# Porsche LEAN culture

Operational Excellence & continuous improvement as success factors Dennis Knoll

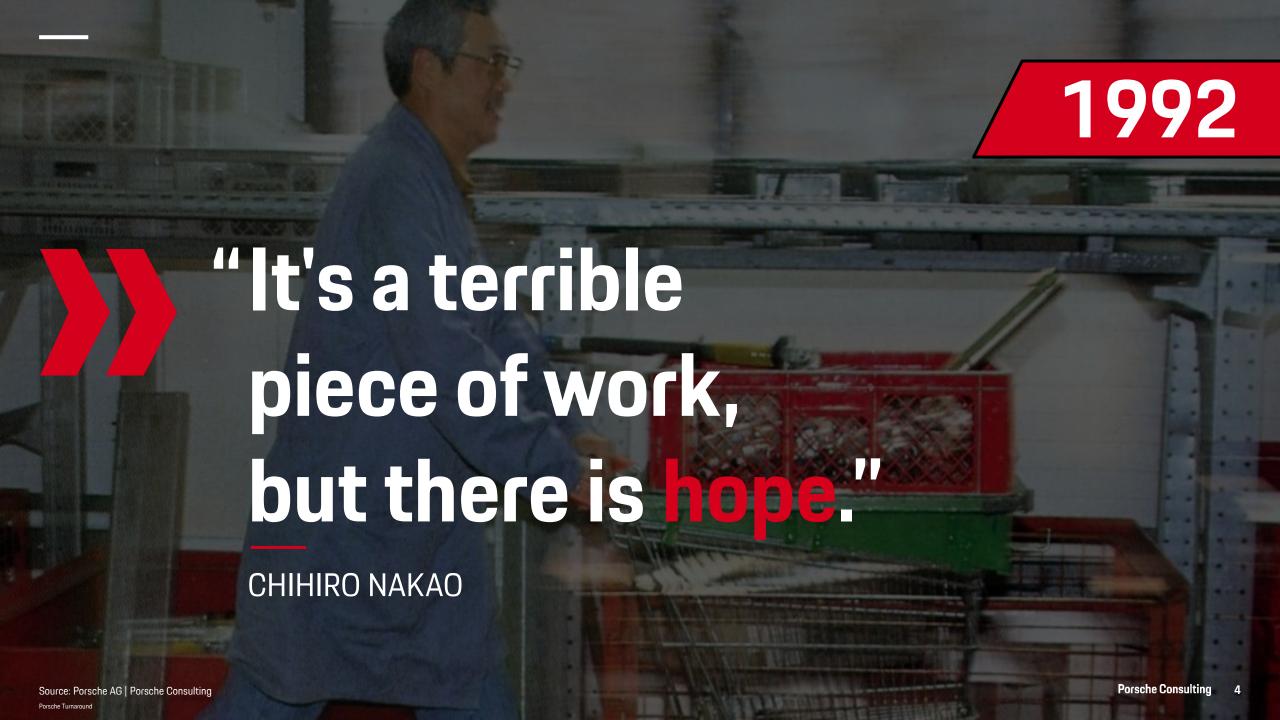
**Porsche Consulting** 

Strategic Vision. Smart Implementation.

# YESTERDAY







# TURNAROUND



Continuous improvement at Porsche starts in 1993 with TOM TURBO



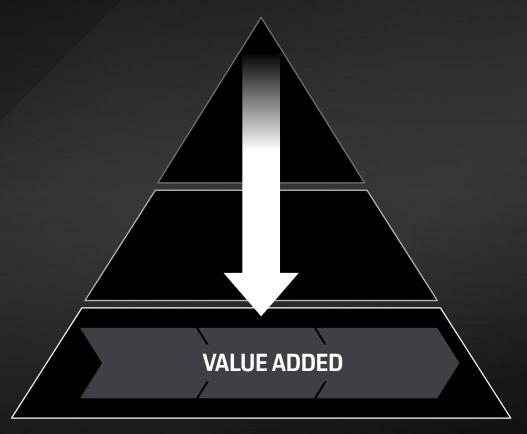


Porsche Consulting

# At Porsche, the focus is on the value creation process

CLASSIC METHOD

PORSCHE METHOD





# Leadership in the lean enterprise supports the focus on the creation of value throughout the company

## **BEFORE**

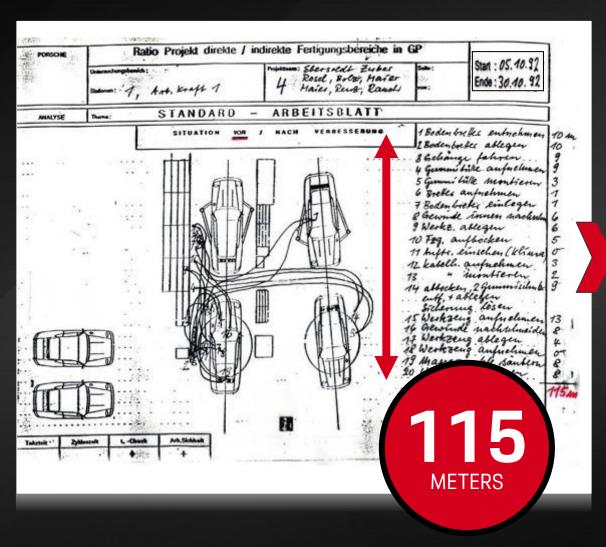
### TURNAROUND

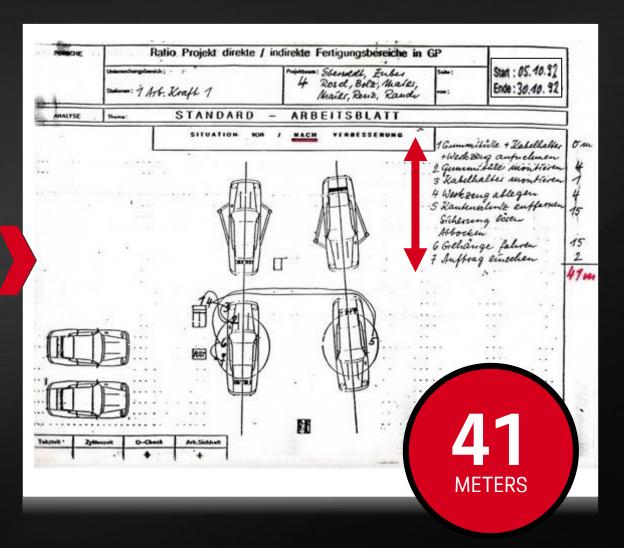
## AFTER

Product orientation	<b>&gt;&gt;</b>	Process orientation
ing in the office/meeting	<b>&gt;&gt;</b>	Be on site/Go GEMBA
Management by orders	<b>&gt;&gt;</b>	Management by objectives
Informer		Communicator
Control		Guidelines & Control
Area focus	<b>&gt;&gt;</b>	Cross-divisional thinking and acting
ment according to own criteria	<b>&gt;&gt;</b>	Improvement with strict customer orientation
Firefighting activities	<b>&gt;&gt;</b>	Process stability
	ing in the office/meeting  Management by orders  Informer  Control  Area focus  ment according to own criteria	ing in the office/meeting  Management by orders  Informer  Control  Area focus  ment according to own criteria

Lean processes are introduced from THE INSIDE OUT **CORPORATE STRATEGY SUPPLIERS CUSTOMERS FUNCTIONAL STRATEGIES ORGANIZATION PROCESSES** Leadership process Development Purchasing **Production** Support processes **PRODUCTS** 

## Initial productivity improvements tackled obvious waste





# Furthermore we developed standardized design and assembly concepts

Individual design
& recognition element
"in the rear mirror"











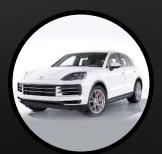
**IMPLEMENTATION** 

- Part families are developed based on a common concept
- Part families are assembled in the same way
- Focus is on assembly procedures and subsequently the reduction of assembly time

Similar part families can be found in different products



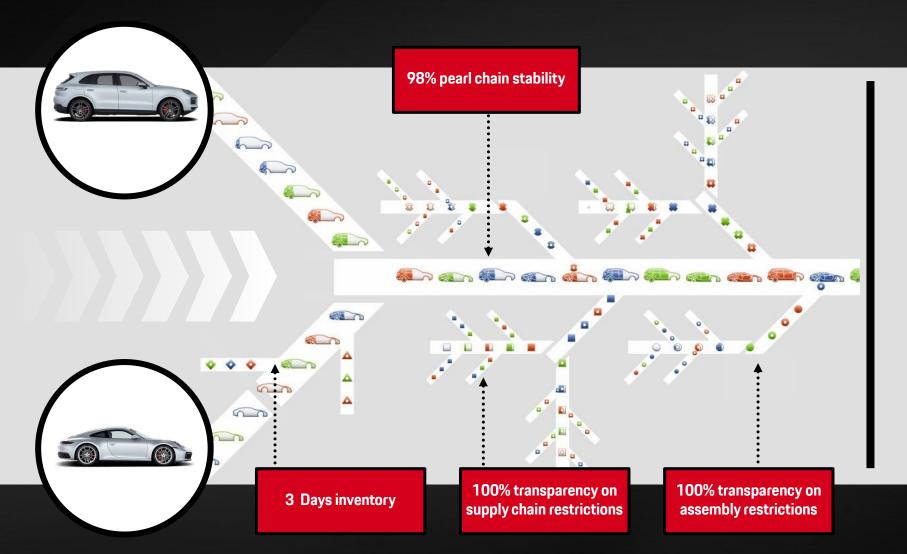






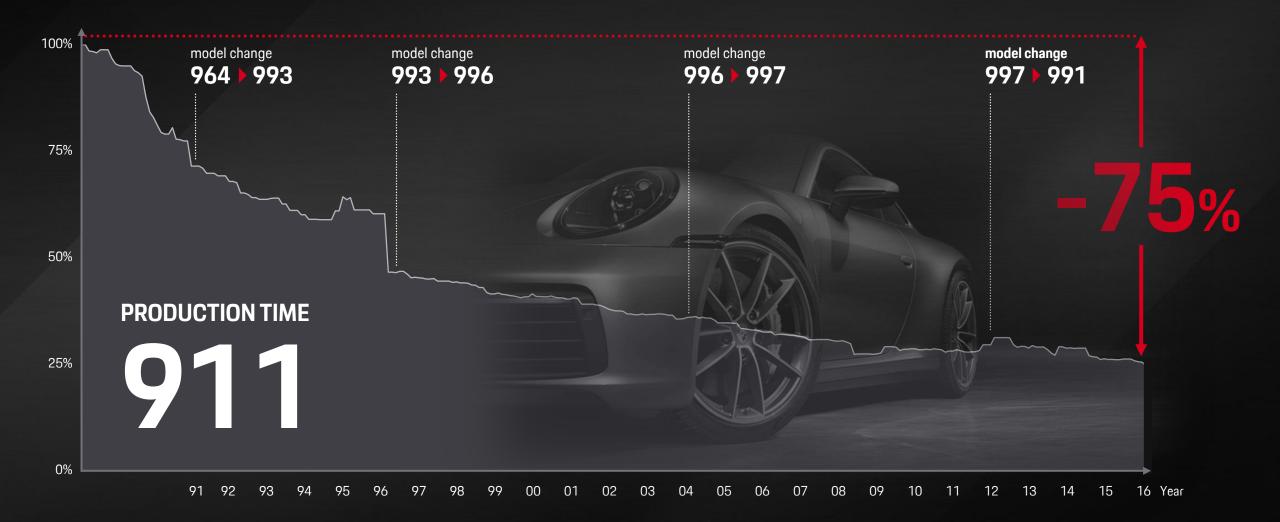


## Additional productivity is achieved through a mixed model line



- Transparent,
  high Performance
  Supply Chain
- Advanced demand & capacity mgmt. process
- Demand-oriented, pull-based material disposition

# Continuous improvement led to a 75% drop in production time





# Porsche Consulting started out in 1994

1994 LEAN

**PRODUCTION** 

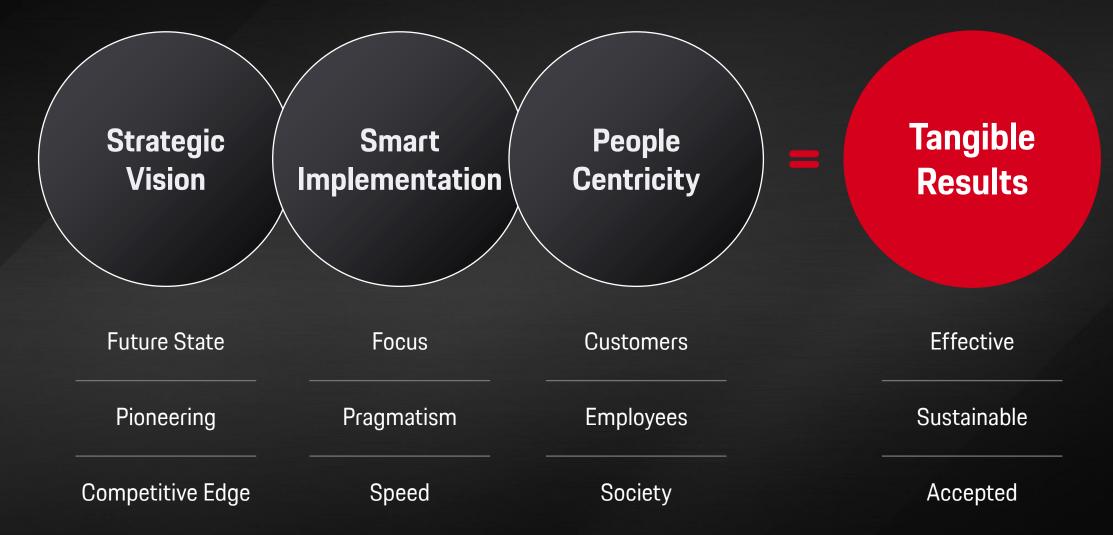
LEAN ENTERPRISE 2014

OPERATIONAL EXCELLENCE

2020

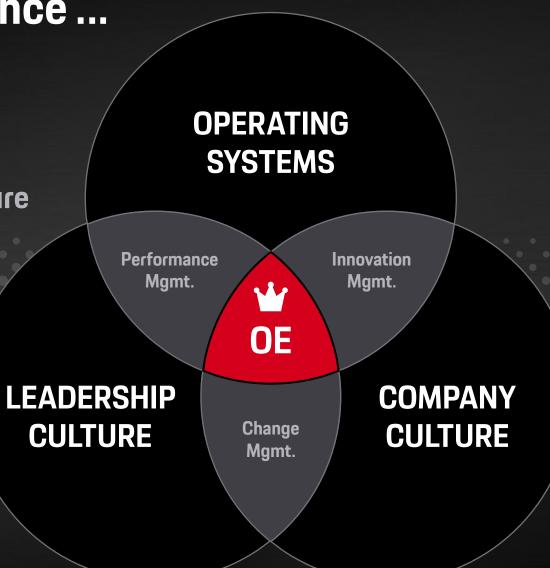
STRATEGIC TRANS-FORMATION

# Our Way of Working



Operational Excellence ...

... is a combination of **Operating Systems**, **Leadership & Company Culture** 



# "Best of Consultancies 2023" – great results for Porsche Consulting





Ranked 1st in the categories

Automotive & Supplier

**Operations Management** 

YEAR OVER YEAR AGAIN! 2023, 2022, 2021, 2020, 2019, ...



# PIP performs in all fields helping to achieve factory-targets

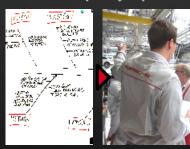


### QUALITY

**Activities to improve** product quality (DKA/Audit,

purchased parts, ...)

Problem-solving-workshop for main quality topics





### **FINANCE**

**PIP-activities including** possible savings according to costs, investments and VBZ

e.g. **Reduction NPM-costs:** improvement & alternative material







### **PROCESS**

#### Improving work-processes (time reduction, process stability, transparency, standards, ...)

Improving working-process: **Providing tool-sets** 







### **HUMAN**

#### **Increasing work-conditions** for employees

(ergonomics, safety, usability, ...)

Improving ergonomics: providing an exo-skeleton

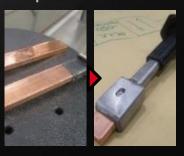




### **ENVIRONMENT**

Activities with a positive effect for the environment (electrical energy, heating, hazardous substances, ...)

e.g. Reduction material usage: development of a strike-chisel



# The results of improvement are presented to the management in defined terms



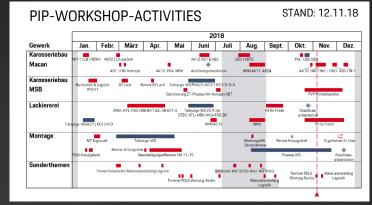
#### **FINAL PRESENTATION**

- Presentation of the results directly by the workshop-team
- Direct Feedback for all involved employees



### **GOALS AND BENEFITS**

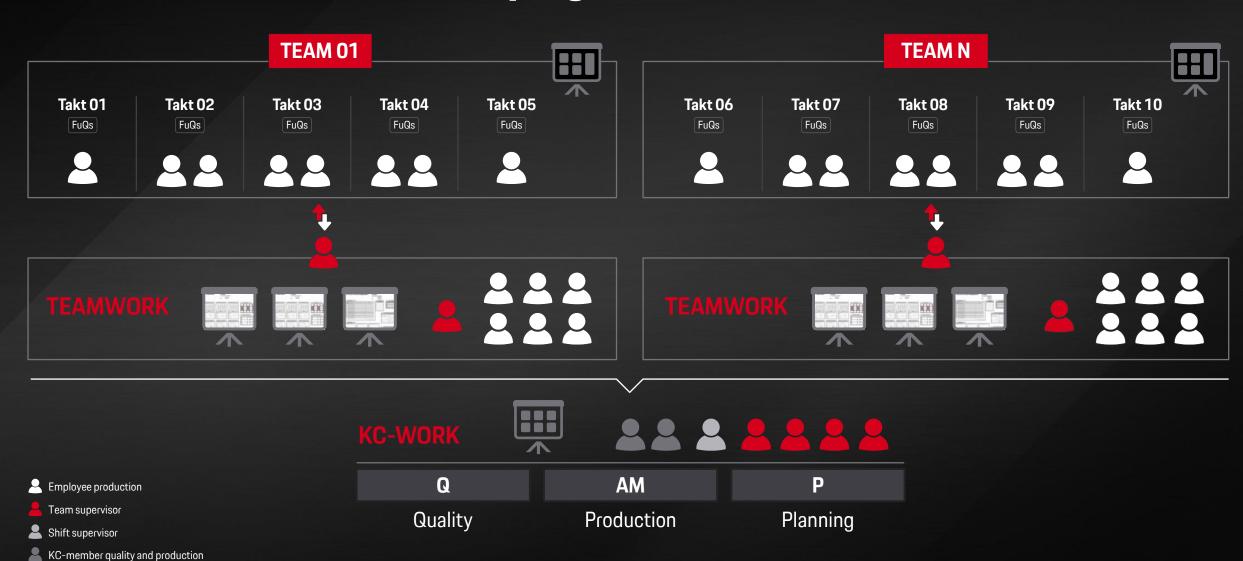
- Appreciation for employees...
  - through management-attendance
  - especially for employees from production line
  - part of the Porsche culture and further effects
- ✓ Gemba: Presentation on/close to shopfloor
- ✓ QFPHE: Results are fitted to the according target-categories







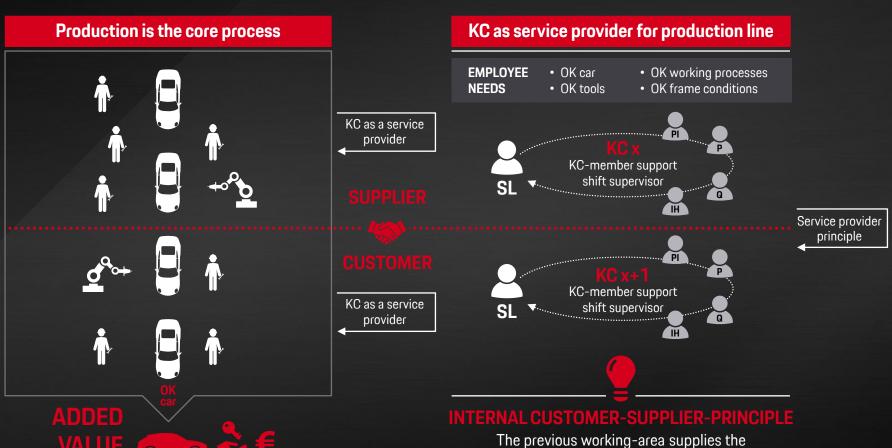
## Teamwork at Porsche Leipzig

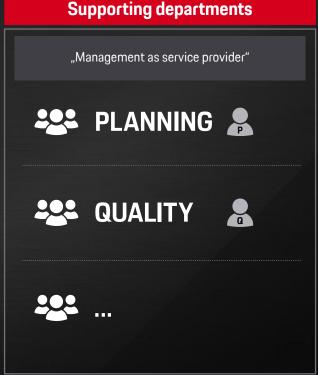


Source: Porsche AG | Porsche Consulting

# KC-work is based on the service-provider- and the customersupplier-principle

following working-area with an OK car

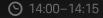




#### SERVICE-PROVIDER-PRINCIPLE

All activities are targeting the support of production line

## Shopfloor management – Report-cascade assembly







#### SHIFT-TRANSFER

#### MEMBERS

- Shift supervisor early-shift
- Shift supervisor night-shift

- Status and activities [10 min]
- Shift-transfer [5 min]



- Status-QFPHE\*
- Shift start
- Top-tasks (team)
- Escalation to KC

Shift supervisor

**(**) 19:00–19:30

**O** 06:45-07:15

- Team supervisor
- Report, status and activities by
- Status und escalation by team supervisor [5 min]
- Status by KC-member quality

**TEAM MEETING** 

- KC-member quality
- shift supervisor [15 min]
- [5 min]

- Status-QFPHE\*
- · Shift start
- Top-tasks (KC)
- Escalation to Head of department & Head of assembly

#### © 07:45-08:30



#### **ASSEMBLY MEETING**

- Head of assembly
- Head of departments and shift supervisors
- Supervisor custom tailoring and head of assembly-process
- Report and Status top-topics KC by shift supervisor [5 min]

#### 08:45-09:15



#### **MORNING MEETING**

- Status-QFPHE\*
- Shift start
- Top-tasks (department)
- Escalation to quality, planning and logistics



Assembly

Logistics

Quality

Purchased parts

- Purchased parts Logistics
- Quality

#### **FL MEETING**

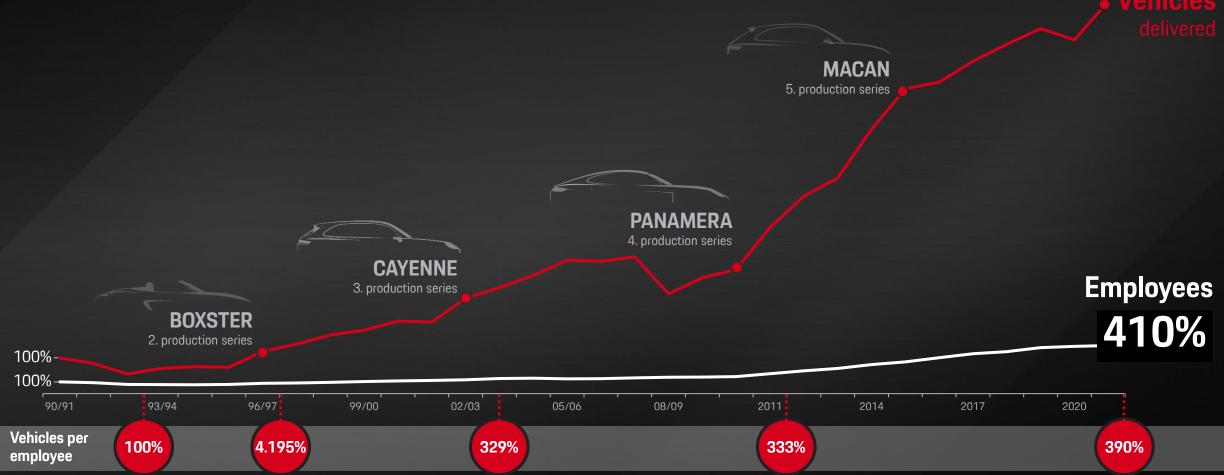
09:00-10:00







# Disproportionate growth in sales volumes thanks to continuous efficiency enhancement





# The consistent focus on four principles still forms the basis for operational excellence in all areas today



TRANSPARENCY & LEADERSHIP



FOCUS ON VALUE CREATION



PROCESSES & STRUCTURES



PERFECTION & CIP





## "Success factors for Porsche"

### Teach employees to see

only in this way can waste be identified and eliminated

### Think in processes

and consistently align your actions with customer needs

### The future needs flexibility

make it measurable and a corporate goal

### Kaizen is a culture

establish it "from the top"

### Give employees a vision

and be a role model

## We are happy to answer your questions and to stay in contact



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Operational Excellence

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