

# Wageningen Data Competence Center & LC-RDM

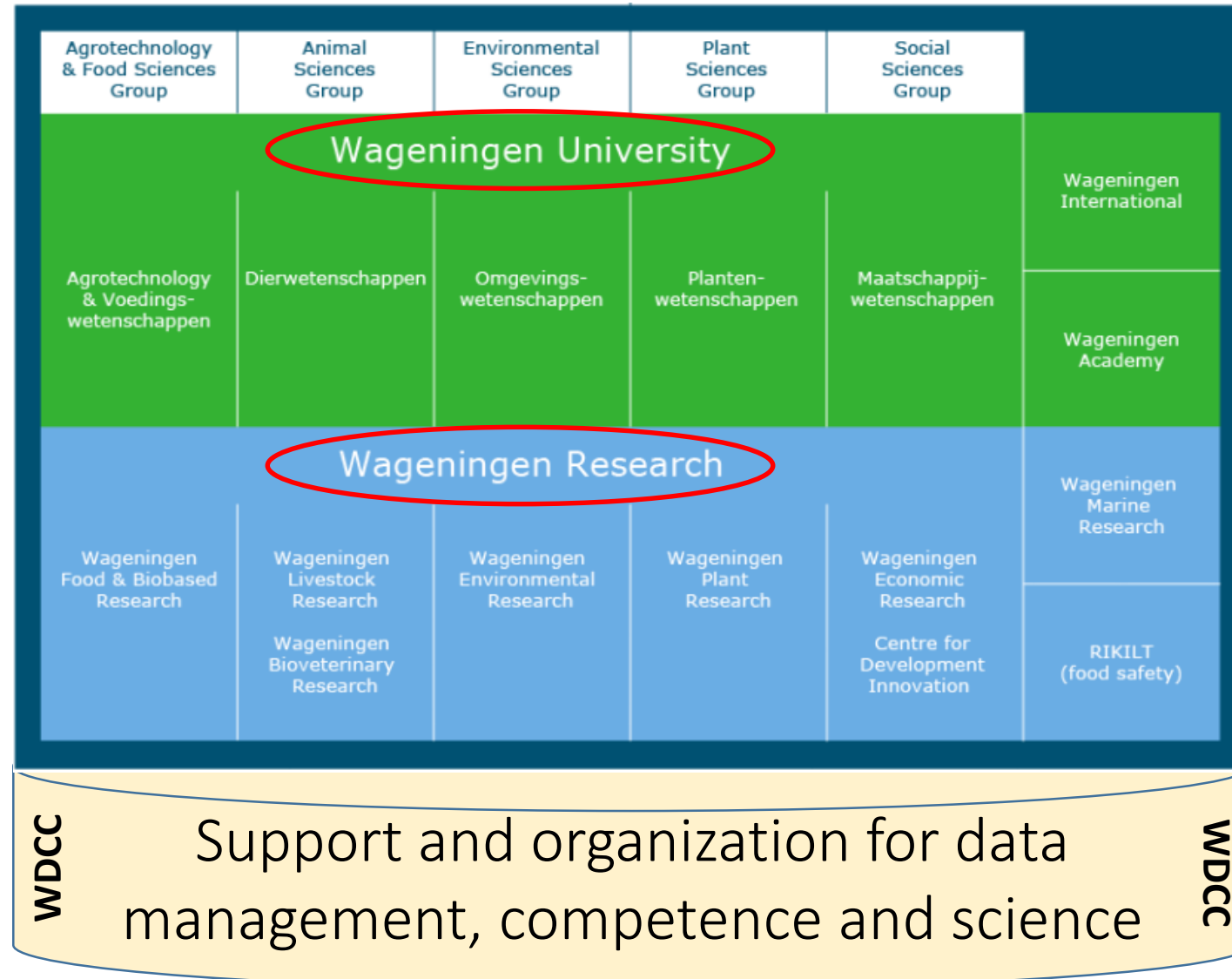
Conference National Point Research Data Management Feb 8th 2018

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What is WDCC for?

# WDCC is part of WUR



# FUTURE FARMS

## small and smart

### SURVEY DRONES

Aerial drones survey the fields, mapping weeds, yield and soil variation. This enables precise application of inputs, mapping spread of pernicious weed blackgrass could increase wheat yields by 2-5%.

### FLEET OF AGRIBOTS

A herd of specialised agribots tend to crops, weeding, fertilising and harvesting. Robots capable of microdot application of fertiliser reduce fertiliser cost by 99.9%.



### FARMING DATA

The farm generates vast quantities of rich and varied data. This is stored in the cloud. Data can be used as digital evidence reducing time spent completing grant applications or carrying out farm inspections saving on average £5,500 per farm per year.

### TEXTING COWS

Sensors attached to livestock allowing monitoring of animal health and wellbeing. They can send texts to alert farmers when a cow goes into labour or develops infection increasing herd survival and increasing milk yields by 10%.

### SMART TRACTORS

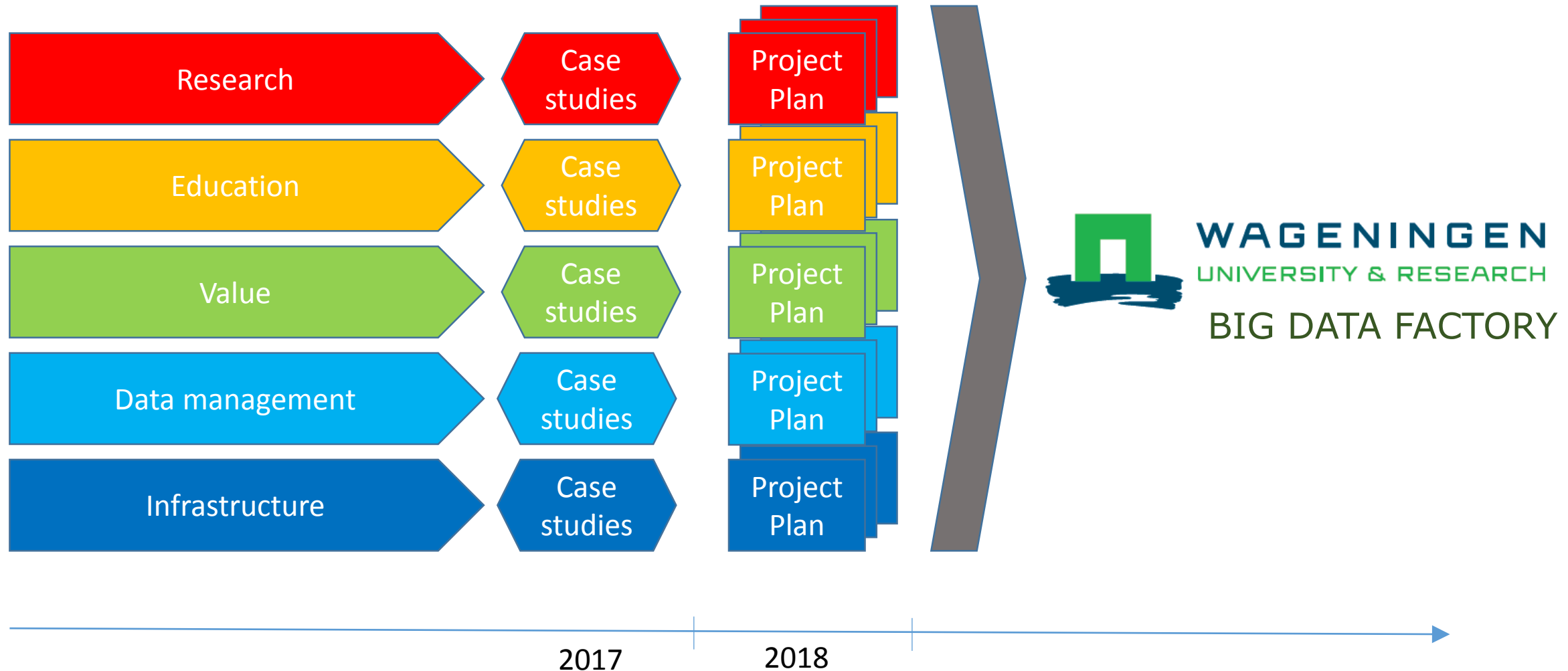
GPS controlled steering and optimised route planning reduces soil erosion, saving fuel costs by 10%.

# Why?

Farming  
Based  
On  
Evidence  
(Data)

Rich  
Cross  
Sectoral  
Know How  
At WUR

# Programme



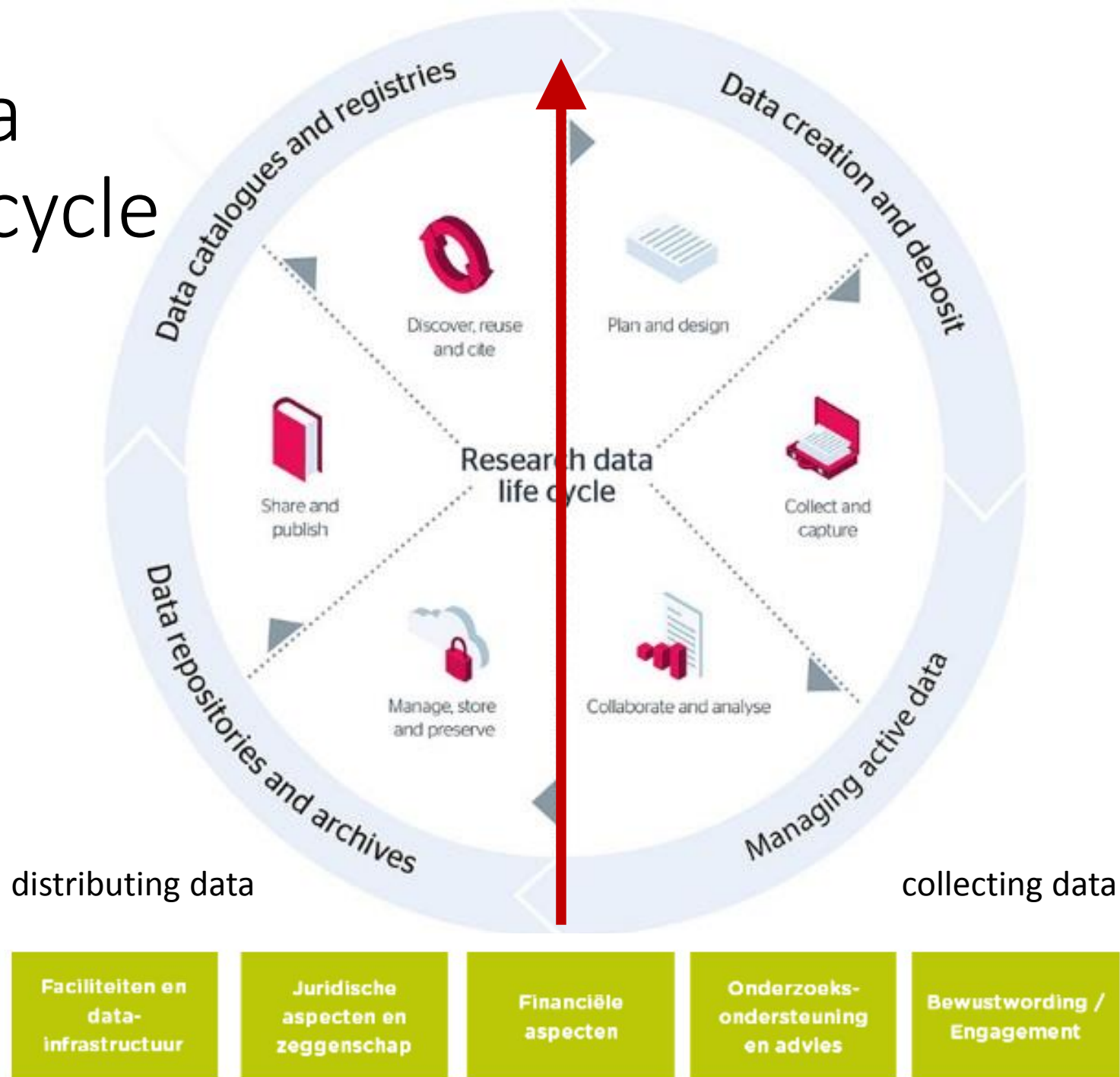
# Ambitions for RDM by WDCC at WUR

- Develop approaches for open data
- Develop approaches for protected data
- Organize supporting infrastructure in an exchange hub
- Organize education in applied data science

Some ideas for next phase of LC-RDM

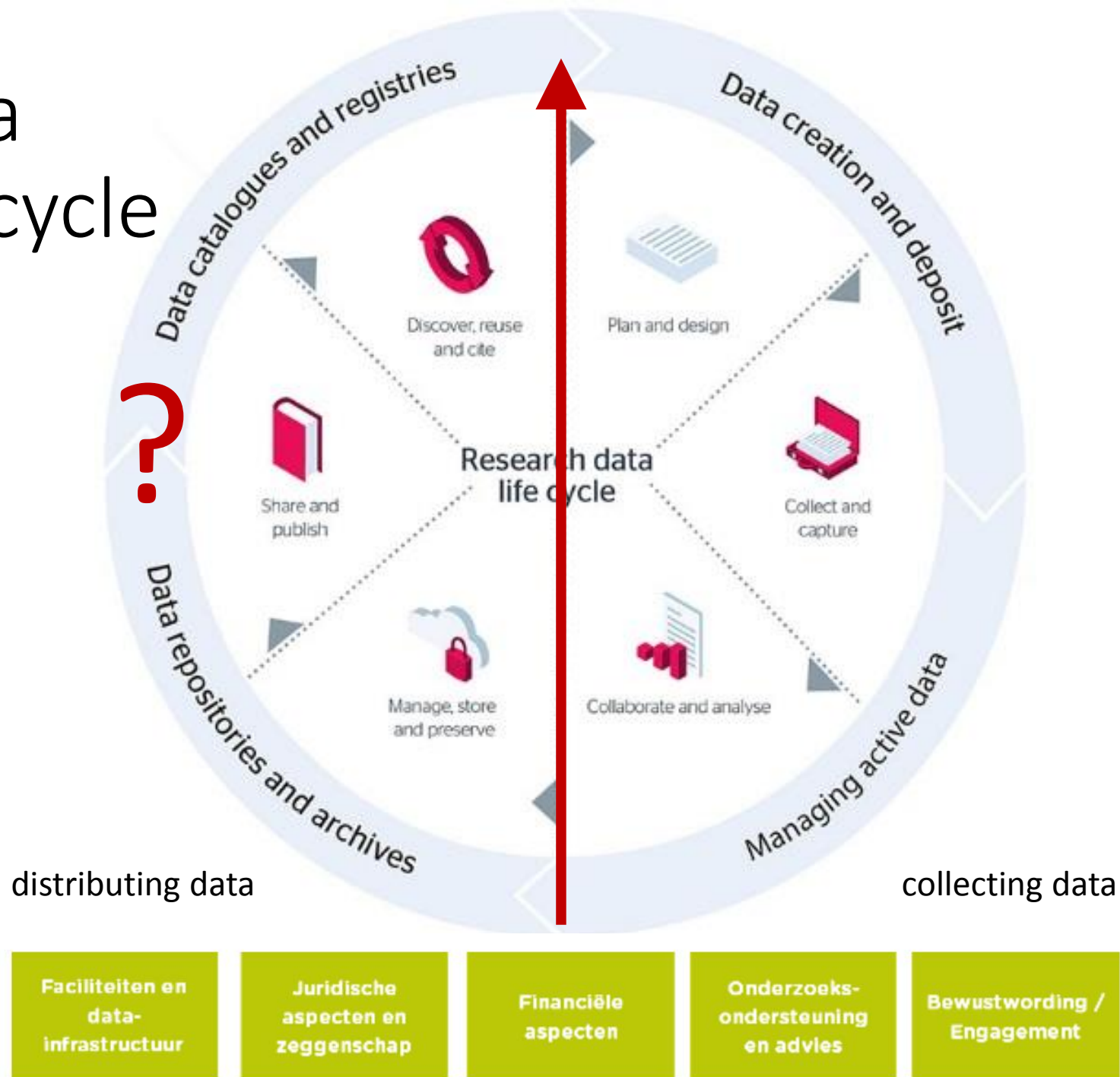


# Data Lifecycle

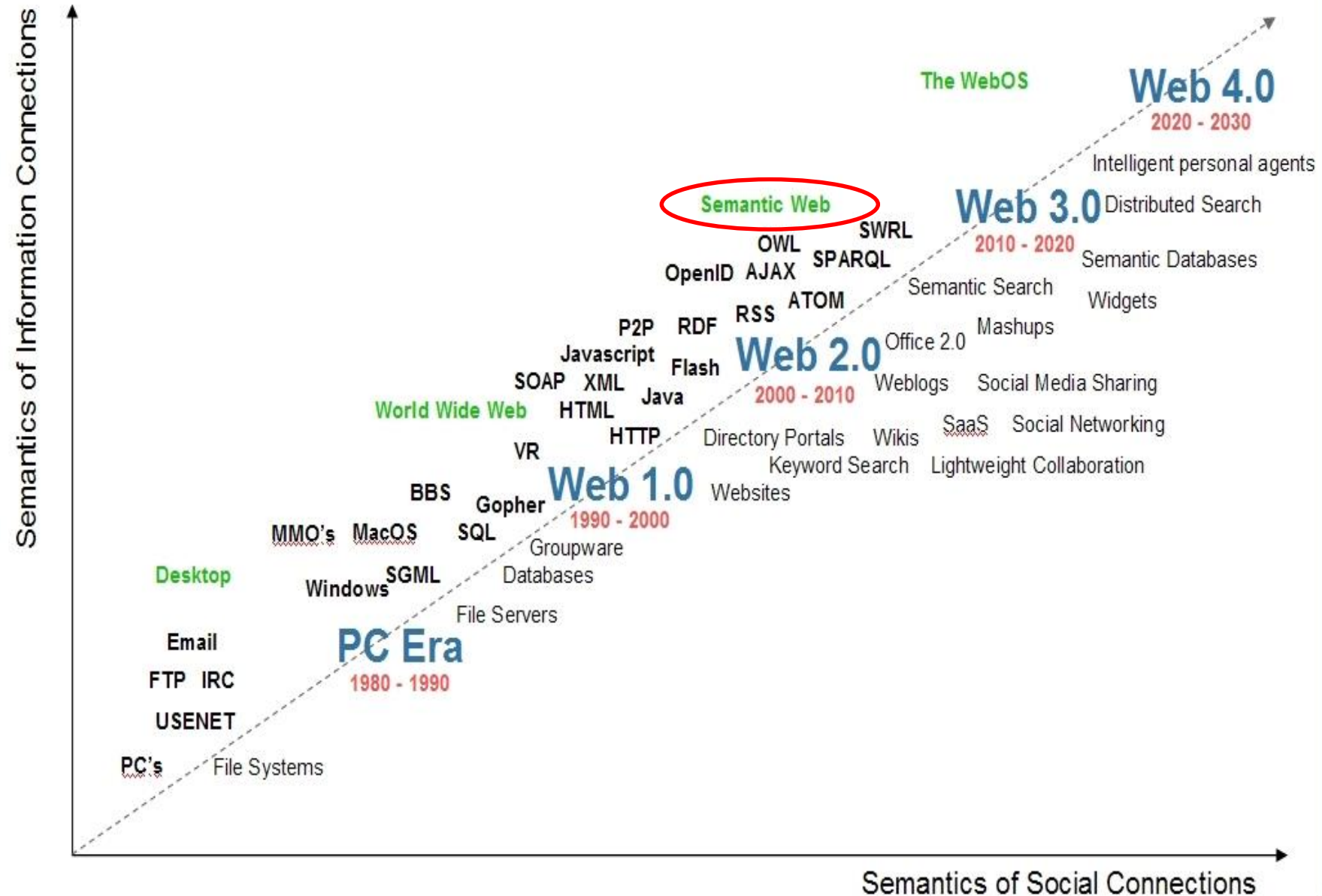




# Data Lifecycle



# Open data



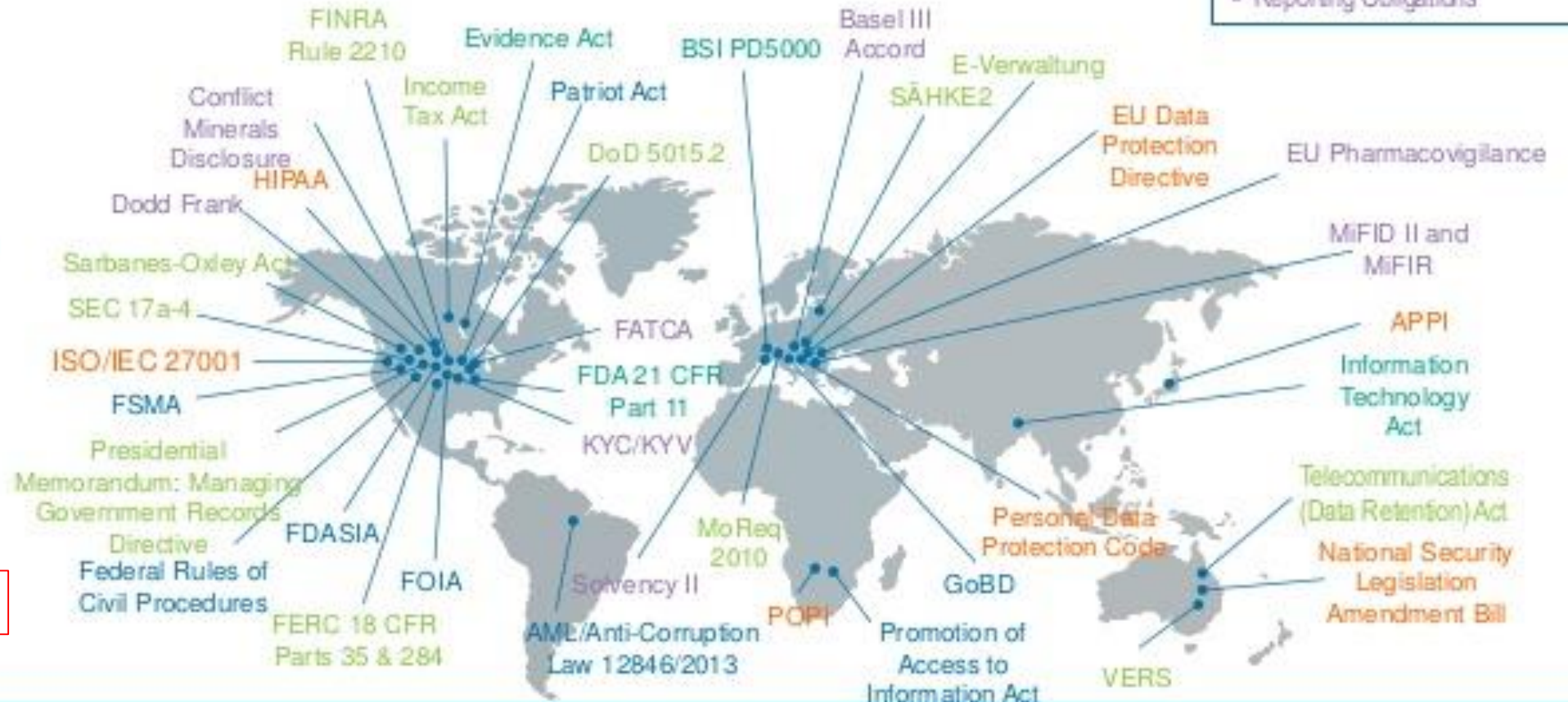
Automated data exchange

# Protected data

## Governance is a Growing Focus

More than 100,000 rules and regulations and growing

- Data Protection & Privacy Rules
- Regulated Records Retention
- eDiscovery Requirements
- Information Integrity & Authenticity
- Reporting Obligations



## Linked Blockchain Data

RESEARCH PAPER RELEASED.

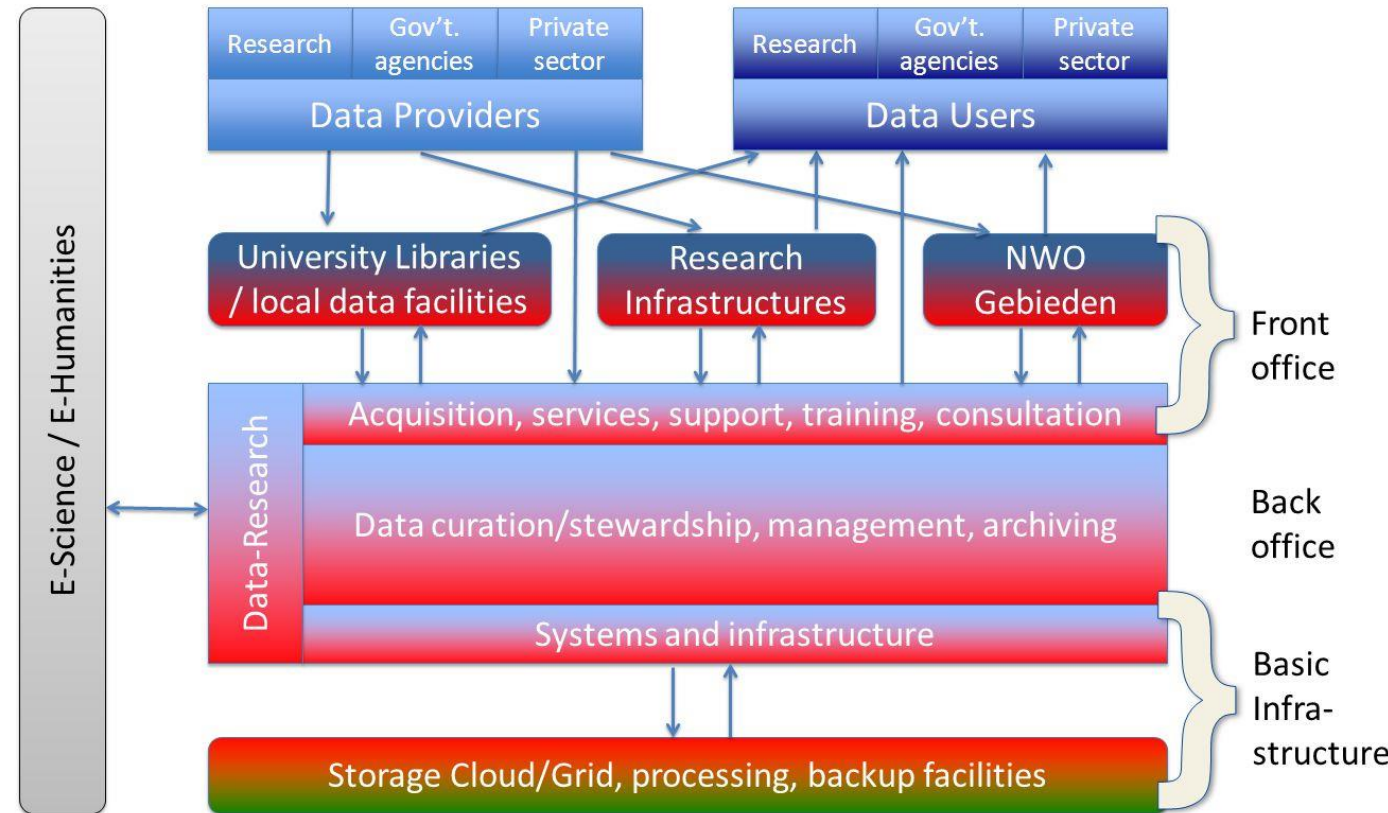
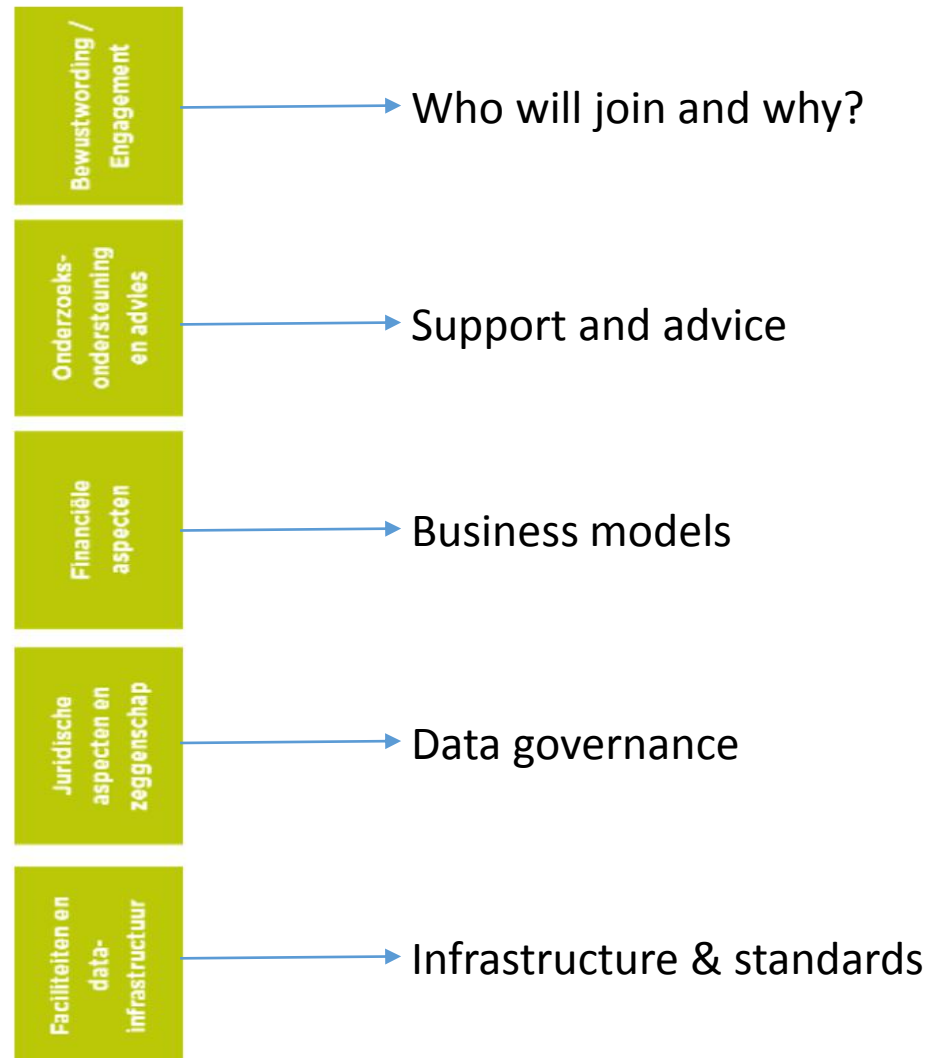


## Secure data exchange



# Linked Open/Protected Data Exchange for a federated data infrastructure?

## The federated data infrastructure: a collaborative framework



# Thank you for your attention!