### Team work & continuous process improvement

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### Team work and continuous process improvement ...continuous improvement in daily business

# Project "Facilitation of work groups on shop floor"

Project scope

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This documentation is based on the project "Facilitation of work groups in a shop floor environment" in a medium sized manufacturing company

Objectives were the revitalization of an existing team work process and the design of a supporting organization as an external "Lean"-Expert and Facilitator

250 employees from manufacturing, warehouse and shipping divided into 16 groups were involved in the project

The duration of the project was 9 month and included more than 90 events. On average 4 facilitated events a day took place on shop floor on 2 days per week

# Why group work?

#### **Objectives and Actions**

### **Objectives**

- Improvement of Business results
- Long term protection of jobs

### Actions

- Decrease production- and product-costs
- Simplification of workflows
- Delegation of decision making
- Involve employees in decision making processes
- Continuous process improvement processes should assure product quality in production
- Meet customer expectations and market needs

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# What is group work?

#### Group work definition

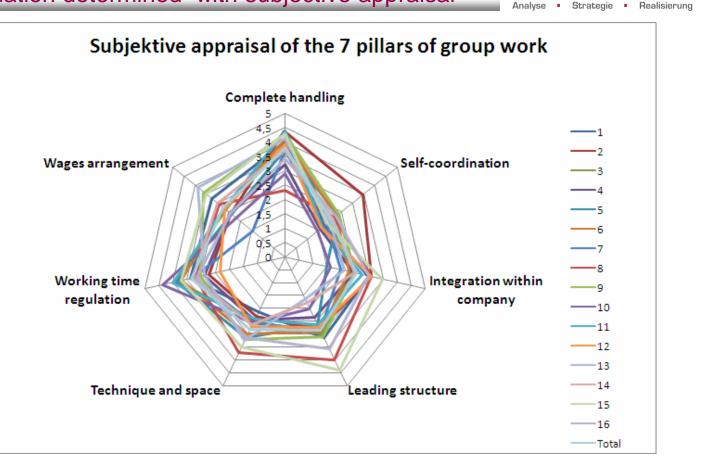
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### **Definition:**

- Group work is the collaboration of multiple employees with a shared task
- The task itself is clearly defined/scoped and can be controlled by the group itself
- The team controls the allocation of work and job rotation taking into account general technical and organizational specifications

### Analysis phase with assessment of the current situation within the single groups Sian

Current situation determined with subjective appraisal



The subjective appraisal of the 7 pillars of group work using a standardized questionnaire within the particular groups shows improvement potential of the group environment.

# Specific Group training

- Identification of waste in daily business on shop floor -

#### The 7 types of waste

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- Unnecessary motion
- → Waiting time
- → Transport
- Correction
- → Overprocessing
- → Overproduction
- → Inventory

### + Wasted manpower

# Specific team training

- Quality tools used during the problem analysis within the particular groups -

The 7 quality tools

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### **Defect collection:**

Defect check sheet

### **Defect analysis**

- Pareto-diagram
- Cause-and-Effect diagram (Fishbone-diagram)

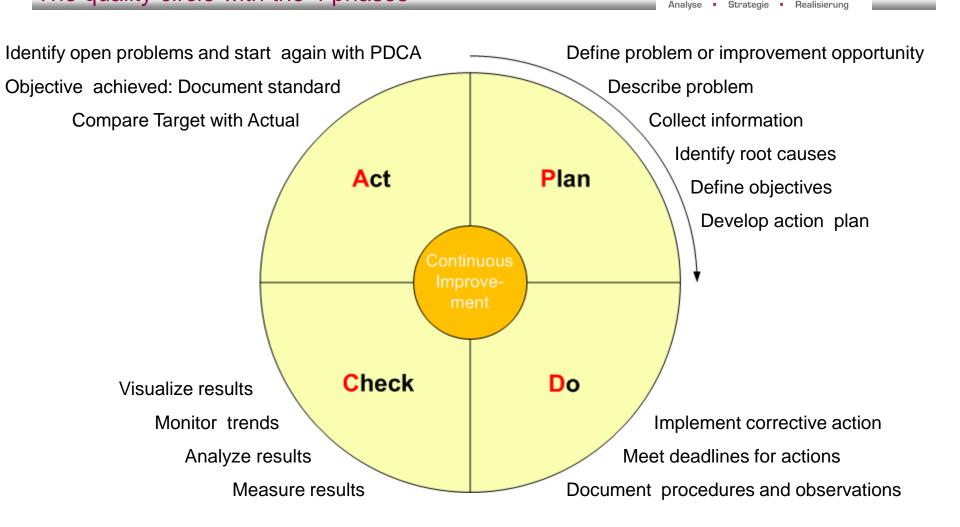
#### **Facilitation techniques**

- Brainstorming
- Idea cards and prioritization (N/3-Methode)

#### **Process analysis**

- ➡ The 5 "WHY" Questions
- Flowchart

### Basis for the improvement process is the circle of quality (PDCA-Circle) The quality circle with the 4 phases



# Team discussion process

Quality circle and continuous improvement process

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**Every group follows a standardized process** 

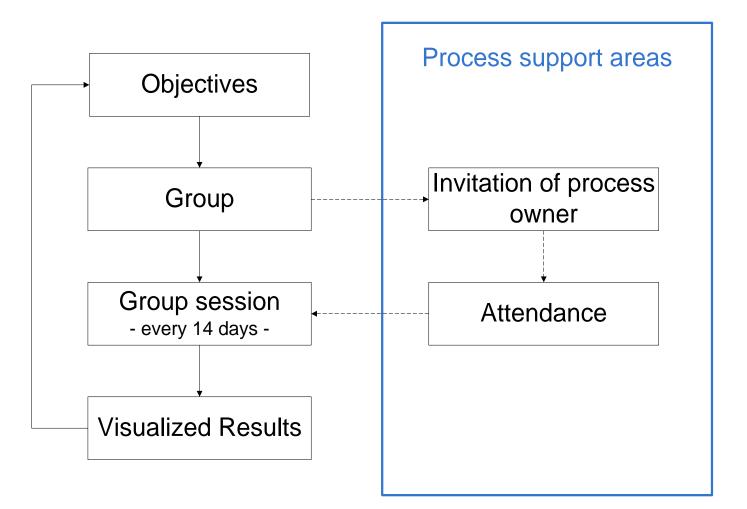
- Generate and document ideas
- Define actual problem
- Specify expected results
- Plan corrective actions and assign responsibility
- Implement corrective action
- Measure results
- Standardize process
- Visualize results



### Group session process

#### **Objectives, Groups and Results**

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### Single team presentation with activities and results Sigma Process Consulting

The whole process visualized with the PDCA Circle



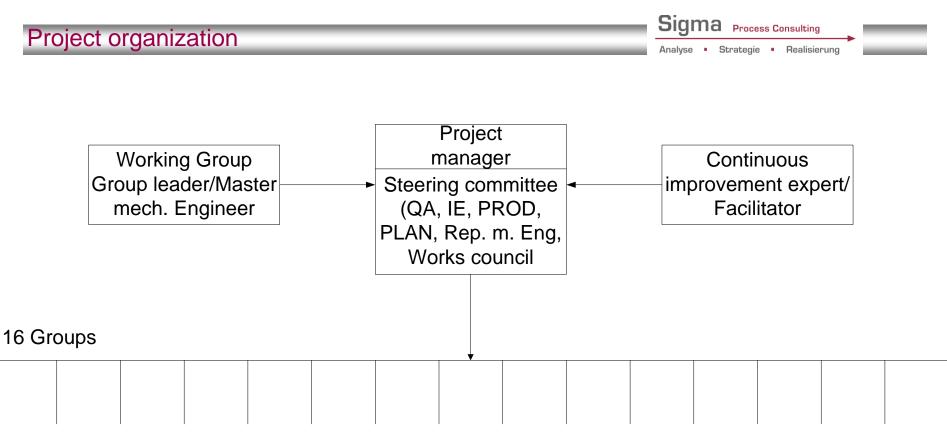
The team is shown in Phase 4 of the quality circle. Team members are responsible for their actions and the sustainable implementation

Realisierung



#### **Heinrich Moormann**

# Making the process stick.....



The teams are supported by a continuous improvement expert, at the beginning from an external resource. The Steering committee consists of managers of all production support areas together with the works council. The working group "Teamleader/Master mech. Engineer" deals with overall issues regarding team work.

#### **Heinrich Moormann**