

QUALITY MANAGEMENT 4.0 SCENARIO

ACTIVITY SUMMARY

The overarching aim is to teach quality management methods, particularly in the context of and supported by Industry 4.0 technologies.

TEACHING APPROACH



PROJECT BASED
LEARNING



CHALLENGES



SELF-
DETERMINED
LEARNING

LEARNING OBJECTIVES

Knowledge

- Knowledge of the most common quality management methods
- Recognizing the importance and connection of quality management in Industry 4.0

Technical skills

- Application of quality management measures in the context of Industry 4.0
- Implementation of 4.0 technologies to support quality management

Interpersonal skills

- Developing skills for employee competence development
- Correctly assessing the importance of quality management in the context of Industry 4.0
- Recognize need for retraining and qualification of employees

MATERIELS

REMOTE LERANING MATERIALS

PROJECT IN PRACTICE

TEACH THE TEACHER

LEARNING MATERIALS

PLACEMENT TEST

FINAL TEST

RESPONSABILITY

- The head of quality management of a company has the responsibility to train its employees on the latest standards and technologies of quality management 4.0.
- To ensure consistent quality, quality management staff must work conscientiously and adapt to changes.
- The quality management employee is responsible for maintaining product quality after adequate training by the supervisor.

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SPECIFICATIONS OF THE ACTIVITY

RECORDING THE INITIAL LEVEL OF KNOWLEDGE

At the beginning, a questionnaire is used to record the team leaders' initial level of knowledge regarding quality management in the Industry 4.0 context. This is crucial for determining the specific learning content or learning modules that the participants should attend.

DETERMINING THE LEVEL OF
KNOWLEDGE.
DETERMINING THE LEARNING CONTENT
TO BE TAUGHT.
ASSESSING THE PARTICIPANTS.

APPLICATION OF THE INDIVIDUAL LEARNING MODULES (PHASE 1)

In the area of learning modules, participants are provided with theoretical content as self-study modules. This gives them the opportunity to learn independently and completely independent of time. The learning content is personalized through the questionnaire that is carried out beforehand.

THEORETICAL CONTENT AS SELF-STUDY MODULES.
TIME-INDEPENDENT LEARNING.
PERSONALIZED LEARNING.

WORKER TRAINING (PHASE 2)

After the team leaders have been instructed in the content of Quality Management 4.0 at the upstream level and have built up skills in this area, they are now passing this knowledge on to their employees. This works according to the train-the-trainer principle. The team leaders must therefore independently adapt the content they have learned to their company. In this way, sustainable success of the processes and the widest possible dissemination can be ensured.

PASSING ON THE KNOWLEDGE GAINED.
HELPING THE COMPANY TO HELP ITSELF.
SERVING THE UNDERSERVED IN THE PERSON
OF THE WORKERS.

PRACTICAL IMPLEMENTATION PHASE AND TESTING

After the workers have been trained in quality management technologies for Industry 4.0 by their foremen, this knowledge is to be deepened in a practical project. To this end, the trained team leader should establish a project within their own company in which the workers can apply their knowledge and which ideally also increases the quality of the products.

REALIZATION OF A PRACTICAL
IMPLEMENTATION PROJECT.
DEVELOPMENT OF SKILLS AMONG USERS.
INCREASING PRODUCT QUALITY.

QUALITY MANAGEMENT 4.0

SCENARIO

EVALUATION

Knowledge assessment

This evaluation focuses on a self-reflection of the team leaders participating in the first phase. Here they should reflect on what they think they have learned, how this helps them and how this qualifies them for the further training of their workers.

Perception assessment

This evaluation focuses on the satisfaction of the team leaders with the knowledge transfer in the first phase of the training. Here they can give feedback on what they found good and what they see as potential for improvement. The concept can then be adapted on the basis of this feedback.

