TRIMM

DIGITAL CRAFTSMANSHIP

17 maart 2016 ••• De Kuip in Rotterdam

Industrial Ethernet

De revolutie van het industrial internet of things

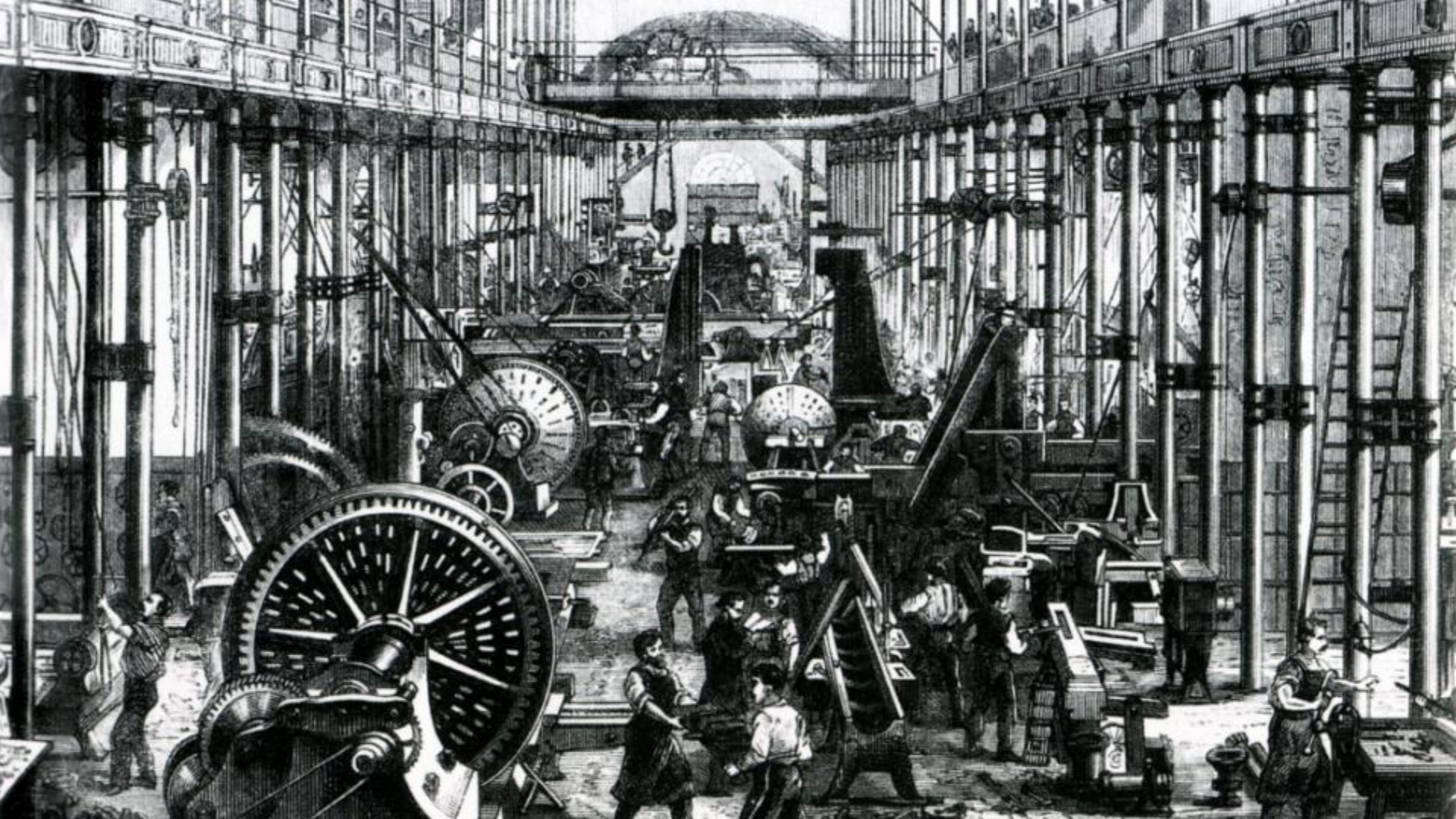
Industrial Ethernet

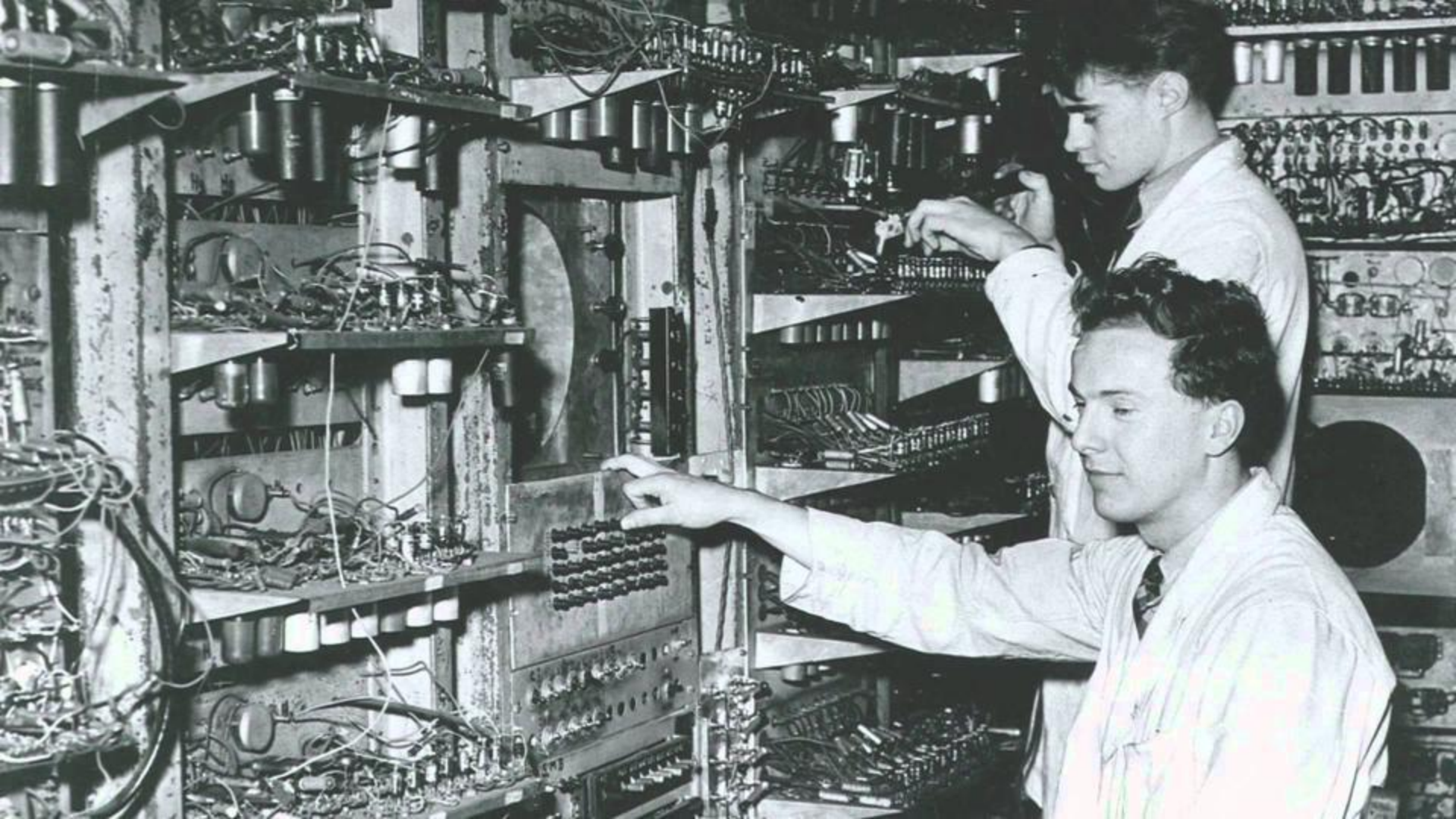
Michiel Verheij

March 17, 2016 De Kuip, Rotterdam

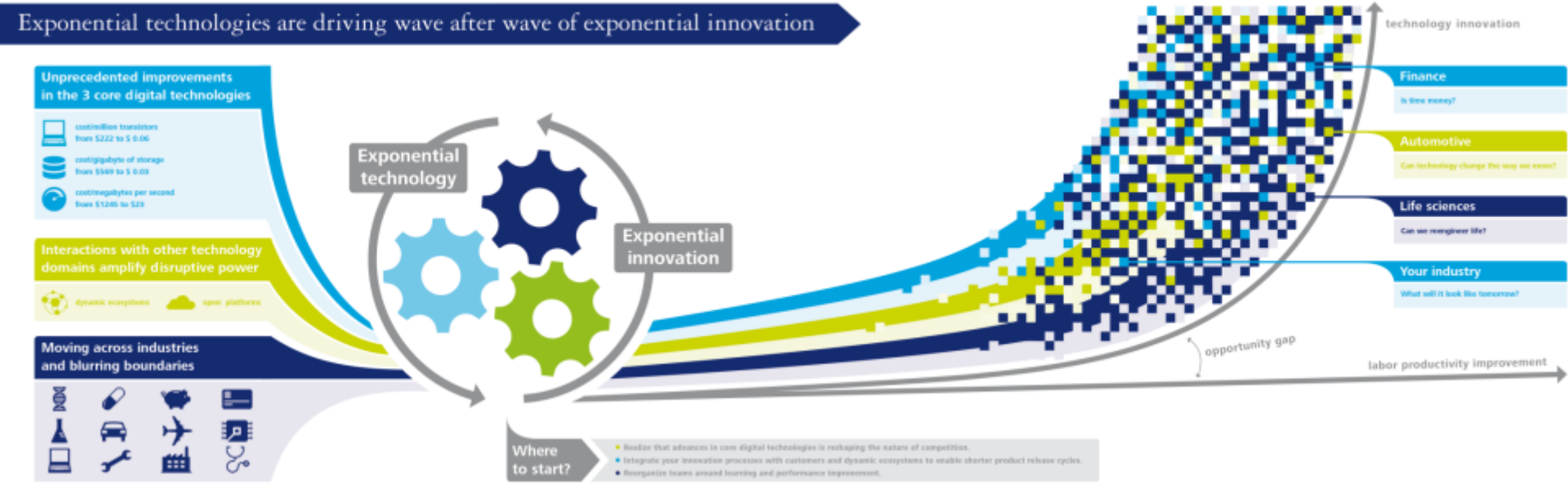
TRIMM
DIGITAL CRAFTSMANSHIP

Insights
Influence
Measure
Analysis
Data collection
Communicate
Automate
Interact





SOFTWARE IS EATING THE WORLD


Exponential technologies are driving wave after wave of exponential innovation
Unprecedented improvements in the 3 core digital technologies
cost/million transistors from $222 to $ 0.06
cost/gigabyte of storage from $569 to $ 0.03
cost/megabytes per second from $1285 to $23
Interactions with other technology domains amplify disruptive power
dynamic ecosystems
open platforms
Moving across industries and blurring boundaries
Exponential technology
Exponential innovation
technology innovation
Finance
Is time money?
Automotive
Can technology change the way we move?
Life sciences
Can we reengineer life?
Your industry
What will it look like tomorrow?
opportunity gap
labor productivity improvement
Where to start?
Realize that advances in core digital technologies is reshaping the nature of competition.
Integrate your innovation processes with customers and dynamic ecosystems to enable shorter product release cycles.
Reorganize teams around learning and performance improvement.

‘A Revolution doesn’t happen when society adopts new tools

It happens when society adopts new behaviour’

Clay Shirky

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PAY
ATTENTION
WHILE
WALKING
YOUR FACEBOOK
STATUS UPDATE
CAN WAIT.

允许使用手机
但风险自负
CELLPHONES
WALK IN THIS LANE
AT YOUR OWN RISK

PHOTO FINISH

2015:

UBER

the world's largest taxi company owns no vehicles

facebook

the world's most popular media owner creates no content

阿里巴巴 Alibaba.com

the most valuable retailer has no inventory

airbnb

the world's largest accommodation provider owns no real estate.

Internet
of Things

Internet of Things

- The Internet of Things (IoT) is a computing concept that describes a future where everyday physical objects will be connected to the Internet and be able to identify themselves to other devices.
- The IoT is significant because an object that can represent itself digitally becomes something greater than the object by itself. No longer does the object relate just to you, but is now connected to surrounding objects and database data. When many objects act in unison, they are known as having "ambient intelligence."

Menu
Eneco
11:25
19 juni 2015
Utrecht
14,5°
19,0°
+
-
Programma
Aan
Om 22:30 uur op 15,0°
Stroom nu
150 Watt
Gas vandaag
2,5 m³
12,0°
Weg
19,0°
Thuis
15,0°
Slapen
20,0°
Comfort

CHALLENGES
AHEAD

CATAPULT
High Value Manufacturing

Usine
du Futur

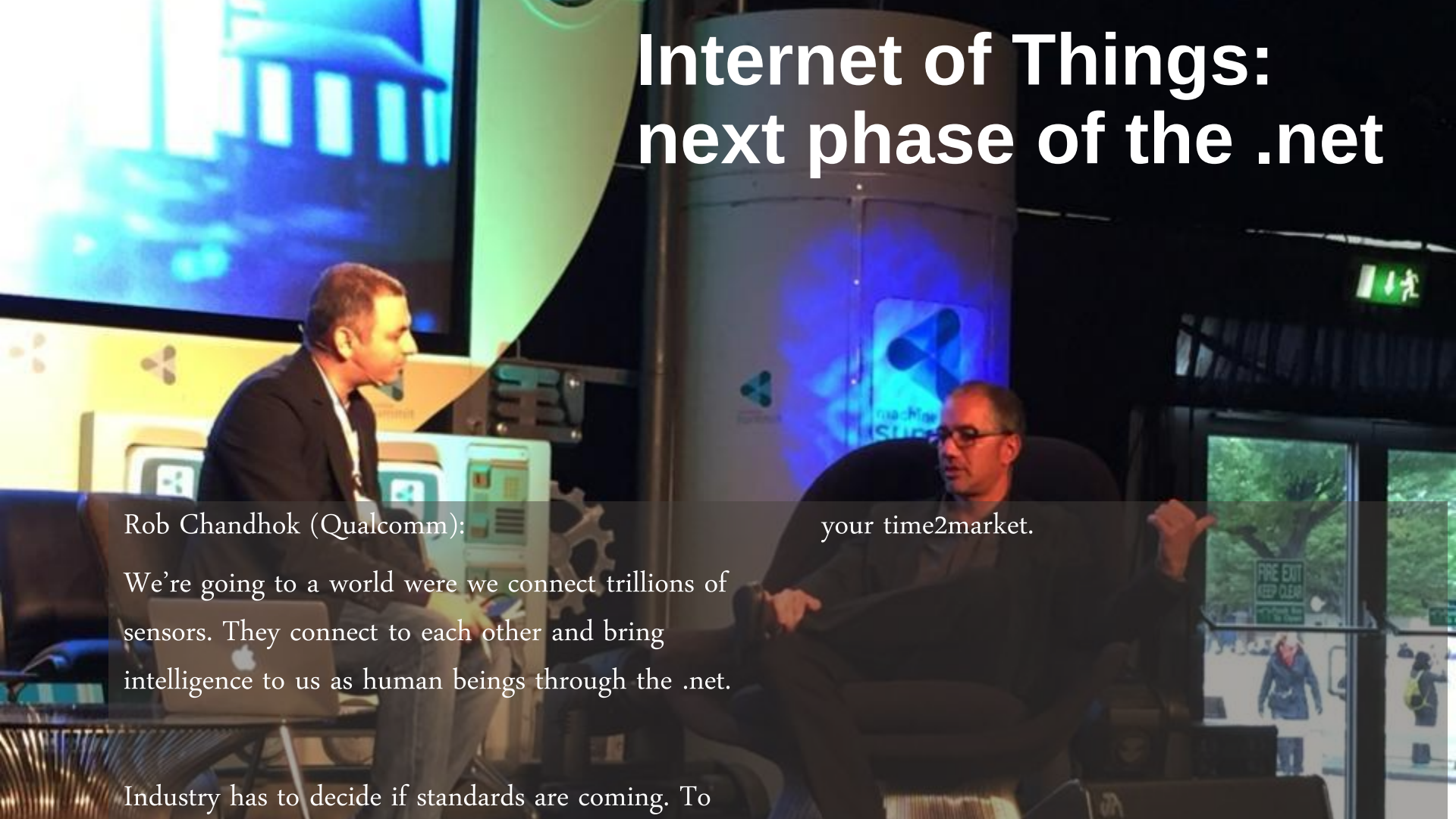
IIC MEMBER
industrial internet
CONSORTIUM

Industrie 4.0

smart
industry
DUTCH INDUSTRY FIT FOR THE FUTURE

MADE IN
SWEDEN
2030

Internet of Things: next phase of the .net

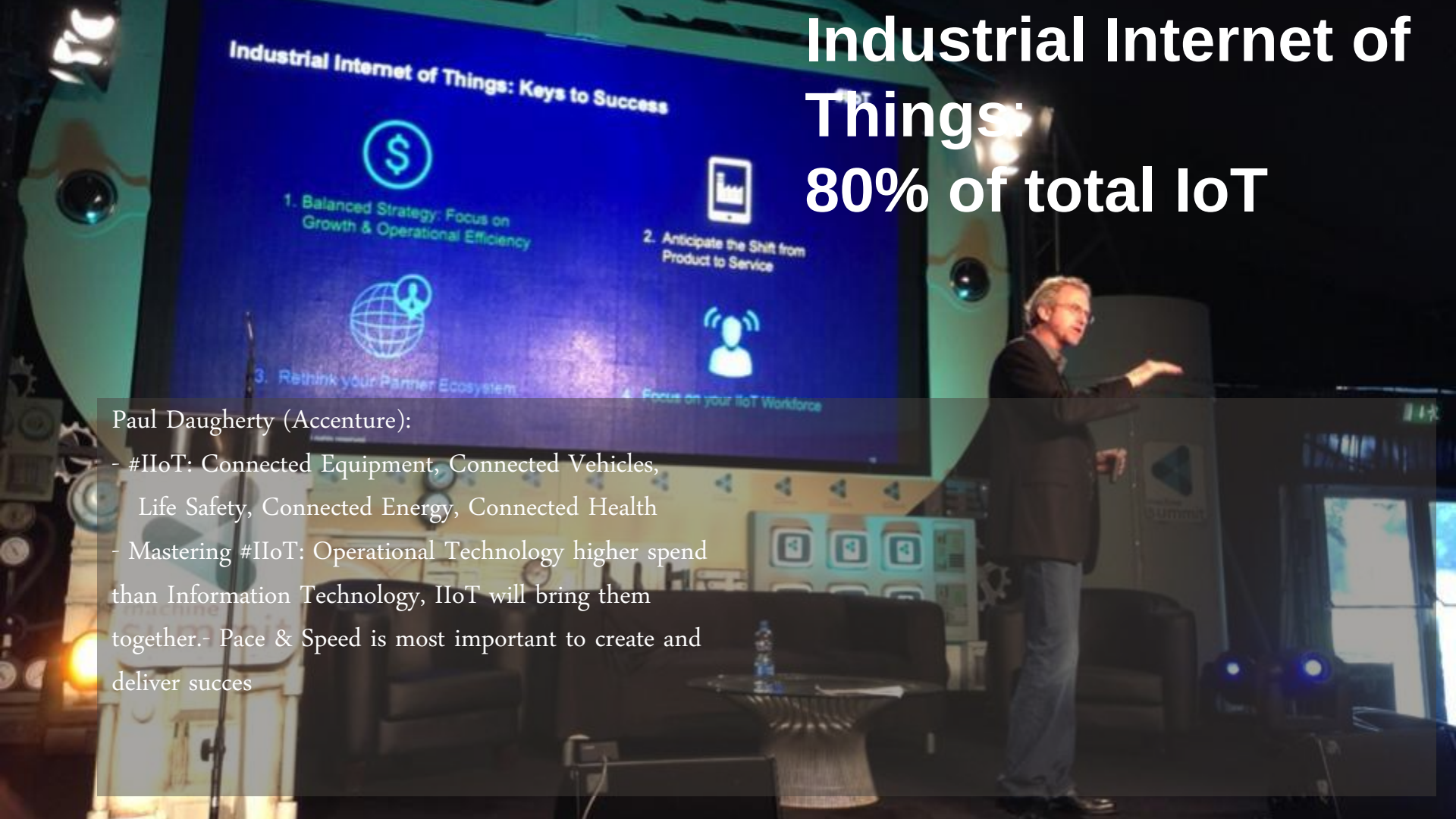


Rob Chandhok (Qualcomm):

We're going to a world were we connect trillions of sensors. They connect to each other and bring intelligence to us as human beings through the .net.

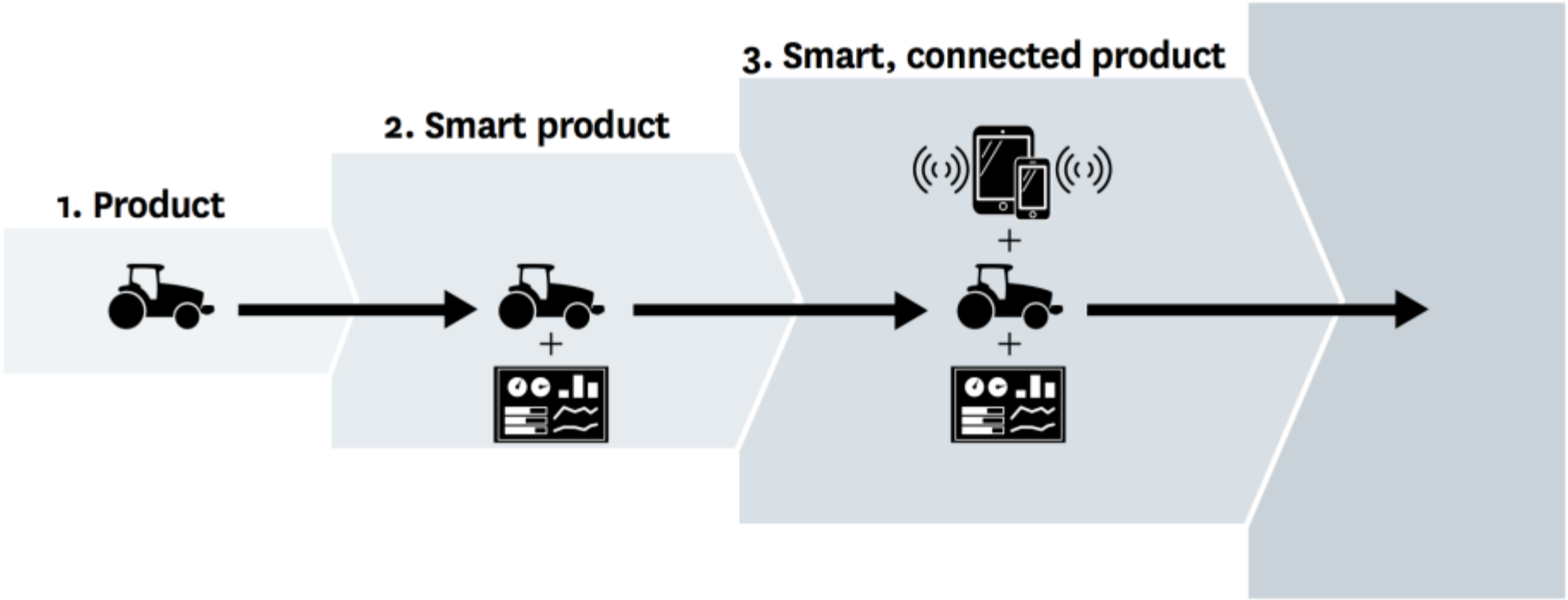
Industry has to decide if standards are coming. To your time2market.

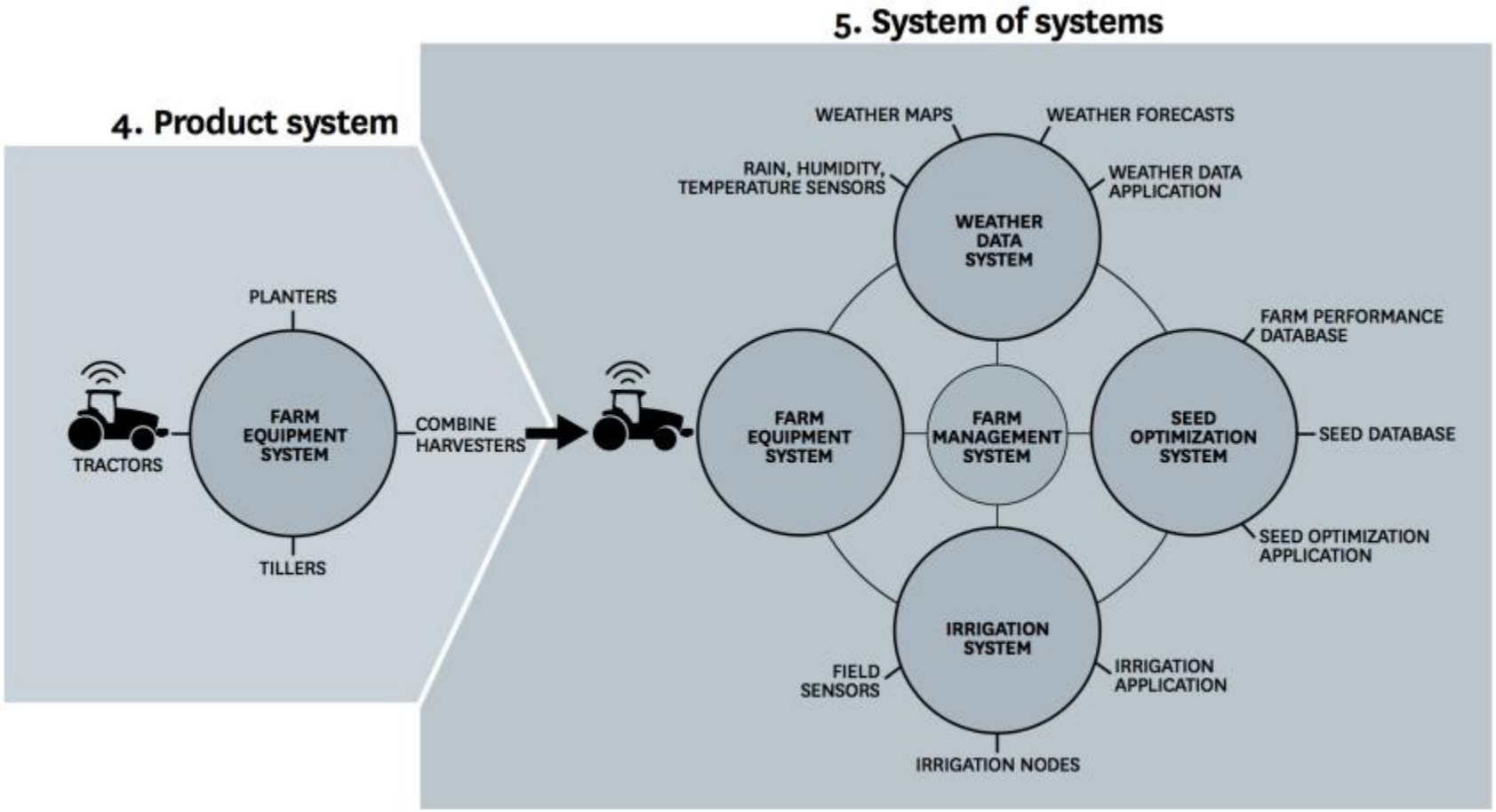
Industrial Internet of Things: 80% of total IoT



Paul Daugherty (Accenture):

- #IIoT: Connected Equipment, Connected Vehicles, Life Safety, Connected Energy, Connected Health
- Mastering #IIoT: Operational Technology higher spend than Information Technology, IIoT will bring them together.- Pace & Speed is most important to create and deliver succes


1. Product
2. Smart product
3. Smart, connected product


5. System of systems
4. Product system
PLANTERS
TRACTORS
FARM EQUIPMENT SYSTEM
COMBINE HARVESTERS
TILLERS
WEATHER MAPS
WEATHER FORECASTS
RAIN, HUMIDITY, TEMPERATURE SENSORS
WEATHER DATA APPLICATION
WEATHER DATA SYSTEM
FARM PERFORMANCE DATABASE
FARM EQUIPMENT SYSTEM
FARM MANAGEMENT SYSTEM
SEED OPTIMIZATION SYSTEM
SEED DATABASE
SEED OPTIMIZATION APPLICATION
IRRIGATION SYSTEM
FIELD SENSORS
IRRIGATION APPLICATION
IRRIGATION NODES

Accenture estimates the Industrial Internet of Things could add $14.2 trillion to the global economy by 2030

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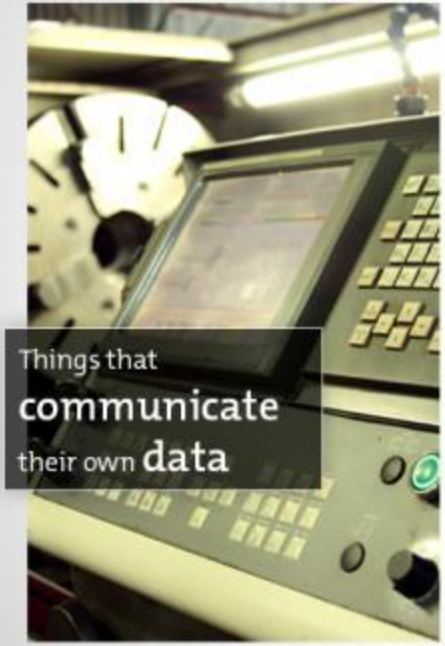
DIGITAL CRAFTSMANSHIP

Sensors
* Low energy
* Minitiurization
* Reduced costs
* GPS

Wireless Connectivity
* High bandwith
* Open standards
* Reduced costs
* Smartphone as interface and datahub

Dataprocessing and analysis
* Increasing computing power, memory and datastorage
* Cloud service access
* Reduced costs

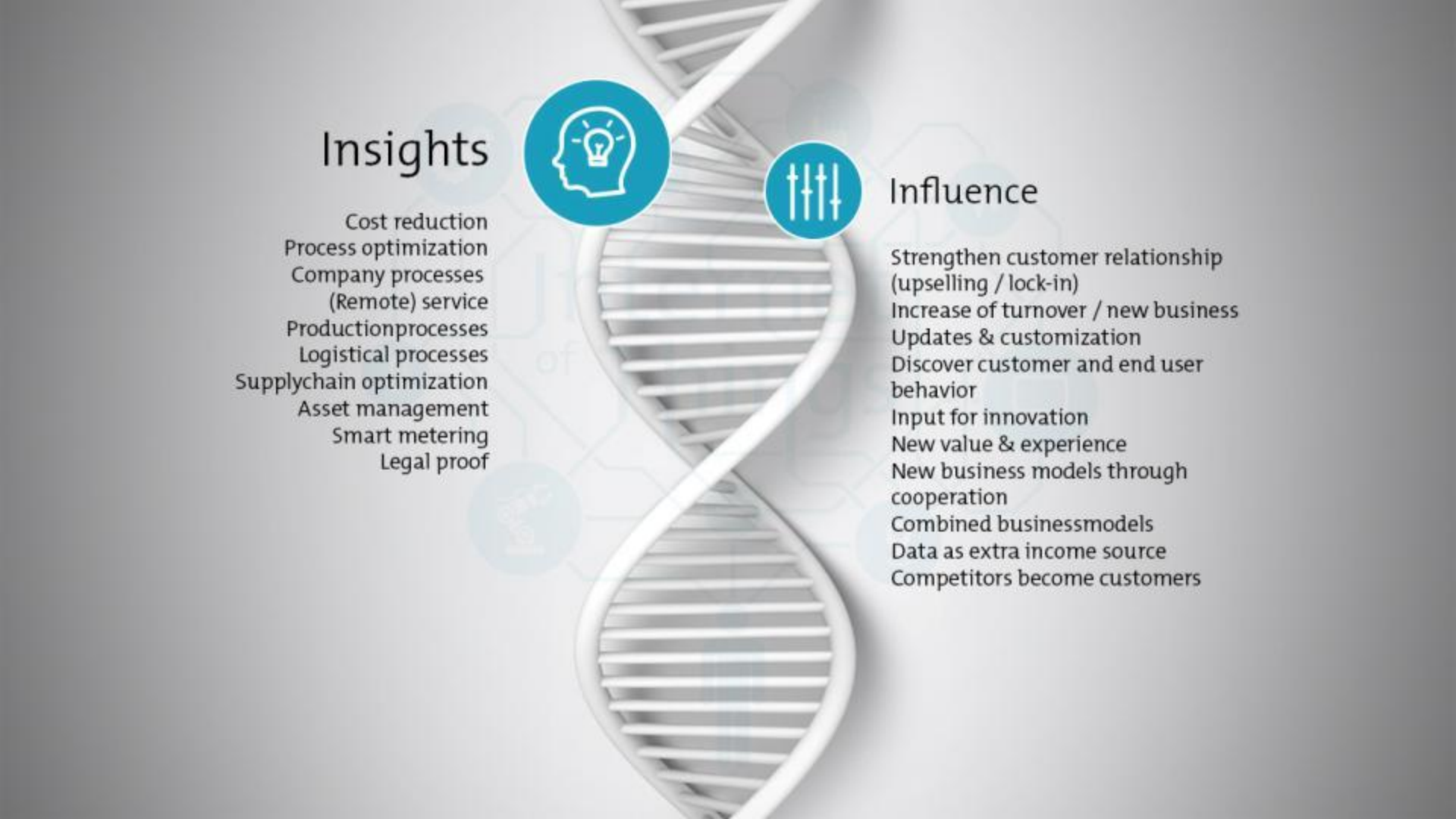

Things that
communicate
their own data

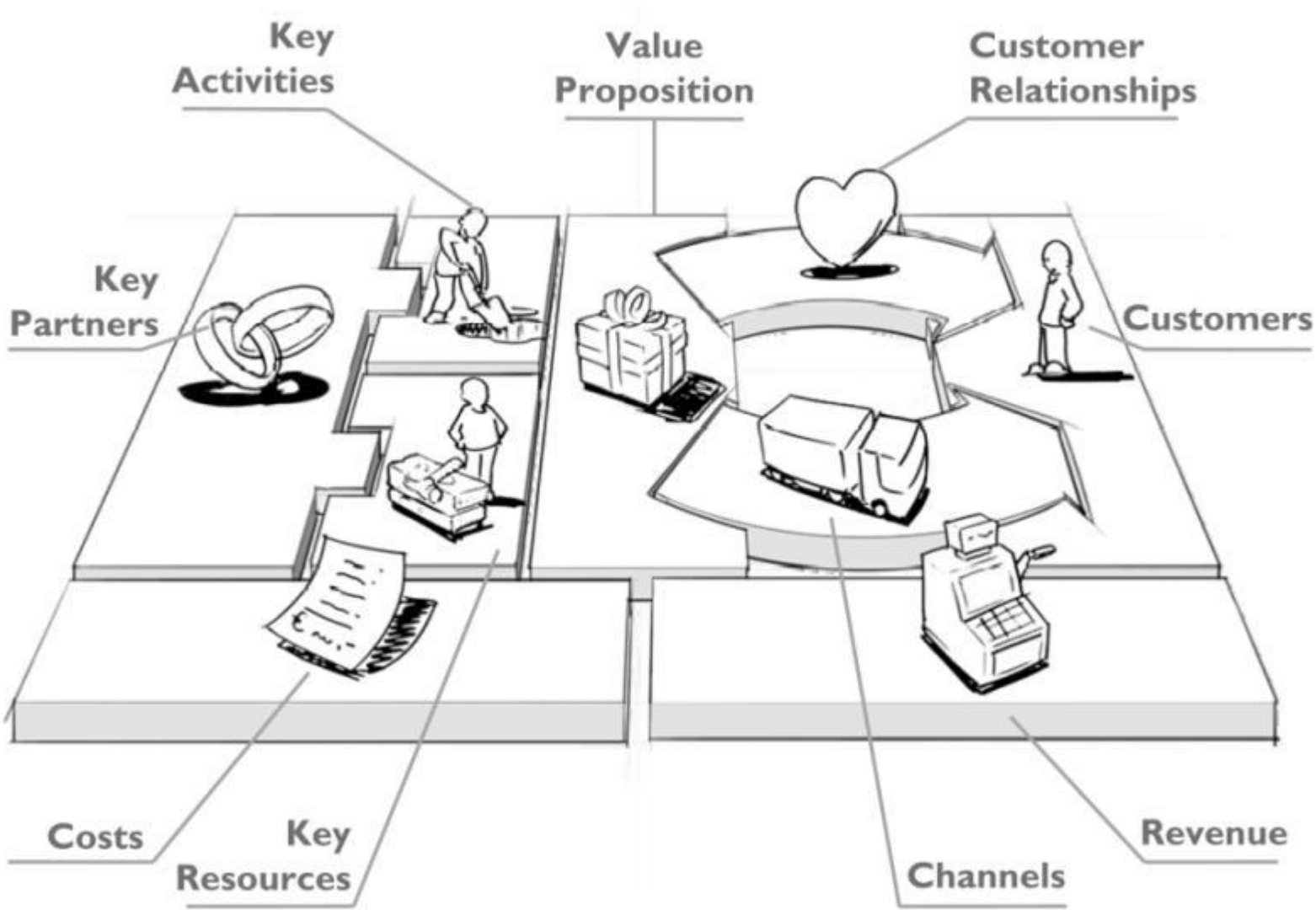
Things that also
communicate
data of their
surroundings

Things that
(autonomously)
react on their
surroundings and
communicate with
other objects
(and humans)

Insights
Influence
Measure
Analysis
Data collection
Communicate
Automate
Interact

Clairvoyancy
Wisdom
Knowledge
Information
Data


Insights
Cost reduction
Process optimization
Company processes
(Remote) service
Productionprocesses
Logistical processes
Supplychain optimization
Asset management
Smart metering
Legal proof
Influence
Strengthen customer relationship (upselling / lock-in)
Increase of turnover / new business
Updates & customization
Discover customer and end user behavior
Input for innovation
New value & experience
New business models through cooperation
Combined businessmodels
Data as extra income source
Competitors become customers


Key Activities
Value Proposition
Customer Relationships
Key Partners
Customers
Costs
Key Resources
Channels
Revenue

Product

Software/Application

Services

Our

Services

Data/Information

Indirect/Marketing

Business ecosysteem

Dontflush.me

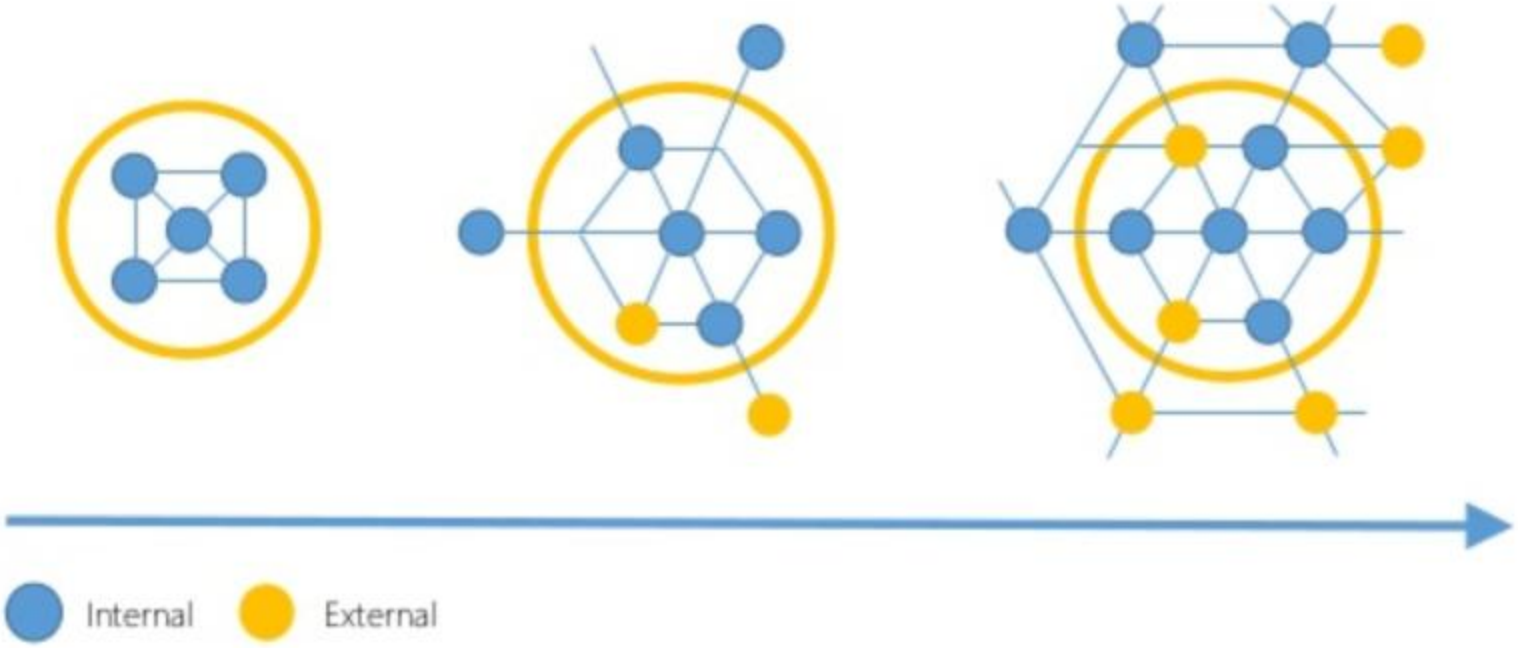
Mercedes-Benz TomTom

Dacom

Victron

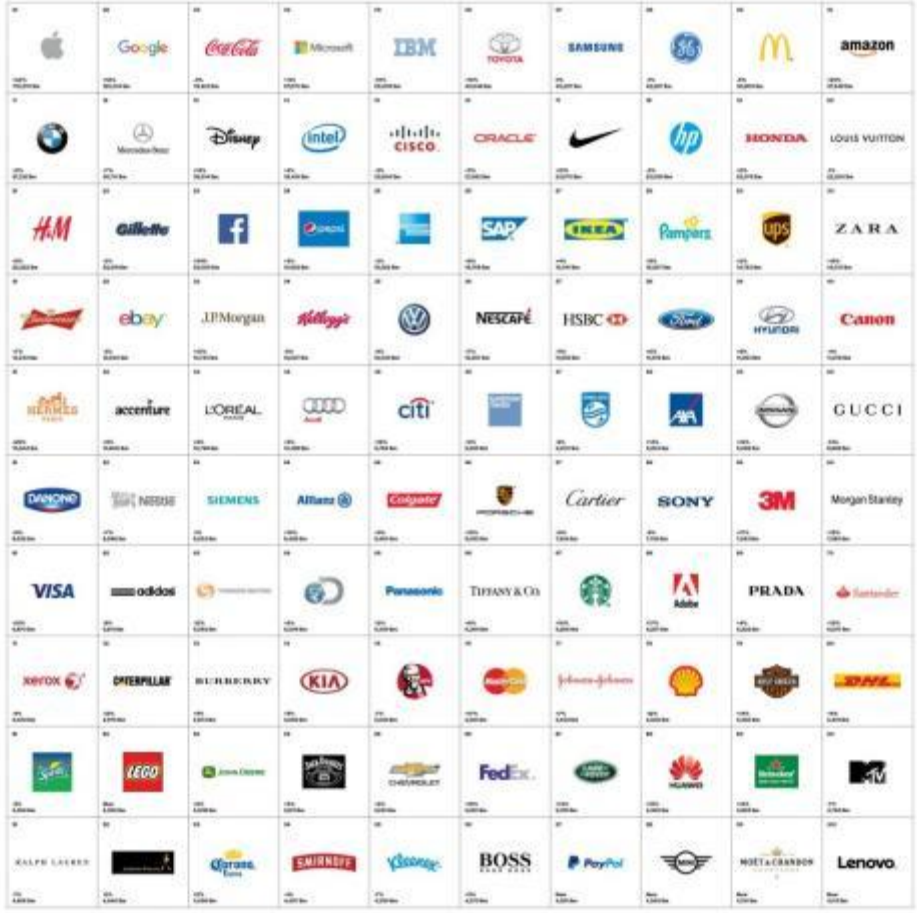
Almere HUB2
+ Add a site
FAQ
Profile
Logout
Set time
Solar yield
This day
This week
This month
This year
Remotely monitor Victron equipment all over the world.
Victron Remote Management is a free service provided by Victron Energy to remotely monitor electrical equipment all over the world.
Victron Remote Management
TRY OUR DEMO

The Extended Enterprise



WE ❤ CUSTOMER
INVOLVEMENT

BEST GLOBAL BRANDS 2015



#BGB2015

Interbrand

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Contact.

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