

Digitalization

Cultural Change **or** Cultural Clash

Volker Ganz | 15th June 2021,
ISLA – Service Leaders Summit Days 2021

PRICEWATERHOUSECOOPERS 

IBM Services

SIEMENS

KraussMaffei
Pioneering Plastics



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DIGITALIZATION

CULTURAL CHANGE OR CULTURAL CLASH

Are you curious?

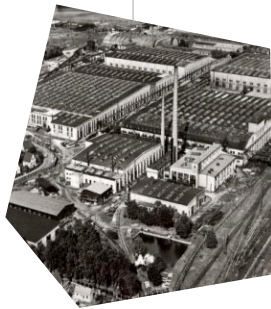
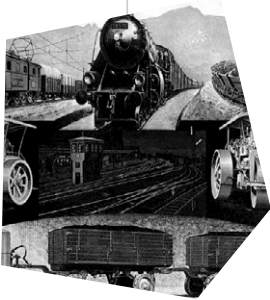
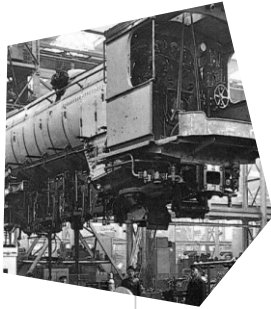
- What is KraussMaffei doing ?
- Why do we transform from product to customer centricity ?
- What are the key pillars of our digital transformation journey ?
- What are our lessons learned in scaling digital service products ?
- How to lead our operating systems of lifecycle & digital services ?



What is KraussMaffei doing ?



KraussMaffei – An impressive industrial history



PIONEERING PLASTICS

KraussMaffei is among the world's leading Manufacturers of machinery and systems for the production and processing of plastics and rubber. Our brand stands for cuttingedge technologies. For more than 180 years. Our range of services covers all areas of injection molding machinery, extrusion technology and reaction process machinery.

60
LOCATIONS
WORLDWIDE

SINCE **1838**

1,200
PATENTS

16
PRODUCTION
PLANTS

~5.000
NUMBER OF
EMPLOYEES

30
SUBSIDIARIES

ABOUT **570**
COMMERCIAL AND
SERVICE PARTNERS

INJECTION MOLDING MACHINERY

REACTION PROCESS MACHINERY

EXTRUSION TECHNOLOGY

DIGITAL & SERVICE SOLUTIONS

- Automotive
- Construction
- Chemicals
- Electronics
- Electrical Engineering
- Consumer Goods
- Medicine
- White Goods
- Packaging

PIONEERING PLASTICS

- » At the cutting edge of digitalisation.
- » Working with – and for – our customers.
- » One brand. Limitless possibilities.





Manufacture of „everyday products“

Product examples for machine utilization at customers

Packaging industry/ consumer goods industry

Boxes and buckets, bottle closures and caps, PET bottles, thin-walled packaging

White goods

(Insulating) components for refrigerators, washing- and automatic coffee machines, buttons, handles, trims

Construction industry

Pipes, window and door profiles, insulating material, panels, floors, fittings, handles, buttons, smart home components



Automotive industry

Light beams and other lighting concepts, structural parts with / without Carbon fibers, bumpers, tires, interior components, foamed trim/surfaces, tire semi-finished products, different films for various applications

Electrical/electronics industry

Surface parts and covers for computers, mobile devices, game consoles, hi-fi and household devices, switches, housings, gears, crown wheels, displays, (Insulating) components

Medical industry

Injectors, inhalers and other medication dosing units, cannulas, ophthoies, surgical instruments (manufactured under highest cleanroom conditions)

Why do we transform from
product to customer
centricity ?



Changing digitalized world requires new mindset from product to customer centricity

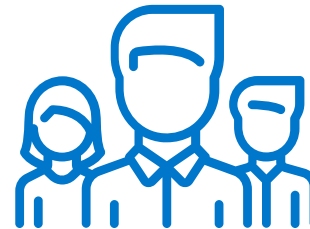
From... PRODUCT-CENTRIC Approach



This KraussMaffei machine is characterized by the following **features**.



To... CUSTOMER-CENTRIC Approach



What **customer value** does (only) the **KraussMaffei solution** have for me?

With our realignment, we will become a holistic solution provider with a focus on the production efficiency and sustainability of our customers

from
Machine supplier
with strong
product focus



to
Holistic solution
provider along
customer's lifecycle

from
On-Site diagnostics
and reactive
After-Sales Service



to
Data based support
and proactive digital solutions
for maximum efficiency

from
Three segments with
focus on the individual
machine technology



to
Symbiosis of core
competencies for
holistic sustainability

KraussMaffei creates Customer Value with tailor-made Solutions along the entire ,Customer Journey‘

Holistic Solutions with Customer Focus

Recycling **Logistics & Packaging** **Medical** **Automotive**
 Lightweight **Surfaces**
Circular Economy
 Beverage **Flat & Foam Products** **Tire & Rubber Products**
Technical Appliances **Rigid & Soft Foam**



Customer Values illustrated in blue



Service Products & Digital Solutions

Relocations
 socialProduction
Field Service **APC+** **Retrofit**
 dataXplorer
Spare Parts **forensicExpert**
Injection Molding as a Service
smartAssist



We offer a wide range of lifecycle and digital products bundled in Smart Service Packages

Holistic overview on our DSS Service Product Portfolio

Lifecycle Services



EXAMPLES

- Commissioning
- Spare parts
- Field Service
- Reman, Repair and Used Machines
- Retrofit
- Machine Relocation
- Training
- ...

Field Service



Retrofit



Upgrade



Used Machines




Spare Parts



...

Digital Services



SMART SERVICE PACKAGES

Bundle of our Lifecycle Services with Digital Products to ensure maximum customer value



Our service packages providing full-time protection, availability and fixed cost to budget

OUR PERSONALIZED PRODUCT FAMILIES ...

- Maintenance4You
- Productivity4You
- Factory4You
- Usability4You

smartAssist
Maintenance4you



socialProduction
Productivity4you



Injection Molding as a Service
Usability4you



Injection Molding Machinery IMM



Extrusion Technology EXT



Reaction Process Machinery RPM



What are the key pillars of
our digital transformation
journey ?



**The basis for
every
transformation
is a clear
strategy.**



Structure follows Strategy –

Digital & Service Solutions



Digital
Transformation

OUR VISION

Redefine plastics solutions
to generate **business impact** &
customer value

- *moving beyond machinery*
- *focusing on end-to-end service execution*
- *value creation with long term customer relationships*
- *leading portfolio of digital solution*
- *innovative new business models.*

We combine *Service* & *Digital Excellence*.

Our aim is to create by digitalization a *unique customer experience* with regards to speed, availability and competence.

KRAUSSMAFFEI'S DIGITAL & SERVICE SOLUTIONS

DIGITAL VENTURES

 **polymore**
A COMPANY OF KRAUSSMAFFEI

> 50.000
MACHINES IN OPERATIONS
GLOBALLY

> 600
LOCALIZED SERVICE TECHNICIANS
ONSITE FOR CUSTOMER SUPPORT

42
SALES & SERVICE
OFFICES

> 20
(DIGITAL) PRODUCTS
TO DRIVE SUSTAINABILITY
AND CIRCULAR ECONOMY

> 700
B2B COMPANIES ON
POLYMORE.COM

> 80%
OF REQUESTED MATERIALS
ARE RECYCLES

EACH NEW MACHINE
EQUIPPED WITH 5G-READY
CONNECTIVITY HARDWARE

> 100.000
SPARE PARTS SHIPMENTS
PPER YEAR GLOBALLY

3
MAIN SPARE PART HUBS
IN EUROPE, ASIA AND
AMERICA – DRIVING SPEED
AND AVAILABILITY

**OUR CUSTOMER VALUE DRIVEN
SERVICE PORTFOLIO...**
... based on global E2E processes –
enabled by Digital Solutions

- >> Business value for our customers
- >> Global support for local success
- >> State-of-the-art technologies

6
DIGITAL PRODUCTS
SCALED IN MORE THAN
30 COUNTRIES

2
GLOBAL CUSTOMER SERVICE-
& ECOMMERCE EXPERIENCE
PLATFORMS

> 2.000
ACTIVE USERS OF DIGITAL
PRODUCTS & SERVICE
PER MONTH

> 40
DIGITAL EXPERTS IN
ONE GLOBAL TEAM

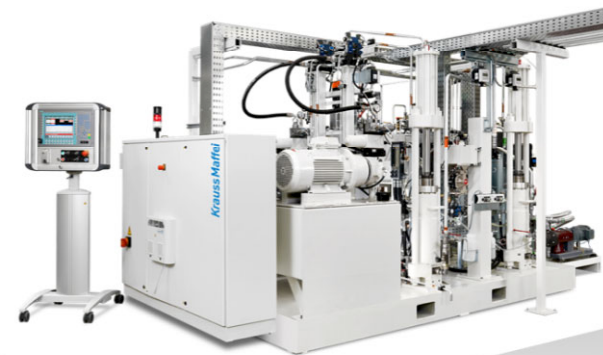
5
DIGITALIZATION
HUBS

> 5 STARTUPS
AND **> 10 KEY PARTNERS**
IN DIGITAL ECOSYSTEM

> 100
STARTUPS SCREENED
AND SCOUTED IN THE
LAST 12 MONTHS



Data is our new electricity!



>50k

KraussMaffei
machines **worldwide**

>2k

new KraussMaffei
machines **every year**

>8 P_{eta}B_{yte}

of machine data generated
per year in 2024

PB = PetaBytes, 1 PB = 1,000 TeraBytes = 10^{15} Bytes = .1.000.000.000.000.000 Bytes

MAINTENANCE4YOU



**DIGITAL
INSIDE**

PRODUCTIVITY4YOU



USABILITY4YOU



Data

Usage
fee

Machinery
Service
Financing
Risk Transfer

KraussMaffei

Pioneering Plastics

SOCIAL PRODUCTION

Production. Communication.
Mobile. Intuitive.



Machine overview, KPIs & automated process monitoring for faster reaction time

Challenges, impact and value drivers of socialProduction



CHALLENGES

- No consistent access to production status and process parameters
- Communication problems in the production plant & use of semi-official private messengers
- Non-automated process monitoring and only a few parameters are provided with tolerances



IMPACT

- Insufficient transparency of production
- Slow reaction times and high downtime costs e.g. during ghost shifts
- Unstable processes that lead to rejects or changing component quality
- Regular, manual control of the process and data evaluation (e.g. using the actual value protocol)

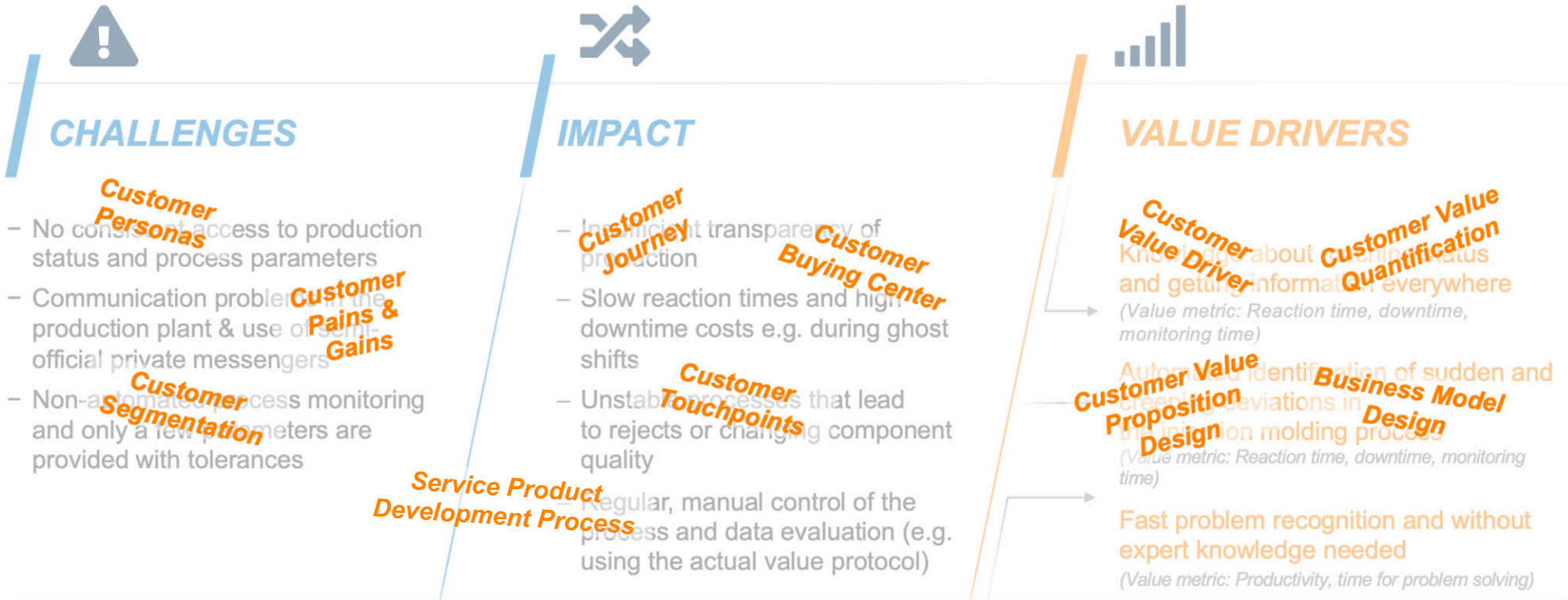


VALUE DRIVERS

- Knowledge about machine status and getting information everywhere
(Value metric: Reaction time, downtime, monitoring time)
- Automated identification of sudden and creeping deviations in the injection molding process
(Value metric: Reaction time, downtime, monitoring time)
- Fast problem recognition and without expert knowledge needed
(Value metric: Productivity, time for problem solving)

Machine overview, KPIs & automated process monitoring for faster reaction time

Challenges, impact and value drivers of socialProduction



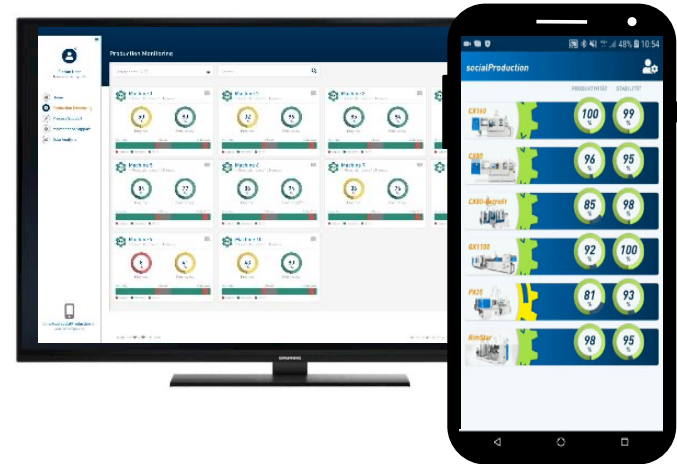
Method & Tools to drive **Capability Development in Customer Centricity**

Revolutionary Machine-to-Human-to-Human Communication

PRODUCTIVITY4YOU – socialProduction

socialProduction enables a completely new way of digital production & makes team communication easier than ever before

- + Reduce your process-related downtimes significantly!**
Our autonomous process monitoring **reports independently** and gives advice to you. Your machines will talk to you.
- + Enable lessons learnt & communicate faster!**
The modern **messenger** brings humans and machines together. **Documentation** with full control of your data included. Rethink communication.
- + Your machine status at anytime and anywhere!**
All relevant machine information is visible **real-time** on your mobile device **at anytime**. Be always up to date and **safe time**.



CATCH PHRASE

Social messenger with integrated early-warning system (e.g. tire pressure sensor)

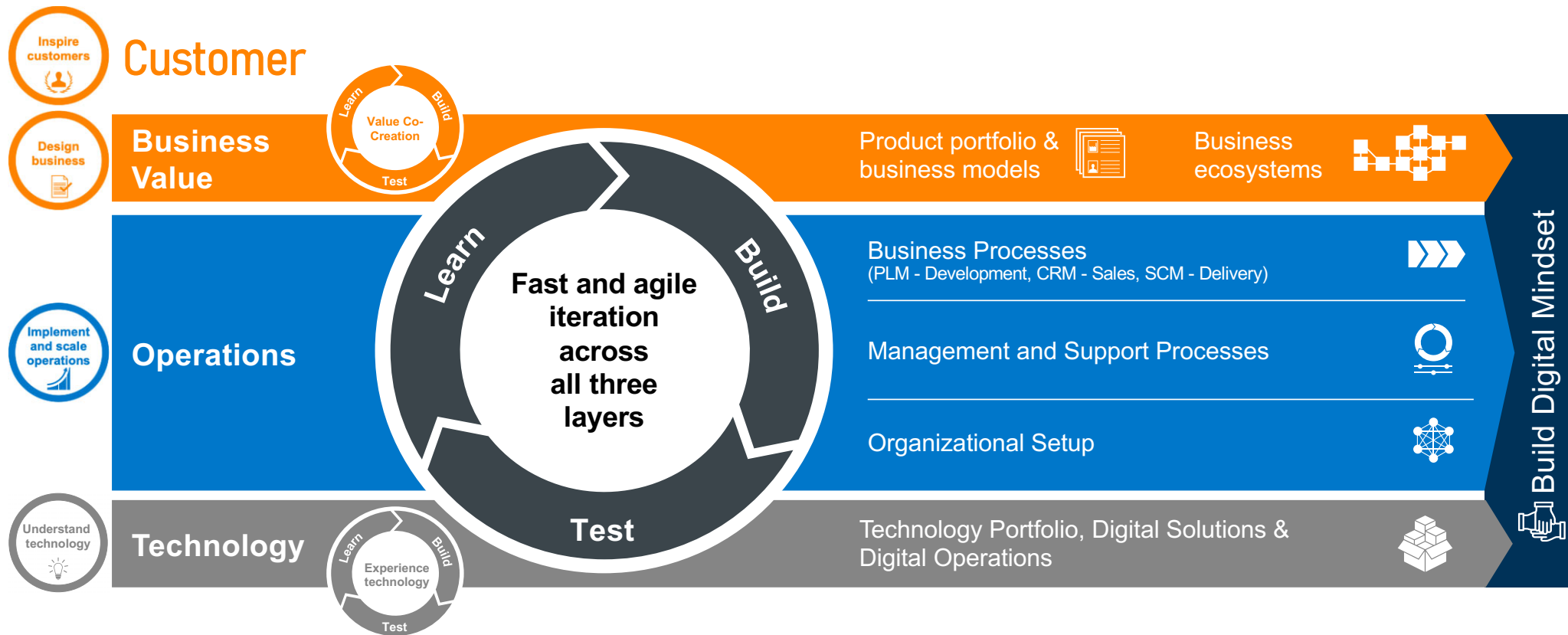
What are our lessons
learned in scaling digital
service products ?



Monetarization of Digitalization



Key Elements of Digital Transformation by scaling Digital Service Products



How to lead our
operating systems of
lifecycle & digital services ?



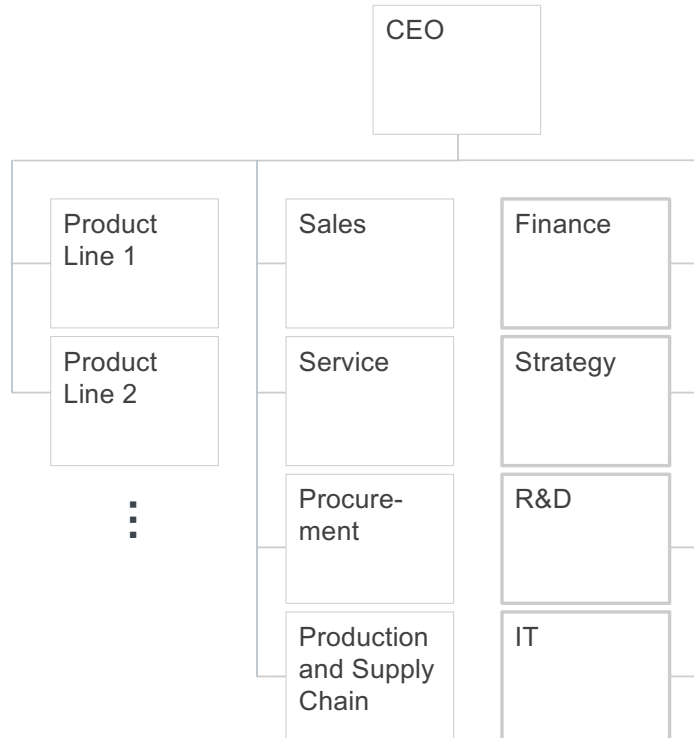
Mindset & Culture

TECHNOLOGY
MEETS DIGITAL

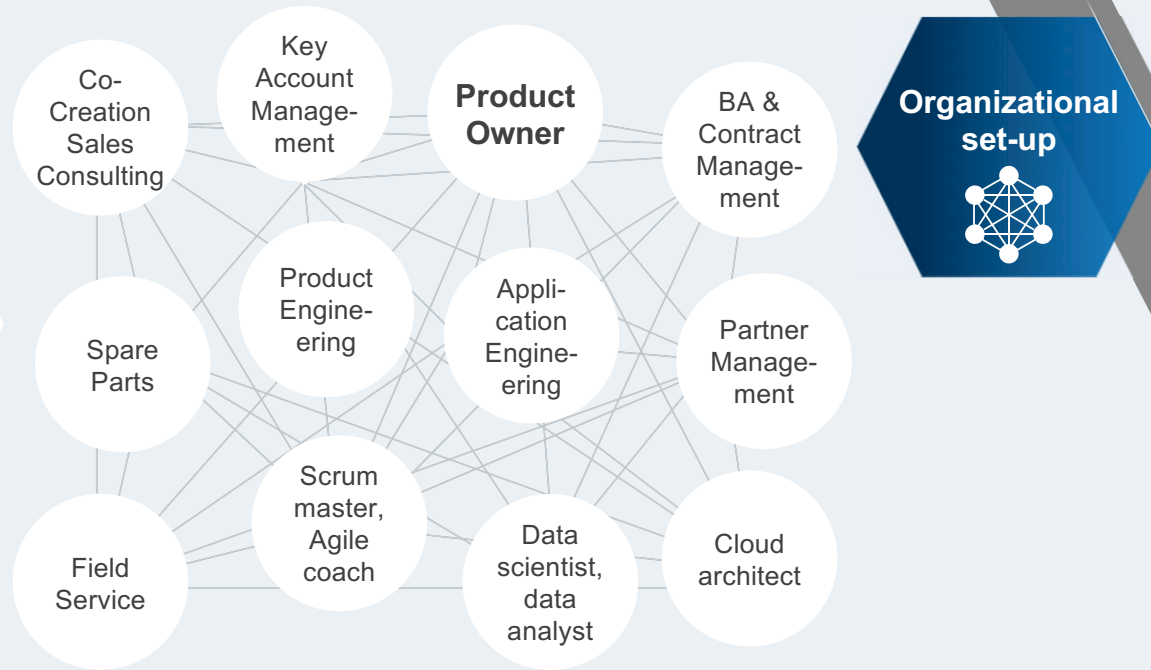
*Making plastics 4.0
a reality.*

The organizational set-up of a digital company requires a virtual project-driven set-up with close cross-functional collaboration

Line organization



Virtual project-driven set-up, e.g.



Corporate operating Systems meets Digital operating System

Two operating systems require different mindsets and working approaches

CORPORATE *Operating System*

Whatever we can **predict**,
we can shape!

DIGITAL *Operating System*

Whatever we can **shape**,
we don't need to predict!

Future is predictable

Objectives are clear

Consistent and clear information

Almost no changes

Complexity under control

Future is uncertain

Volatile and moving targets

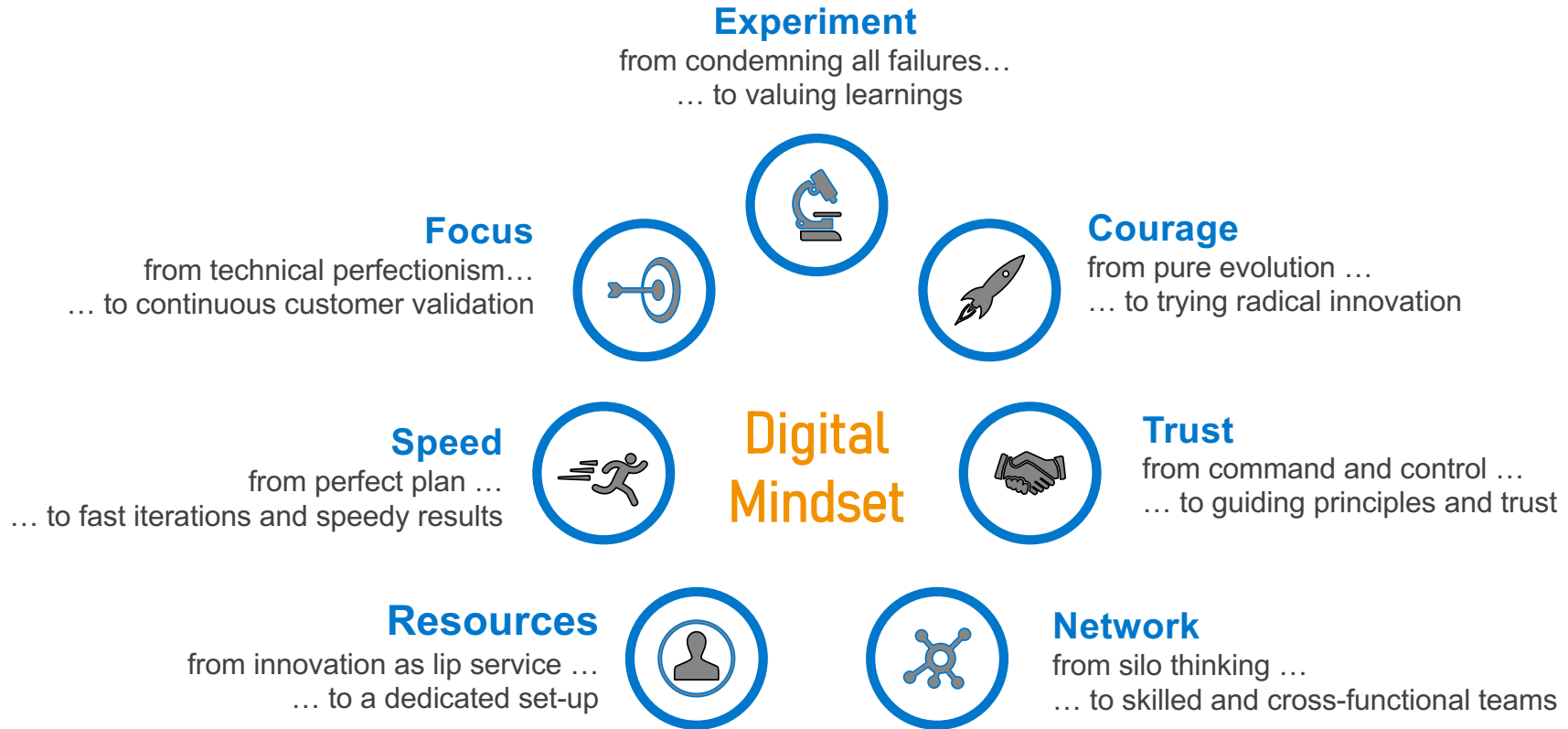
Ambiguous information

Permanent changes

high Degree of complexity

Digital Transformation requires to build a Digital Mindset

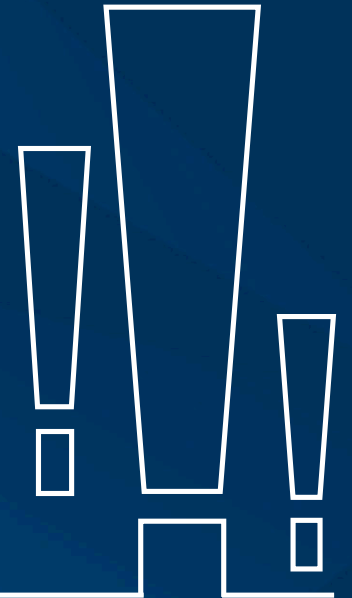
Key Principles



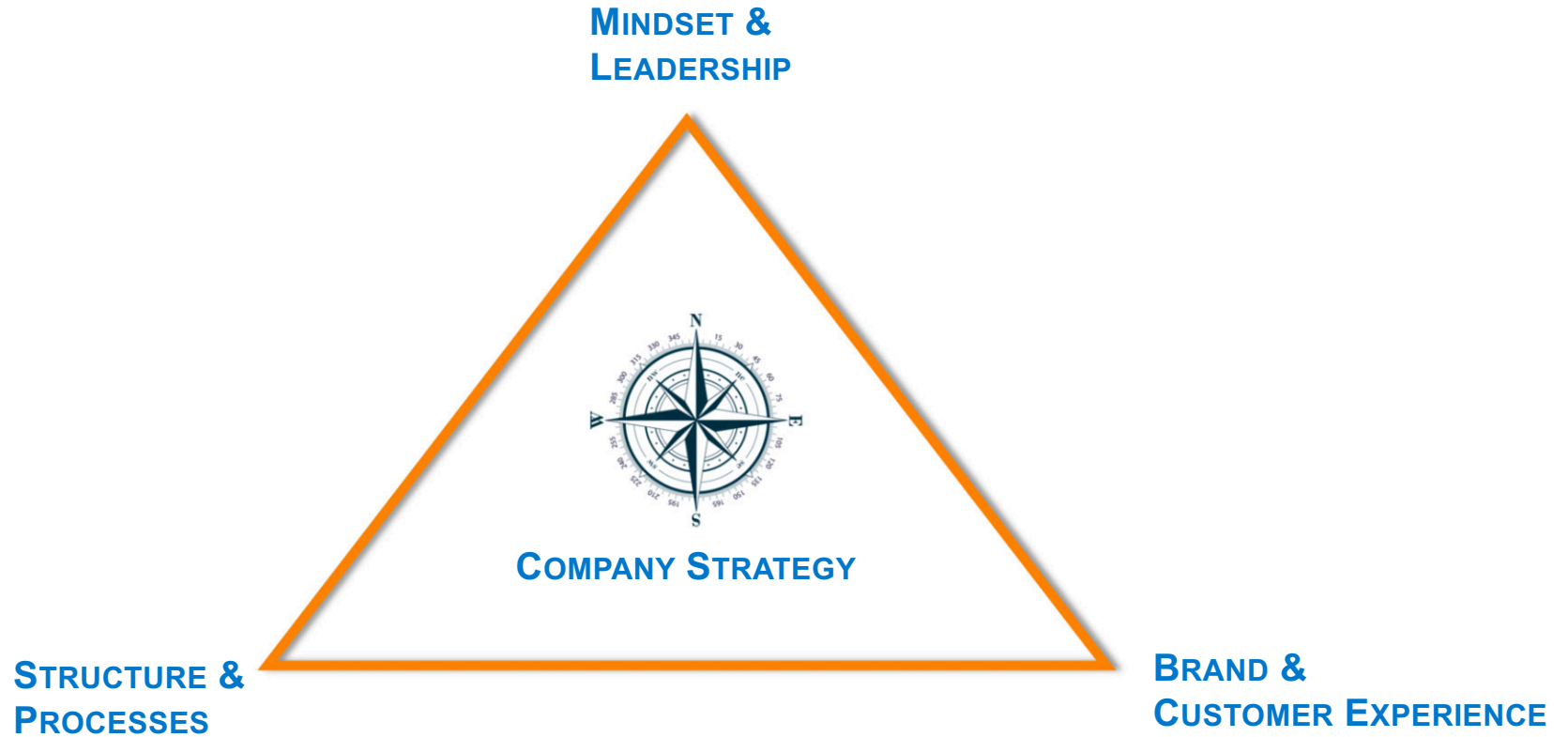
Digitalization = ~~010101~~

Digitalization = Mindset

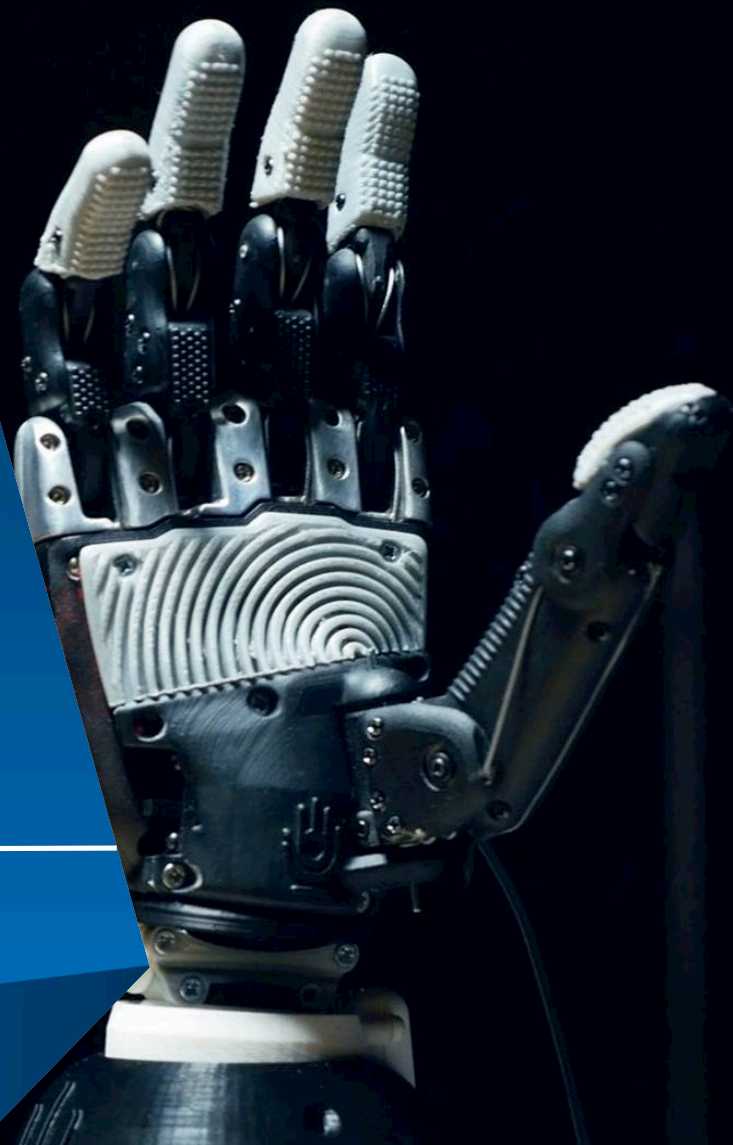
Let's summarize



Digital Transformation @ KraussMaffei



QUESTIONS





Thank You !

TECHNOLOGY
MEETS DIGITAL

*MAKING PLASTICS 4.0
A REALITY*

