

# How to enable the Digital Transformation at Schaeffler – from strategy to execution

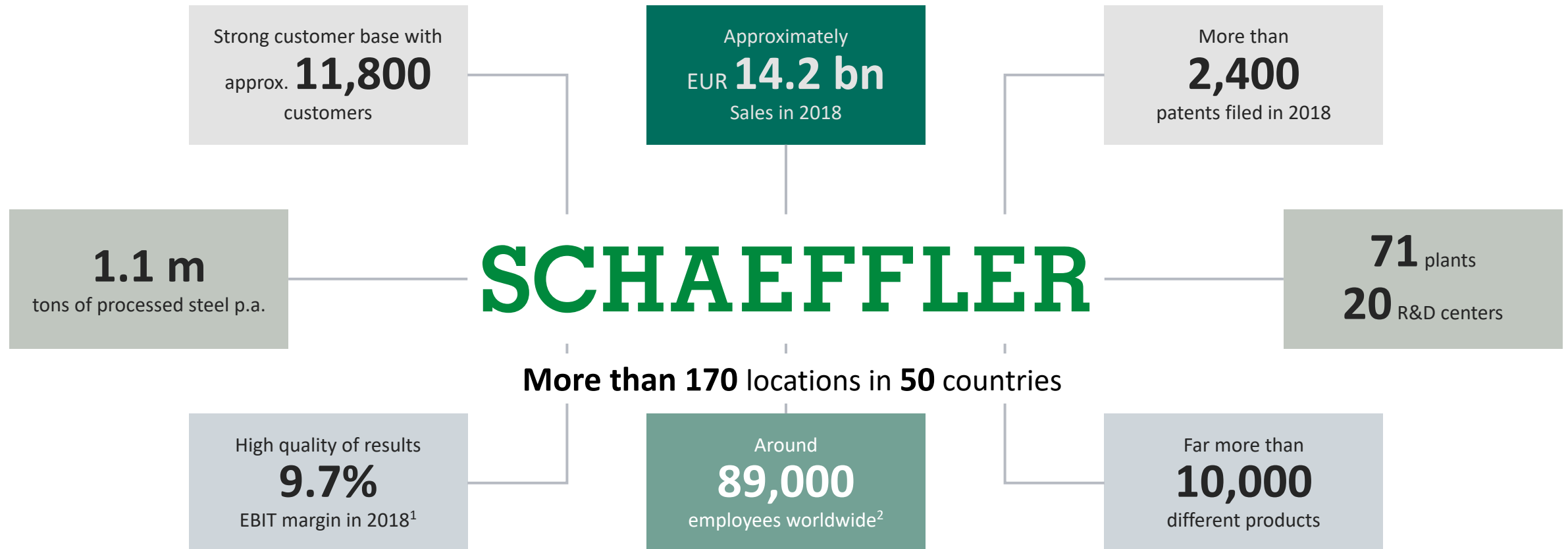
Marcel Rau, Martin Mohr

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go digital!

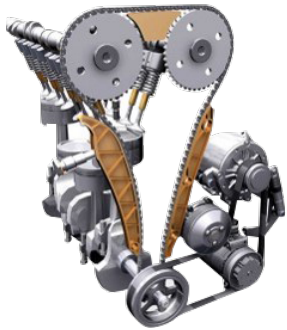
## Schaeffler in facts – strong starting point



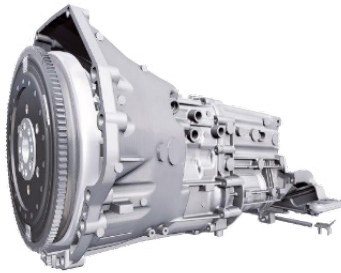
<sup>1</sup> Before one-off effects | <sup>2</sup> As at September 30, 2019

## Three divisions – automotive OEM, Automotive Aftermarket and Industrial

### Automotive OEM | Systems



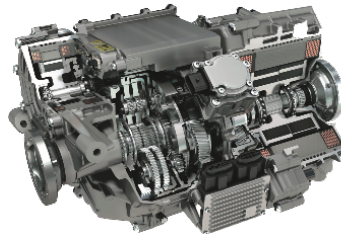
Engine Systems



Transmission Systems



Chassis Systems



Hybrid and Electrical Drive Systems

### Automotive Aftermarket | Segments



Passenger Cars



Light Commercial Vehicles



Heavy Commercial Vehicles



Tractors & Agricultural Vehicles



Services

### Industrial | Sector Clusters



Wind



Raw Materials



Aerospace



Railway



Offroad



Two Wheelers



Power Transmission



Industrial Automation



***Disrupt Or Be Disrupted***





## We view E-Mobility, Industry 4.0, and Digitalization as key opportunities for the future

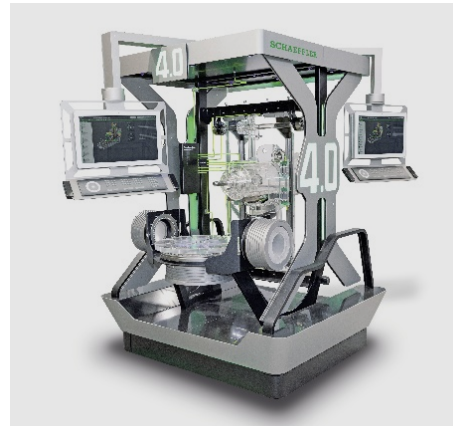
### E-Mobility

- More than 15 years composition competence for future drivetrain concepts
- Expertise in engine, transmission, and chassis form the basis for ideal system solutions
- Production competence and mechanic know-how, integration and vehicle/drivetrain section as important differentiating factor

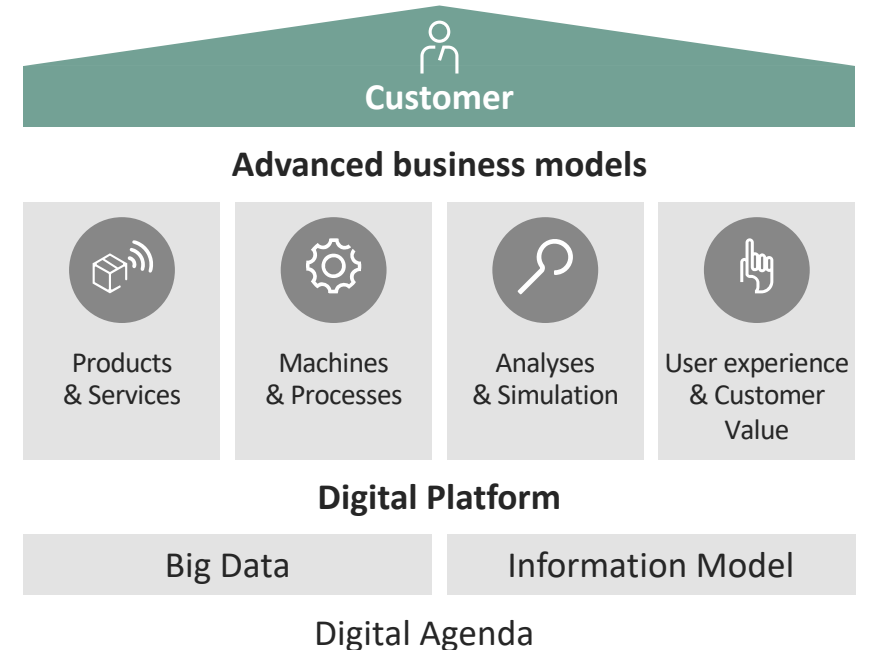


### Industry 4.0

- Machine 4.0 combines existing technologies with new intelligent components – from sensor to cloud
- Bearings are equipped with sensors, thereby becoming data providers
- Innovation project with DMG Mori started in 2015



### Digitalization



- Equipping components with digital intelligence and sensor technology
- Digitization of internal processes and equipment as a means to improve productivity

## Digitalization – the 4 components of the digital agenda

### Products and Services

- The rolling bearing of the future works as a sensor
- Additional added value by connecting to the Schaeffler cloud



## Digital Agenda



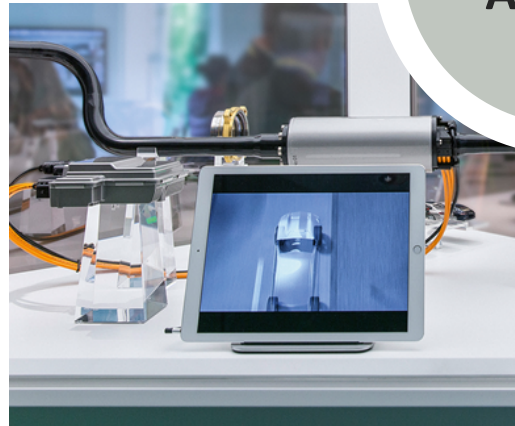
### Machines and Processes

- Further development of production thanks to networked machines
- Considerable reduction in setup times by means of digital order management



### Analyses and Simulation

- Value-adding information by connecting product and process data
- Design for human-machine interaction



### User Experience and Customer Value

- Data recording and evaluation in real time to increase productivity
- Online condition monitoring as a new business model will be expanded significantly in the future





## What it is about... different perception and understanding of Digital



### Digitization

The process of making information available and accessible in a digital format.

### Digitalization

The process of considering how best to apply digitized information to simplify specific operations.



### Digital Transformation

The process of devising new business applications that integrate all the digitized data and digitalized applications.

## COMPLEX



How are all the gears, sprockets and springs interrelated? Problem can be solved by applying logic!

## COMPLICATED



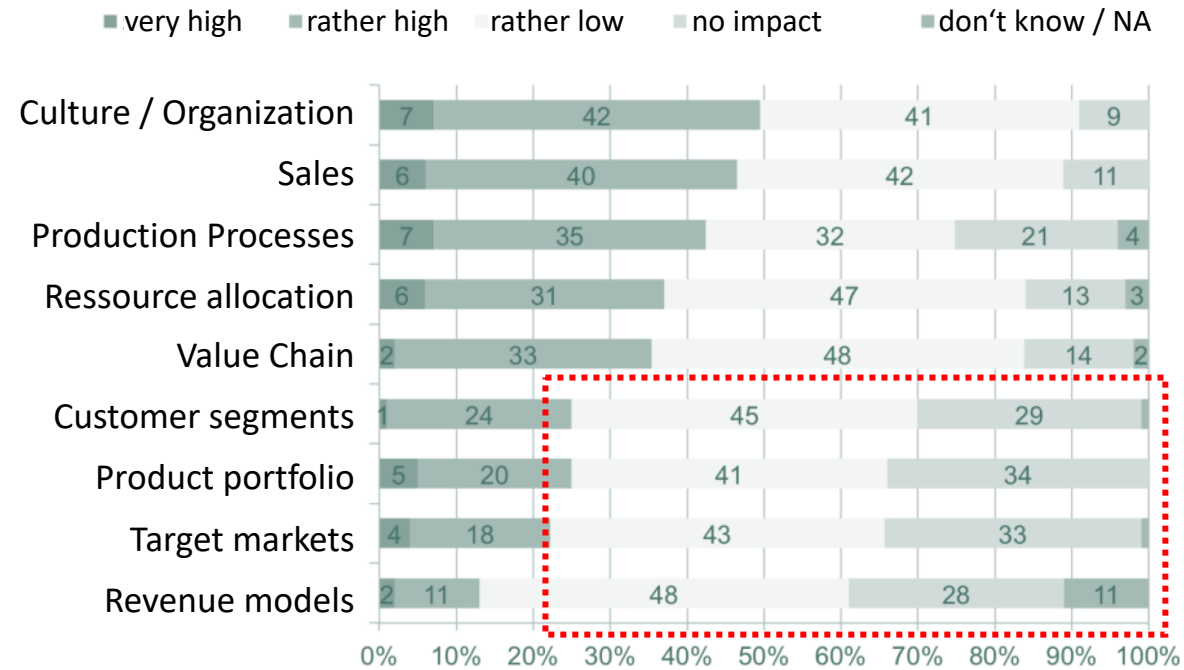
What happens when you pull the blue string? No solution by logic – needs trial and error, iterations and learning from failure!



## Digital Transformation – Why German companies don't get it?

### How digital impacts the enterprise

Survey among 201 C-Level / digital decision-maker in German medium and large enterprises



Quelle: Forsa im Auftrag von Horváth & Partners 2016

Dr. Holger Schmidt | Netzoekonom.de | hs@netzoekonom.de

6 September 2016

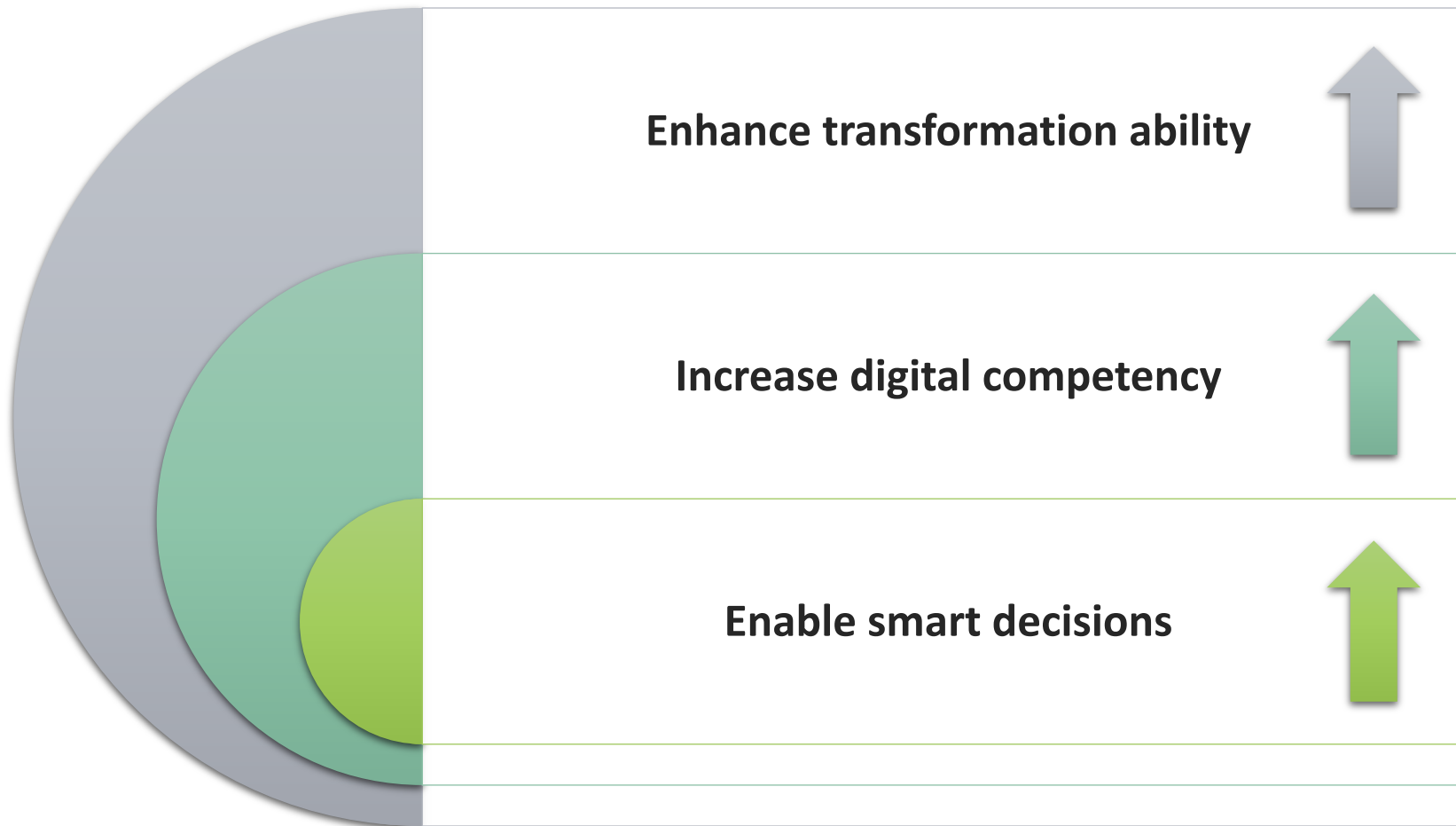


More than **75% deny relevant impact** on key business aspects, more than 50% sees no to low impact at all

BUT the disruption has already happended!  
The question is just, when the tsunami will hit us,  
Dieselgate, E-mobility, trade war may be accelerater.

AND everybody wants to play digital: Robot Process Automation, Industry 4.0, Performance Marketing, Customer Centric xyz, ...

**We build on our core competencies and extend our scope to close the gap**



As Enterprise Architects we enable business leaders to take smart decisions.

We can increase the organisations digital competency by humbly educating our business stakeholders.

And ultimately we can enhance our organizations ability to transform through helping business leaders to

- Recognize and understand the need to transform
- Gain courage and will to change
- Develop a target vision

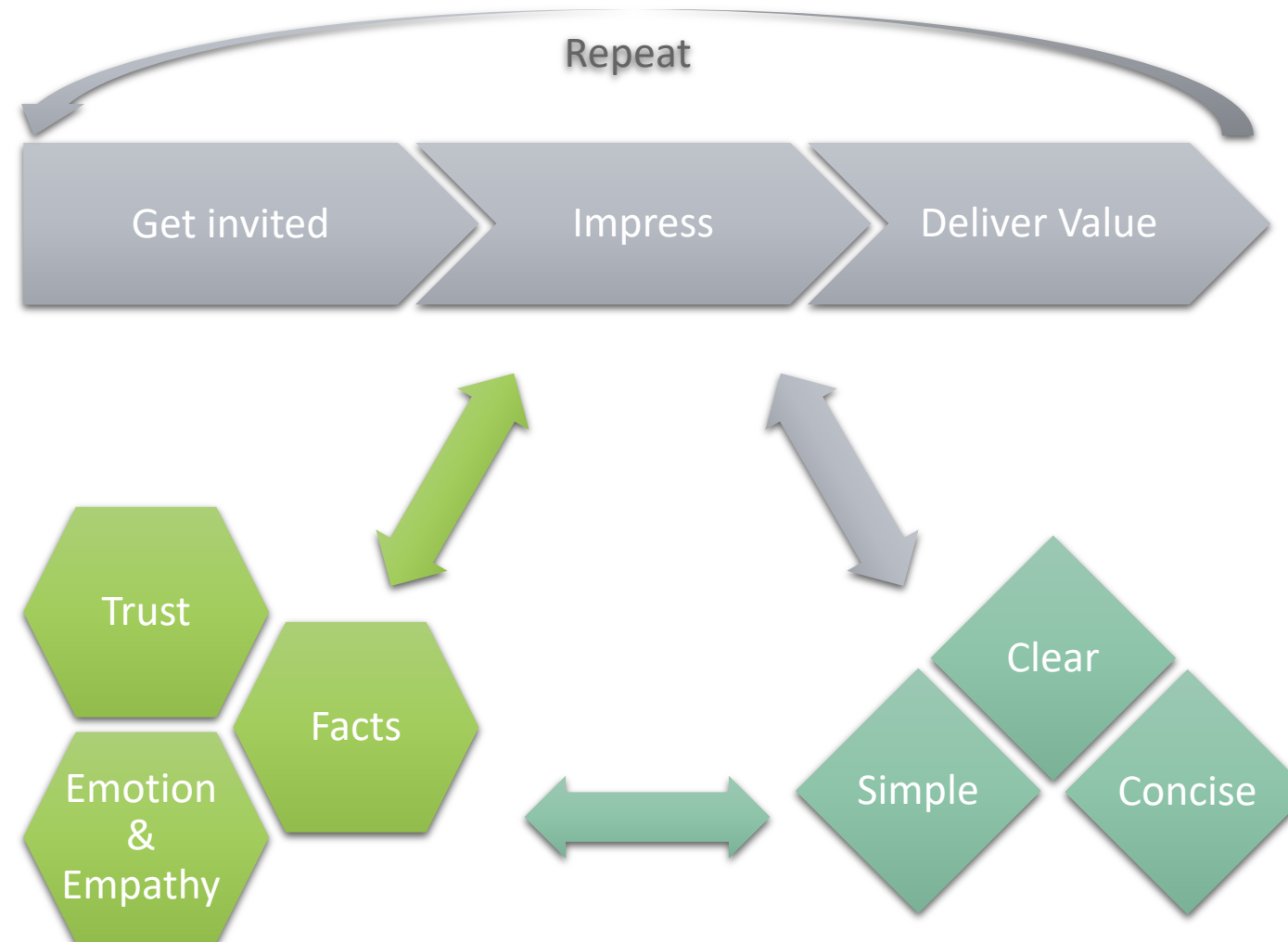


# Culture

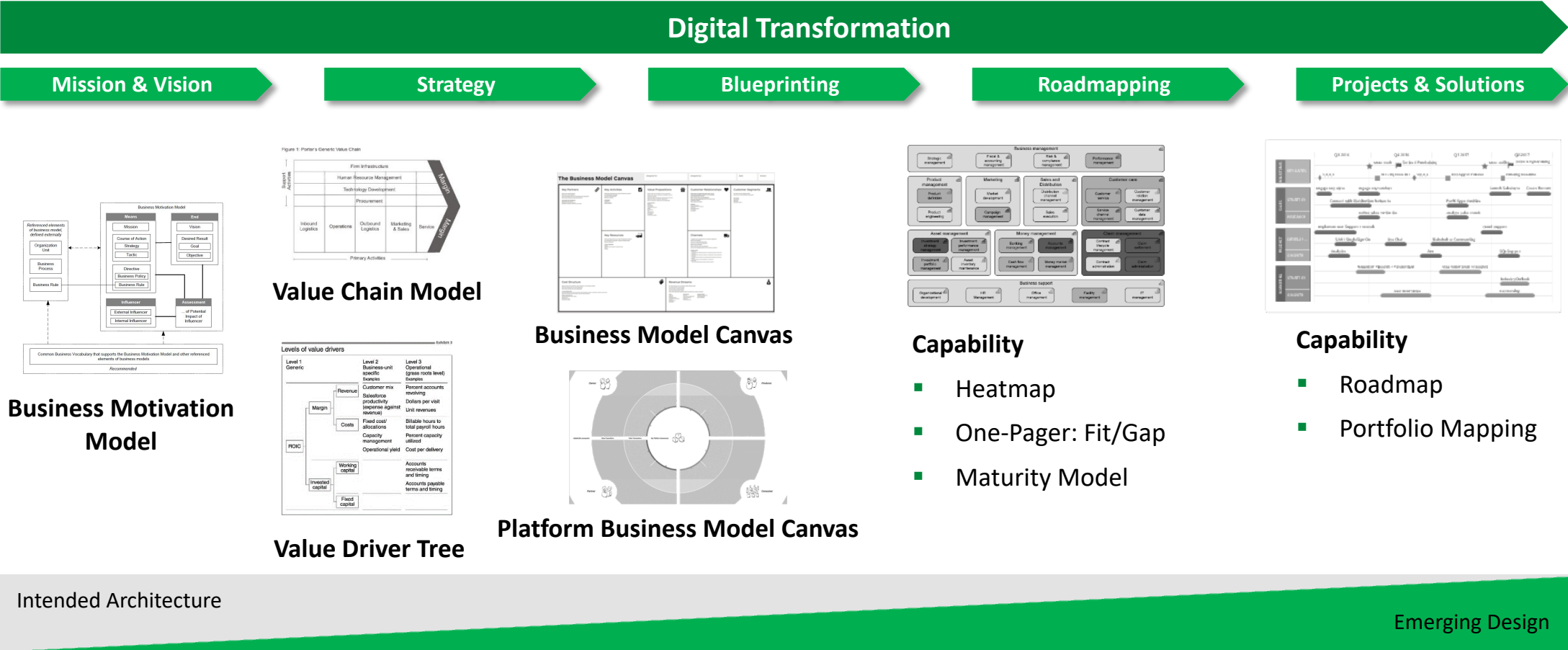
Strategy



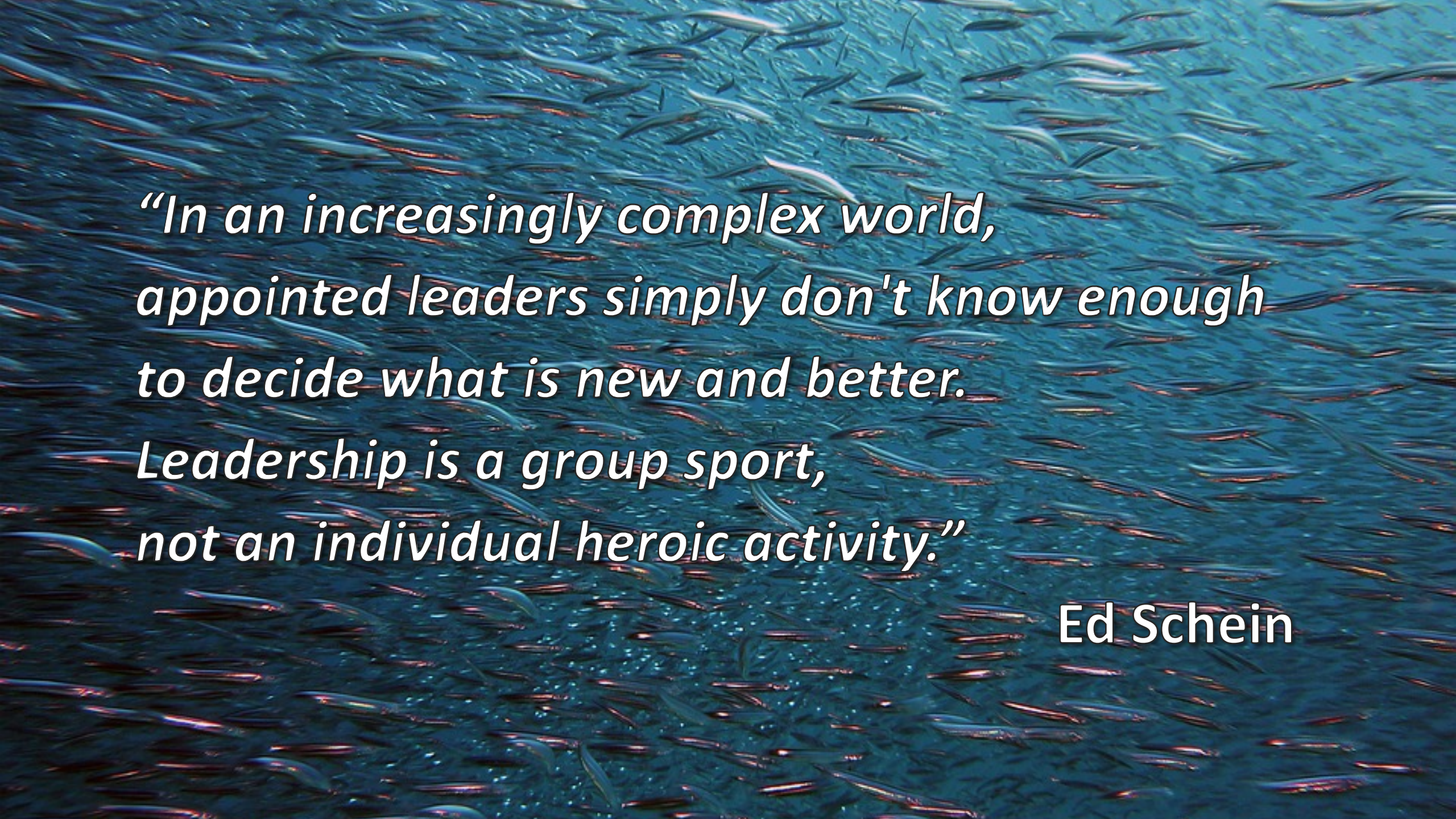
## Impact through relevance



Business Architecture Artefacts, which we feel might help to structure the Digital Transformation at Schaeffler







*“In an increasingly complex world,  
appointed leaders simply don't know enough  
to decide what is new and better.  
Leadership is a group sport,  
not an individual heroic activity.”*

**Ed Schein**



# Questions?

