

# **Charter for Work and Learning in Industry 4.0**

*of the Plattform Industrie 4.0*

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# Preamble



*Innovative working arrangements are key to a competitive manufacturing industry. Lifelong learning, confidence in dealing with technical and social change and a modern leadership culture are important levers of the digital transformation of industry.*

Agile working methods offer new forms of flexible cooperation across sectors. They also pose new challenges to workers and company structures. It is important to shape these standards proactively – through collective dialogue premised on social partnership.

The Charter for Work and Learning in Industry 4.0 is the result of collaboration between the companies, associations, academic institutions and social partners of the Plattform Industrie 4.0 and expresses their shared values. Based on the three central pillars of **people, organisation and technology**, it aims at the sustainable design of work and training. Through the Charter, the Plattform reaffirms its commitment to social sustainability, as already set out in its Mission Statement 2030.

We are designing a digitalised world of work that has people at its heart. We are committed to safe, fair and self-determined work and to a digital transformation that is fit for the future and able to withstand crisis.

In so doing, we respect and safeguard fundamental principles and rights at work. We endorse diversity in teams and boardrooms as well as participation and social dialogue.

# Charter for Work and Learning in Industry 4.0

**People, organisation and technology:** the interplay between these three pillars forms the basis of a strong industry 4.0, guaranteeing growth, progress and prosperity in the global economy.

The actors and stakeholders of the Plattform Industrie 4.0 endorse the following four core statements:

- 1. Working in industry 4.0 is characterised by the greater autonomy and participation of the workforce in change processes and by the preservation and cultivation of workers' capacity to learn and act.*
- 2. Agile companies react flexibly and directly to the demands of the digital transformation. New forms of work and learning culture support workers in dealing successfully with the dynamics of industry 4.0.*
- 3. The participation of employees and their representatives contributes to more value creation, innovation and economic progress in companies. Social partnership in companies promotes employability and job security.*
- 4. New technologies have an impact on an innovative and competitive industry 4.0. They are to be used in a socially, ecologically and economically sustainable manner, having due regard to occupational health and safety.*

# Explanatory notes on the core statements

## Statement 1

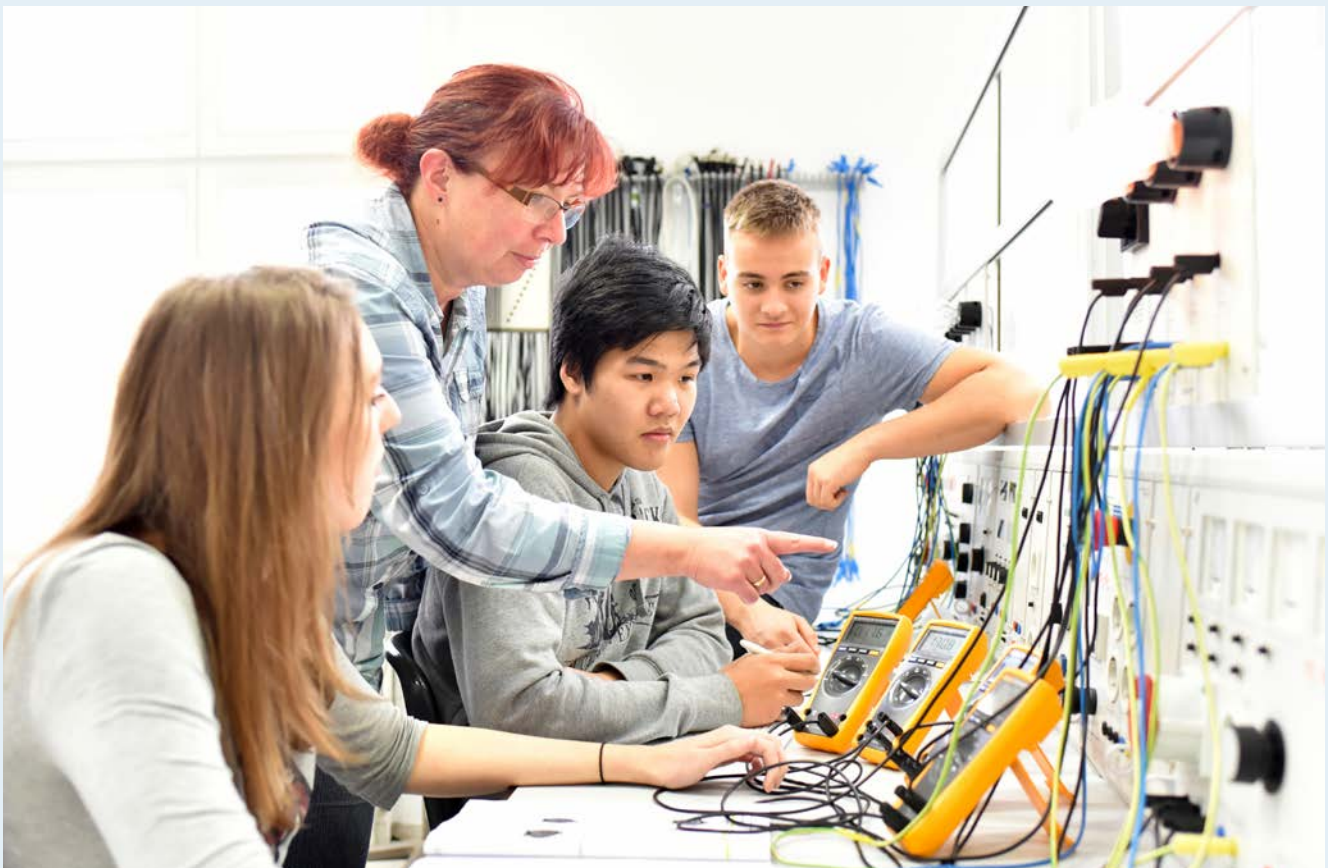
***Working in industry 4.0 is characterised by the greater autonomy and participation of the workforce in change processes and by the preservation and cultivation of workers' capacity to learn and act.***

*Work is, to a large extent, a source of personal identity. It guarantees participation in social life. Digitalisation is significantly changing workers' needs and their demands from gainful employment. Successful companies will adapt to these developments and organise work so that it leads to greater autonomy and independence in learning and taking action.*

*This change is driven by a willingness to experiment with different ways of organising work. For example, a stronger culture of trust and the freedom to make mistakes strengthen employee loyalty. Mobile working, the demands for more personal responsibility and flexibility, or preserving and cultivating the capacity to learn and perform in later life all create new challenges for professionals and managers.*

*The most important resource of any company is its employees. Recruiting young talent, training and securing employability through continuous qualification are therefore the central tasks of every company. Modern education and training enable lifelong learning. This is more important today than ever before, because jobs are undergoing major changes or are even at risk due to transformation processes.*

*The social partners are working together to continuously adapt education and training to new developments and requirements. Only together, with competent staff, can the long-term competitiveness of Germany's industrial manufacturing companies be secured.*



## Statement 2

**Agile companies react flexibly and directly to the demands of the digital transformation. New forms of work and learning culture support workers in dealing successfully with the dynamics of industry 4.0.**

Agile working offers a proactive and creative response to constantly changing economic conditions. Agile organisations can react more quickly to changes in customer requirements, the market and technology, while offering a more stable and secure future for their staff. A vibrant corporate culture enhances the sense of identity, motivation, loyalty and solidarity of its staff.

Agile employees contribute to the design of their work processes and the need for change within their organisation. Working in teams, they are involved in the development and testing of new design solutions for the digital working world, based on actual practice.

Employees and managers alike also benefit from a strong culture of learning. With the support of self-directed learning, above all through digitalised offerings, learning can be individualised and flexibly integrated into everyday working life. In particular, ways of working that promote learning, participation in development, experimental and creative problem-solving and cross-functional thinking contribute to a sustainable learning culture. A modern learning culture is supported by mobile learning and a more intensive transfer of knowledge.



### Statement 3

***The participation of employees and their representatives contributes to more value creation, innovation and economic progress in companies. Social partnership in companies promotes employability and job security.***

*Workforce participation is crucial for the successful design of company change processes. In Germany, cooperation between the social partners has stood the test of time – particularly as a successful crisis management tool. This constructive cooperation is essential for a successful digital transformation in the interest of employees and companies. Taking on board innovative ideas from the workforce can contribute significantly to greater productivity and innovation in a company.*

*Agile enterprises require modern forms of constructive cooperation and communication. These may be characterised by direct participation or an increased assumption of social responsibility by the workforce and its participation structures.*

*The transformation of industry is an opportunity – for employees and employers alike. The close cooperation between management, human resources and works councils helps to ensure that working practices centred around people and their needs are considered at an early stage.*





## Statement 4

***New technologies have an impact on an innovative and competitive industry 4.0. They are to be used in a socially, ecologically and economically sustainable manner, having due regard to occupational health and safety.***

*Artificial intelligence, virtual reality, augmented reality, big data analytics, the use of avatars and assistance systems and their application in modern production processes lead to closer and completely new forms of interaction between humans and machines.*

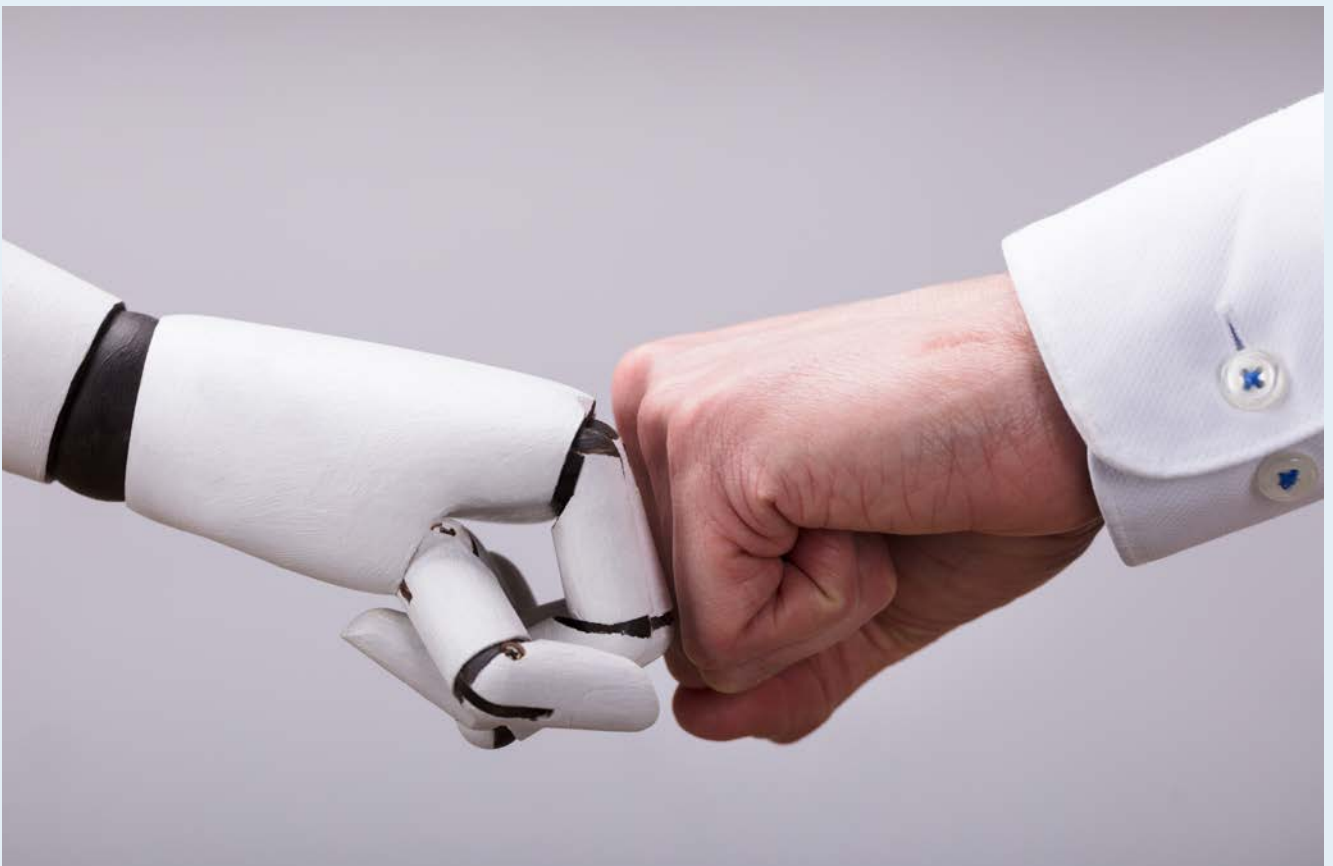
*Modern technologies are intended to make people's everyday work much easier. For example, exoskeletons can facilitate physically demanding activities and smart wearables can reduce the risk of injury.*

*Modern assistance systems can also make work more attractive by taking over routine tasks. By using data glasses, for example, low-skilled workers can be enabled to perform more complex tasks. Speech, visual and hearing*

*aids can also promote the inclusion of people with disabilities in the world of work. Possible stress caused by multi-tasking or higher drop-out rates can be avoided by preventive technology and method evaluation.*

*Industry 4.0 manufacturing systems also offer considerable potential for improvement in the context of energy efficiency. For example, energy-orientated data analyses and energy-efficient components can be used to dynamically control and optimise machines and processes in terms of energy requirements.*

*The focus is not simply on what is technically feasible, but on what makes technical sense for people. The active involvement of those affected in the introduction of new technologies creates acceptance among all those involved, promotes skills development and thus also strengthens the success of a company.*



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The Charter for Work and Learning in Industry 4.0 is dedicated to the memory of our dear friend and colleague, Martin Kamp, formerly Head of the Working Group “Work, Education and Training” and to his tireless commitment to cooperation between the social partners.

