

In Germany,

workers are taking the reins of digital transformation

An innovative project initiated by the country's largest union, IG Metall, is showing how labour's proactive participation in the changing workplace can turn digitalisation and globalisation from threats into opportunities.

By Jennifer Hattam¹

Digitalisation and globalisation are creating massive upheavals in the world of work, transforming job tasks, workplace culture and the ways in which companies are organised. These changes often pose a threat to workers, by making their jobs redundant or moving them overseas. But by proactively engaging in such transformations, Germany's IG Metall is showing that innovation processes can be managed in a way that benefits workers and employers alike.

"Getting workers to participate in all the processes involved in shaping the future of work is essential to protecting their rights and ensuring decent working and living conditions," says Jochen Schroth of IG Metall, Germany's largest single union, with 2.2 million members.

Schroth and co-author Kathrin Schaefers detailed this approach in a report, *Shaping Industry 4.0 on Workers' Terms – IG Metall's »Work+Innovation« Project*, published in September 2020 by the German foundation Friedrich-Ebert-Stiftung (FES).

Initiated by IG Metall in 2016, the Work+Innovation (W+I) project engaged workers at more than 100 plants and companies across Germany – including multinationals such as Airbus, Bosch, Siemens and Volkswagen – in a process that

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involved both opportunities for improving their qualifications and for re-envisioning their own workplaces.



In this September 2018 photograph, members of the Airbus General Works Council take a tour of the company's production line in Hamburg, where the A320 is manufactured. (Thomas Range/IG Metall)

According to the report, IG Metall First Chairman Jörg Hofmann and others at the union realised that “the possibilities provided by digitalisation could only be seized if the opportunities offered by shop floor and collective bargaining policy were consistently used, pointing out alternatives, making recommendations for action and involving the workforce in these processes at the earliest possible stage.”

To this end, the W+I project was conceived with a dual-track approach, combining worker training programmes with company-specific innovation projects. The courses were designed to prepare workers for the digitalisation of industry, which is known as ‘Industry 4.0’. Though the content of these courses varied depending on the individual needs of the works councils taking part, the main topics covered include technological changes at companies, innovation policy, employee participation and a three-day module in a ‘learning factory’ at Ruhr University Bochum.

“In learning factories, problem- and action-oriented learning can be enabled in a realistic factory environment,” Schaefers and Schroth write in their report. “The special feature of the Bochumer Lernfabrik [Bochum Learning Factory] was and continues to be that it does not focus on technology alone, but above all on its effects on people. Thanks to this seminar module, it was therefore possible for the participants to jointly understand the opportunities and risks of technical-organisational changes on the basis of real production processes, to experience the associated consequences for working conditions first-hand and to develop alternatives for shaping them.”

In parallel to the qualification courses, the W+I project developed and supervised individual transformation projects on a company level, addressing issues such as working time and organisation; implementing new technologies in the production line in a manner favourable to the workforce; and establishing necessary programmes for further education.

Tapping the expertise of employees

One W+I success story came from a Siemens plant in Tübingen that manufactures geared motors. After management announced in 2017 that assembly would be relocated to the Czech Republic, the plant's well-organised workforce generated 80 concrete proposals for reducing costs by several million euros using digital technology in order to maintain the Tübingen site.

"You need good ideas, but also a strong union to get the respect you need to negotiate on the same level as the employer," Schroth says. The mobilisation of this associational power at Siemens persuaded the initially sceptical management to participate in W+I.

"The employees for the qualification series were selected and a company project group was set up, followed by extensive negotiations with the help of IG Metall," Schaefers and Schroth write. "Finally, a series of digital applications were agreed upon [...]. For example, a screen in the production hall now shows in real time what the capacity utilisation and availability of the individual machines is."

The digital applications generated by the workforce "not only prevented the closure of the site, but also helped to ensure that the plant could continue to operate," the report explains, adding that "Siemens Tübingen is now a digital showpiece within the Siemens group". The increased productivity meant that the plant could become profitable again, and by keeping it in Tübingen, hundreds of jobs were saved.

"This example shows how our workers on the shop floor are the real experts on questions of improving the production system," says Schroth. "The process took more than one-and-a-half years, but at the end of it, everyone was on the winning side."

According to a survey carried out by IG Metall in 2019 of works councils and shop stewards from almost 2,000 companies in all unionised sectors, transformation

strategies were “virtually or completely absent” at more than half of the plants represented. This creates an opportunity for worker-led solutions to a variety of challenges.

Putting people first

When Airbus Operations GmbH established engineering centres in the United States and India, the time difference between its locations created a demand for round-the-clock support, exposing engineers at the Airbus site in Hamburg to permanent on-call duty and the associated increased strain.

As part of the W+I project, employees developed a voluntary and self-organised system of scheduling weekend shifts, with a backup system of defined criteria for a supervisor to use to determine staffing when a particular shift is not selected by enough workers. The model also provides supplemental pay for weekend work and allows for the option of working from home on public holidays.

“Following a pilot phase and a subsequent evaluation, a company agreement on this working time model was finally reached which led to better planning and greater acceptance,” according to Schaefers and Schroth. “During the process, the employers’ side also learned that work organisation and job satisfaction must be considered hand in hand.”

Implementation of the W+I project was facilitated by Germany’s Works Constitution Act, which legally enshrines opportunities for co-determination, as well as by support from the country’s Federal Ministry of Labour and Social Affairs, which co-financed the project along with the European Social Fund.

“The fact that the Labour Ministry understands that the discussion about the future of work shouldn’t just focus on technology, but more on people, played a crucial role before A+I even started,” says Schaefers. “The ministry knew we could find answers to that challenge because we are so close to the plant level. With more than 100 W+I projects, we can now provide evidence that it works in real life.”

The W+I project concluded in 2019 but this summer, IG Metall launched a follow-up initiative to create toolkits for different aspects of shaping the transformation process – such as checklists and seminar concepts – that can be adapted by works

councils as well as full-time unionists to use in ways specific to the needs of their individual workplaces.

“We cannot stop the changes in the workplace – they are coming and the transformation is already in full force,” says Schaefers. What initiatives like W+I can do is ensure that not only are workers not left behind by that transformation, but that they play an essential role in leading it.

