

Digitalisation for equality, participation and cooperation in industry

More and better industrial jobs in the digital age

Digital technologies are increasingly present in our daily lives and our working lives. Digitally-enabled objects are present in our pockets, in our homes, in our vehicles, and in our work places in industry. They enable people and objects to communicate anywhere and at any time in a global and interactive network. They have transformed the way in which we work, have dramatically changed whole industries and will continue to do so in the future.

IndustriAll European Trade Union propose policies and actions for more and better industrial jobs in the digital age. Their common strategic perspective is that digital technologies should be leveraged to develop cooperative, integrative, democratic and egalitarian work-places and societies, in the long-term interest of workers and of society at large.

Digitalisation massively impacts employment, and has specific effects

Digitalisation is the **networking** of any object and any person, at any time, in any place. In industry, it leads to the **digital integration** of all processes: design, manufacturing (the "Industry 4.0" concept), maintenance and administration. This digital integration has the potential to bring massive **gains** in productivity, reliability, adaptation to customer needs and speed. It can significantly improve the comparative advantages of European manufacturing, thereby protect or even **re-shore industrial jobs**.

On the other hand, the negative consequences of digitalisation on **employment volume** of existing jobs are potentially **massive**. The proportion of human jobs that are at risk of being replaced by digital technologies is estimated at around 40% for the whole economy. These threatened jobs are mostly routine jobs typical of industry, including white-collar jobs.

Digitalisation also has specific effects, beyond the productivity gains that have been common to all technological transformation of industry in history:

- it **concentrates** power and wealth along the value chain in the digital marketplace platform, thereby depriving all other companies with the capacity to invest, to innovate and to provide good wages and working conditions
- it challenges the foundations of the (permanent, full-time) **employment relationship**, because all functions of this relationship (including the control of the task) can be performed automatically and remotely. Consequently, workers are placed in a world-wide competition on price, and **precarious work** is exploding (free lancers, bogus self-employment, crowd-sourcing)
- it opens new possibilities for asymmetric, vertical and unilateral **control** over workers, but also of symmetric, horizontal, multilateral **cooperation** between them. In the views of industriAll Europe, the choice between both possibilities will be the result of a *political* decision, regarding the status of the participants in communications networks, and is not determined by technology.

Digital technologies must foster equality, participation, and cooperation, for more and better industrial jobs

IndustriAll Europe proposes **policies** and **actions** to seize the opportunities of digitalisation for more equality, participation and cooperation in industry, for more and better industrial jobs in Europe. These proposals also aim at alleviating the threats posed by the impact of digitalisation on employment volume and on the employment relationship itself, and by its potential to concentrate wealth and power. The perspective for IndustriAll Europe is to **shape the changes** brought by digitalisation, to positively accompany this transformation – under the strict condition that it be managed in a socially responsible way.

Create industrial jobs in the digital age

(This chapter is under the lead responsibility of the Industrial Policy Committee)

1 Leverage digitalisation for responsible innovation

Digital technologies can significantly reduce employment in existing economic activities. However, they also have the potential to create new markets and new jobs, by meeting societal needs (e.g. remote monitoring in healthcare, smart electric grids managing irregular supply by renewables), or by re-shoring externalised jobs. These new jobs can compensate losses, at least in part, and their potential should be fully leveraged. At this stage of its reflection, IndustriAll Europe has identified some fields where digital innovation has a great potential for job creation in Europe, and where political action is needed.

1.1 Restore a leading industrial position in Electronic Components and Systems

IndustriAll Europe supports the objective that the European Union should double the value of **electronic components and systems** being produced in Europe by 2025, by implementing the [European Strategic Roadmap on Electronic](#)

[Components & Systems](#) published by the Commission, DG Connect, in June 2014, as a part of its strategy on [Key Enabling Technologies](#) (KETs). This Roadmap includes both massive investment in supply (full factories) and in the demand of innovative socio-technical systems (in the form of geographically dedicated "reference zones" for their digital integration and testing).

1.2. Create jobs and reduce waste with automated dis-assembly factories

Flexible, digital assembly technologies could be used in a reverse flow to efficiently **dis-assemble** products having reached their end of life. Provided the product contains (e.g. in a removable RFID tag) the information relative to its assembly operations, a flexible dis-assembly line could use this information to dismantle the product, and recover re-usable components and strategic raw materials, thereby reducing waste generation and pollution, in a high-performance re-use, re-manufacturing and recycling process.

Such technical developments could have a strong, positive impact on industrial employment, and on raw material and energy efficiency, thereby reconciling environmental and employment concerns.

IndustriAll Europe recommends that the EU Circular Economy strategy include the development of the technologies, standards and institutions to equip such "dis-assembly" factories: reverse logistic flows, sensors, automated testing systems, data semantics to describe (dis-)assembly operations.

1.3 Digitally trace and monitor social and environmental conditions of manufacturing

The international market position of EU-based industrial firms is handicapped by unfair competition from companies that source their manufacturing activities in long, complex and international supply chains, and which don't know (or deliberately hide) the social and environmental conditions of manufacturing at their suppliers' facilities (and further up the stream of suppliers). A first condition to restore a fair competition is that information on

manufacturing conditions be reliably generated and transmitted along value chains.

IndustriAll Europe demands that a technical and institutional infrastructure be set up to ensure the reliable **tracking** and **monitoring** of **environmental & social** manufacturing conditions along value chains. Once reliably collected along internationally-accepted measurement standards by independent third parties supported and supervised by trade unions, this information should be inscribed into an individual RFID tag attached to the item, with appropriate digital authentication so as to prevent later tampering.

This digital infrastructure will enable customers along the value chain (until the final consumer) to be reliably informed on the social and environmental conditions of manufacturing, and thus to make choices based upon more than price alone. This will restore fair competition for companies abiding with EU social and environmental values and rules – and support their Corporate Social Responsibility efforts.

2 Regulate the sharing of value added along digital supply chains

Companies can only provide decent working conditions and wages to their workers, invest and innovate for their future, if they generate a sufficient economic value added. If this value added is captured by a dominant player along the value chain, and specifically by a digital platform, no other company has the capacity to be a decent and sustainable employer. The distribution of value added along the value chain is thus an essential topic, to be treated in parallel to the more usual issues of the sharing of the company's value added between labour, investment and the remuneration of capital.

2.1 Regulate and tax value creation along the rules of where work is physically performed

Digital-based companies have the technical possibility to legally settle anywhere – and specifically in jurisdictions where labour laws and taxation are low, or even non-existent (aka "tax havens"). From there, they organise the work of

their employees remotely, but are subject only to the legal and taxation obligations of their legal place of establishment. This can be the source of dramatic races to the bottom in terms of wages and working conditions for employees, and of tax revenues for EU Member States.

IndustriAll Europe believes that such developments must be prevented. We recommend the following rules:

- the **labour law** and **collective agreements** applicable to a given employee must be that of his/her **physical place of effective work**, i.e. also his/her home if s/he works remotely from there
- the **tax regime** applicable to the company's profits should be determined according to the Member States where its employees physically work.

On the second point, industriAll Europe recommends to apply the principles of a [mandatory Common Consolidated Corporate Tax Base](#) to *all* firms having employees that physically work in more than one Member State of the EU.

2.2 Set-up open standards for the digital integration of manufacturing

This is the purpose of a detailed [existing Policy Brief](#) by industriAll Europe, aiming at distributing the economic value of the digital integration of manufacturing along the whole supply chain, and at preventing its capture by the owner of a proprietary standard.

2.3 Regulate monopolistic digital platforms

This is the purpose of a detailed [existing Policy Brief](#) by industriAll Europe. The objective is to reduce the concentration of wealth and power in the hands of monopolistic digital platforms, at the detriment of their suppliers, specifically with four measures:

1. the "big data is open data" principle
2. the obligation to introduce "fair" search algorithms,
3. the breaking up of cross-subsidisation structures, and
4. the prevention of Unfair Trade Practices.

3 Create the digital skills necessary for industry

In the digital transformation of industry, as in all those that have preceded it, a first task for its social management is the long-term **anticipation of change**. Once these changes are identified and quantified, the **skills** of the existing and upcoming work-force should be shaped to adapt for this new situation, and to give European industries the qualitative edge they need to differentiate on world markets.

Such reflections are already under way in the European [e-skills policy](#), such as the common, technology-neutral [e-Competence Framework](#), and the “[Grand coalition for digital jobs](#)”, and must be complemented by trade union action (see below).

Better conditions for digitally-transformed work

(This chapter is under the lead responsibility of the Collective Bargaining and Social Policy Committee)

Digitalisation will entail massive impacts on all aspects of manufacturing, and specifically on employment volume, on employment quality and on the employment contract, which is at the core of the relationship between working persons and companies. Trade unions cannot remain passive in front of such structural transformations.

Reciprocally, improving the working conditions in the digital age is not only an issue of social rights. In the views of industriAll Europe, it is a positive contribution to the long-term innovativeness of the firm, and is thus a profitable investment.

For industriAll Europe, it is important to state that there is no determinism regarding the social impacts of digitalisation. The consequences of the changes are still open and we are willing to contribute to build them in a fair and just way. In this large-scale struggle, industriAll Europe’s priorities are the following.

1 Extend the coverage of Collective Bargaining agreements to all workers

The digital transformation enables unscrupulous companies to push ahead their divisive agenda of segmenting the work-force between a dwindling “core” of provisionally secure employees under open-ended contracts, and a diversified array of precarious and badly protected workers, where each layer is threatened to be dumped into the lower one, and lured into obedience by the promise to be promoted to the higher. Under the pretext of unilateral flexibility, this evolution led to dramatic increases in the numbers of agency workers, of fixed-term contracts, and of “new” digital forms of employment, such as “crowd-working” and forced / bogus self-employment.

IndustriAll Europe fears that a decentralization or even an individualization of collective bargaining could rise with digitalisation of work, because workers and labour markets are more and more fragmented. This can cause difficulties for collective organization of workers

Trade unions cannot accept these “divide and conquer” tactics by companies. IndustriAll Europe will fight to include *all* persons working for a company in the coverage of Collective Bargaining agreements, whatever their legal status. This objective also entails a challenge for trade unions themselves: namely to organise the precarious workers spawned by the digitalisation of work, whose culture and needs are very different from those of trade unions’ existing constituency.

2 Extend the Information, Consultation & Participation rights to all workers

For the same reasons as above, Information, Consultation & Participation rights must not, in the views of industriAll Europe, be restricted to only those workers in “standard”, open-ended employment contracts. Similarly, the numeric thresholds that open such rights in a company or an establishment should be computed by including all persons working for the company or the establishment, whatever their legal status and their physical location (e.g. working remotely).

3 Reflect on working time: volume and flexibility

Digitalisation brings with it remarkable productivity gains: the time being worked by humans (i.e. not by computers or robots) to perform many value-adding tasks (including highly qualified but repetitive tasks in R&D&I) will be dramatically reduced. Tele-working enabled by digitalisation has an additional potential for saving commuting time.

In the views of industriAll Europe, workers should get their share of these productivity gains. The allocation and distribution within society of these gains in hours worked should be broadly discussed. Productivity gains should also be used to deal with the social consequences of digitalization for workers as well as for society as a whole.

Digital technologies enable also a very significant increase in **flexibility** in the organization of working time. This flexibility can be positive for workers by increasing their control over their lives. However, it is currently mainly used in a one-sided way by employers to create more profit. This seriously harms the health and the work-life-balance of workers, and generates psycho-social risks and stress. Unilateral flexibility and limitless working time arrangements have to be avoided.

4 Negotiate new rights for Education & Training in the digital age

The technical changes imply the need for changed and new qualifications for workers. In this process, it is important for industriAll Europe, that qualification is a right for the worker, and not a favour given by the employer. We have to fix mandatory and sufficient **training rights** for workers to keep and improve their chances on the digitalised labour markets, such as:

1. Integrate the new digital **qualifications**, tasks and work categories in the negotiations with employers
2. Negotiate the **permanent up- and re-skilling** of the existing work-force, to adapt to the fast pace of technical change in the digital world

3. Support the usage of **standards** as tools to increase **vendor-neutral training and certification**
4. Negotiate **e-learning** conditions that are favourable to workers, i.e. with effective, measurable and certified outcomes, at affordable prices and a fair sharing of costs (in time and money) and benefits.

5 Negotiate a dedicated space for workers' representatives and trade unions in corporate Intranets

In the physical world, workers' representatives and trade unions have the right to be allocated a dedicated, private space in the company's premises for them to hold their meetings and to organise. In the views of industriAll Europe, the equivalent right must be given to workers in the digital workplace.

IndustriAll Europe demands that workers' representatives and representative trade unions in a company be given a private, specific space on the corporate Intranet, with the capacity to install whatever software or data they consider fit, under the protection of an adequate firewall.

6 Manage the risks and opportunities brought by mobile work

More and more workers are very mobile, and are not bound to a fixed workplace anymore. The employers see that as a possibility to reduce their fixed costs and use it for rationalization (i.e. new office concepts etc.). For the workers mobile work contains both positive and dangerous aspects. It will be an important task for trade unions in the future to minimize the risks of mobile work for the workers (i.e. constant availability, limitless work, etc.) via good collective agreements.

7 Obtain the right to privacy at work

Employers have the right to ensure that their employees actually perform the work that they are paid for, and that they respect safety and security rules. A form of surveillance of workers by their employer is thus legitimate. However, the technical means made available by digital technologies enable a level, a permanence and a

frequency of surveillance that is beyond anything experienced so far.

This excessive surveillance is resented by workers. It is also an issue for employers – because it leads to de-motivation and passive-aggressive behaviours. industriAll Europe advocates a right to **privacy at work**. The exact limits of legitimate surveillance, adapted to each work-place situation, should be the purpose of explicit social dialogue

Conclusion

Digitalisation of manufacturing is a major social, economic and industrial upheaval. It challenges trade unions and societies in a massive scale. IndustriAll European trade union invites political institutions at all levels, companies and social partners, to a thorough and concrete political dialogue to make the best – and avoid the worst – from this structural change in our life and in our working environment.

