GOOD LEADERSHIP AND WORK IN THE DIGITAL TRANSFORMATION

COMPARATIVE APPROACHES AND INSTRUMENTS TO LEADERSHIP DEVELOPMENT IN THE DIGITAL AGE

Skills and Competences for Leadership and Digital Transformation

2nd March 2022

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Fraunhofer
IAO

Fraunhofer IAO and IAT of the University of Stuttgart

Overview

Founded: IAO – 1981
IAT – 1991

Institute management: Prof. Dr.-Ing. Prof. e. h. Wilhelm Bauer (managing)
Univ.-Prof. Dr.-Ing. Oliver Riedel
apl. Prof. Dr.-Ing. habil. Anette Weisbecker
Dr.-Ing. Florian Herrmann

- **Financial volume:** €46,7m. *
- **Personnel:** 650 employees*

* 2020 Data, inkl. IAT of the University of Stuttgart

www.iao.fraunhofer.de
www.iat.uni-stuttgart.de

Our Vision

Shaping the future of work – for the benefit of people

- We are the leading competence partner **for solving applied research tasks** in the fields of work design and technology management.
- We take a **holistic view of the interaction between work and technology** and thus create practical solutions for our customers.
- We accept our **responsibility towards society and the environment** and advocate **sustainability**.
- We **encourage our employees** in their scientific ambitions and provide **excellent working conditions**.

Team Competence Management

Work priorities

Competences

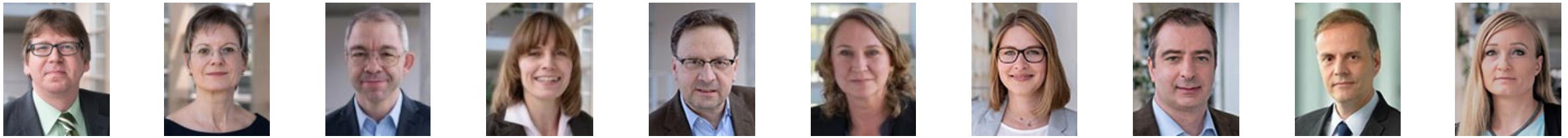
- Changing competence and job profiles in and by digitisation
- Digital competence

Learning

- Learning of the future – Future of learning
- (New) Learning formats in and by digitisation

Work design

- Impact of digitisation and AI on work
- Design of work and assistance systems conducive to competences and learning



Our leading research questions

How is the working world changing as a result of deploying new technologies?

What does this mean for work organization, human labor and management?

What skills are required from leaders and workers for coping with the new challenges?

How can learning be designed to enable leaders and workers for coping with the working world of tomorrow?

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Project "eLLa4.0"

Modification of Leadership Models

- Scenarios and options
- Skill requirements
- Interactional skills

Qualification in the Labs

- Development of specific qualification offers
- Interactional skills for leaders in the DFA Demonstration Factory Aachen and the Future Work Lab in Stuttgart

Specific Solutions for Companies

- Individual leadership concepts and interactional skills in the course of socio-digital transformation within the 4 use cases

- **Implementation of use cases**
- **Development of a new format for cross-company oriented demonstration factories (Labs) with main emphasis on interactional skills**
- **Continuing education offer for excellent interactional leadership**
- **Practically proven transfer instruments (learning events and workshops)**

Demonstrators		Dissemination	
E-Learning	Learning Labs	Action Guide	Book Publications
Social Simulation	Multimed. Learning Offers	Publications & Conferences	Learning Events & Workshops

Duration of project:
01.09.2019 - 31.08.2022

Network partners

technische universität dortmund · Sozialforschungsstelle Zentrale Wissenschaftliche Einrichtung · fir an der RWTH Aachen · Fraunhofer IAO · DMG MORI · BEUMERGROUP · WBS TRAINING · BELFOR DeHaDe

Associated partners

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Skills and competences for Leadership and Digital Transformation

eLLa4.0 approach

Specification of a working definition for interaction competence

Specification of skill and competence clusters for leaders in terms of interaction competence

Requirements for interaction competence from an operational point of view

Requirements for specific training to acquire interaction competence

Elaboration of specific training offers to acquire interaction competence

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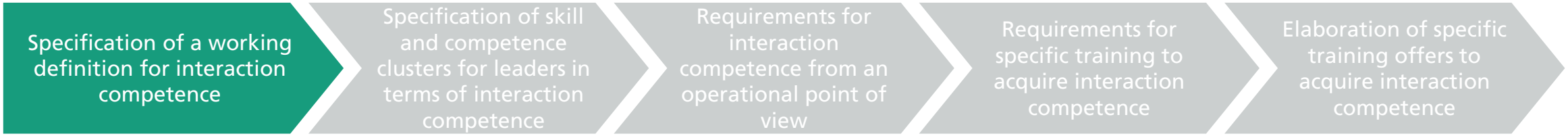
Skills and competences for Leadership and Digital Transformation

Modification of Leadership Models



General definition	Interaction denotes a reciprocal and related action between two or more people. Interaction competence is thus to be understood as the ability to express oneself appropriately and constructively in social relationships and situations, in terms of acting and speaking.
Project-specific definition eLLa4.0	Interaction competence aims at a behavior-influencing design of the entire company-related (digitally supported) interaction space (PTO) in normative, strategic and operational terms – with the result of creating informational, qualification, motivational and infrastructural conditions.

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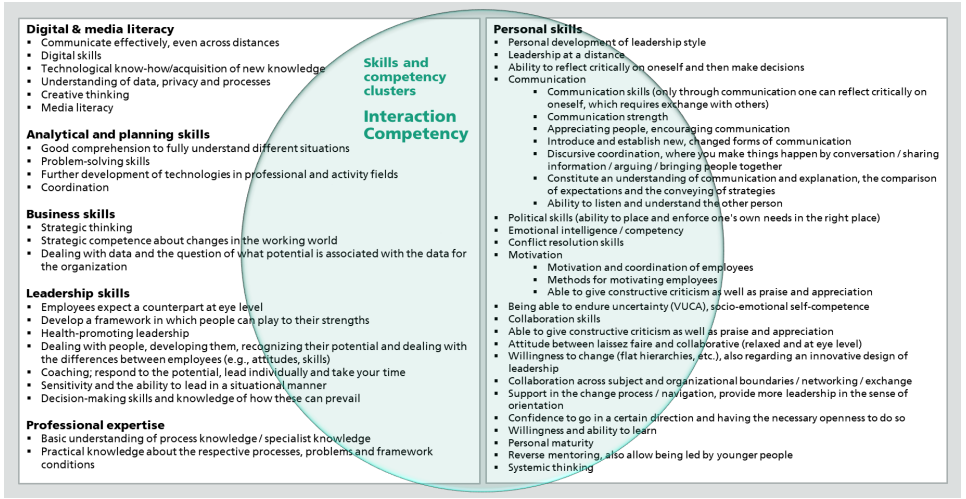
Skill and competence clusters

Digital & media literacy | Analytical and planning skills | Business skills | Leadership skills | Professional expertise | Personal skills



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Skills and competence clusters

Interaction competence

Digital & media literacy
- Communicate effectively, even across distances
- Digital skills
- Technological know-how/acquisition of new knowledge
- Understanding of data, privacy and processes
- Creative thinking
- Media literacy

Analytical and planning skills
- Good comprehension to fully understand different situations
- Problem-solving skills
- Further development of technologies in professional and activity fields
- Coordination

Business skills
- Strategic thinking
- Strategic competence about changes in the working world
- Dealing with data and the question of what potential is associated with the data for the organization

Leadership skills
- Employees expect a counterpart at eye level
- Develop a framework in which people can play to their strengths
- Health-promoting leadership
- Dealing with people, developing them, recognizing their potential and dealing with the differences between employees (e.g., attitudes, skills)
- Coaching; respond to the potential, lead individually and take your time
- Sensitivity and the ability to lead in a situational manner
- Decision-making skills and knowledge of how these can prevail

Professional expertise
- Basic understanding of process knowledge / specialist knowledge
- Practical knowledge about the respective processes, problems and framework conditions

Personal skills
- Personal development of leadership style
- Leadership at a distance
- Ability to reflect critically on oneself and then make decisions
- Communication
  - Communication skills (only through communication one can reflect critically on oneself, which requires exchange with others)
  - Communication strength
  - Appreciating people, encouraging communication
  - Introduce and establish new, changed forms of communication
  - Discursive coordination, where you make things happen by conversation / sharing information / arguing / bringing people together
  - Constitute an understanding of communication and explanation, the comparison of expectations and the conveying of strategies
  - Ability to listen and understand the other person
- Political skills (ability to place and enforce one's own needs in the right place)
- Emotional intelligence / competence
- Conflict resolution skills
- Motivation
  - Motivation and coordination of employees
  - Methods for motivating employees
  - Able to give constructive criticism as well as praise and appreciation
- Being able to endure uncertainty (VUCA), socio-emotional self-competence
- Collaboration skills
- Able to give constructive criticism as well as praise and appreciation
- Attitude between laissez faire and collaborative (relaxed and at eye level)
- Willingness to change (flat hierarchies, etc.), also regarding an innovative design of leadership
- Collaboration across subject and organizational boundaries / networking / exchange
- Support in the change process / navigation, provide more leadership in the sense of orientation
- Confidence to go in a certain direction and having the necessary openness to do so
- Willingness and ability to learn
- Personal maturity
- Reverse mentoring, also allow being led by younger people
- Systemic thinking

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Media competence	Comprehension	Ability to lead in a situational manner	Process knowledge / specialist knowledge	Socio-emotional competence	Willingness to learn
Reflection on which medium is best in a specific situation. Selection from the toolbox.	To fully comprehend/understand the given situation.	Dealing with people, developing them (further), recognizing their potential and dealing with the differences between employees.	Basic understanding.	Personal development of leadership style, being able to endure uncertainty (VUCA).	Reverse monitoring, letting younger people guide you, systemic thinking.
Creative thinking	**Problem-solving competence**	**Strategic competence**	**Strategic thinking**	**Decision-making ability**	**Coaching**
Experience	**Communication**	**Conflict solving**	**Willingness to change**	**Support in change processes**	**Collaboration competence and trust**

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Qualification and training solutions

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Learning formats that build on one another are particularly suitable for a targeted build-up of skills in the complex environment of Industry 4.0 which include both e-learning and face-to-face units and are consistently linked to one another via a learning stream.

- **Blended learning course concept**
  - Web-based training (WBTs)
  - Webinars
  - Face-to-face learning
  - Accompanying learning platform

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Pillar 1: Leading Yourself

Interactional skills on intrapersonal level

(interaction with self)

Being able to reflect leadership leadership role in the context of a digitized work environment, and to foster a digital culture and the commitment of their employees within digitalization.

Pillar 2: Leading People and Teams

Interactional skills on interpersonal level

(interaction with employees)

Being able to connect with and connect other people to collaborate in a digital and virtual work environment, and to help employees and teams to transform for modified or new digitalized job roles and integrate learning into daily work.

Pillar 3: Leading Organizations

Interactional skills at institutional level

(interaction with corporate environment)

Being able to explore, initialize and bring digital innovations to success, and to drive change and new ways of generating value in a digital and volatile business environment.

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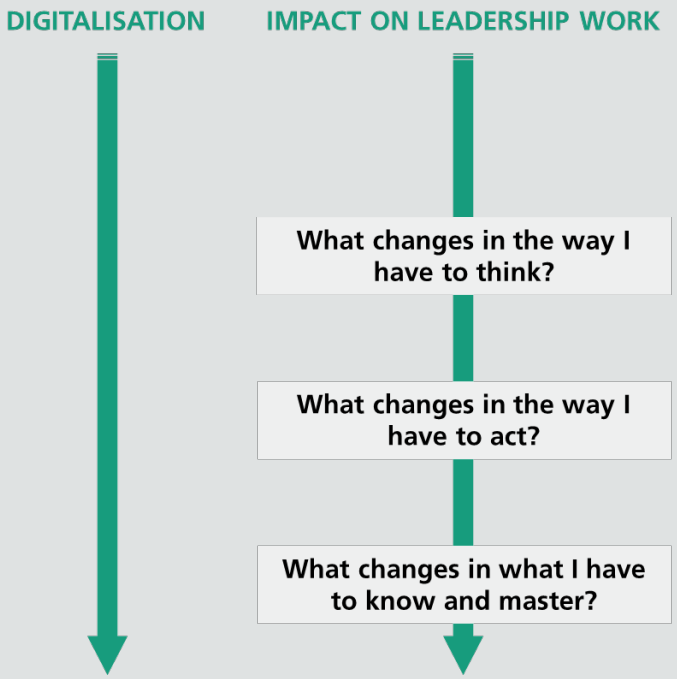
Importance: Why is the specific topic key to success for my work as a leader in a digitalizing working environment?

Mindset: Which mindset do I have to be aware of for this topic to become a success factor in my work as a leader in a digitalizing working environment?

Toolset: Which methods, instruments, tools and procedures are there? How do I apply them? When does it make sense to apply them?

Skillset: What skills do I need for this topic to become a success factor in my work as a leader in a digitalizing working environment?



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Thank you for your attention

Questions?

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