



FACULTY OF ECONOMICS AND SOCIAL SCIENCES

Research Division: Political Economics and Comparative Policy Analysis







SMART FACTORY [SF]: COUNTRY REPORT ON THE SURVEY SOME POINTS

Dr. Harald Kohler Karl-Ulrich Gscheidle



Structure of the Interview

The basis of the country reports are 11 interviews with selected experts. These interviews were conducted from February to May 2017 and their findings gradually influenced the Online-Delphi-Survey. This survey has been carried out in four rounds in four regions/countries. The aim was to trace the changes in the companies caused by digitisation and technologisation on a micro level (enterprise level) through the expert interviews guided by six sets of questions.

We selected the following experts:

1. General Experts, number of interviews: 3,

Expert 1: Political stakeholder

Expert 2: Church association

Expert 3: Church association

2. Companies/ Company representatives, number of interviews: 2,

Expert 4: Companies/ Company representative

Expert 5: Companies/ Company representative



Structure of the Interview

3. Operational Employee representatives (works council and shop chairman), number of interviews: 6

Expert 6: Automobile industry

Expert 7: Engineering

Expert 8: Medical technology Expert 9: Paper manufacturing

Expert 10: Electronics sector Expert 11: Automobile industry

The content of the interviews was assigned to six categories according to the six sets of questions of the interview guideline



1 Changes in the organisation of the workplace due to the digitisation and technologization

The digitization and technologization is advancing in all areas of the company. This happens at a different pace and with a different influence on the work organization of the companies.

However,

"the development is proceeding at varying paces, even though we are an in phase right now, where the pace is clearly accelerated, because different sections of production and service are merging, with microelectronics, like it was not the case five years ago (E4, translated freely)



2 Workplace situation and Changes

In general the digitisation has increased, "It has increased significantly, so I would even say it has doubled in the last five years (E11, translated freely)"

A corresponding expectation of all interviewed experts is, that the jobs in all areas of the company are subject to strong changes and high risks, but also offer opportunities.

"The trend is moving away from simple learning activities, which in fact can more and more be taken over by robots" (E8, translated freely).



2 Workplace situation and Changes

And reaches:

"except for the janitor, which nowadays has probably much to do with SAP... really, it's in all areas" (E11, translated freely)

Consequently

"for sure, there will be a substitution of jobs. For example, most of the very simple workplaces, where really simple activities, whether it is in the office or on the machine, we will not see that in a few years" (E11, translated freely)

Nevertheless,

"industry 4.0 and digitization offer the opportunity to create qualified jobs that we do not even think of today" (E6, translated freely)



3 Qualification requirements and needs

"So, the development is clearly headed towards "permanent learning", which means the constant willingness to change, permanent adaptability. It's also possible, that in one phase you will be more active development, research, construction and in another in production (E5, translated freely)



4 Corporate culture and data protection

Certain trend towards outsourcing of working activities and toward monitoring

"the people get more controlled and are therefore more productive. But the job is not necessarily worse." (E4, translated freely).



5 Delimitation of work

Strong trends towards the delimitation of work, but counteractions through company agreements

"...that through the fusion of working and leisure times due to digitization... there, I fear a mixture of these times, which will be socially disastrous" (E3, translated freely)



6 Need for actions and opportunities for actions

There is a central need for action and regulation regarding the data protection, employment as well as for cloud working and crowd working

"There is a significant need for regulation regarding the topic digitization, big data: Where are data recorded?... In which IT-Systems appear data of employees? Where are the technical possibilities for analyzing these data? For what will the analysis be used?" (translated freely)



Thank you!



Contact persons

Dr. Harald Kohler, Researcher and National Project Coordinator

Phone: +49 7071 29-78370

E-mail: harald.kohler[at]uni-tuebingen.de