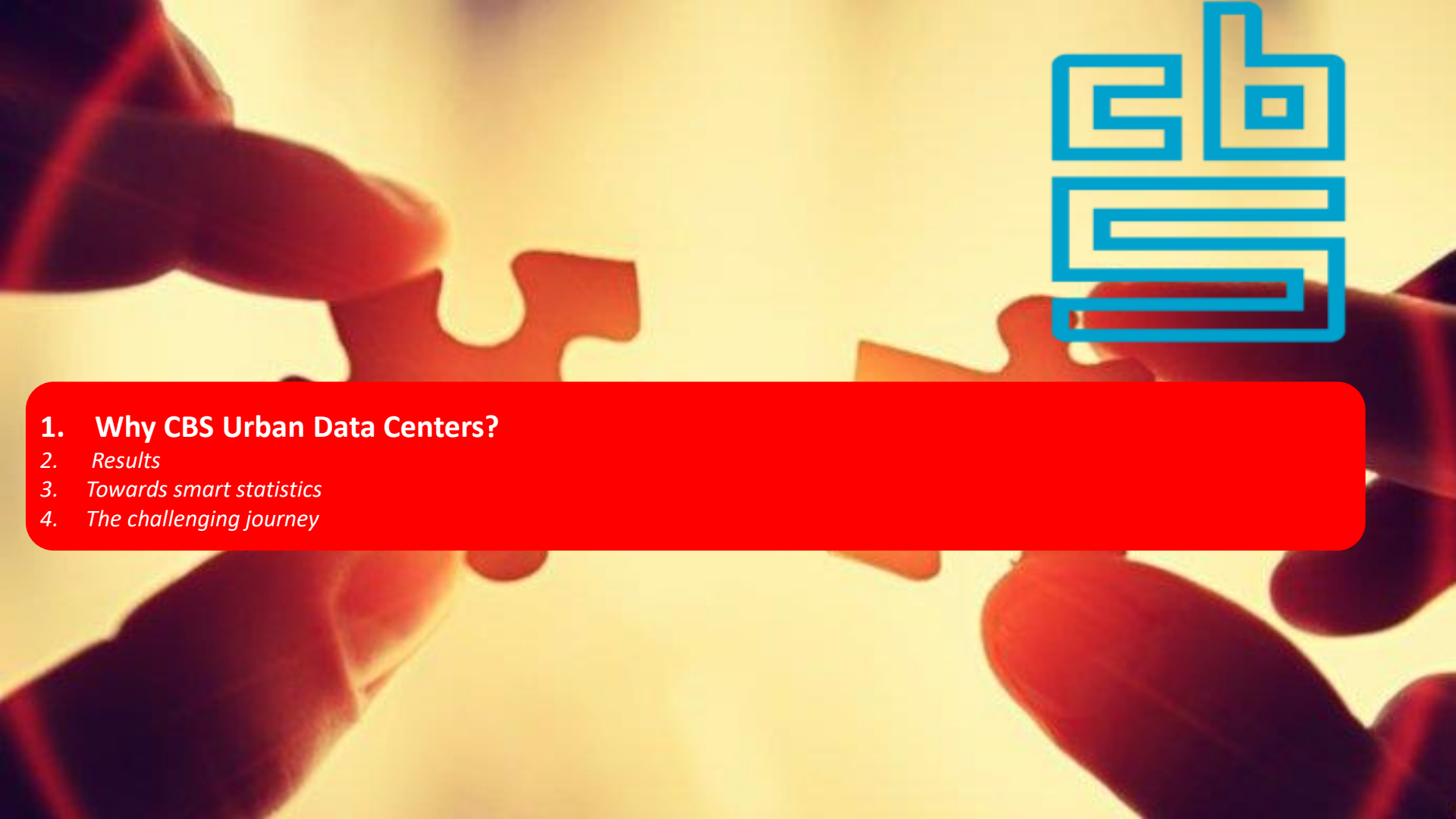
Urban Data Centers in The Netherlands

Barteld Braaksma - CBS Innovation Manager

1. Why CBS Urban Data Centers ?
2. Results
3. Towards smart statistics
4. The challenging journey



1. **Why CBS Urban Data Centers?**
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Cities have many data related ambitions:

Data driven, fact and evidence based, open data, big data, standardising data, (inter-) national benchmarking, smart cities

But cities lack access to *national* data and often lack data – expertise with regards to:

- ***data science***
- ***data analytics***
- ***data integration***
- ***data visualisation***
- ***data management***

So…why did CBS create Urban Data Centers ?

To connect CBS data and CBS data-expertise to cities leading to:

- *a better understanding of a city*
- *better (facts based & data driven) informed city decisions*
- *better city finances (smarter use of data can lead to substantial savings on city budgets)*
- *optimized, harmonized, standardized data local – regional – national - international*

Urban Data Center

Rural data center

Provincial data center

'16 '17 '18

EINDHOVEN · Gemeente Heerlen · Gemeente Groningen · venlo · Zwolle · Leidschendam-Voorburg · Den Haag · Kempengemeenten · LEIDEN · provincie limburg

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Data may lead to better insights and better spending of city finances:
combining and integrating data may help
to ***fight city poverty*** and realise savings on city social welfare budget

Data Camp The Hague

innovative collaboration model
before launch of UDC The Hague (March 2017)

- 30 researchers, four organisations
- 8 research questions related to poverty

- Working in secure closed environment
  - CBS microdata
  - The Hague microdata
  - Social media, online election programs

- Very successful, but
- Far too little time and data…☹

CENTRE FOR BOLD CITIES

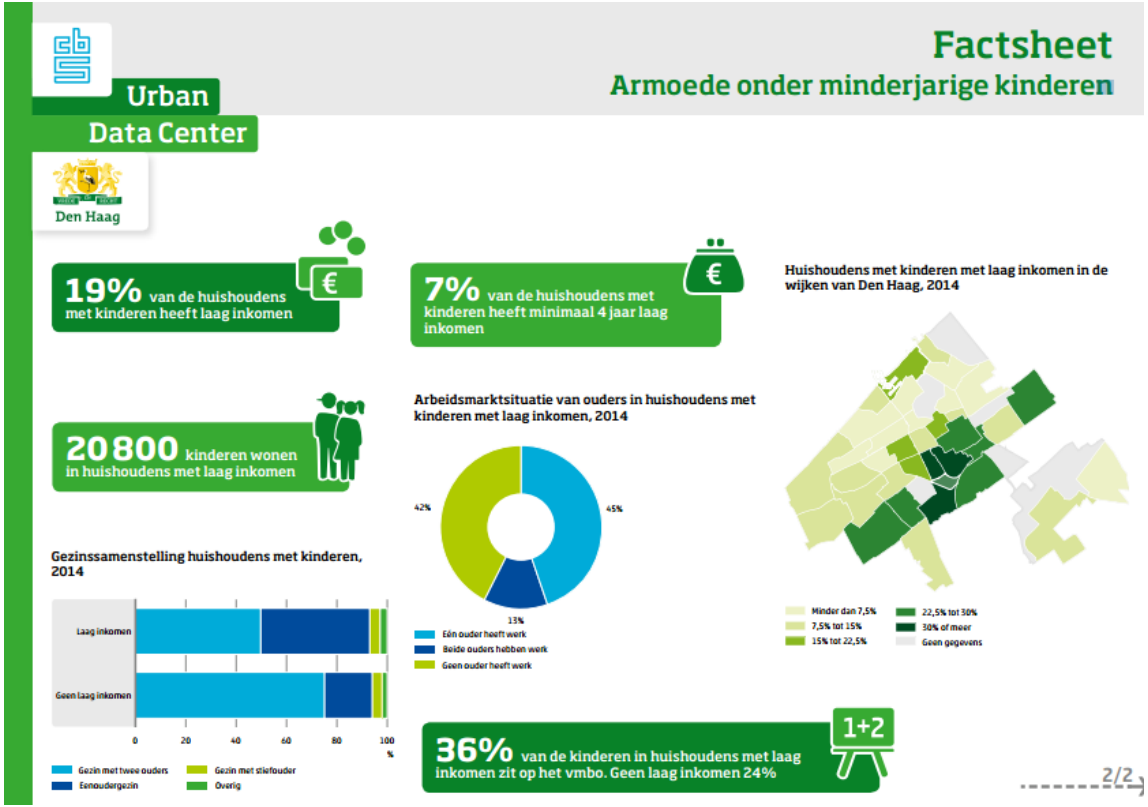
Digitale Steden Agenda
vernieuwingskracht voor de hele stad

VREDE EN RECHT
Den Haag

Urban Data Center

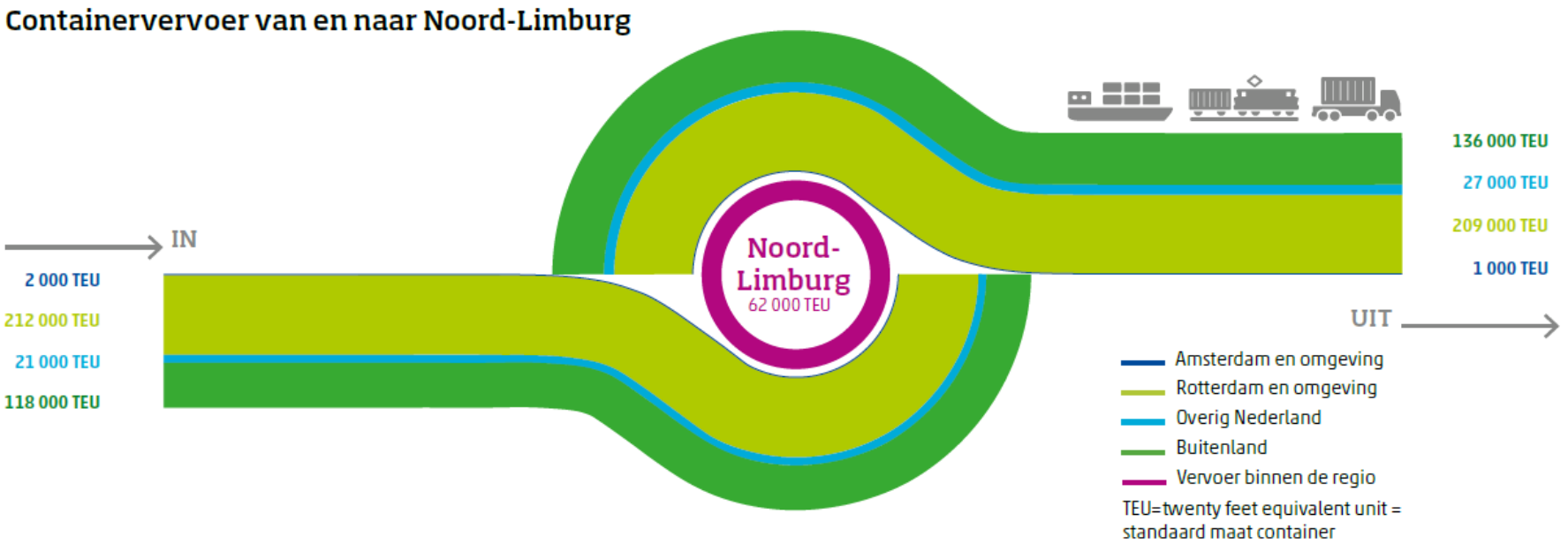
Poverty among children in The Hague

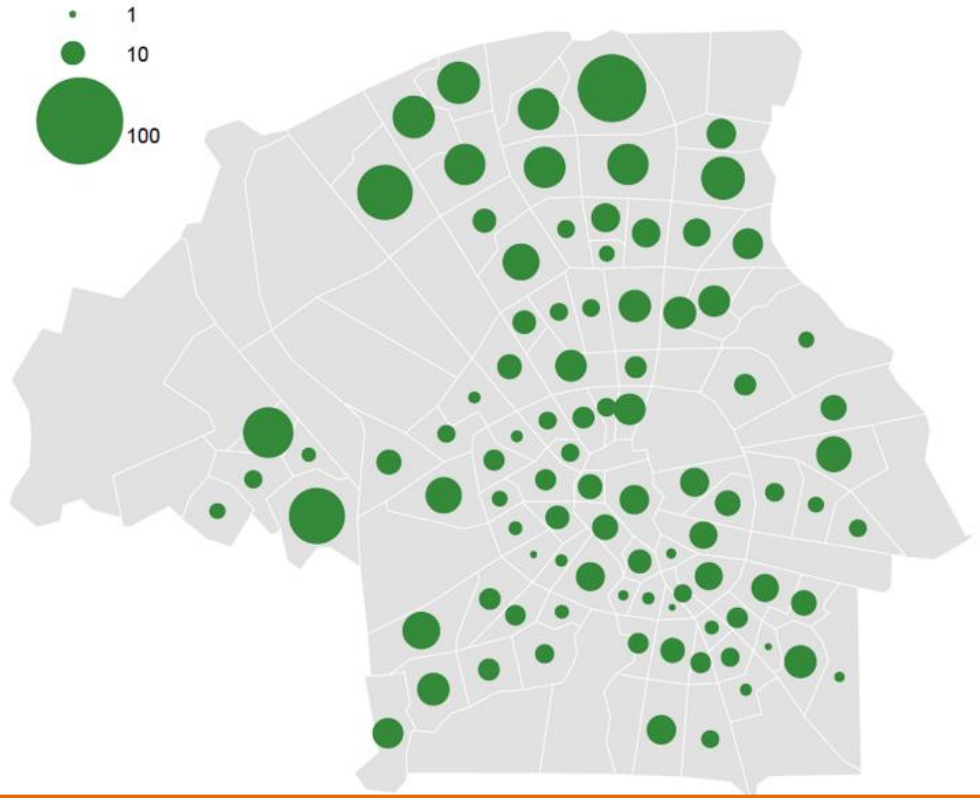
Information on
- ✓ Children affected
- ✓ Parents' work
- ✓ Family situation
- ✓ Education level
- ✓ Living environment
- ✓ Duration



Information presented at the opening of UDC The Hague, September 2017
as part of a Fact Sheet
inspired by results from the data camp

Better understanding cross national border transportation of goods **(used for citymarketing)**





Data driven (investment) decision making in UDC Eindhoven

Where are the electric cars?

Information used to install charging stations for electric cars in the right places

Through collaboration with the World Council on City Data (since 2016)
city and national data are increasingly
standardized and harmonized with global data

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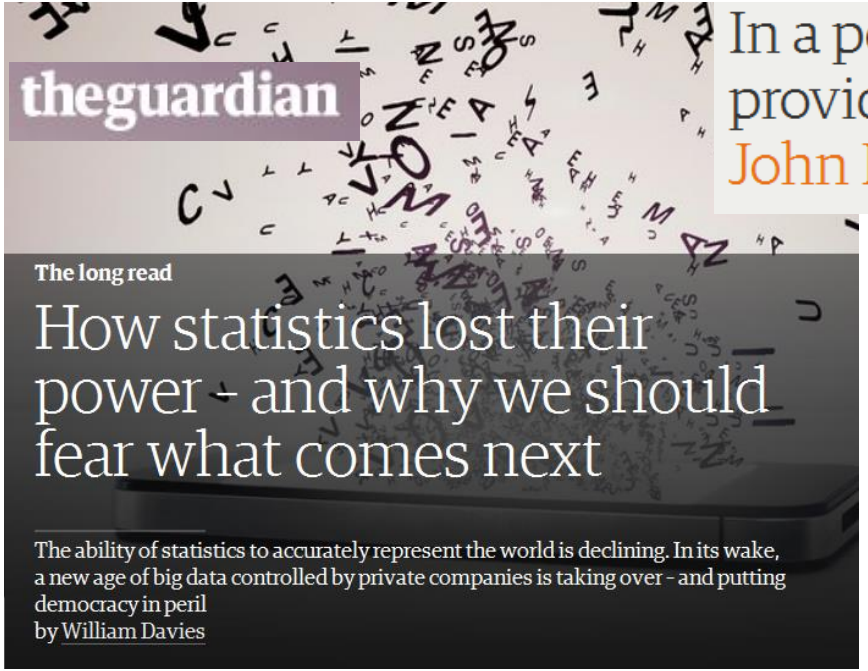
Is the time of statistics over?



In a post-truth world, statistics could provide an essential public service
John Pullinger

CBS answer:
Center for Big Data Statistics
(*connected to UDCs)*

https://www.theguardian.com/politics/2017/jan/19/crisis-of-statistics-big-data-democracy

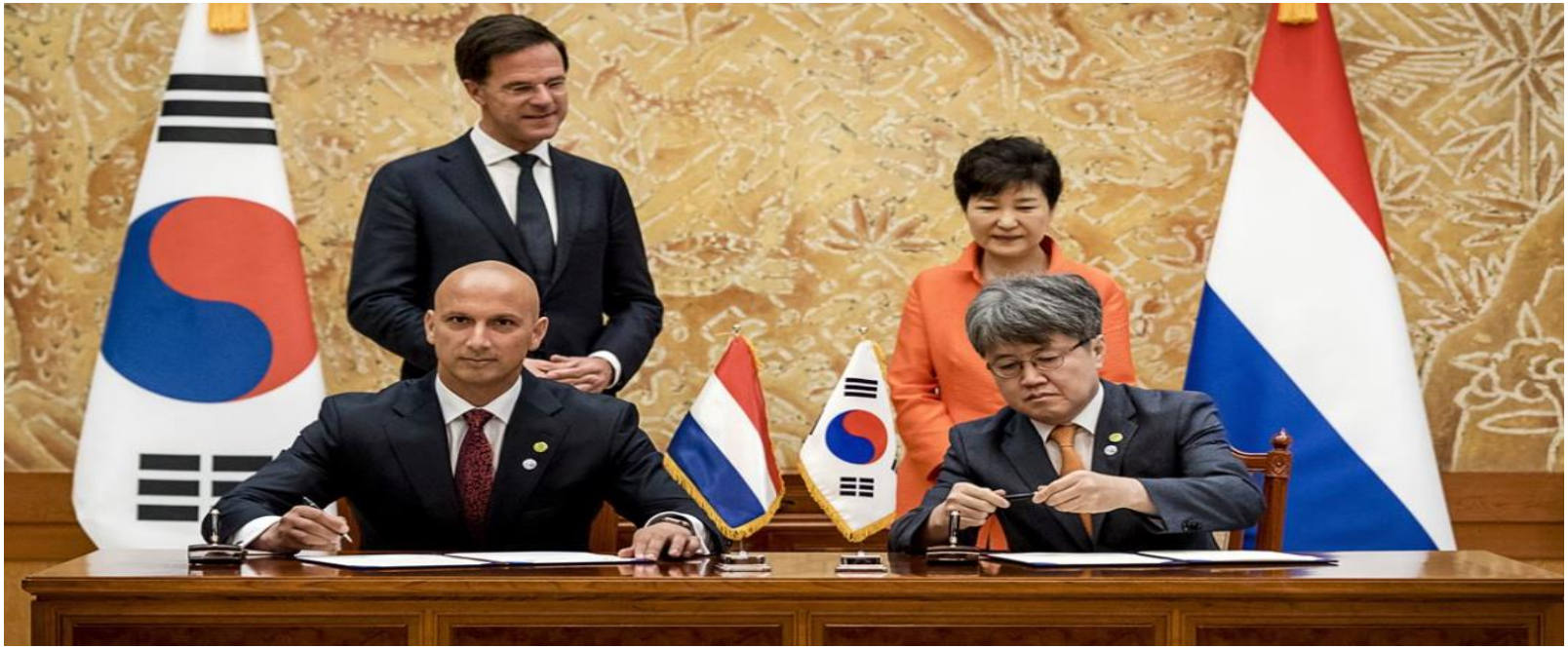
Center for
Big Data Statistics

Data, data everywhere

Information has gone from scarce to superabundant.

The Economist

CBDS approach: partnering!



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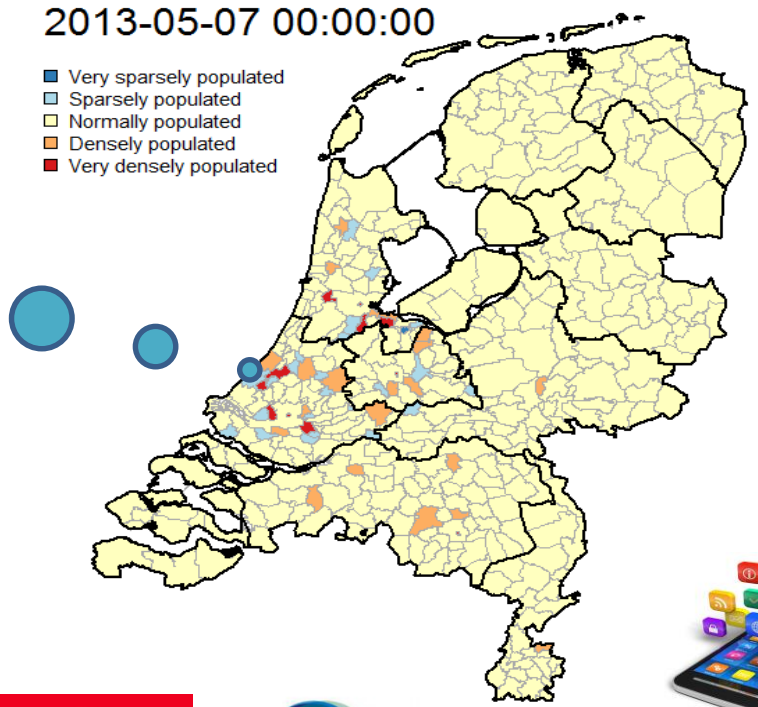
- Academic, public, private partners
- Both national and international
- Various relationships

Daytime population based on mobile phone data

Which level of detail?
How to present?
Is it useful?



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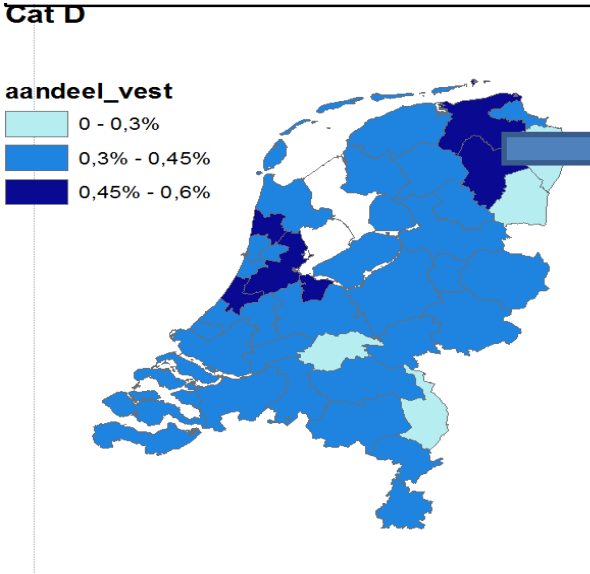
vodafone

mezuro

Measuring the internet economy
in The Netherlands- and Groningen



Main research question:

"What is the importance of the internet to the Dutch economy?"

The aim of the research project was fourfold:

1. Determine a pragmatic definition of "the internet economy"
2. Show the importance and size of the internet economy in NL
3. Show the possibilities of new measurement methods
4. Explain differences from regular statistics/concepts

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Google

dataprovider

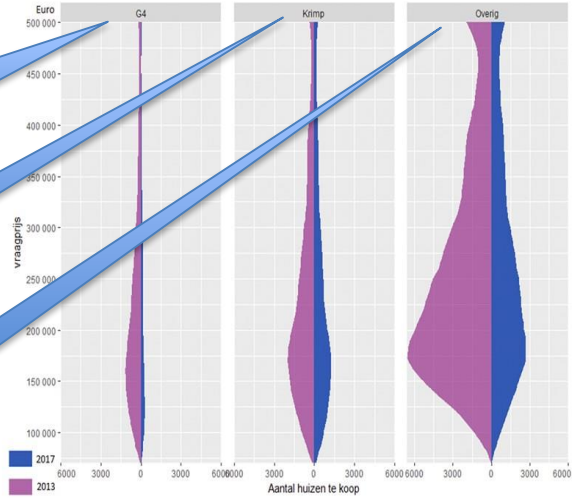
2.5 million Dutch websites linked to business register

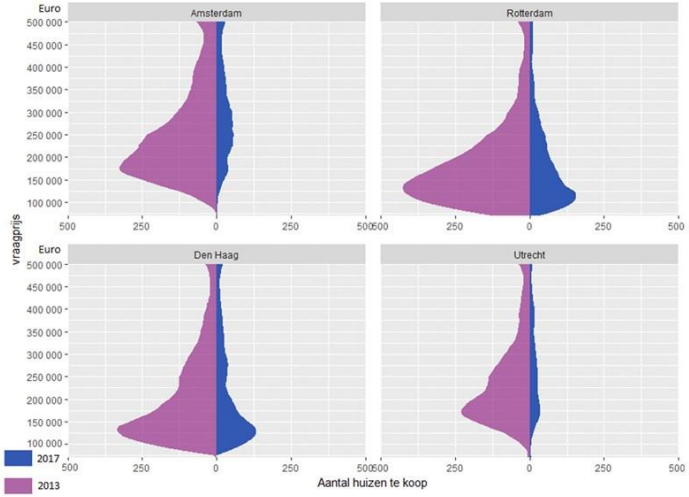
The online housing market in The Netherlands

Four largest cities (G4)

Shrinking regions

The rest of the country





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Number of houses for sale online, 2013+2017

Source: JAAP.NL ALLES OVER HUIZEN |data services|

National Bicycle Counting Week 18-24 September 2017

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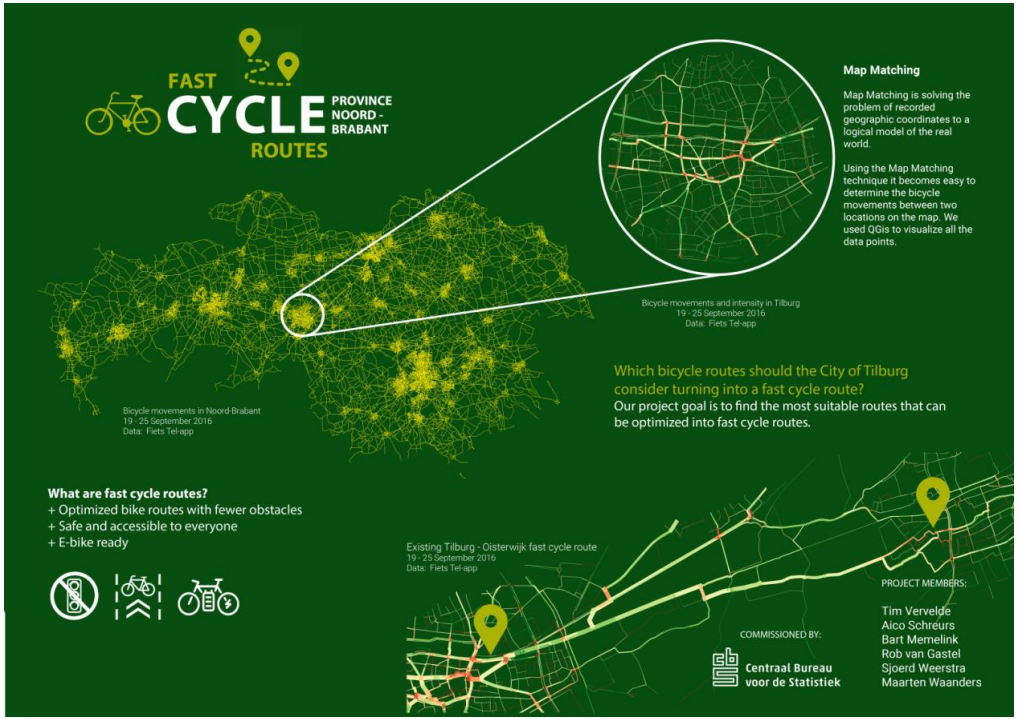
Can we turn this into statistics?

National Bicycle Counting Week 18-24 September 2017



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Fontys

Yes we can! See also the website

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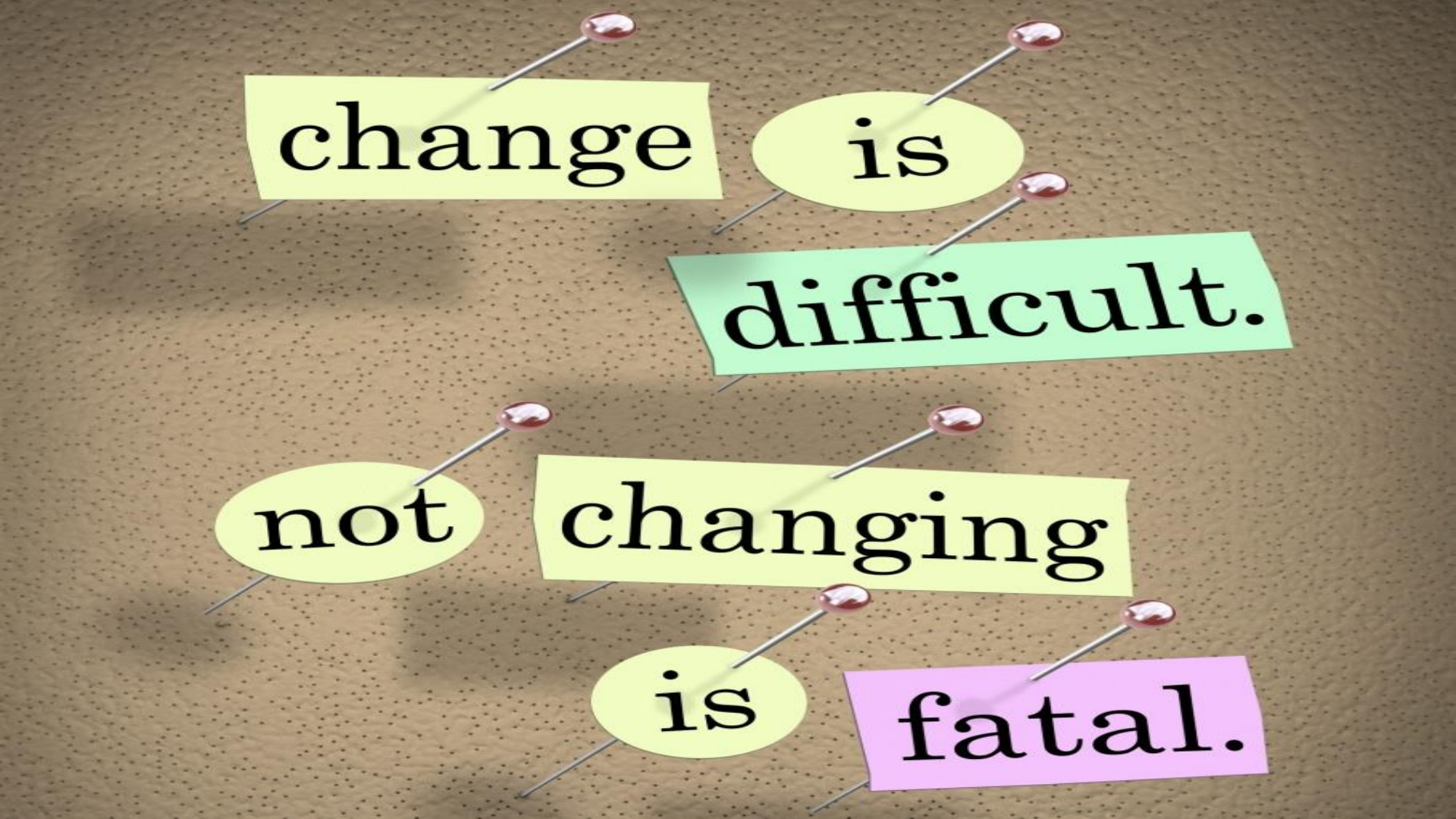
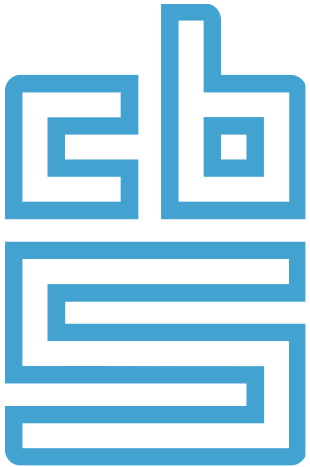

change is difficult.
not changing is fatal.

*Creating and implementing CBS Urban Data Centers is a **challenging journey**, not "a walk in the park"*



Smart Statistics 4 Smart Cities

Facts that matter