

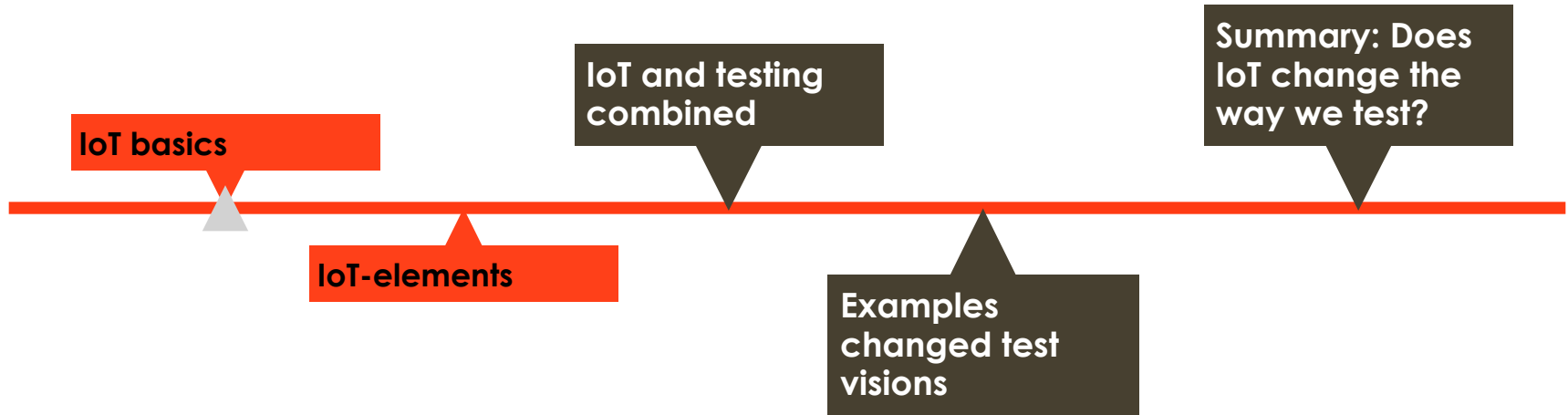
**IoT needs IoT  
(Innovation on  
Testing)?**

# IoT changes testing

**Tom van de Ven**  
**Senior High Tech Testconsultant**

Dutch Testing Day 2015

# Agenda

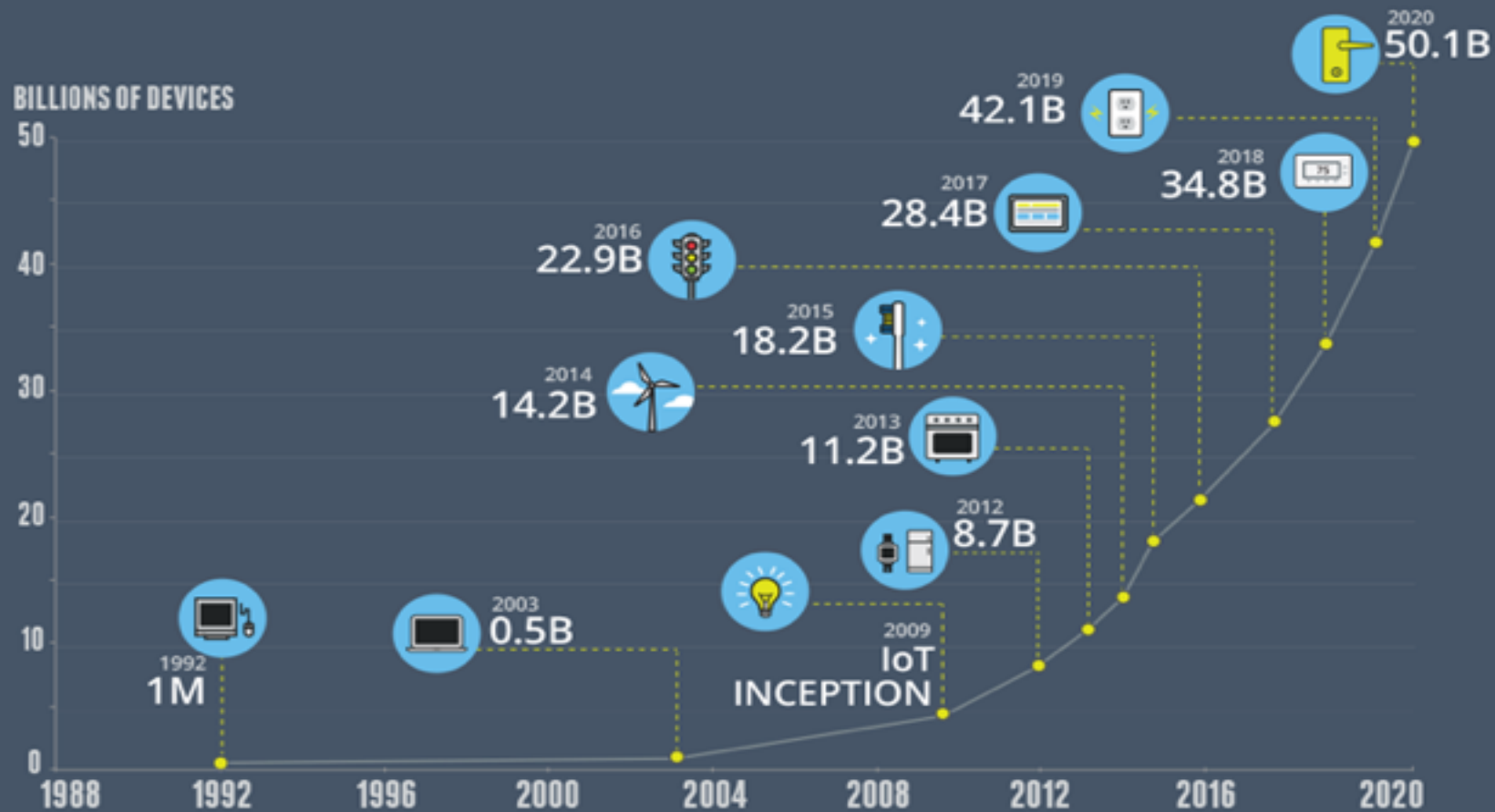






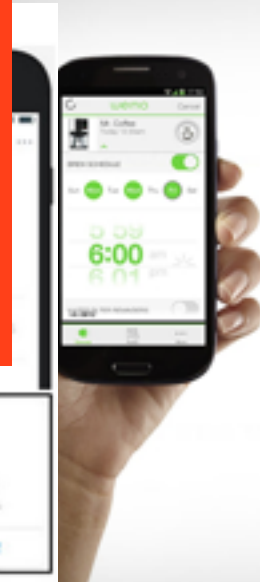
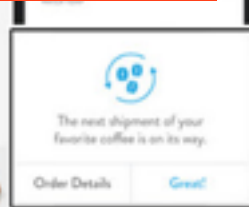
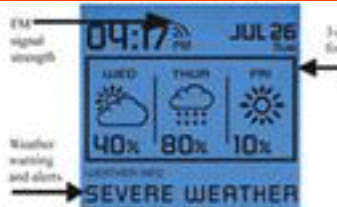
# GROWTH IN THE INTERNET OF THINGS

THE NUMBER OF CONNECTED DEVICES WILL EXCEED **50 BILLION** BY 2020





# Testing IoT is testing an experience



# Agenda

IoT basics

IoT-elements

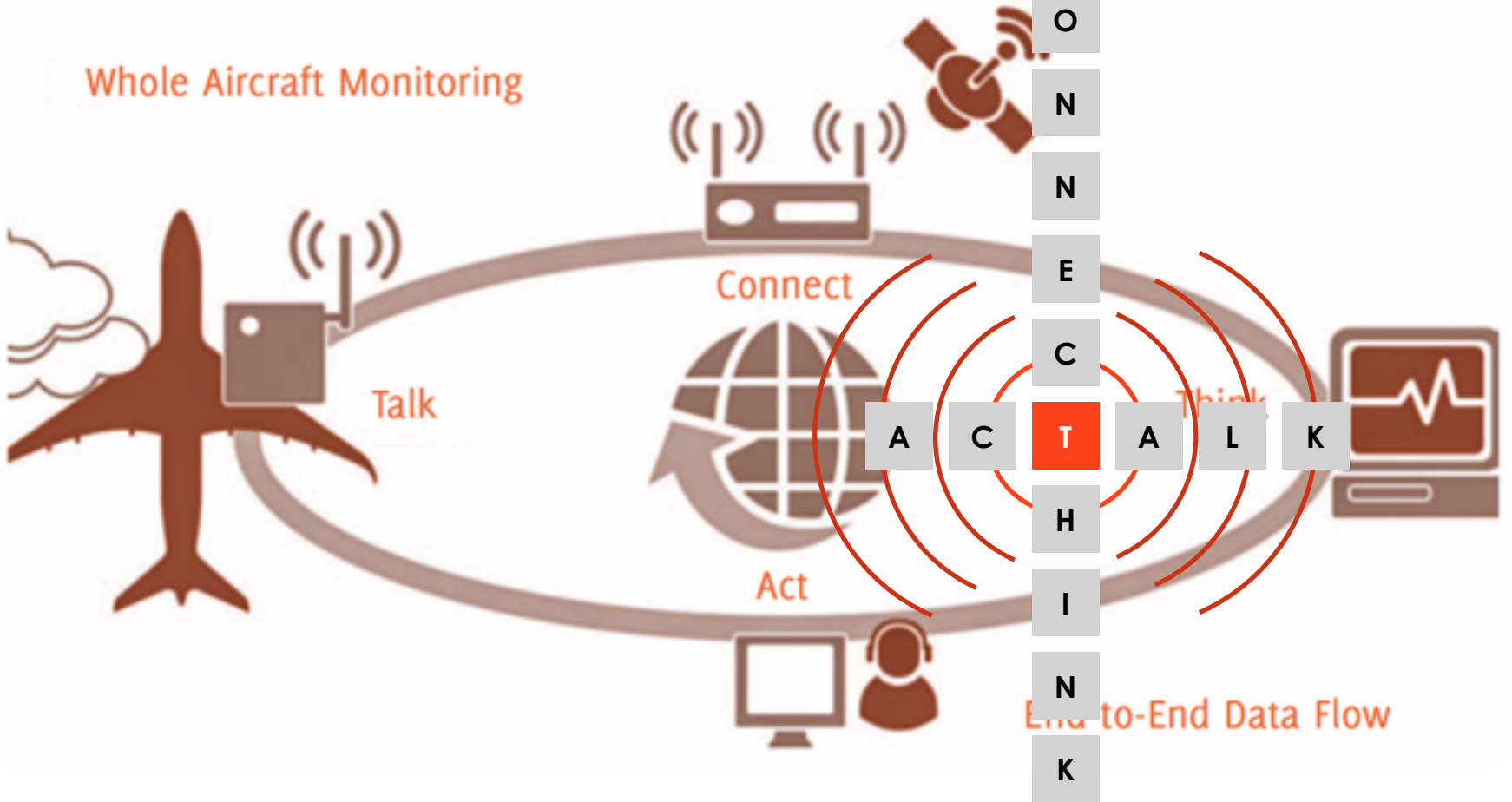
IoT and testing  
combined

Examples  
changed test  
visions

Summary: Does  
IoT change the  
way we test?

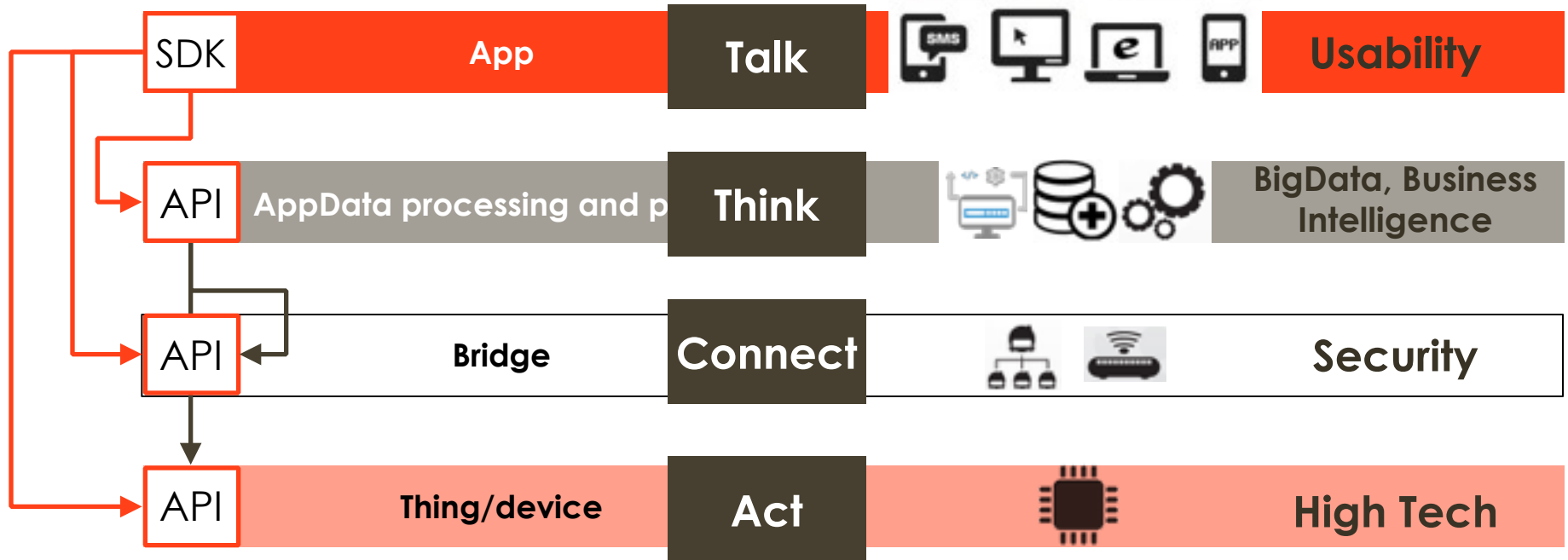


# Whole Aircraft Monitoring



# IoT-layer-model

Test examples



# Agenda

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IoT and testing  
combined

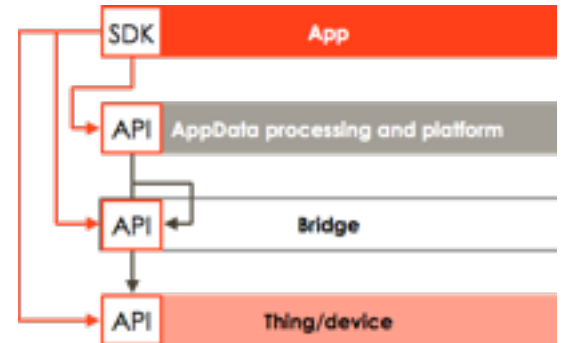
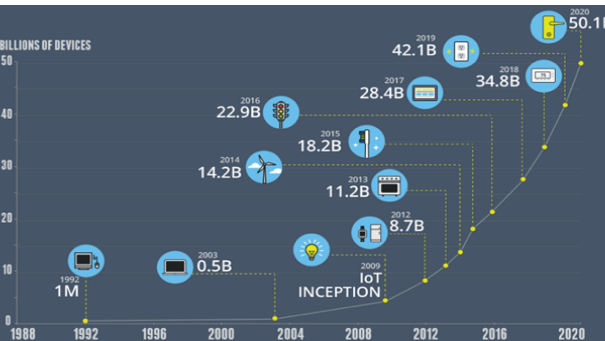
Examples  
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Summary: Does  
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# IoT and testing combined

## IoT test insights:

- ▶ Test expertise needed for all IoT layers
- ▶ Product to the market before the other 50 billion do
- ▶ IoT product combinations (exponential growth of test situations)
- ▶ Test the IoT experience



# Agenda

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combined

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# Examples

*“Two examples as a result of the new IoT view on testing”*

## Crowd test



## IoT story telling



# Example of story telling

- ▶ Less functional
- ▶ Focus on
  - ▶ performance
  - ▶ usability
  - ▶ security
  - ▶ interoperability
- ▶ IoT Model
- ▶ IoT Layer

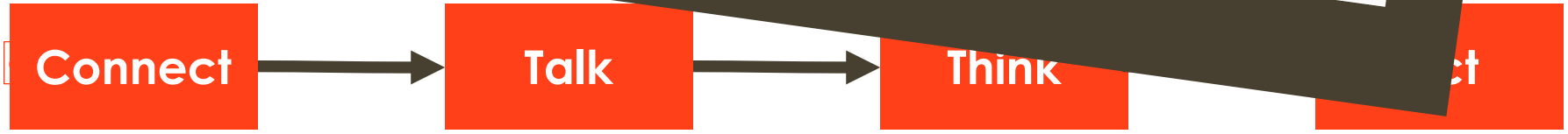
Testing is an expertise!

IoT testing is a collection of expertise areas:

- Testing
- High Tech
- Open Source
- Business Intelligence
- Mobile apps

- Security
- Cloud

- Business Technology
- Project- en Service Management
- Functioneel Beheer
- Infrastructure Services
- Mainframe



# Example: Crowd test

▶ Put the IoT solution out there as quick as possible and test it there

▶ Quick test in lab environment: next stop field test

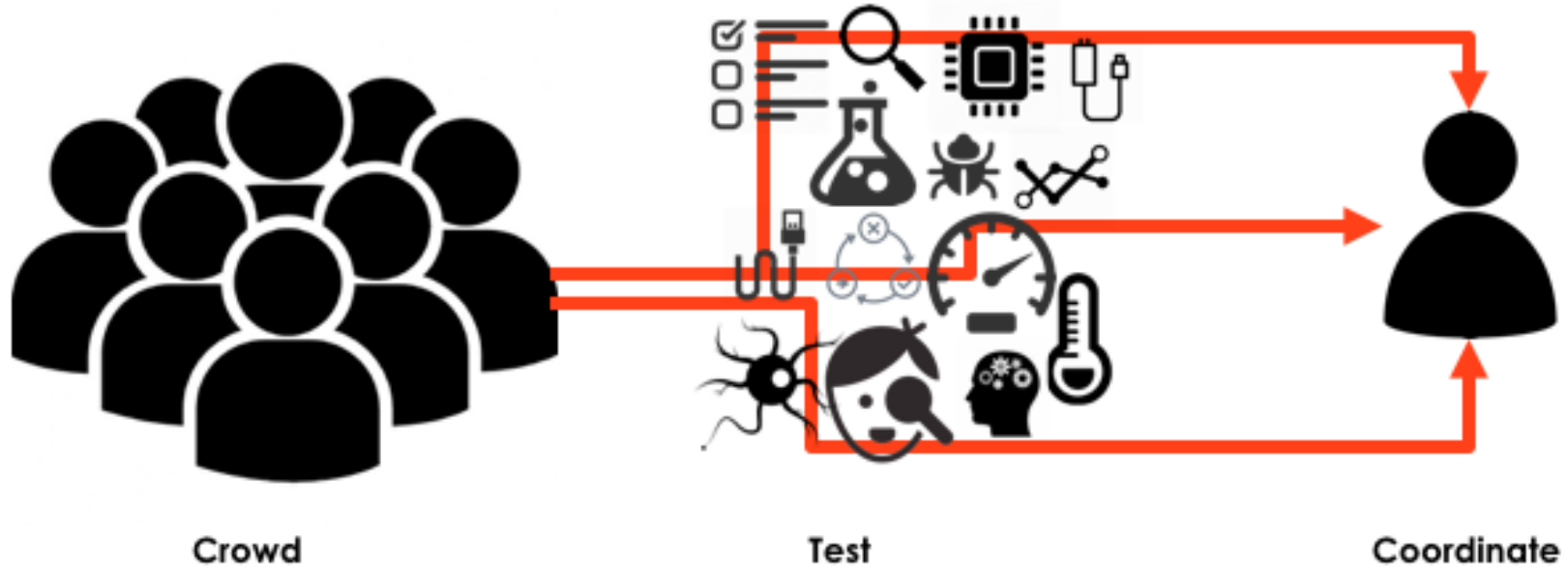
▶ Make end users part of the test proces: inform them

Crowd testing





# Example: Crowd test



# Agenda

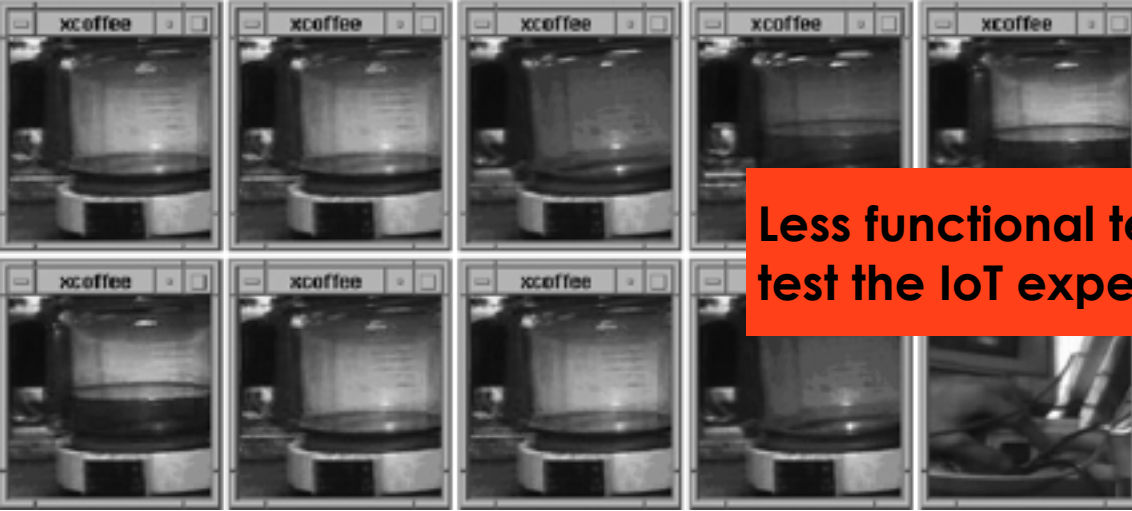
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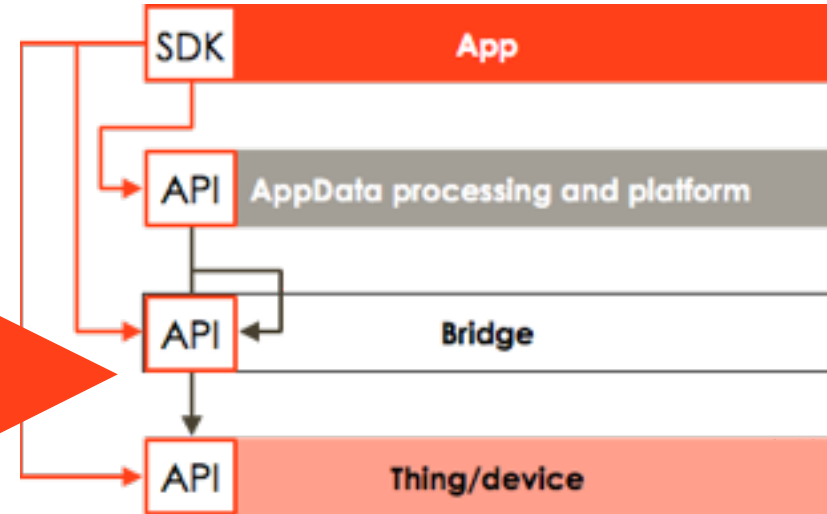


**Less functional testing:  
test the IoT experience**



**50-100 miljard  
"things"**

**Test together!  
All IoT disciplines  
Together with users**



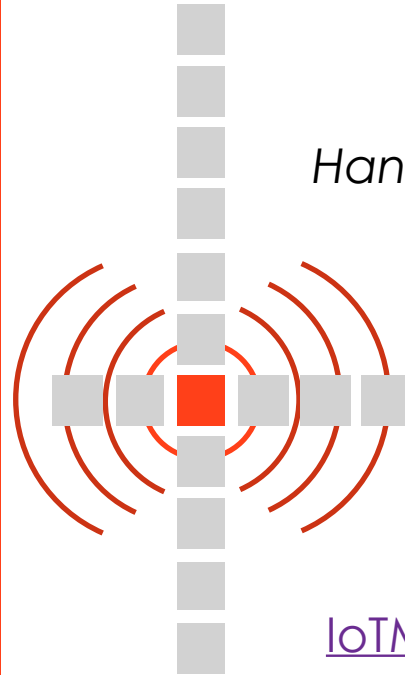
**IoT changes the  
way we test!**

Handbook

1

Definition IoT

IoT test  
approach



# IoT<sup>2</sup>Map

Handbook testing & IoT

Release Q1-2016

Write up for the  
bookpresentation!

[IoTMap.nl@sogeti.com](mailto:IoTMap.nl@sogeti.com)

ing in IoT  
ments

a high  
product