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DIRESOC

Digitalisation and Restructuring:
which Social dialogue?

WP3: Country case studies

Supporting co-determination in restructuring: the experience of

ARBEIT+INNO>ATION

(Work and Innovation)

Draft report

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Introduction

With the launch of the concept Industry 4.0 at the Hanover Fair in 2011, a large number of debates began on the future effects of digitization on the world of work. The assessments range from disruptive upheavals to a successive, incremental transformation process (Pfeiffer 2015). In this respect, the associated labor market forecasts also diverge, predicting massive job losses (Frey/Osborne 2013) on the one hand, or only a moderate shift in employment relationships on the other (Dengler/Matthes 2015).
However, there is consensus that the digital transformation has the potential to fundamentally change the world of work. It is therefore extremely important for trade unions and work councils to shape the coming changes in the interests of employees. With its Green Paper Working 4.0, the Social Democrat-led Federal Ministry of Labor and Social Affairs has initiated a debate on labor policy that explicitly involves the employees (BMAS 2015: 7). In this respect, the largest German trade union IG Metall has launched the project series *"Arbeit und Innovation - Kompetenzen stärken +> Zukunft gestalten"* (short: W+I), with which it underlined its proactive approach to shaping future work and expanded its trade union education work and company policy in the companies.[1] The financing volume of the Work and Innovation program was also one of IG Metall's largest projects since the state programs for the humanization of working life (HdA) at the end of the 1980s.

1 Methodology

At the end of the project series "Work and Innovation" ten company projects of selected companies were published as examples of good practice in a lighthouse brochure. The company projects mainly deal with the introduction and use of new (digital) technologies and their (possible) effects on work-organization and the employees in the companies. Two of these projects will also be presented in this case study in order to illustrate the design processes surrounding the company projects and to present the reader with concrete results from the W+I program. For the individual reports, semi-standardized interviews were conducted in advance, by telephone or on site, with the people involved in the company-projects. These included works councils, company specialists, in so far as they were involved in project management, and the coordinators of IG Metall, who accompanied the project. The interviews conducted, formed the basis of the practical examples presented. In addition, the documents relevant to the project were analyzed. For example, in some cases a company agreement was drafted within the framework of the company projects, so that the regulation-relevant topics could also be presented in the reports of the brochure.

[1] ´Work and Innovation - Strengthening Competences +> Shaping the Future´

2 The Work and Innovation projects

2.1 Origin

Political background

In the Green Paper Working 4.0, Andrea Nahles, then Federal Minister of Labor and Social Affairs, wrote in her foreword that a holistic approach was necessary in shaping future work. This means that the design of future work should not depend exclusively on the driver of technology but should also include the "human factor" in the discussion. The Federal Minister said:

> *"´When we talk about work 4.0, we are not only talking about the new technological worlds of industry 4.0. We are talking about the work of the future in all its breadth and diversity. Technological change is only one important driver. A quiet revolution is coming from the people themselves: "We are currently experiencing a fundamental cultural change with new demands on the organisation of work". (BMAS: 2015: 7).*

The Green Paper was addressed as a basis for discussion to the relevant actors in charge of shaping a future work in Germany. The results of the debate were published in November 2016 in the White Paper Work 4.0.

Origin in the IG Metall

IG Metall took up the topic of "Working 4.0" at its trade union conference in the year in which the Green Paper was published and thus derived its claim to a safer, fairer and more self-determined world of work. Chairman Jörg Hoffmann stressed that the opportunities offered by digitization can only be exploited if company and collective bargaining policy opportunities are consistently used and the workforce is involved at an early stage. To ensure this, trade union education-work has an outstanding role to play. It must be able to provide full-time trade unionists with the appropriate qualifications for their future tasks and to train employees involved at the company level (IG Metall 2015: 8). The delegates of the trade union conference specifically called on the executive board to do so in their lead proposal "Beteiligungsgewerkschaft IG Metall". The proposal called for strengthening the enforcement of company interest groups with the help of pilot projects that initiate a sustainable and proactive company policy and at the same time provide technical support for the transfer of practical experience through full-time support (ibid. 237ff.).

This proposal paved the way for the project series "Work and Innovation - Strengthening Competences +> Shaping the Future", which will start in the following year. The aim of the ambitious programme was to further expand the labour policy focus in the design of digital work and to further develop the educational work and company policy of IG Metall (Schroth 2018:1).

The question arose as to what concrete impulses trade union education work and company policy could provide in restructuring processes in the context of digitization, so that these could be shaped in the interests of employees. The conclusion of collective bargaining agreements and co-determination are an indispensable basis for this, as they are instruments for shaping future work in a way that is humane and effective.

In addition, it was necessary to provide comprehensive support in the large-scale project W+I, as the 150 participating companies are confronted with different challenges and these require a diverse competence profile of the actors involved. The concrete fields of action of works councils and management include topics such as job security, personnel development and qualification requirements or concrete agreements on the future organization of working time or questions of employee data protection (ibid:2). In this

case study, two company projects are presented as examples which deal with the above-mentioned topics and the associated restructuring measures.

2.2 General information and structure of Work and Innovation

Project details

Table 1: Overview

Project details „Work und Innovation“	
Project launch	February 2016
End of project	February 2019
Duration	3 Years
Funding	10 million Euro
Funded by	BMAS/ESF
Participating companies	150
Seminar participants	250
Qualification series	21 consisting of 5 modules

The "Work and Innovation" project series started in February 2016 and ended in February 2019 with a final event at the IG Metall headquarters in Frankfurt (Main). During the three-year period, more than 250 participants were trained in 21 qualification series. Each qualification series consisted of 5 modules, whereby the participants of each module took part in a 3-day qualification seminar. Altogether 150 pilot enterprises, consisting of medium-size mechanical engineering enterprises up to numerous automobile final manufacturers represented in Germany, participated in the W+I projects. The W+I projects was supported by the Federal Ministry of Labour and Social Affairs ("Securing skilled workers: training and promoting equality") and the European Social Fund. Of the total project volume of approx. 10 million euros, half came from public funds. This makes work and innovation the IG Metall's largest externally funded project Since the government grants for the humanization of working life (HdA) at the end of the 1980s.

The qualification series were divided regionally into different enterprise groups:

- Bavaria und Baden-Wuerttemberg
- New federal states (without Berlin)
- North Rhine-Westphalia
- Schleswig-Holstein, Hamburg, Bremen, Lower Saxony
- Saarland, Rhineland-Palatinate, Hesse, Berlin

The project series Work and Innovation comprises three core elements

Projects at company level
The W+I series focuses on the operational projects of the participating companies. For the admission of pilot companies, an application is first necessary in which the planned project is presented in a proposal and afterwards the expectations and objectives of the company actors are discussed in an initial workshop. A signed project confirmation from the works council and company management is also required. The company

undertakes to release selected employees during working hours for an A+I qualification series as well as to develop an independent W+I implementation project and implement it in the company on a social partnership basis.

Qualification series
During the W+I project, the participants from the companies go through a training series consisting of five modules, each with three-day qualification seminars. Participating project companies have the opportunity to train selected employees from individual specialist departments, personnel managers, trade union shop stewards and works councils to become experts in the field of work 4.0. By attending the qualification series, the participants are trained to be enabled to plan, control and reflect on necessary company change processes and to carry them out with the involvement and participation of the workforce. The basis for this is a good balance between the participants' experience, knowledge transfer and practical relevance. The project budget covers the costs for the qualification series and supports the company implementation projects with suitable qualification sequences or specific technical expertise.

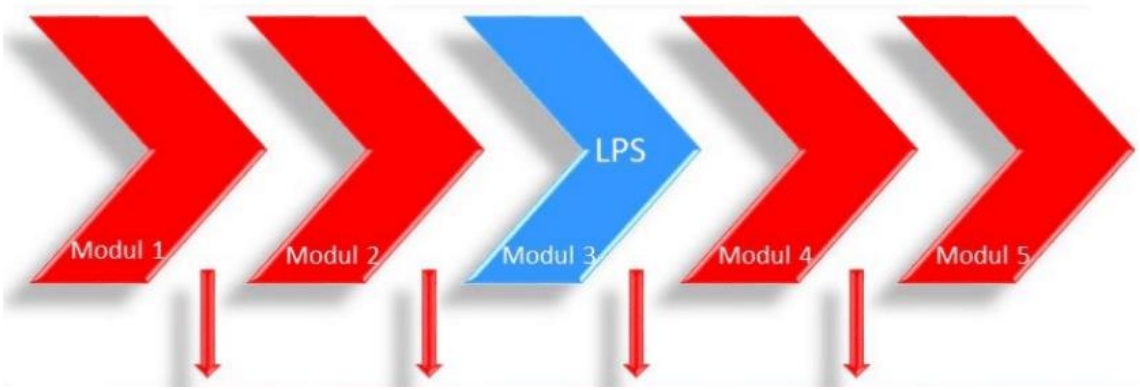
Network of experts
In addition to the five-module training series, a W+I steering committee including an advisory board with experts from the individual departments and levels of the IG Metall trade union structure was set up to advise on issues relating to work structuring, qualification and gender equality issues as well as to provide know-how on collective bargaining policy and collective bargaining issues. The IG Metall training centers have an interdisciplinary team of training officers consisting of labour and social scientists, lawyers, business economists and experienced vocational educators.
In addition, the W+I pilot companies have the opportunity to consult an external network of experts to help them implement their company level projects. This nationwide network consists of around 30 scientific institutions and institutes that specialize in working-sciences processes and in questions relating to production system design or material and energy efficiency. The need for expertise must be justified and applied for from the project management. Subsequently, qualification sequences lasting up to five days, which take place on site and are tailored to operational needs, can be financed from the project funds. This often forms the basis for follow-up processes in the company, which are designed in a spirit of social partnership.
In addition to the support mentioned above, regional network meetings and practical-science dialogues are organized in which the methods for implementing the company projects and further findings from other research projects are presented. Altogether, around 50 events offer space for exchange and networking during the course of the project, in addition to the company's own A+I qualification courses.

2.3 Qualification series

2.3.1 Module contents

The first central approach of "Work and Innovation" is the design and implementation of qualification series (IG Metall: 2017: 6). The central content of the qualification series is the participation and design of innovation processes from an employee perspective. These include questions of work organization and work design, an insight into technological change processes and the resulting fields of action in company policy. In addition, there are questions about effective project management and the associated sustainable safeguarding of operational project results. The training modules serve as an

orientation framework and can be adapted to the specific needs of the company, depending on the project region and the requirements requested in the project application.
In addition to the modules of the qualification series, the company level project is a central component of the W+I series. This is worked on by the participants in the time between the modules and supported by the coordinators. The company level project is also reflected in the modules. Thus, in the best case, the contents conveyed in the seminars are to be transferred directly to the company's own implementation project.
In addition, during the course of the project there are three cross-cutting thematic topics (1) competence development/qualification, (2) working time and organization of working time, (3) work organization and learning at the workplace, which are dealt with in the modules.



Practical implementation of the enterprise project

Contents of the five training modules

1. Innovation and work 4.0 and the role of the works council in innovation processes
2. Participation and design of innovation processes
3. Possibilities of technological changes and operational fields of action in the company
4. Learning factory: Personal experience of the consequences of technological changes within the framework of group exercises, joint development of design alternatives, getting to know evaluation methods
5. Ensure sustainability of operational project results

Module 1 –Innovation

- Presentation of your own implementation project ideas
- What are innovations?
- Who has what interests?
- What role does the works council play?
- How do I accompany a process? (Introduction to a structured process design)

Module 2 –Participation + Design

- Reporting and feedback round on own implementation projects
- How do I create participation for the development of innovations?
- How do I make ideas for innovations known, how do I "advertise" them?
- How do I communicate with different actors?

Module 3 – Technological changes: Theory

- Reporting and feedback round on own implementation projects
- Technological changes with a view to the digitalisation of the world of work/industry 4.0
- Legal framework
- Identify and define fields of action for the works council

[The order of the topics in modules 3 and 4 can be changed if necessary]

Module 4– Technological changes: Practice

- Reporting and feedback round on own implementation projects
- Experience technological change "live" in the Learning Factory of the Chair of Production Systems at the Ruhr-University Bochum
- Employee-oriented strategy development

Module 5 –Ensuring sustainability

- Present implementation-projects in the form of a final report
- Considerations to ensure sustainability
- Planning further steps

2.3.2 Particular characteristics

The W-I qualification series are characterized by two special features that represent new territory in the trade union education landscape. Firstly, the seminars of the five training modules are also explicitly open to employees nominated by the employer. This gives companies the opportunity, in consultation between company management and works council, to jointly decide which employees are selected for the qualification series and are responsible for the implementation of what they have learnt in the further process in the company.
Secondly, in the context of the project it was possible for the first time to open a university learning factory for the qualification of trade union training measures. What's more, the didactic concept of a work and participation - oriented learning factory has been developed in the course of the project to date in close cooperation with the Joint Office of IG Metall and the Chair of Production Systems (LPS) at the Ruhr University Bochum (RUB). Opportunities and risks of technical-organizational change processes can thus be jointly understood in real production processes, the associated consequences for working conditions can be experienced at first hand and design alternatives based on the model of good digital work. The learning factory in Bochum is an integral part of the W+I qualification series. One of the five modules take place there.

3 Examples for the implementation of company level projects

3.1.1 VOIT Automotive GmbH

Informations about the company

Voit Automotive GmbH	
Branch	Automotive supplier
Employees worldwide	2000
Employees at the site St. Ingbert	1000
Trade union	Yes/IG Metall
Works council	Yes/15 Members
Company level project	Introduction of components and methods for the digitization of work and business processes
Social dialogue and restructuring	Company agreement maintaining and expanding employment in the context of digitizing the world of work and setting up a working group

Voit Automotive GmbH, based in St. Ingbert, is a multinational automotive supplier and sells over 100 million die-cast aluminium parts annually, which are used in around 250 vehicle types. The company is tier1 and supplies over 45 automobile brands, including well-known manufacturers such as Audi, BMW, Mercedes, VW, Ford, Chrysler, Jaguar and Land Rover. At the main location there are about 1000 and worldwide more than 2000 employees at five production sites spread over four countries. Voit Automotive GmbH is a collective bargaining partner of IG Metall and has a works council committee with 15 members at its main location. The chairman of the committee is an exempted works council member with a focus on digitisation and participates with his operational team in the project series Work and Innovation.

Restructuring in the context of digitisation and social dialogue

The topic of digitization plays an increasingly important role in the company. The initiator of the social dialogue within the company was the planned digitalisation of maintenance, which was noticed by the works council rather accidentally in exchange with colleagues. At Voit, some metal forming machines are connected to their manufacturer via the Internet. The manufacturer can read out all the essential parameters of the machines and carry out the maintenance and servicing of the machines with his own service staff on the basis of this data. What may at first appear to be a small addition to the purchase contract has far-reaching consequences. These directly affect maintenance employees whose work tasks are reduced by outsourcing their activities and who consequently see their jobs threatened. The works council learned about the new service orders through discussions with its maintenance colleagues. At that time, the works council was already in contact with IG Metall regarding the planning of work + innovation, so the decision was obvious to make digital networking in production and its labour policy design the subject of the company project.

Initially, the IG Metall education coordinator and the works council intended to limit the project to the area of maintenance only, but in the course of the Work+Innovation

process they learned that this was not enough and recognised the need to create an overview of the digital transformation in the entire company, since the Internet of Things was also to be used in other areas of the company and, for example, the introduction of an MES (Management Execution System) was in preparation. A further goal was to derive requirements for work and competence development.

Adoption of a company agreement
In the course of an intensive discussion in the works council committee and in the W-I training modules, the decision was taken to conclude a far-reaching company agreement for the entire company in order to maintain the works council's ability to act and to be able to react adequately to the new, digital work processes. As part of the A+I training modules, the works council is gradually developing the framework for the works agreement, which focuses on the procurement of information on the planned digitisation topics in the company. To this end, a working group is to be set up to ensure the informative involvement of the works council. The strategic question for the working group was what effects digital technologies will have in the future on employment and on the qualification structure at VOIT.
Due to the prevailing partnership relationship within the company, the management of Voit was positive about the project, so that a company agreement could finally be concluded.

The following points were regulated in the works agreement:

- Maintaining and developing employment
- Design of age-appropriate workplaces
- Integration into operational planning and timely information flow
- Establishment and involvement of an internal working group
- Determination of qualification needs and selection of employees

The primary objective of the works agreement is to maintain and expand employment in the course of digitizing the world of work throughout the company, i.e. both in the production and administrative areas. In addition, digitization processes are to be designed in such a way that they enable workplaces suitable for ageing and old age. In order to plan suitable measures and processes for the design of digital processes, it is essential that an early flow of information takes place in order to involve those responsible within the company in the planning phase. This point was the main concern of the works council of VOIT GmbH, because it had recognized in the course of the digitalization of maintenance that it had missed important information and had only accidentally learned about the scope of the planned digitization processes. In order to ensure this early involvement, the establishment of an internal working group was agreed in the works agreement. The working group is made up of two works councils and one each responsible for personnel, production and IT. In addition, managers of the departments concerned as well as internal and external specialists can be involved.
The working group meets regularly once a quarter for discussions. It also meets when the occasion arises. It determines whether existing jobs could be affected by the implementation of company projects or measures and what effects can be expected. These are evaluated and recommendations for implementation are then drawn up. For example, suggestions are to be made for the qualification of employees at affected workplaces so that they can meet the new requirements that have arisen. To this end, the individual competencies of employees must also be assessed in order to determine

whether internal or external further training is required. From this, a qualification plan is finally drawn up, which is granted to the management and the relevant specialist department. The costs of the qualification measure required by the company for the employee are borne by the employer. If the employee refuses the measure, he will be informed about possible consequences, which in extreme cases can include the loss of his job.
It is also worth mentioning that the adoption of the company agreement was also welcomed by the employer in order to reduce the employees' distrust of restructuring processes and to offer them safety.

3.1.2 OTIS GmbH & Co. OHG, Berlin

Informations about the company

OTIS GmbH & Co. OHG	
Branch	Producer of elevator systems
Employees worldwide	>60.000
Employees at the site St. Ingbert	370
Trade union	Yes/IG Metall
Works council	Yes/9 Members
Company level project	Paperless production as part of a strategy for the smart factory
Social dialogue and restructuring	Company agreement Maintaining and expanding employment in the context of digitising the world of work and setting up a working group

Otis Elevator Company is an American company based in Farmington, Connecticut and the industry leader in elevators. Otis belongs to the parent company United Technologies and is represented worldwide with more than 60,000 employees at 200 locations. In Germany, the company employs approximately 2200 people and is headquartered in Berlin. In addition to the company headquarters, there is also Otis Werk in Berlin with approx. 370 employees, which has also participated in the A+I programme with a company project. OTIS GmbH & Co. OHG, Berlin is a collective bargaining partner of IG Metall and is represented at the site by a works council consisting of 9 employees.

Restructuring in the context of digitisation and social dialogue
Paperless production is to be introduced at the site as part of the strategy towards a "smart factory". Due to a working group that has already been set up to deal with the introduction of lean production in the past, there is already good cooperation at the site and a lively exchange of information in the design of operational projects. Due to the redesign of the production processes, there was a meeting between works council and employers every two weeks. These sessions seamlessly merged into a monthly "Smart Factory" meeting. Works council members, employers-representatives, but also employees from production were present. At the time when the employer presented his idea for paperless production, the works council had applied to the W+I project series. In addition to the Smart Factory strategy, it was decided to develop a company agreement as part of the W+I operating project that dealt with the regulation of digitization processes in the company. The project is also supported by the employer,

who sees the company agreement as an instrument to reduce mistrust and skepticism towards the digitisation projects among the employees. It is also an important signal to executives on how digitization should be handled in the company.

Adoption of a company agreement

Even after the official end of the project, the participating works councils plan to continue with the five training modules in order to maintain a further exchange of experience. The employer had already agreed to support this through financing.

The following points were regulated in the company agreement

- Participation and workplace design
- Performance and behaviour control
- Qualification
- Job protection
- Work organisation and payment
- Conflict management

The aim of the agreement is to regulate the principles and framework conditions for the introduction of digital technologies. It applies to all technical and work-related changes based on the introduction of information and data processing systems. To this end, early involvement of the works council is regulated so that it can deal with planning, design and possible effects and make its own proposals. In addition, it is stipulated that the new technologies do not lead to an intensification of performance. Furthermore, the employer is required to elaborate a concept that deletes the corresponding personal data within a specified time frame.

It is also recognised in the works agreement that continuous qualification of employees is indispensable for the long-term safeguarding of competitiveness and for the future success of the company and that therefore qualification offers for employees should be offered in a consultation procedure agreed between the employer and the works council. When work organisation is changed by industry 4.0 activities, the employees concerned are entitled to qualification in order to prevent staff reductions and secure employment.

In addition, employees are guaranteed the existing level of pay. This means that the use of new technologies must not lead to any grouping of activities. If, in certain cases, a reduction in the work requirements of an existing workplace should be unavoidable, the aim is to restore the existing requirement profile in the medium term by designing the workplace. If this is not possible, the difference to the old incentive bonus is still cleared. Finally, the company agreement regulates any conflicts that may arise between employees and their executives. In addition, works council and personnel department as well as if necessary the next higher superior are to be consulted. A goal is it an amicable solution of all involved ones to strive for.

4 Conclusions

First conclusions

A whole series of demanding operational implementation projects have already been completed and follow-up activities have already been launched in a number of plants. First conclusions from a project perspective have been drawn:

By informing and involving employees at an early stage, their perspective can be directly integrated. This generates additional ideas and suggestions and at the same time eliminates fears and skepticism about impending change processes. By involving both social partners at an early stage, scope for action can be exploited and emerging conflicts can be resolved at an early stage. To this end, a common socio-technical design perspective is promoted, not least due to the opening of trade union qualification formats for employees nominated by the employer and project groups with equal representation.

The actions often start in the company, since the company level is often the origin of change processes. Nevertheless, it is important that in transformation strategies that are implemented at company or group level, important topics are bundled and dealt with at GBR (General Works Council) and KBR (Group Works Council) level. In addition, the employee representatives on the Supervisory Board can help shape strategic decisions. Good communication between the actors of the individual locations and their involvement is therefore important.

Due to the complex transformation processes, there is a comprehensive need for support and expertise in the companies and operations. The trade unions can make a valuable contribution by constantly improving the qualifications of their company advisors and full-time employees. At the same time, new demands are placed on the educational work in order to provide the employee representatives with extensive specialist and process knowledge.

Another important point is the networking of company actors. Regional network initiatives to share experiences from their own projects and to exchange ideas with other actors and, if necessary, to draw on external expertise.

This was also confirmed by the interviews conducted with the employee representatives of the participating companies. In particular, they rated the continuous exchange with colleagues and their feedback within the framework of qualification seminars as particularly helpful for the planning and implementation of company projects. In addition, further seminars and networking events have already been planned, some of which are also financially supported by the employer (see VOIT example). In addition, all interviewees of the W+I project series considered early information and involvement in digital innovations as well as related restructuring measures to be indispensable in order to ensure further process design in the interests of employees and to make full use of their opportunities for co-determination within the company.

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