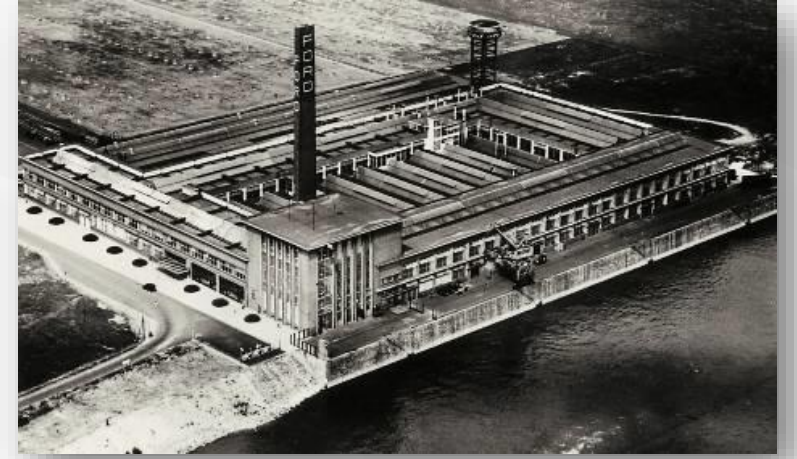


„Factory of Tomorrow“ Cologne

Ford Cologne Electrification Center

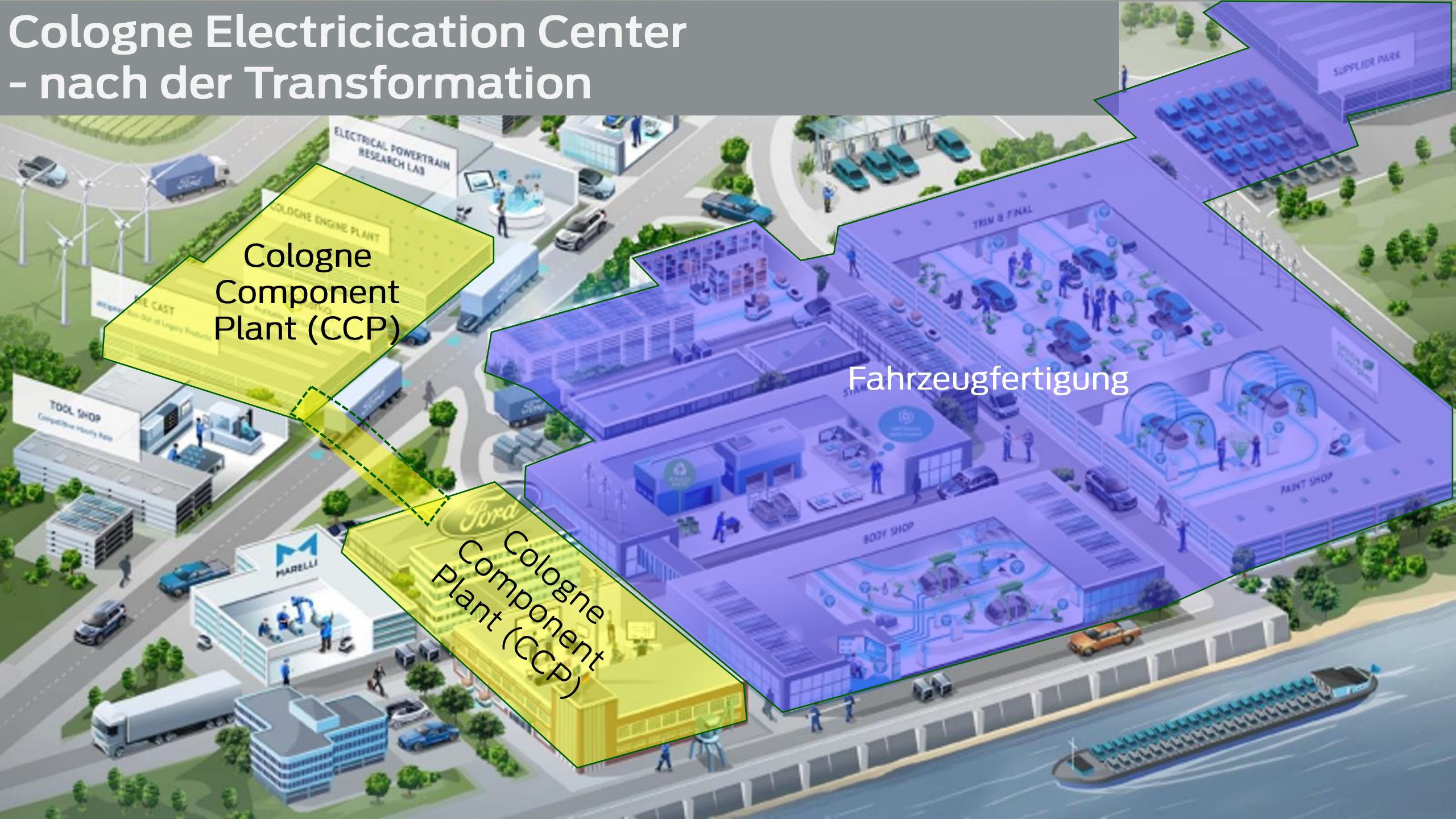
The Ford logo, consisting of the word "Ford" in a dark blue, stylized script font.

**Seit mehr als 90 Jahren werden in Köln Automobile sowie
Komponenten, Motoren und Getriebe gebaut**





Cologne Electricification Center - nach der Transformation



Cologne
Component
Plant (CCP)

Fahrzeugfertigung

Cologne
Component
Plant (CCP)

UNSERE VISION



FORD-WERKE KÖLN
Fabrik der Zukunft



Wir sind Vorreiter in Technologie, die unsere Mitarbeiterinnen und Mitarbeiter beteiligt, begeistert und motiviert, Arbeitsabläufe mutig und erfolgreich zu gestalten.



Unsere Arbeitsorganisation ist ausgelegt auf Wettbewerbsfähigkeit und dient gleichrangig der Erfüllung einer hohen Zufriedenheit der Mitarbeiterinnen und Mitarbeiter.



Wir ALLE identifizieren uns mit Ford, unterstützen uns gegenseitig und arbeiten verantwortlich an gemeinsamen Zielen.

Unsere Fabrik der Zukunft ist der effektivste Standort für die Fertigung von Elektrofahrzeugen und Komponenten.



Transformation to an Electrification Center



Implementation of Industry 4.0



Holistic view on all processes



Cultural Transformation

FoT Cologne – Main Pillars

Digitalization: „New Technologies“

- eFPS
- IIOT Platform
- Digital Twin
- AR/VR
- Mobile Devices/Paperless Shopfloor

„Working Organization“

- Teamstructure
- Ratio
- Rotation
- indirect in direct
- Flexibility

„Qualification & Training“

- Future skills
- Technical skills
- Soft skills
- Leadership

Cultural Transformation > Ford+

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Cultural Transformation > Ford+

FoT Cologne – Transformation & Qualification Needs

Target Groups

- All plant areas involved – focus on VO CX740
- All Hierarchy Levels
- About 3.000 employees in VO

Methods

- 15 different training plans acc to specific job profile
- Internal experts as trainer
- New ways of learning-methods: circuit / virtual / interactive

Content*

- Min. 12 training days, up to 157 training hours per employee (total: more than 320.000 hours)
 - 20% social skills / Ford+
 - 40 – 60% technical training
 - 60 – 40% product training

Timeplan

- Sep 2022 until Q3 2023
- further roll-out to other plants in Cologne & Europe

*according to job profile

FoT– Qualification & Training Concept

Technical Skills & Processes

Robotics
High Voltage
eFPS
...

Industry 4.0/ Digitalization

Digital Factory
Smart Devices
IIOT
Data Analytics
...

Soft Skills

Leadership
Collaboration
Teamwork
Teambuilding
Motivation
...

Cultural Transformation

Qualification – Landscape of Modules

Smart Factory

Basic Knowledge Industrial Transformation

Introduction Industry 4.0 & Productinformation BEV
 Digital Workplace
 Smart Safety
 SMART & Autocall (Automatic Order System)
 Customer View: Cause and Effect of quality factors
 Green Factory
 Launch Knowledge

Specific Knowledge: Industrial Transformation

Understanding of Quality Data and Digital Creation (QLS, FTT etc.)
 AI & Cyber Security
 Screw Technology I
 Screw Technology II
 Paint Technology I
 Industrial Engineering
 Additive Manufacturing Basics
 Power Management Systems

Using Technologies

Robots Basics (Fanuc/Kuka)
 Roboter Specialist (Fanuc/Kuka)
 SPS Basics
 SPS Advanced
 Visionssystem 1
 Visionssystem 2
 Logisticsystems Basic
 Software for Logisticsystems (SMART)
 Software for Logisticsystems (AGV)

Processes, Data & Methods

Basics

Introduction eFPS

Advanced Knowledge

eFPs: TraintheTrainer
 eFPS: Problem Solving & Greenbelt
 eFPS: Advanced Greenbelt & digital Dashboards (Minitab)
 Digital Application & Method II
 Digital Application & Method I
 MobilMaximo
 Digital Factory I (Teamcenter)
 Digital Factory II (AutoCAD)
 NGAVS
 Relationships & Dependencies of production areas

High Voltage

HV1 Basics and Awareness
 HV2 Expert High Voltage KFZ Level I (Level 2a Part 1)
 HV3 Expert High Voltage KFZ Level II (Level 2a Part 2)
 HV4 Expert High Voltage-KFZ-Systems for specific tasks (Level 2b)
 HV5 Qualified Electrician for High Voltage vehicles (Level 2c)
 HV6 Qualified Electrician for work under voltage (Level 3)
 HV7 Transport of dangerous goods - awareness of dangerous goods
 HV8 Transport of dangerous goods -
 lithium battery transport require (Prerequisite HV7)

Virtual Training: Innovation Hub Center

FN1 (Predictive Maintenance etc.)
 FN2: Virtual Paint
 FN2: Plant operator practice training
 FN2: Production rotation training paint
 FN3: Virtual training sequences* in different skill levels
 FN3: New Ecats System (Software)
 FN3: New Ecats System (Hardware)
 FN3: Virtual Meister Training
 MP&L
 FNQ

Change Management

Future: Start
 Future: Manage I
 Future: Master I
 Future: Shape together
 Future with Teamwork (Offsite)
 Future: Manage II
 Future: Master II
 Health Management: Daily Life & Workplace
 Time Management & Self Organisation
 Business Acumen I
 Business Acumen II
 People Leader Responsibilities & Labor Law Basics

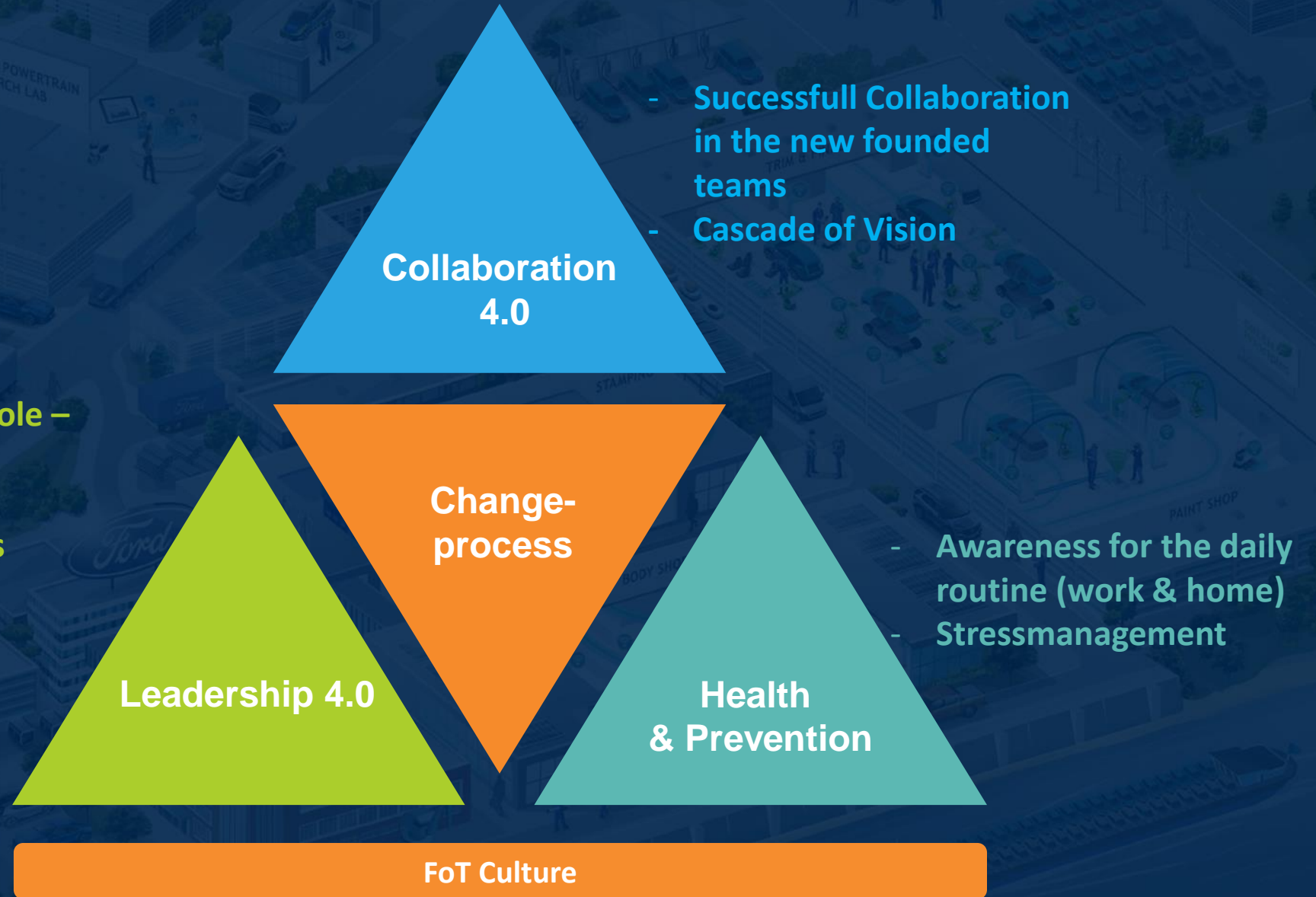
Cultural Transformation – focus areas

Targets:

- Change to new Leadership role – Act as a Coach
- homogenous quality of Leadership through all areas

Tools/Measures:

- Cascade of Vision
- Digital Coaching for Process Coaches and above



FoT– Cultural Transformation Cascade

Manager LL5 ,
HR, BR



INITIATE THE FUTURE

1 day

- Vision Factory of Tomorrow + Ford+ Behaviors
- Leadership model and leadership behavior
- Measurement criteria for cultural change

March
2022

Manager HR, BR



MANAGING THE FUTURE 1

2 days

- Vision Factory of Tomorrow and own role
- Derivation of goals and metrics
- Success criteria and behaviors during implementation

1st/2nd Quarter
2022

Process
Coach, HR, BR



MANAGING THE FUTURE 1

2 days

- Vision Factory of Tomorrow and meaning for own area
- Teamwork and visualization of goals
- Preparation TTT for own teams

3rd Quarter 2022

Teamcoach



HELPING TO SHAPE THE FUTURE

2 days

- Vision and projects in own area
- Teamwork and role of team coach
- Leading communication and team meetings

3rd/4th Quarter 2022

Teams



FUTURE THROUGH TEAMWORK

2 days on the
job

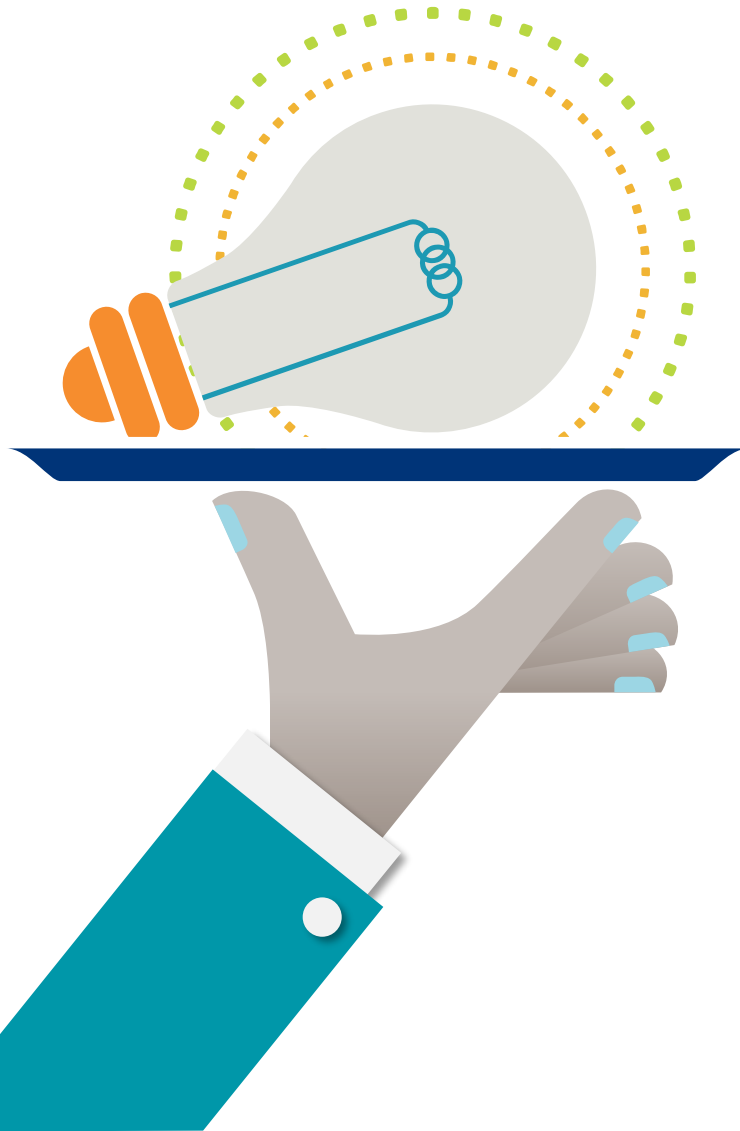
- Vision and projects in own area
- Transfer corporate strategies and goals to own team
- Continuously improve processes

4th Qtr 2022/1st Qtr 2023

Process consultant
+
respective manager

Foreman + Teamcoach
+ „Multiplier“

Methods and Formats for our Sustainable Success



Circuit Training

At individual stations, the employees learn everything about new technologies

Organization's knowledge

Employees are encouraged to take personal responsibility and share knowledge

Gamification

Employees playfully learn all the rules of effective teamwork

Digital Coaching / Coach Hub

The individual strengths are to be encouraged through coaching so that they we develop new skills and competences.

Kommunikation



GEMEINSAM DAS MORGEN GESTALTEN.

Ford | FABRIK DER ZUKUNFT

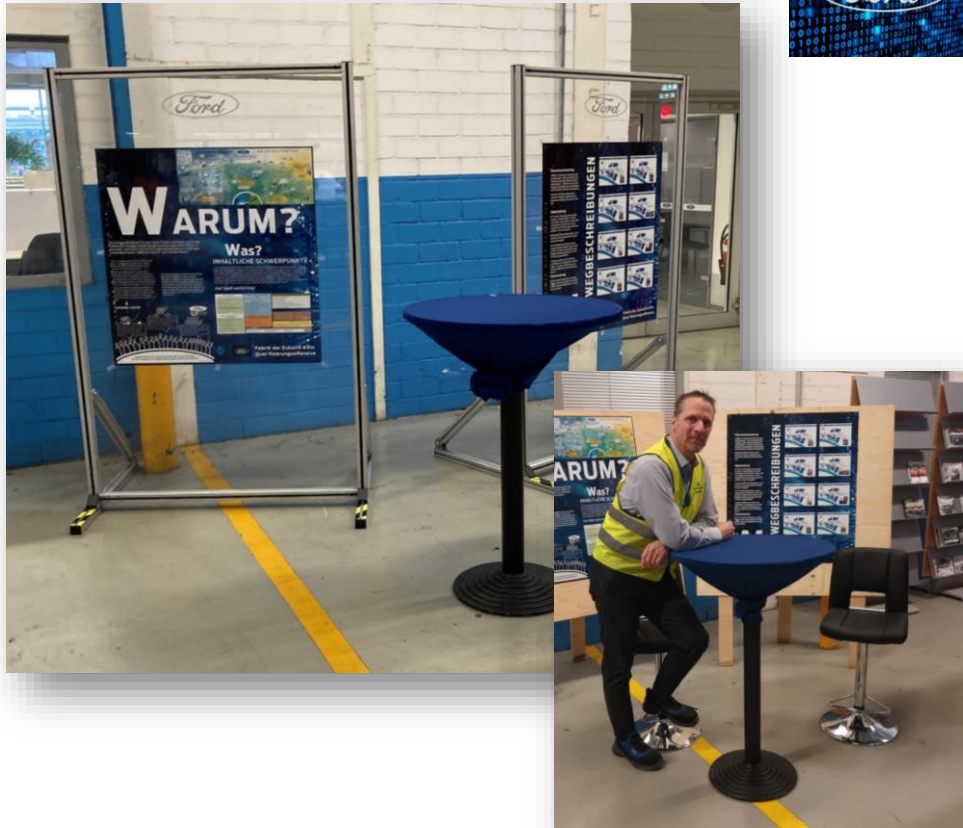
Liebe Kolleginnen und Kollegen,

Lorem ipsum dolor sit amet, hinc nulla ne eos, no qui graeco occurreret. Ad iusto tation mediocrem per, mea discere efficiantur eu. An nemore suscipiantur sit, te vidisse noluisse quo. Bonorum neglegentur vel id. Commune noluisse posidonium est ad, mei at meis mundi accommodare.

Quaque explicari per ea, cu mei modus legere, duo et meis veniam foren-

Fabrik der Zukunft – Qualifizierung findet auch für gehörlose Mitarbeitende statt

In der kw 48 finden die Trainingselemente des Zirkeltrainings, der Gesundheitstag und die HochVolt- Trainings auch für die gehörlosen Mitarbeitenden der Fertigung statt.



[Wie Ford die "Factory of Tomorrow" baut | CoachHub - YouTube](#)