THE TRANSFORMATION OF WORK
SOCIAL EUROPE DOSSIER
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The future of work is an ever-present concern for workers in a globalised economy characterised by footloose finance, fickle supply chains and above all ‘flexible’ labour markets. Fewer and fewer workers enjoy regular labour contracts—with associated social entitlements—and risk is increasingly being displaced on to labour by the rise of short-term and zero-hours employment and notional self-employment at the behest of platform contractors.

These changes have been advanced as having a purely economic logic—replacing the ‘dead hand’ of the state with the ‘invisible hand’ of the market. Yet what has really been at stake is a decades-long shift in the balance of social and political power towards capital, reversing the gains for labour in western Europe and north America deriving from the postwar settlement.

This steady erosion of worker security has been critically facilitated by the rise of digital technologies. These have allowed capital to reorganise labour on a scale never imag-
ined by Frederick Taylor or Henry Ford—to make it merely another ‘just-in-time’ commodity to use up in the production process.

Yet this is a double-edged sword: ‘informational’ or ‘cognitive’ capitalism relies on the knowledge inside the heads of today’s ‘labour aristocracy’ of analysts, gleaned through public education rather than the tutelage of firm apprenticeships. Demands for greater control at work and even ownership are likely to rise accordingly. As is the right to do work that is socially useful—which is for the public good and at minimum does not generate ‘negative externalities’, such as contributing to climate breakdown or biodiversity collapse.

Were the pattern of recent decades to be sustained, a dystopia would hove into view of workers under ever-more tight monitoring and surveillance, with an intensified labour process, depressed incomes and no freedom from work demands even away from the workplace. Alternatively, however, the huge rise in productivity associated with digitalisation could be captured by empowered labour and used to seek shorter working time, greater flexibility from a worker’s point of view, more freedom to work from home, a better work-life balance, a genuine sharing of domestic labour and proper valuation of workers in socialised care.
A new ecosystem of digital labour platforms has emerged over the past decade—transforming the very infrastructures of capitalism. The growth of platforms represents a double movement, whereby certain platforms, in key areas such as logistics, food delivery and mobility, are becoming so pervasive and central to the functioning of economies and everyday lives that they are becoming not just corporate behemoths but infrastructures themselves.

In this new system, the platform business model dominates not only how production is organised but also how it is distributed and valued. In this process, platforms also begin to push other, more traditional infrastructures to adopt their business model, as profit possibilities and margins as well as the efficiency of other systems are called into question. The pandemic especially sped up this process, with a rapid platform-isation of work in a range of sectors, from finance to hospitality, as the space and scope for other labour-market
structures diminished or became impossible to sustain under lockdowns.

In short, platforms now shape labour markets around the world—and there is no going back.

Financial hinterlands

Despite its infrastructural role, platform technology is ‘neither good nor bad; nor is it neutral’, as Melvin Kranzberg put it. Technologies come with their own hinterlands, carrying the biases, fallacies and stereotypes of those who designed them. They are also situated in, and reflect the logics of, the organisations and institutions—the political and economic structures—in which they are embedded.

Yet some of these hinterlands are treated as less problematic than others. While the data hungriness of platforms is well-known, where this hunger stems from is not. While the role of algorithms in shaping and obscuring metrics and processes such as price-setting, remuneration and commission rates is widely acknowledged, the global flow of finance—including venture capital, ‘angel’ investments, national pension funds, hedge funds and so on—supporting these platforms to develop these technologies is less so.

This neglect of attention to the financial hinterlands has important political consequences: it restricts the field of critical thought and social action needed to tame the infrastructural power of digital labour platforms. A focus on capital flows also highlights the power imbalance between those
who establish, finance and run these platforms and those who
work for them or consume their services.

Proposition 22

Contemporary political and legal disputes highlight the
increasing financial dominance of platforms in shaping public
opinion and their subsequent influence on regulation. The
recent success of platforms with Proposition 22 in California
is indicative of their pivotal role in lobbying and campaigning
to exert influence and make space for themselves in regula-
tion, while establishing themselves in the eyes of funders and
customers.

Prop 22 was a ballot measure exempting platform companies
from AB5, a labour law passed by the state assembly last year
which would have extended labour protections to platform
workers. What distinguished this proposition from others
was just how much platforms spent to make their case and
the pervasive marketing tactics they used to ensure a
favourable outcome.

A coalition of gig-economy platforms, including Uber and
Lyft, spent more than $200 million promoting their campaign
—the largest sum spent on a ballot in United States history—
while labour advocates raised barely a tenth (although $20
million was in itself not an insubstantial amount). The day
Prop 22 passed, Uber and Lyft shares rose by 18 and 22 per-
cent respectively, adding $13 billion to their combined market
value.
Interests of capital

Platforms have been effective in pressuring regulators across the board to develop legislation favourable to their business strategy, at the cost of workers’ rights. How can we push for fair platform work, if public discourses around it are shaped by the interests of capital as a *force majeure*?

Our research on platform work around the world shows that asymmetries between labour and capital do not always play out in the same way. In some cases, platforms adopt other strategies than the blatant misclassification—of workers as ‘independent contractors’—they pushed for in California. In Germany, for example, Uber had to adapt its strategy and instead subcontracted with private transport intermediaries, which in turn employed drivers. These subcontracted employment arrangements can be extremely precarious for workers, with several drivers earning below the minimum wage, and others expressing uncertainty about whether they would be insured by the platform if they got into an accident.

Our fieldwork in South Africa and India echoes these findings, suggesting that platforms intersect with regional contexts in unique ways, avoiding, evading and circumventing regulatory frameworks and the unionisation efforts of workers. It is therefore paramount to challenge these exploitative logics beyond the realm of labour law.

Points of leverage

There are many points of social, political and regulatory leverage to move towards a fairer future for platform work.
The platform co-operative movement shows promise, though worker-owned platforms are unlikely to outcompete multinationals, in terms of market share and financial resources—given how current funding structures supporting platforms favour market disruption and unfettered expansion, rather than labour rights.

Sanjukta Paul, professor of Law at Wayne State University, argues that there is an antitrust case to be made for platform-worker rights. The aim would be to reallocate co-ordination rights ‘toward the smaller players and away from the dominant ones’, so that ‘a municipality could run the app and publicly coordinate the market, taking into account public interest’.

Looking to the bigger picture, Francesca Bria and Evgeny Morozov contend that the dominance of venture-capital-backed, proprietary platform technology in directing and redirecting economic processes urges us fundamentally to rethink and recreate digital infrastructure as a public good.

Without significant state investment and engagement on national and regional levels, however, such ideas remain well-meaning abstractions and endeavours. As platforms become infrastructural, they begin to serve an increasingly public function—yet without the public accountability to challenge their fundamentally undemocratic governance and ownership structures.

With financial markets rewarding platforms for successfully evading labour-law responsibilities, the stakes for reshaping the trajectories of platform capitalism are higher than ever. Without a matching social and political challenge, it will be
impossible to avoid a future of work where a race to the bottom is the only option.

Funda Ustek-Spilda is a post-doctoral researcher and project manager at the Fairwork Foundation, Oxford Internet Institute, University of Oxford.

Pablo Aguera Reneses is a research assistant at the foundation, working on communications and outreach and contributing to research on the gig economy.

Fabian Ferrari is a doctoral student at the University of Oxford and a researcher on the Fairwork project.

Matthew Cole is a postdoctoral research fellow working on the project, helping lead various parts of it in different countries and strategising how to institutionalise Fairwork principles throughout the platform economy.

Mark Graham is professor of internet geography at the Oxford Internet Institute and director of the Fairwork Foundation.
In the 2010s, the academic and political debate about the future of work was dominated by discussion of technological change and imminent and potentially ever-more-profound effects of digitalisation—in particular, closer interaction between digital technology and work processes and the issue of what work then remained for humans. Over the years, many of us got used to the expectation of change in the structure of the economy and jobs available, with some fear of a disruption which would put major segments of employment at risk.

Yet, including through actual observation, broad agreement emerged that digital technologies would likely not bring human work close to extinction. There would be risks in some occupations and sectors but also potential for new jobs and work enhancement in occupations that were complementary to the technology rather than substitutable by it.

New occupational profiles and more options for participation and autonomy would thus emerge, fundamentally changing
how work was performed. With a view to the digital transition, the main challenge became to identify changes in human work which would make it more resilient (and potentially more attractive, in terms of quality), mobilising these complementarities with technological solutions.

Large differences

While this is a valid overview, there are large differences among segments of employment. There is structural pressure on the medium segment within many administrative and manufacturing jobs. Although particularly large and well-protected institutionally in many European countries, relative to others, it tends to be characterised by above-average routine and therefore potentially automatable tasks.

To avoid long-term decline and job devaluation, this segment thus depends on an upgrading strategy. The strong institutional framework regarding collective bargaining and firm-level articulation and typically standard employment however facilitates skill adaptation and new models of negotiated flexibility, while still requiring innovative ideas.

The situation is different in private services, which have grown as demand has switched, that are interactive, manual, local and therefore hard to automate, while labour is not scarce. These sectors, while less at risk of substitution, tend to be much less integrated into collective bargaining, so there is a stronger role for governmental intervention. This could comprise a minimum wage or restrictions on temporary agency work or on legal grey zones regarding vulnerable self-
employment but also enhanced training via supportive public policies.

At the other end of the spectrum, more highly skilled workers are in an advantageous position due to the dominance of non-automatable tasks—even with the technological frontier moving—but they still have individual capacities to cope and adapt to change over time. These analytical, interactive, creative jobs have been growing continuously, creating more alternatives for workers with relevant skills, but also bringing gains in average income (not always high income) and job quality, in exchange for demanding requirements and work intensity.

It is no coincidence that claims among such workers for greater autonomy and new modes of work have gained a lot of attention. Many work in standard employment relationships, with additional benefits and higher autonomy perhaps, but also with less collective co-determination, their working conditions depending more on the individual power to negotiate. The situation is more standardised in public-sector jobs, such as in health or education, yet much more diverse with respect to the self-employed, who betray still higher degrees of freedom, adaptability to market changes and autonomy but also economic vulnerabilities.

Inequalities and frailties

Covid-19 has brought old and new inequalities and frailties to the fore. The pandemic appears more disruptive than technological change experienced as evolutionary, while this unexpected shock is having a profound impact on some sectors
and occupations that were long-term job-creating engines. It thus interacts with longstanding patterns of technological development, questioning some trends but also highlighting the need to address chronic weaknesses.

This holds in particular for sectors with high shares of the self-employed, such as creative and cultural activities. There we had seen a robust expansion, due to largely automation-proof tasks, but also diverse incomes and patchy social protection, at best, with marginal integration into the welfare state. These highly visible and articulate sectors now have to rely on *ad hoc* measures providing more or less well-designed support for small businesses and freelances.

Many other professionals who work in regular, dependent employment have moved towards working remotely, including from home, but their jobs are otherwise quite resilient in terms of employment and income stability. Here, both for firms and for workers, digital technologies have been the main tool to ensure business continuity.

**Short-time work**

Again, the situation looks different in the medium segment referred to earlier. To the extent that there was a temporary demand shock, short-time work was deployed heavily to stabilise jobs and incomes for those unable to work from home, trying to avoid dismissals or at least postpone them (for the time being) for the core workforce. This is particularly relevant where skills are specific and where a return to existing jobs is perceived as a valid option.
This might not hold in all cases, however—in particular if the temporary decline morphs into long-term changes in demand, markets and technologies. In such cases, short-time work will not be sufficient, as is already the case with those workers who are less attached to individual employers due to more replaceable skills and non-standard work arrangements. Here, we have seen a stabilisation effort through unemployment insurance and minimum-income support, with access to benefits eased and their generosity increased in the initial phase of the crisis.

Jobs in some sectors which had been perceived as relatively resilient to automation, such as in leisure and travel, might suffer from long-term decline. Other sectors are however being recognised as essential, with growing demand—including health and education but also food and delivery, where a revaluation of roles can be observed.

Unequal consequences

Both digitalisation and the pandemic have differential consequences for sectors and occupations. Policy should thus reduce unequal access to social protection while lowering barriers to adaptation, so that transitions to better and more resilient work are facilitated.

Social protection is important for those at risk of losing their job or undergoing longer phases of short-time work. This holds not only for dependent employees but also for many self-employed. It does not suffice to refer them to minimum-income support or voluntary types of unemployment insurance.
A forward-looking policy would be to design unemployment insurance that also works for the specific situation of the self-employed. More status-neutral social policies that do not exclude certain categories of workers and allow for a combination of different types of contracts would also help create a less segmented labour market.

Moreover, while employment protection and short-time work schemes stabilise jobs, we need to find better solutions to strengthen the adaptability of firms and workers when old job profiles and business models no longer work—as appears to be the case in the automotive, events and tourism industries—by updating skills on the job or preparing positive transitions to new roles. The latter may be in different occupations or sectors which have a positive outlook in terms of job quantity and quality.

For the foreseeable future, we need timely mobility from declining industries and firms to areas with stronger and more robust labour demand. This requires a regular assessment of skills in supply and those in demand and an early identification of feasible transition pathways that work for individuals, broadening access to adult learning—way beyond individuals with strong capacities to cope with change or those enjoying training provided by their employer. This needs to be as universal as social protection.

Many of these solutions have been longstanding policy priorities, indeed heavily debated, yet not fully adopted and implemented. The digital transition and the pandemic however create an urgency to reduce barriers in terms of
qualification and employment type, calling for more status-neutral regulation, training and social policies.

Werner Eichhorst is a research team leader at the Institute of Labor Economics IZA and an honorary professor at Bremen University, focused on comparative analysis of labour-market institutions and performance, as well as the political economy of labour-market reform.
The last decade has seen much public and policy debate on the future of work. Standard employment—permanent, full-time and subject to labour law—is still dominant in Europe and non-standard work, with the exception of part-time work, has been growing only to a rather limited extent. But it is more and more acknowledged that something is happening on the European labour market which is not transparent from the data, that this is of increasing importance and that it is influencing the quality of work and employment.

To probe further, in 2013-14 the European Foundation for the Improvement of Living and Working Conditions (Eurofound) conducted a mapping of ‘new forms of employment’ across the European Union and Norway. It identified nine trends, emerging or of growing importance since about 2000, on the European labour market. These related to formal relationships between employers and employees different from the established one-to-one employment relationship, uncommon work patterns or work organisation (notably related to time
and place of work), networking and co-operation among the self-employed, or some combination of these.

The employment form most often identified as new or increasingly important by then was ICT-based mobile work. Here an employee or a self-employed person works from various locations outside the traditional workplace—less place-bound than traditional teleworking and indeed working ‘anytime, anywhere’.

While this trend can be attributed to digitalisation as well as societal change, the second biggest trend—casual work—is rather driven by economic requirements of employers. In this employment form, the employer is not obliged to provide the worker with regular work but can call them in on demand, resulting in an unstable and discontinuous work situation for the employee.

Rising platforms

As the European labour market is in flux, in 2020 Eurofound repeated its mapping exercise, this time to explore how prevalent the nine previously new forms of employment had become. ICT-based mobile work, identified by about 60 per cent of the analysed countries as new in 2013-14, now exists in all countries. Casual work, previously found to be new in about 44 per cent of the analysed states, is now prevalent in about 86 per cent.

Some caution is called for when comparing the two mapping exercises due to the different underlying questions (whether an employment form was new since about
2000 versus whether it existed in the country in 2020) and slight differences in coverage (Estonia and Malta did not take part in the earlier survey). But the substantial furtherance of all nine trends justifies the claim that new forms of employment are of increasing importance in Europe. Particularly striking is the rise in platform work, which was new in about 40 per cent of the countries in 2013-14 but exists now in over 95 per cent of them (Figure 1).

The new employment forms are not only becoming more prevalent across Europe. They also contribute to greater diversity on the labour market within countries.

While in 2013-14 on average three new employment forms had been identified in the analysed states, in 2020 this was true of six on average. In 2013-14, less than 20 per cent of the analysed countries identified six or more employment forms

Figure 1: New forms of employment in Europe, identified as ‘new’ in 2013-14 versus prevalent in 2020 (number of countries) Sources: Eurofound 2015, 2020
as new; in 2020 however, almost 80 per cent found six or more to be prevalent (Figure 2).

![Figure 2: New forms of employment in Europe, identified as ‘new’ in 2013-14 versus prevalent in 2020 (number of employment forms)](image)

While discussions on the future of work and new forms of employment continue, the elephant in the room is the lack of (harmonised) concepts and definitions, which would be an important precondition for establishing regulatory frameworks and generating policy intelligence such as statistical data. Better understanding these not-so-new-anymore trends is probably even more important today than it was a while ago. They are not only part of the more structural ‘twin transition’ to the digital age and a carbon-neutral economy, but also a factor to be considered in the era of Covid-19.

Digitally-enabled new forms of employment could play an important role in the recovery, as might those found to be related to more resilient business models (for example, worker co-operatives) or contributing to a win-win situation
for employers and employees alike, including in economically difficult times (such as employee-sharing). At the same time, some of the new employment forms (casual work or some types of platform work) identified as less advantageous for workers might surge due to lack of alternatives on the labour market in the crisis situation, rendering already precarious workers even more vulnerable.

Nuanced approach

Policy-makers should focus on balancing flexibility with the retention of employment standards and workers’ protection. This requires a nuanced approach: tailor-made interventions should tackle the specific opportunities and challenges inherent in individual employment forms, rather than applying a ‘one-size-fits-all’ stance across the diversity of new forms of employment.

In casual work, voucher-based work, platform work and collaborative employment, employment status should be clarified and sustainable career trajectories ensured, to avoid labour-market segmentation and to support collective voice. In the digitally-enabled new employment forms, the focus could be on monitoring and control, algorithmic management and data ownership, protection and use.

Ensuring adequate working time would be key in those new forms of employment where working hours tend to be too long or too short or characterised by unpredictability. Workers in employment forms subject to less integration in organisational structures could meanwhile be supported in skills development to enhance their employability. Finally,
transversal and entrepreneurial skills could be improved and
good-quality self-employment fostered in new forms of
employment in Europe characterised by high self-organ-
isation.

Irene Mandl is from Austria where she worked in policy-
oriented socio-economic research in the field of employ-
ment/labour markets as well as entrepreneurship and
industry analysis before joining Eurofound as research
manager.
The Covid-19 pandemic has changed the way we live and work in unprecedented ways. According to the second Eurofound ‘Living, Working and Covid-19’ survey, in July 34 per cent of respondents were solely working from home.

Telework can offer greater flexibility and autonomy in work organisation, enhancing efficiency and productivity. It can contribute to a better balance between work, family life and leisure time and cut commuting.

But telework can also blur the boundaries between work and private life, by making workers reachable by phone, e-mail or instant messages outside of normal working hours. This ‘always on’ culture may be aggravated by organisational cultures characterised by heavy workloads and overtime, resulting in long working hours. Moreover, remote working may bring monitoring systems which invade privacy and liberty.
Working from home during the pandemic has led many to extend their working days late into the evening, and to the weekend. Eurofound research has shown that intensive teleworking, a work-life balance conflict, longer working hours and insufficient rest were quite common among employees working remotely and flexibly with information and communication technologies (ICT).

Workers in such arrangements are also more likely to report suffering from health-related problems, such as work-related stress and sleep disorders. So can ICT-enabled flexible work be better framed, to improve the protection of workers, while maintaining the benefits of flexibility for individuals and companies?

Legislation

This is the background to the debate around the ‘right to disconnect’. Yet to be formally conceptualised, it can be described as the right of workers to switch off their devices after work—without facing consequences for not replying to e-mails, calls or messages.

Only France, Belgium, Italy and Spain have legislated for a right to disconnect. They do not prescribe how it should be operationalised and rely on social dialogue, at sectoral and company level, to determine the modalities of implementation. And there are differences in the scope of legislation and the existence of a fall-back option (such as a charter elaborated by employers), should negotiations fail to reach an agreement. In the Netherlands and Portugal, legislative proposals have been made but the process is stalling.
In eight countries (Germany, Finland, Ireland, Luxembourg, Lithuania, Malta, Sweden and Slovenia), a more or less intensive debate is taking place on the right to disconnect, with discussions being most advanced in Germany, Malta and Ireland; in some the debate has re-emerged in the context of the pandemic.

In the remaining 13 member states of the European Union there is no debate on legislation. Existing legislation is perceived to be sufficient, ICT-based flexible work is not widespread—as in most east-European countries—or collective bargaining is preferred when it comes to improving work-life balance, as in Scandinavian countries.
Hard and soft measures

The right to disconnect is being operationalised through a variety of hard and soft measures, determined primarily via company-level agreements. Hard disconnection tends to entail connectivity shutdowns after a pre-defined hour or the blocking of incoming messages—akin to a ‘right to be disconnected’. Softer measures include pop-up messages reminding workers (and/or clients) that there is no requirement to reply to emails out of hours. The latter are often accompanied by training on the importance of achieving a good work-life balance.

While different approaches provide the flexibility to tailor solutions to the company, the implications and impact also differ. A ‘right to be disconnected’ can be more effective and it places the onus on the employer, but it may limit flexibility for both employers and workers. A ‘softer’ approach, based on the ‘right to disconnect’, however requires employees to make a decision—which they may be reluctant to do if perceived as betraying lack of ambition, with potentially negative career implications.

While evaluations of the impact of right-to-disconnect legislation on work-life balance and health and safety are not to hand, there is evidence of a boost to collective bargaining, resulting in more agreements at sectoral and company levels. Notwithstanding the national differences, there is a relatively broad consensus among social partners that the modalities of connection and disconnection, as well as the organisation of working time in remote working, have to be determined and agreed, at least, through social dialogue at company (or/and
sectoral) level, to ensure they are adapted to specific needs. It is however recognised that in member states with low unionisation and attenuated collective bargaining such an approach could entail an unequal playing-field.

EU directive

In a resolution adopted on December 1st, the Employment Committee of the European Parliament said member states had to ensure that workers were able to exercise the right to disconnect effectively, including by means of collective agreements. Adding that this was vital to protect workers’ health, the committee called on the European Commission to propose a directive enshrining the right. This non-legislative resolution is expected to be voted on in a plenary session in January 2021. Once endorsed by the parliament, it would be advanced to the commission and member states for implementation as part of future regulatory decisions.

Given that the pandemic has sparked a new debate in many countries about extending flexible working (including teleworking) to more workers, it is likely that discussions on the right to disconnect will also become more pressing as the ‘new normal’ of working life unfolds. Although some relevant legislation is in place at European and national level, data gathered by Eurofound show that the issues linked to constant connectivity persist.

Even in the absence of any evaluation, what is clear is that in countries with legislation on the issue, the number of collective agreements reached and actions taken at company level have increased. This demonstrates not only the important role
of social partners but also that legislation can provide an impetus for the issue to be tackled, while still open to adaptation to specific requirements at company level.

Oscar Vargas Llave is a research officer in the working life unit of Eurofound.

Tina Weber is research manager at Eurofound.
Recently, public-service unions in Spain signed a major new agreement on telework, covering 2.5 million public-sector employees. The agreement shows how trade unions can negotiate effectively to establish new rights for workers and even guarantees on the delivery of services to citizens.

The unions were responding to the explosion of telework across public administration, as a result of the Covid-19 pandemic, and they wanted to ensure that the short-term, emergency changes to working practices were properly regulated for the long term. The agreement says that telework should be voluntary, reversible and subject to health-and-safety requirements, equality, transparency and objectivity. It also provides for the ‘right to disconnect’, data protection and the right to privacy.

Telework is, of course, a familiar and longstanding part of the transformation of work, driven by digital tools, and more fundamental changes are in prospect as public services adopt new processes and exploit further the potential of artificial
intelligence. While there are concerns about the implications for workers, unions are also aware of the possible benefits of digitalisation.

Major moves

In a survey of affiliates of the EPSU (the European Federation of Public Service Unions) involved in tax administration—where there have been major moves over several years to digitalise key processes—13 trade unions from 10 countries agreed with the assessment that digitalisation had helped improve job quality, with only seven disagreeing. However, most (19 out of 21) also agreed that digitalisation was often introduced as part of a cost-cutting strategy.

EPSU has been keen to understand what is happening across its sectors and in 2017 it commissioned a report by the research organisation OSE (the European Social Observatory) on the impact of digitalisation in public administration (public-employment services) and social services (home care), based on focus groups of workers in France, Spain and the United Kingdom. It revealed positive outcomes in terms of better work organisation and time management, improved communications and reduced commuting and travel time. Workers also however raised concerns about the increased pace and intensification of work, more monitoring and surveillance by employers and inadequate training.

The report indicated the very limited extent to which digitalisation was effectively regulated by collective bargaining or social dialogue—or indeed subject to proper processes of information and consultation. This finding was reflected more
recently in a survey of managerial and technical workers in the UK civil service. The survey, for the EPSU affiliate Prospect, found that 73 per cent of workers were not very confident or not confident at all that their employer would involve them in decisions about how new technology was implemented.

Inclusive strategy

This question was fundamental to a 2017 agreement in Norwegian local government, signed by the Fagforbundet trade union, the Norwegian Ministry of Local Government and Modernisation and the Norwegian Association of Local and Regional Authorities. The aim was to shape an inclusive strategy for the digitalisation of public services and it committed the parties to social dialogue and active worker participation in shaping the transformation.

The agreement stressed the need to involve worker representatives and employees in the process—examples from healthcare showed how shop stewards could be involved in joint committees on digitalisation. Employees were also encouraged to engage individually, with some becoming ‘digital agents’, testing and deciding on the introduction of new digital tools.

Three years on, a report on a project involving 70 municipalities draws positive conclusions in relation to the involvement of employees and shop stewards. Indeed in some cases change has extended beyond digitalisation to the broader relationship between municipal employers and worker representatives.
With the financial support of the European Commission, EPSU has been running a project on collective bargaining and digitalisation. A survey of participants in its first four seminars revealed that 58 per cent thought digitalisation had been implemented in a unilateral way by employers, with only 33 per cent saying there had been any information and consultation; only 8 per cent had been involved in any negotiations. So there is still a long way to go before even most EPSU affiliates are able to ensure they have a role in regulating digitalisation.

Spurious grounds

Information, consultation and negotiation have also been central to discussions between European employers and trade unions, led by EPSU, in central government. The partners concluded an agreement on information and consultation rights on restructuring in 2015 and wanted it to become generally binding, via a European directive. This would have plugged a gap in the existing directive on those rights.

The commission however intervened and refused this on spurious grounds, leaving EPSU no choice but to seek annulment of the decision. The case (T310/18) is now in front of the European Court of Justice, following an appeal.

The employers and unions continued their discussions in a project on digitalisation and work-life balance. This was finalised in November 2019, with the approval of a checklist and series of recommendations, on how to ensure that the progressive digitalisation of services or processes in governments improved the work-life balance of employees.
throughout their career. Managers and central government were also recommended to frame digitalisation in a strong collective-bargaining culture, based on trust, gender equality and regular consultation of employees and civil servants and their trade union representatives.

The European social dialogue in electricity has addressed this, in a framework of actions agreed earlier this year by EPSU, industriAll and Eurelectric, the employers’ organisation. While sharing the view that digitalisation is a challenging opportunity to boost innovation and promote smart technologies, both sides see guidelines as essential to address restructuring in a socially responsible transition. The framework covers training and lifelong learning and strategies to prevent psycho-social risks—particularly recognising the importance of the right to disconnect and safeguarding working-time arrangements and wellbeing at work.

Model agreements

These issues are also being actively tackled at national level by EPSU affiliates. The Unite trade union in the UK and ver.di in Germany have drafted model agreements which can form the basis of negotiations at local, sectoral and national levels. They underline the need to have information in good time and for worker involvement throughout. Training, health and safety and protective measures relating to monitoring and surveillance are also key.

Earlier this year, ver.di began negotiating a collective agreement on digitalisation with the federal government. Although delayed by the impact of Covid-19, the bargaining process
resumed in August with a discussion on the right to training, with the next round of negotiations set to focus on employment security. The union underlines that the aim is to ensure that workers benefit from the opportunities provided by digitalisation and new forms of work, while protecting against the risks.

Digitalisation will continue to be a priority area for EPSU, including monitoring key national negotiations, and collaborating with our global sister organisation, Public Services International, on a new publication on collective bargaining and digitalisation. Further initiatives are also planned—not least a potential major project in collaboration with the OSE, looking in detail at the impact of digitalisation on work and workers in EPSU sectors in eight countries.

While we need to understand better how digitalisation is affecting our members, it is also fundamental to ensure that our unions have the rights to information and consultation, social dialogue and collective bargaining which are crucial to regulate and control the introduction of new digital tools and processes.

Richard Pond is policy officer for the EPSU, responsible for collective bargaining and research.

Jan Willem Goudriaan is general secretary of the EPSU.
The way working time is organised has changed profoundly in recent years. Structural changes in the economy, loosening of labour standards and decline in trade union strength, as well as workers’ changing life-courses and preferences, have fostered more flexible, fragmented and variable work schedules.

But if working time is being adjusted to maximise staffing efficiency and achieve a better alignment between working hours, staffing and workloads—including via zero-hours contracts or on-call work—it is mostly down to growing pressure to cut costs and increase productivity in new ways.

These management strategies are greatly facilitated by technological innovation. Computerised systems can now not only co-ordinate the scheduling of many workers, minimising human mistakes and avoiding overtime payments. A large volume of data can also be collected on daily, weekly or seasonal volatility in customer behaviour, as well as real-time
information on traffic, weather and equipment failures—even a timestamp of a worker at a particular location.

Great difference

The benefits for employers are plentiful, included enhanced control with reduced managerial supervision. But these changes tend to come with a claim that they also benefit workers—enabling them to achieve a better work-life balance and plan work around education, childcare or personal interests.

This view is consolidated by policy-makers accepting such an association, as in the recent European Union work-life balance directive. Yet there is a great difference between the flexibility requested by workers—such as taking time off at short notice to deal with personal emergencies or temporarily reducing working hours to manage care work—and the ‘flexibility’ of the just-in-time workforce.

It is highly misleading that such different mechanisms and logics of organising working time should be lumped together. Academic literature is more rigorous in distinguishing employer- and employee-oriented working-time flexibility but such nuance is all too often lost in the policy discussion. The assertion that all flexibility is good for workers even led a former UK work and pensions secretary to categorise exploitative zero-hours contracts as a work-life balance policy.
Weaker position

When the balance of power is in the employer’s favour, workers have little scope for turning flexibility in working time to their advantage. Their weaker position derives from various factors—notably financial necessity or a perceived lack of labour-market alternatives, whether due to few job openings with labour oversupply or a lack of sought-after skills.

Hourly workers who in theory might choose to decline job assignments or shifts in reality risk various sanctions, such as allocation of less work or less desirable shifts, as well as an immediate income loss for the declined hours. The redefinition of automated scheduling as conferring ‘flexibility’ has perversely served to reinforce the employer’s control over working time.

This is evidenced, for instance, by an app-based automated scheduling system introduced by the giant retailer Walmart in the United States. The company claimed the app would give its workers more control of their time, allowing them to adjust hours to fit their lifestyle and find a work-life balance.

In allocating hours, however, the system favoured workers who registered as much availability as possible—thereby limiting choice as to when not to work and precluding a genuinely flexible schedule tailored to needs. Workers expressed concern that even basic preferences, such as to which part of the day they wanted to work, were not sufficiently taken into account.
‘Entrepreneurial spirit’

Online labour platforms exemplify technology use in the management of flexible working hours. Just as with low-level, hourly jobs in the traditional service sector, most work on platforms is characterised by uncertain hours, unpredictable income and low pay. The platforms have however inserted an aspirational tone in their communication with prospective workers, associating extreme flexibility with freedom and the ‘entrepreneurial spirit’.

Platform workers could truly take advantage of irregular and uncertain hours if they were in a position to refuse work and only work when it suited them. But since platforms matching clients relies on access to a large pool of readily available workers—improving efficiency and driving prices down through their competition—work is scarce and insufficient to meet all workers’ demands. The figure below illustrates the scale of this mismatch, between sought-after and available work, on a food-delivery platform.
Actual and preferred working hours of Deliveroo riders in Belgium (2017) Source: ‘Work in the platform economy: Deliveroo riders in Belgium and the SMart arrangement’ (ETUI)

As a result of the oversupply of workers, their logging into the platform does not guarantee work will be available. Workers thus spend a lot of time unpaid—searching for or waiting for tasks. And they have little control over the allocation of hours—often being assigned no shifts or fewer than those requested.

Moreover, workers who depend on platform earnings as a main source of income have less freedom in choosing which clients or tasks to accept or are constrained to work at very specific times of the day and week to earn enough. They also commit longer hours to work on a platform, which renders their involvement closer to a full-time job and leaves limited scope for exercising any flexibility.

Not surprisingly, workers who expected that platform work would allow them to plan work around other spheres of life
—notably education for students—have in practice found themselves adjusting their private lives to fit around it.

Not all workers are in any case equally equipped to benefit from very irregular work hours and not all needs for work are compatible with highly flexible and unpredictable schedules. We also should not overestimate the desire for flexibility among workers, even if platforms or employers present it that way. As the Deliveroo case shows, even among a young workforce composed largely of students there was a strong preference to work regular hours, with 42 per cent in favour and 31 per cent not (the rest undecided).

Collective rights

What can be done then to ensure that work-life balance is possible in this highly flexible economy?

Informal workplace practices, such as exchanges with colleagues and negotiations with supervisors, can shift the balance of power somewhat away from employers, granting workers more control over their hours. These mechanisms are however essentially lacking in platform work, as there is no ‘shopfloor’ where such informal practices could develop and there is no scope for personal discretion in the algorithmic allocation of work. Moreover, shifting yet another burden and individual responsibility on to workers in precarious positions does not seem right or effective.

A way forward is thus extension of collective rights to all workers—including dependent self-employed and platform workers—so that they have access to effective channels to
influence employers’ decisions and negotiate the terms and conditions of their work. This requires regulatory support.

An important element will now be the EU predictable work directive. If transposed properly, this could restrict highly exploitative practices in working-time organisation—and offer protection against workers who ask for better conditions being given fewer hours instead.

Agnieszka Piasna is senior researcher in economic, employment and social policies at the European Trade Union Institute in Brussels. Her research interests lie in job quality, labour-market policies and regulation, working time, and gender issues. She co-ordinates research in the framework of the ETUI project on contingent and platform work.
Digital labour platforms have been expanding in recent years and the Covid 19-pandemic will probably give them another boost. Even if they do not directly involve most sectors and workers, moreover, some effects are likely to ‘spill over’ into more traditional forms of work.

We have seen how temporary agency work, for example, though engaging only a small share of workers, has put pressure on labour relations far beyond. Labour platforms could likewise contribute to (further) fragmentation of production into ‘business units’ across national jurisdictions, eroding employment relationships and protections.

International regulation of labour platforms thus appears necessary. This is especially so for cross-border, web-based, ‘crowdwork’ platforms, through which tasks such as coding, design or bookkeeping are outsourced globally. (At least ride-hailing or food-delivery platforms are based locally and can be subject to national regulation.)
The International Labour Organization’s Global Commission on the Future of Work proposed an international governance system for digital labour platforms, requiring platforms (and their clients) to respect certain minimum rights and protections—on the model of the ILO’s Maritime Labour Convention for the global shipping industry. Since the commission’s report, discussion has focused on the possible role of (top-down) regulation in this industry.

Little consensus

As yet, however, there appears little consensus behind such an approach within the ILO. At this stage self-regulation, with cross-border social dialogue (CBSD) at its core, could be a more realistic option. The flexibility which voluntary social dialogue offers could fit the evolving nature of this industry and be a first step towards an ILO standard, if the ILO constituents so decided. Indeed, it might remain an element of regulation even once such a standard eventuated.

Inspiration can again be taken from the Maritime Labour Convention. Seafarers’ working conditions are regulated through global collective bargaining within the International Bargaining Forum between the International Transport Workers’ Federation and a Joint Negotiating Group of international maritime employers.

In the crowdwork platform industry, if organised global social partners so determined, CBSD could enable all actors in the crowdwork platform industry to work together to resolve problems and improve conditions—enhancing incomes and ensuring minimum social protection and a level playing-field
against unfair competition, while blocking a possible down-
ward spiral in basic labour standards. And it could pave the
way towards a transnational industrial-relations framework.

Emerging efforts

Yet CBSD requires strong structures of collective representa-
tion and voice. And efforts are emerging to organise platform
workers, with the support of trade unions or through new
collective organisations. The ratio of membership in any form
of workers’ organisation is of course much smaller than in
traditional industries, where organising grew over decades—
but there is something on which to build.

On the other side of the table, however, the situation appears
more complex. There are very few if any collective organisa-
tions representing platforms and none would claim to be an
‘employer organisation’—as platforms, in their vast majority,
do not present themselves as typical employers at all, but
rather as ‘intermediaries’. And there are no indications digital
labour platforms are likely to join established employers’
associations in the near future or opt for representation
through them.

The *status quo* is likely to change though, under certain condi-
tions. Elsewhere awareness of a need to conduct social
dialogue—and reach tangible, bipartite, cross-border agree-
ments—has largely relied on interconnected factors or incen-
tives which could also be important for CBSD involving
digital labour platforms.
Pressure from ‘within’, for instance, can play a role in workers organising, mobilising and protesting, on the one side, meeting a responsible corporate culture combined with a wish to prevent competitors from freeriding on the other. Pressure from ‘outside’ can stem from public awareness of the suboptimal working conditions of platform workers (on the increase due to the pandemic) and an emerging, mandatory, ‘due diligence’ regulation targeting global supply chains (into which crowdwork platforms may be drawn) in some European countries and the European Union.

These pressures could incentivise all sides to enter dialogue. The ‘shadow of public regulation’ has often been crucial to compel actors to join social dialogue. A proactive approach by governments and traditional social-partner organisations could prove essential.

Four themes

The specific issues to be dealt with through negotiations, consultations or exchange of information between global social partners would of course be up to the partners themselves. Drawing on the few examples of stakeholder consultations on platform work—such as the German ‘crowdsourcing code of conduct’ or the British ‘Fairwork principles for online work’—one can nevertheless identify at least four priorities:

- pay and working conditions, as well as data protection and privacy;
- transparent and fair contracts;
• social protection, such as paid sick leave and pensions, and
• freedom of association, worker representation and labour-management consultation.

Of course, this list is not exhaustive—but it would be enough to kickstart social dialogue.

In its 2019 centenary year a fresh mandate was given to the ILO, on enhancing the contribution of cross-border social dialogue to the promotion of decent work, in an increasingly interconnected world of work. While for now there may be reticence, notably on behalf of some states and employers, to go down the route of international regulation of labour platforms, CBSD in the crowdwork industry could prove a credible pathway towards better working conditions and fairer terms of co-operation between platforms (and their clients) and crowdworkers.

This could lead to more ambitious global social regulation, more responsive to the needs of societies and economies in the 21st century.

Thorben Albrecht is policy director of IG Metall, Germany’s largest trade union. He was a member of the Global Commission on the Future of Work established by the International Labour Organization. As a state secretary at the German Federal Ministry of Labour and Social Affairs from 2014 to 2018, he launched the ‘Work 4.0’ dialogue on shaping quality jobs in the digital age.
Dr Kostas Papadakis is a senior specialist in the Governance and Tripartism Department of the ILO, focusing on national and cross-border social dialogue and industrial relations, participatory governance and corporate social responsibility.

Dr Maria Mexi is affiliated with the Graduate Institute—Albert Hirschman Centre of Democracy and the United Nations Research Institute for Social Development, heading the Initiative on Shaping the Future of the Platform Economy and Global Governance. She has also been a consultant at the ILO (Geneva).
When the platform economy launched a decade ago, proponents claimed it would revolutionise the world of work. Optimistic expectations proved febrile, however, as positive stories have not taken off. On the contrary, the companies at its heart face severe criticism over inadequate employment protections (unfair work), freeriding on conventional businesses (unfair competition) and inadequate consumer protection. A big reset is necessary, as the balance has tipped too far in the platforms’ direction.

People choose such work because they value more freedom and autonomy, digital platforms say. Yet there is strong evidence that freedom and autonomy do not always reach their apogee there. Excessive surveillance through algorithmic controls, combined with reduced bargaining power, effectively undermines the freedom the firms tout and their workers desire.

This power imbalance is also manifest in the arbitrary way platforms act to build profit on data generated by workers for
free. The companies need to manifest a compelling vision of data justice, providing fair compensation and workers’ control of the terms of their engagement with data.

Fundamental imbalances

Core to these fundamental imbalances are freeriding mindsets, embedded deep within the platform economy. Throughout the years, in markets across the globe, platforms have been benefiting from freeriding on the security provided by conventional employment.

The pandemic has further exposed this dark side. During the early lockdowns, digital platforms successfully externalised responsibilities on to governments for financial support and on to platform workers for their own protection. Some have even increased surveillance of workers during the pandemic—with the potential this will become ‘normalised’ in its aftermath.

As certain platform-type practices degrade the norms that define decent employment and responsible business conduct, we need to look at where an economy dominated by an ever-growing class of digital freeriders—and an underclass of insecure ‘freelances’—will take us. We need public debate about the limits of platform markets, reasoning together about the right ways of embedding the platform economy in the digital age, distilling what principles governing work we want to protect rather than let perish.

Such an agenda of decent digiwork would engender a robust, democratic dialogue about the moral foundations of the plat-
form economy—with the primary goal a more equitable and engaged society, which rebalances power in digital workplaces.

Mutual interdependence

Securing decent work is above all a call for political action and social activism, recognising our shared responsibilities and mutual interdependence. As we report in a recent International Labour Organization research brief on social-dialogue outcomes reached globally during the early phase of the pandemic, there has been only a vague focus on platform workers and other groups particularly vulnerable to the impacts of the Covid-19 crisis—such as women, migrants and informal workers.

Yet vulnerability has no borders; nor has solidarity. As platform workers’ precarity has grown during the pandemic, we can no longer afford indifference to the many pariahs of the digital economy. Nor can we consume platform services without regard to effect. The evidence calls for new types of vigilance, where institutions and citizens alike have a role to play.

Mobilisation on the part of social partners—which have valuable, sector-specific knowledge—is also vital to level the playing-field, by bringing pressure for more fine-tuned regulation or by pushing digital platforms to come to the negotiation table. This in turn makes it critical that we enable platform workers to have a voice at work.
Governments and international agencies also need to put in place effective frameworks of due diligence on labour issues, covering the platform economy, and support a formal role for labour and civil society in these frameworks. In the case of globalised crowdwork platforms, such arrangements can lead to rebalancing power asymmetries in their cross-border operations. All these issues will soon be put on the table more intensely, as telecommuting and virtual service delivery are triggering an acceleration of the globalisation of services—in which crowdwork platforms play an important role.

Pressing platforms to adopt voluntary codes of good conduct is also important for addressing imbalances. In the long run this could bring together existing initiatives in a broader and coherent global framework, which could be actively endorsed by organisations such as the ILO and the European Union. While voluntary codes are no ‘silver bullet’ for fixing problems, they can have a more immediate impact than ‘hard’ law, which tends to move more slowly.

Transparency and justice

The time has come also to embed transparency and justice in labour markets and societies increasingly defined by data. Workers’ demands for data compensation are likely to become one of the most confrontational issues with platforms in the years to come. New trade union strategies will be needed to push forward a data-as-labour agenda, which could enable ‘data labourers’ to organise and collectively bargain with platforms. All this requires, on one hand, global
trade union co-operation and, on the other, country-specific action.

Today, as the platform economy evolves, governments worldwide struggle to put in place far-reaching solutions, with international and multilateral co-ordination weak. Considering the cross-border aspects and heterogeneity of platform work and markets, a global observatory dedicated to the platform economy could strengthen synergies and add policy coherence.

Such an observatory could be entrusted with monitoring and providing country-level support on such issues as working conditions, algorithmic management and control, or cross-border social-security co-ordination. It could be administered by an existing international institution with a strong normative labour-standards agenda, such as the ILO.

One of the most worrying tendencies of our time is the diffusion of the undesirable mindsets and attitudes that govern most platform-type work and markets—by their very DNA less equitable and inclusive—into other spheres of life, devaluing the solidarity on which democratic citizenship depends. There is no bigger challenge today than the need to offset the risk of a platform economy gradually becoming a ‘platform society’. We can still reverse this but it will take a lot of work—individual and collective.

An agenda of decent digiwork is as much about identifying the agents of transformation as it is about articulating new ideas. It is, above all else, about people and their aspirations for a future of work which takes a big turn for the better.
Dr Maria Mexi is affiliated with the Graduate Institute—Albert Hirschman Centre of Democracy and the United Nations Research Institute for Social Development, heading the Initiative on Shaping the Future of the Platform Economy and Global Governance. She has also been a consultant at the ILO (Geneva).
Democracy, as a fundamental value of the European Union, provides the foundation for the trade union movement, with solidarity its *raison d’être*.

Democracy at work is one of the cornerstones of the social-market economy. Workers’ voices find expression in the exercise of collective rights, in private and publicly owned companies. Day after day, trade unions effectively exercise those rights and defend the interests of workers.

Exploiting loopholes

Democracy at work cannot however be taken for granted. It can only be considered consolidated as long as a majority of actors respect and support democratic principles and the exercise of democratic rights.

Democracy also relies on strong democratic institutions, to adopt and review legislation, so as to guarantee the *effet utile* of workers’ rights to information, consultation and participa-
tion. EU and national legislators should guarantee that European law does not lead to *de facto* circumvention of participation rights—as when businesses exploit loopholes in the European Company directive or create letterbox companies.

Lack of recognition of information, consultation and participation rights is a telling denial of democracy, not least in the public sector. On this, the European social partners in central government have negotiated an agreement, which should find its way into EU law.

New company forms

Likewise, new company forms—especially in the digital economy—should be regulated, so as to stop those business models circumventing fiscal and social rules, and in particular workers’ participation. This is leading to in-work poverty and precariousness, drastically affecting young people and women.

Digitalisation has a profound impact not only on how people work, their workloads and their health and safety at work. It also brings with it new means of management and control, and new forms of surveillance of workers’ behaviour and performance. This should be addressed, so that trade unions can defend workers’ rights to data protection and privacy.

All these attempts to minimise, sideline or evade workers’ rights clearly show that democracy at work is nowhere near as widespread as it should be. They weaken trade union structures and reduce the means available to workers and
their representatives to defend and promote the interests of the workforce effectively. It is therefore of utmost importance to set standards within the EU.

Critical part

Democracy at work is not just nice to have—it is a must. It is fundamental to the trade union movement. Strong trade unions defend working people’s interests in Europe and the ability of workers to express their demands collectively is a critical part of the functioning of democracy at work.

For many, it is at the workplace that they experience the support of their trade unions most directly, most visibly, thanks to works councils and trade union delegations and occupational health and safety committees. European works councils and representatives on boards are the few places where unions have influence at company level—all the more important to counteract businesses’ short-term economic and financial interests.

Why? Not only is democracy at work the prerequisite for a wide range of positive outcomes for workers, business and society. It also delivers, in good times as well as bad, and is the foundation of social and economic cohesion.

Co-determination

The evidence clearly shows that those companies where workers’ representation and participation rights were respected, and effectively exercised, weathered the financial and economic crisis of 2008-09 more successfully than compa-
nies without co-determination. Democracy at work also promotes better quality jobs and wellbeing at work, respect for health and safety, higher wages, better working conditions, more productive workers, higher labour-force participation and more innovative companies.

Democracy at work is in any event a fundamental right, fostering more equal societies and more active and confident citizens through greater worker involvement at the workplace. Workers’ participation is the most powerful democratic antidote to inequality.

And co-determination is not just a promising idea for the future to help strengthen the presence of workers in corporate governance. It is an instrument of collective control over the disruptive and damaging impacts of globalisation, which is already anchored in law in 18 of the 27 member states of the EU.

Action urgent

It is the political and social responsibility of the EU and member states firmly to address these issues. This is all the more important during an unprecedented pandemic, when working people and their families should be at the core of political action. The European Trade Union Confederation, together with the European Trade Union Federations, has repeatedly alerted the EU and national institutions to the need to act urgently.

The labour ministers’ statement at the last Council of the EU meeting in October is a first step in the right direction. It is
however not enough—words should be transformed into actions.

Concretely, democracy at work should entail:

- revision of the European Works Council directive, so that workers and their representatives can be informed and consulted effectively;
- elaboration of a new EU framework for information, consultation and participation of workers, so that businesses do not use EU law to circumvent workers’ voices;
- anchoring board-level employee representation rights in EU company law, so that democracy at work becomes an essential element of sustainable corporate governance and a prerequisite for companies to do business and exercise freedom of establishment in the EU, and
- rendering access to public funds and public procurement conditional on democracy at work.

Democracy at work needs much more than a mention of the EU *acquis* in the European Pillar of Social Rights—failing to identify any new, progressive course of action. The EU also needs substantive inclusion of workers’ voices in the implementation of the pillar.

**Autonomy and power**

Far from weakening the need for democracy at work, the pandemic has revealed that workers’ participation is
extremely important in such critical situations, in mobilising forces and resources for working people and their families to maintain employment. In good times, meanwhile, workers’ participation substantially strengthens workers’ voices and autonomy over their work, and their power over work processes and their working environment.

It is a means to shape the company they work for, whether publicly or privately owned, and the economy as a whole. Fundamental rights cannot stop at the factory gate nor at the office door. They cannot be secondary rights either.

More democracy at work is crucial for social and economic cohesion. We should invest much more in making it happen, now, and in shaping a responsible and sustainable future for the people of Europe.

Isabelle Schömann was elected confederal secretary of the European Trade Union Confederation at the 14th Congress in Vienna in May 2019. From 2005 to 2016, she was a senior researcher with the European Trade Union Institute in Brussels.
There’s little doubt the adoption and integration of digital technologies in the workplace have, in principle, great potential to make humankind safer. If we look at past waves of technological advance, we can see how these have ameliorated health and safety and working conditions. There is also growing evidence of the benefits of intelligence-led transformations in the world of work—when ethically implemented.

Robots are being deployed in environments dangerous for workers and technological developments have put an end to certain dangerous and demeaning jobs. Automated systems and the ‘internet of things’ can improve workplace safety with better prevention mechanisms, bringing reduced injuries, as well as increased capacity for human creativity. Robotics and artificial intelligence can alleviate repetitive and stressful tasks which cause musculoskeletal disorders or mental ill health.
Drastically accelerating

In this exciting context of work, employers are drastically accelerating corporate strategies prioritising workplace productivity and business performance and how, in that context, these systems will operate in the future. At the same time, there is increasing demand from the public and civil society for better understanding of how the digitalisation of workplaces will affect workers’ conditions and health and safety.

Many of these fast-moving and highly competitive firms preach the ‘our people are our most important asset’ narrative. Yet when tech companies have addressed the transformative impact of technology in the workplace, ‘the people’ have not seemed to be at the centre of their strategic agenda. Profit-making has remained the priority, leaving workers behind. This needs to stop.

Under these circumstances, workplace safety is sacrificed to a production-first mindset and the over-performance of employees. Cutting-edge businesses have been found to keep occupational injuries off the records and to misreport practices, making their due diligence look better than it should. During the pandemic, tech companies have faced criticism for keeping their workplaces fully operative while failing in their duty of care to protect their staff from the risks of contagion.

Different picture

The actual picture is thus far different from the one initially painted. Recent research suggested that physical workplace
injury should fall as a result of more pervasive automation. Platform workers were ‘sold’ an illusion of flexibility, freedom and independence. The adoption of AI should have improved the collection and analysis of information needed to assess and manage workplace safety and health hazards and ameliorated routines causing worker fatigue or psychological stress. Latest developments in people analytics are capable of detecting patterns across workers’ data, which could help monitor employees’ health and wellbeing. But the benefits of investment in these technologies for the improvement of working conditions are yet to be evidenced.

Investigations of the real effects of rapid digital disruption in the workplace are holding companies accountable for the negative impacts of technology developments:

- A leaked Amazon memo revealed plans to hire intelligence analysts to track attempts to organise its workforce. The firm has heavily invested in the automation and robotisation of its warehouses, to the detriment of workers’ safety. Company records obtained by Reveal from The Center for Investigative Reporting showed work-related injuries were 50 per cent higher at robotic facilities than in its conventional warehouses. Robots have become an efficient tool, but this has had a knock-on effect on workers’ productivity expectation, work intensity and pressure.
- While the Tesla chief executive, Elon Musk, has described automation as humanity’s ‘biggest existential threat’, the company’s aggressive
production projections are affecting working conditions. Although there have been technology-related improvements to safety practices, together with incorporation of ergonomics principles into the design phase, the firm is struggling with workplace safety issues.

- In 2017, it was reported that Barclays used a tracking software, OccupEye, surreptitiously to monitor the presence of its workers at their desks, impinging on the privacy of staff and affecting their mental wellbeing.

The incorporation of automation, AI systems and so on in workplaces by technologically advanced companies is thus coming under intense public scrutiny. Associated practices have recently been exposed in *American Factory*, *The Social Dilemma* and *The Great Hack*, documentaries which have only scratched the surface of how world-leading tech firms have the potential to produce profound transformations in the global workforce.

It’s critical that organisations shift their business strategies from a technology-centric work culture to one that puts people at the centre. Corporations in the digital age need to keep pace with requirements for public disclosure, stronger due diligence and policies and practices for the governance of AI. And before individual technology transformations are deployed in a workplace, a safety assessment must be performed.
Dr Ivan Williams Jimenez is a policy and advocacy manager at the Institution of Occupational Safety and Health in the UK. He supports IOSH’s global advocacy on health, safety and wellbeing, corporate social responsibility, sustainability, supply chains and decent work. The views expressed here are those of the author and do not necessarily reflect the views of IOSH.
Earlier this year, when the coronavirus started to spread, the supply of hospital ventilators was at crisis point. Within weeks, sectors as diverse as Formula 1 engineering and vacuum-cleaner and military-hardware manufacturers had switched to turning out medical equipment.

It did not escape notice that the speed of design and testing in these industries could be applied to more beneficial products. Yet why does it take a worldwide pandemic to encourage socially useful activities?

The idea is not new. September 2020 saw the death of Mike Cooley, the pioneering engineer and trade unionist who in 1976 led workers in the British aerospace industry to develop the Lucas Plan. Confronted with the loss of thousands of manufacturing jobs due to restructuring, they demanded the right to socially useful production.

The plan—based on the skills, experience and needs of workers and their communities—took a year to complete and
included market analyses and economic arguments, as well as ideas for retraining and new management structures.

Redundancies waste society’s most precious asset—the skills, ingenuity, enthusiasm, energy and creativity of workers. The plan proposed more than 150 alternative products, including wind turbines, heat pumps, hybrid cars, better braking systems and kidney-dialysis and portable life-support machines. It was ahead of its time, designing items to protect the environment as well as people, and attracting attention around the world.

Role of new technology

Consideration of socially useful or satisfying work inevitably impinges on digitalisation, new technologies and their impact on ways of working. Karl Marx famously noted: ‘In the handicrafts and manufacture, the workman [sic] makes use of a tool, in the factory, the machine makes use of him.’ Well before contemporary innovations in automation and digitalisation, workers were already experiencing alienation.

Of course, it is not technology *per se* that is the problem but the way it is developed and applied, for example largely excluding women from design decisions. Rather than enabling the soul-destroying deskilling of labour, it could allow people more time for constructive activities. Rather than furthering the never-ending pursuit of ‘growth’, it could be dedicated to socially useful ends.

Marx also said that what distinguished the worst of architects from the best of bees was the capacity to imagine. And
Cooley outlined two alternatives: either human beings will be reduced to working like bees under the systems imposed on them, or they will be the architects of new advances in human creativity, freedom of choice and expression.

‘It is not only factory workers who may experience alienation. Whenever workers are in a position in which [they] … cannot control the uses to which their work is put, they are alienated,’ argued John Graves in *Liberating Technology*. ‘People’s sense of life, of fulfilment and of purpose … can derive only from doing work with a definite objective, in a given social context, involving certain human interactions of relationships and having a certain value.’

Such value can be found in unexpected places. Interviewing steel workers in Britain in the 1970s, Polly Toynbee found they were proud of their furnaces, however unpleasant and dangerous, because they believed steel was a vital resource and their work mattered. The same applied at one time to coalmining.

Trade unions’ demand for ‘quality jobs’ implies not only decent pay and good working conditions but also job satisfaction. But can job satisfaction be equated with socially useful work? The notions of respect for people and the environment, work-life balance, freedom of choice, creativity and a sense of purpose should be central to both.

This requires a re-evaluation of many tasks, especially of women’s traditional caring work and the fulfilment it offers at home and professionally. One striking aspect of the coronavirus crisis has been the dedication of care workers—invariably women—in residential homes, often at the expense of
their own safety. The many examples of carers self-isolating at work—cutting themselves off from their own families for weeks—to protect elderly residents, go beyond professional obligations. We have seen carers in tears after the deaths of individuals to whom they had grown close. Prioritising socially useful work means a fundamental reassessment of the value of jobs that have always been low-paid and low-status.

At the same time, climate-conscious young people are increasingly demanding jobs that avoid further environmental damage and offer them a sustainable future.

How to do it

Enabling workers to take more control—to be architects instead of bees—would make work more satisfying and more ethical. Work organisation in companies, from online platforms to production lines, is largely designed for the convenience and profit of employers. Greater worker influence could help to generate human-centred design choices, as well as eroding the barriers between high-skilled employees and those carrying out low-paid and tedious tasks. Inevitably, some jobs—however socially useful—are likely to be boring and arduous. It is the organisation and control of such work that makes the difference.

The best way to strengthen workers’ voices is through trade union organisation. Existing systems for worker participation, such as European Works Councils and seats on corporate boards, offer an initial step forward.
But sometimes direct action is necessary. Following the military coup in Chile in 1973, employees at the Rolls Royce plant in East Kilbride, Scotland, discovered that engines from their factory were going to the dictatorship. They refused to work on them. During a period of four years, they managed to ground half of Chile’s air force.

Other options include workers’ co-operatives and social enterprises, which are increasing in number and range of activities across Europe. Recent EU research finds tens of thousands operating in Belgium, France, Germany and Italy.

Back to the future

Accounts of the Lucas Plan experience tend to view it as a product of the 1970s—a time of real hope of social progress. Yet the desire to dedicate one’s labour to something worthwhile remains more relevant than ever in the context of Covid-19 and continues to inspire new initiatives.

As the 2020 travel lockdown started to affect the aviation industry, in the first three months of the pandemic Airbus suffered a 55 per cent drop in year-on-year revenues and predicted the loss of 15,000 jobs. At its headquarters in Toulouse, 3,400 workers—many of whom had been with the company for decades—were threatened with redundancy.

In response, l’Atécopol, a collective of more than 100 local scientists and researchers, put forward its own proposal. Recognising the lack of certainty about the aviation industry’s recovery, coupled with the damage it inflicts on the environment, the plan foresees no return to business as usual. ‘That is
why we believe that it is high time to open a difficult but clear-headed debate on the reconversion of the sector and your companies.’

It calls for a public-service objective, to prioritise the common good, like health services and public transport. ‘Responding to the essential needs of our population, far from market injunctions and imperatives linked to economic growth and international competition, would make sense, for you and for our society,’ it concludes.

The pandemic has forced society to stop and reflect on what is really needed for the health and wellbeing of all. Guns or ventilators? This opportunity to step up the demand for socially useful work must not be missed.

Kate Holman is a freelance journalist based in Brussels and an editor and writer at the European Trade Union Confederation. The views expressed in this article are her own.
Last year the International Labour Organization adopted its ‘Centenary Declaration on the Future of Work’ to face into the organisation’s second century. Now—one year and a severe crisis later—it is time to review the declaration and, even more importantly, move from declarations to action.

The declaration was based on a report from an independent Global Commission on the Future of Work. But while the report suggested concrete steps actively to shape the future of work, the official ILO declaration merely adopted some headlines and buzzwords. It fell short of taking on the active policies advanced to secure the proclaimed ‘human-centred approach to the future of work, which puts workers’ rights and the needs, aspirations and rights of all people at the heart of economic, social and environmental policies’. 
More urgent

But active policies are even more urgent, since we have witnessed during the Covid-19 crisis a boost in the use of digital technologies. We have seen the opportunities of these technologies, but also how dependent we are on monopolistic platforms—and how vulnerable are those who keep these platforms running every day. We are aware that a number of jobs lost in the crisis will not return in a recovery but rather be displaced by technology.

We have seen how important good public services are and we have all applauded the care workers, especially in health, who have held up humanity and saved human lives—often risking their own. But will there be long-term appreciation of care and investment in it, including better wages and working conditions for care workers?

The vulnerability of informal workers has become visible, especially in the global south. But do we really expect better social protection after the crisis? Or measures which ensure that new forms of informal labour, such as on the fast-growing labour platforms, are regulated to protect those working there?

Global supply chains—already under pressure from the unilateral power politics of the largest global economies—have shown too their limits in the crisis. But will they be redesigned so that sustainability, as well as human and workers’ rights, becomes an important factor?

The current health crisis and the economic crisis which has followed will speed up transformations already under way,
especially the digitalisation and decarbonisation of our economies—and maybe deglobalisation too. Only if active policies to protect workers in these transitions are effected by governments and multilateral organisations can a just transition towards a human-centred future for work be possible. The 2019 report from the global commission provides important ideas as to what these policies could look like.

Investment priorities

The report urged governments to invest in the care economy, the green economy and rural economies. It called on them to supply high-quality physical, digital and social infrastructures, as a prerequisite for the transformation of our economies to promote decent and sustainable work. Now that governments and multilateral organisations are having to invest huge sums to foster a recovery, these priorities could guide them. And the promotion of social dialogue—also a key element of the commission’s recommendations—could make sure that recovery measures benefit both the economy and the wider society.

The report also called for a transformative and measurable agenda for gender equality, including public policies to foster the sharing of unpaid work. This seems even more urgent now, since we have witnessed a backlash on gender equality and women’s share of unpaid work is increasing.

The same is true of the commission’s plea for universal entitlement to lifelong learning, helping workers and the unemployed to reskill, upskill and acquire new skills through an appropriately financed learning ecosystem. Against the back-
ground of soaring unemployment and the ever-faster application of new technologies, financing the (re)qualification of unemployed and workers vulnerable to technological change needs to be part of any recovery scheme.

With the growing use of artificial intelligence at workplaces and the increasing power of labour platforms, harnessing and managing technology for decent work should also be a priority. The commission’s recommendations included a ‘human-in-command’ approach to AI and an international governance system for digital labour platforms, to ensure certain minimum rights and protections.

Also, the report called for a ‘universal labour guarantee’ to secure fundamental workers’ rights, an adequate living wage and safe and healthy workplaces, regardless of contractual arrangements or employment status. This could be an answer to the vulnerability of non-standard forms of work which has become apparent in the Covid-19 crisis, as has the importance of safe and healthy workplaces.

The same is true for social protection, as we have witnessed the cost of insufficient welfare systems—including the loss of human life—during the pandemic. An adequate, universal social-protection floor, complemented by contributory social-insurance schemes providing increased protection, must be a priority for governments in the aftermath of the crisis.

International co-operation

All these policies should steer not only governments but multilateral institutions as well. The ILO has provided impor-
tant guidance through global, regional, sectoral and thematic recommendations during the crisis. A human-centred, post-crisis, growth and development agenda depends even more on coherence across policy areas and national boundaries. International co-operation remains crucial in reacting to the crisis and for recovery measures.

Against this background, it would be helpful to reactivate the global commission or find other ways to develop a post-pandemic agenda for the future of work, with concrete measures to secure a just transition. It is even more important now than a year ago to walk the walk and put this agenda, and associated measures, into practice.

Thorben Albrecht is an internationally acknowledged expert on the future of work. He was a member of the Global Commission on the Future of Work established by the ILO. As a state secretary at the German Federal Ministry of Labour and Social Affairs from 2014 to 2018, he launched the ‘Work 4.0’ dialogue on shaping quality jobs in the digital age.
Since we have come to live with the coronavirus around the globe, ‘digital work’ has been enjoying an unprecedented boom. To ensure social distance, we had to work in a kind of isolation for months (and still have to or will have to again), but it works. Thanks to digitalisation, we use more and more tools to work, communicate and collaborate productively, even from home. Yet realising the goal of ‘good mobile work’ depends closely on the labour-law framework and collective agreements—including over working time, privacy and surveillance and individual circumstances such as childcare.

We are working on bridging this gap. And at least employers have to admit now that flexible work, allowing employees more self-determination, is successful and doesn’t ruin the company. Prejudices regarding the motivation and work discipline of ‘home-office’ workers have not been confirmed. That’s the good message.
Turning the tables

But employers are already starting to turn the tables: companies are reducing office spaces, to create a ‘more distributed workforce’—and to cut costs, because, as we know, work at home works. But what does it mean for the future of office work? Do employees have to work out of office because they have lost the daily ‘hot-desking’? Shall we have to book a ticket for the use of an office? And will the further availability of working space or equipment for employees depend on their performance—all monitored by artificial-intelligence (AI) systems?

The nature of ‘mobile work’, including work at home as an opportunity for self-determined flexible work, would then change fundamentally. Under German labour and constitutional law, it is not possible simply to transfer work to the private rooms of employees. If employees work at home regularly it has to be linked to certain provisions, to safeguard occupational health and safety, which means additional efforts on the part of employers.

Employers are trying to prevent exactly this. They are declaring ‘home office’ as mobile work—suggesting a new, limitless freedom—to circumvent regulation.

Dealing with the digitalisation of work, we witness the power of employers to set ‘the facts’, as we have known it for ages. At the same time, technology is being used to change work, and power, structures. And the coronavirus crisis seems to be being exploited as an accelerator, to enforce employers’ or
shareholders’ interests—particularly through job cuts via automation and a new level of surveillance.

Massive job losses

On the one hand, many companies are obviously under pressure due to the pandemic. So while the digital push can engender new, collaborative forms of work, managers can use the opportunities offered by digitalisation to cut jobs as far as possible via automation. Trade unions and workers are already facing massive job losses and job security is a high priority in many areas. The pressure will likely only increase.

This scenario is linked to the new wave of AI systems at workplaces. It’s no coincidence that there are initiatives such as IBM’s ‘Human Friendly Automation’, demanding a higher awareness of the impacts of AI in the workplace, especially regarding the number and quality of jobs. ‘Change impact plans’ to assess the consequences of AI systems for employees, as proposed in March by the German trade union confederation, the DGB, are not mandatory but they should be—and the sooner the better.

While policy-makers focus on assistance systems and the much-invoked human-centred design, corporate strategies seems to have changed significantly. The assumption of increasing risks to workers makes regulation all the more necessary—for example, in relation to AI systems affecting workers’ rights and job security—as proposed in the European Commission White Paper on Artificial Intelligence.
The crisis shows in particular that a shift in the balance of power at the expense of employees must be countered politically. This applies to the legal framework, especially regarding co-determination and the negotiating position of employees, works councils and unions.

Surveillance software

On the other hand, the upheaval caused by the pandemic has been accompanied by increasing use of surveillance software. Here we can witness a link to AI systems, too: the ‘spyware’ is not only being used to track or control employees but offers opportunities to measure individual productivity and workers’ behaviour. This form of ‘management by algorithm’ shows that new, remote-control systems are emerging.

Disguised as support for the workforce, it’s as if workers are themselves being turned into machines. And while AI systems provide an appearance of objectivity, this cannot be verified appropriately due to the lack of transparency. If such systems were to be established in the world of work on a large scale, there would be far-reaching consequences in terms of the balance of power, remuneration systems, occupational health and safety and so on.

Of course, there are safeguards in data-protection law (GDPR) and certain co-determination rights (in Germany), although there are loopholes and gaps. But experience shows companies tend to test the limits and often breach them. Moreover, not all employees are protected by collective agreements or works councils.
This is not painting a future dystopia but the evidence of today. Managers talk about a ‘new normal’ in the world of work but this must not mean that appropriate regulation is no longer required. German employers’ associations have been calling for a softening of labour law for years—and are exploiting the crisis to assert these claims from the last century.

Appropriate framework

Policy-makers have to act and set out an appropriate framework to foster good digital work by using technology. Here we can see another gap, however—between the political discourse and the reality created by business. The lively debate on the use of AI at work is engendering much dialogue but no tangible results, in terms of regulation to resolve what are inevitably conflicting goals.

There is an urgent need for a modern framework for the work of the future: fostering transparency and traceability of technology, bargaining on an equal footing, protecting privacy adequately and empowering workers. In this context, additional training opportunities for employees should be supported and publicly funded to a much greater extent.

So far digitalisation has been a great promise on the political stage. It would be a disaster if it turns out to be an empty one—and the much-vaulted possibilities for self-determination result in more insecurity, alienation and inequality.
Oliver Suchy is head of the Digital Workplaces and Workplace Reporting department of the German Trade Union Confederation (DGB), with a focus on shaping artificial-intelligence systems for good work.
It is widely believed that the new digital technologies are opening up completely new potential applications, with social and economic consequences no less than disruptive. In the public debate, this is linked on the one hand to fears of massive job losses, the discounting of qualifications and far-reaching control over workers. On the other hand, digitalisation is envisaged as facilitating innovative work design and decent working conditions, or ‘new work’.

This thesis cannot be fundamentally refuted. In a range of sectors—information technology, software and various service fields—digitalisation has been associated with sustained, far-reaching, structural change for many years. But this is by no means true of most sectors and work processes.

Contrary to expectations, as expressed especially in the German-initiated ‘Industry 4.0’ discourse, evidence shows
that industrial production in particular has in recent years seen only moderate innovation patterns and transformative tendencies. Available empirical findings show this especially for the large German manufacturing sector and the same can be observed in many other European countries: the reality in most companies remains technically and organisationally very conservative.

Indeed, digitalisation in industrial production has up to now been a path-dependent transformation of work processes. In the vast majority of companies there is no lasting change in work, nor are the much-discussed design options for ‘good work’ really being used.

Digitally-based process innovations in most companies proceed mainly incrementally, closely bound to given technological, functional, organisational and economic exigencies. While debate tends to focus on large, technologically ‘high-end’ companies, in most average-size and especially smaller firms digitalisation takes place only step-wise and within limits. This is evident from statistical data on the spread of digital technologies in German industry, as well from case studies.

Path dependency

The relationship between new and old technologies in companies can be traced to the well-known mechanisms of path dependency. As new systems are added, existing IT solutions are optimised through regular updating with new hard- and software, improved networks and increased data availability. Meanwhile, existing processes undergo partial
improvements and the elimination of ‘bottlenecks’, such as unreliable onward data transfer or absent network capabilities.

These incremental steps are accompanied by a structurally conservative approach to work processes: the dominant organisational and work-related structures are largely retained, despite the implementation of new digital technologies. At most they are changed by marginal modifications to work procedures to accommodate the new technologies, and then continually adjusted.

An ongoing optimisation process, often in small steps, brings increasing returns to firms, reinforcing the existing structures. Most companies thus retain well-established work practices and job qualifications—radical change in established practices in production areas has not yet been discernible.

‘Piles of paperwork’

This can be illustrated by one small German logistics company. It introduced a digital information system to get rid of unwieldy ‘piles of paperwork’. To this end the company’s forklift drivers and packing workers were to be supported by new PCs or tablets, on which the next five to ten pending orders were to be displayed, individually confirmed and sequentially carried out by the driver.

Recognisably, a certain freedom of decision enjoyed previously by these workers was thereby to be largely eliminated. At the same time, however, the annoying disruptions and
stress formerly resulting from information errors would also
be removed.

Currently observed tendencies can thus be characterised as
simply the *updating of work processes*. This indicates a very
moderate pattern of technological and social innovation,
whereby companies, in the course of digitalisation, implement
new technologies and develop qualifications and competencies
only in proportional to existing plant and work organisational
forms and without substantially changing their structures. In
theoretical terms, in the sense of path dependency these trends
can be considered ‘small events’, bringing gradually increasing
returns through stepwise and moderate changes.

**Coronavirus crisis**

Perhaps, though, this pattern of path dependency could be
succeeded by fundamentally disruptive change in industrial
work and an implementation of innovative patterns of
‘decent work’? This question becomes germane in the context
of the coronavirus crisis.

The current situation can be described, in the sense of the
Italian philosopher Antonio Gramsci, as an interregnum—an
interim period in which old certainties become obsolete but
the new order is not yet really recognisable. This is especially
ture of the future of work.

A widespread opinion is that the pandemic will lead to a
surge in digitalisation, because the new technologies offer
solutions to the economic and social challenges the crisis
presents. As we already know, digitised modes of communication are becoming more extensive and flexible working between home and ‘workplace’ will probably gain in importance over the long term.

Furthermore, the requirements of more flexible markets, new service- and customer-orientated strategies, and faster technology changes—in the context of greater ecological demands—are pushing companies to transcend previous technical and organisational structures. In particular, change in long-established forms of work becomes necessary because of their inflexibility and/or limited capacity for innovation. New solutions in work design, with a staff of highly skilled and motivated employees—albeit very often reduced—will be inevitable.

Technological prerequisites

Politics must however support these prospects for decent work more sustainably than before. It should act as midwife especially of innovative forms of work. It should make clear that digitalisation establishes the foundational technological prerequisites for this—that it can promote and not endanger employment, and that new technologies can support and guide work without deskilling it or restricting the autonomy of employees.

Examples of the successful transformation of work—as positive good practices—should be systematically disseminated and made known. And politics should emphasise, more explicitly than before, that decent, digitalised work is a funda-
mental element for social cohesion, inclusion, participation and self-realisation.

Hartmut Hirsch-Kreinsen is a former professor of economic and industrial sociology at the TU Dortmund and currently a senior research professor working on the digitisation of work and industry 4.0, in close co-operation with the Social Research Centre Dortmund.
With the Covid-19 pandemic, Big Tech finally attracted positive headlines again. Amazon secured the distribution of face-masks, disinfectants and toilet paper. Alphabet’s Verily established a virus-testing scheme in California. Apple and Google together enforced a privacy-friendly solution for national contact-tracing apps.

This sounds like good news, yet these incidents not only manifest Big Tech’s ever-growing infrastructural power but also its appropriation of the ‘foundational economy’ of goods and services critical to the daily reproduction of society. This is the sphere, conventionally, of public goods—non-rival and non-exclusive, delivered by public institutions rather than private corporations.

What has happened in the course of the pandemic does not however come as a surprise. If leading companies of digital capitalism tap into the public domain it does not evoke bewilderment any more. A while ago, a manager of the German public railway company, Deutsche Bahn, told me in all
sincerity he feared the large-scale involvement of Amazon. The German automotive industry has been discussing such scenarios, with reference to Google and others, for years.

Cashing in

The idea of an unstoppable expansion of Big Tech is basically just the extension of everyday experience: an ever greater part of our time awake is screen time, which we spend glued to our smartphones. With every act of consumption there, we participate in a world controlled by one of the leading companies.

If we search for products or news on Google, the company cashes in on the producers of these goods through targeted advertising. If we pay for something in Apple’s App Store, the company retains 30 per cent of the turnover. If we buy something on Amazon from a third-party supplier, the retail giant demands its take.

Other companies are increasingly imitating this logic. The entire business model of the ‘gig economy’—the intermediation of formally independent activities via digital platforms—is based on the same rent-seeking from market transactions. The ride-sharing start-up Uber, for example, takes the typical 30 per cent of the turnover generated by drivers via its platform. Established companies such as Daimler play the same game with applications such as Free Now and this logic is threatening to gain a foothold in the context of industrial platforms as well.
The profits generated in this manner are simply rents—unproductive incomes. Once the digital infrastructures of the platforms have been set up, the costs incurred for further development, maintenance and expansion no longer bear any relationship to the profits: it costs Facebook practically nothing if a new user registers on the platform but every extra user generates additional profits. This non-correlation has made the platforms the darlings of investors worldwide.

Paradigm of transformation

Despite being the cause of resentment in some sectors (the taxi industry in protest against Uber and the like), this logic is increasingly the paradigm of transformation of late industrial capitalism. Companies such as Google, Apple or Amazon are not sufficiently understood as digital marketplaces. Via the progressive integration of new product categories and third-party suppliers, as well as via aggressive acquisitions, these companies are in fact appropriating the markets they serve.

Take Google: the company has relied on ever-increasing variety within its product range to integrate users into its network. The search engine was complemented—partly via company purchases—by the map service, the free email account, the social network Google+ (now discontinued), cloud storage and numerous other applications. A milestone was the purchase of Android Inc (2005), with the presentation of the first Android operating system for mobile devices (2008) as well as the associated App Store.

Today, Android has a global market share of around 80 per cent of smartphones. The operating system and the App Store
serve as the basis for various in-house services, but above all as a place where an ever-growing number of third-party providers launch their own products. This is a market for a constantly and systematically expanding product range.

On the demand side, the meta-platforms rely on different strategies to lock in consumers. On the one hand, their own systems are continuously optimised for maximum convenience, to reduce the need to switch to another system. On the other hand, they make it as difficult as possible for users to use certain services outside their own ecosystem.

From this perspective, the widely-admired new business models of the internet giants turn out to be a programme for the appropriation of markets. The leading companies of the commercial internet do not really operate in markets: they are these markets.

Forms of control

Compared with the classic, producer monopolies, primarily blamed by economic theory for consumer-damaging price-fixing, this power of market appropriation materialises in four distinguishable forms of control. The often-criticised information control, through Big Tech surveillance, is only the first step. The control of access, prices and performance comes on top.

Regarding the producers, platform companies have the power to decide which competitors they want to allow in or keep out. On the consumer side, they can control who gets to see which offers at which prices (access control).
This creates a separate field of business, algorithmic pricing, and enables the platforms to pursue a lucrative strategy of *price control*. In contrast however to what is expected by monopoly theory, this has so far worked to the advantage of consumers—not at their expense—because the power over the supply side enables market owners to optimise competition between market participants in the service of their own profits.

In addition, there is *performance control*—the ability of market owners to dictate the conditions under which producers provide their services. In the end these strategies are aimed primarily at the producers. It is with them—not consumers—who really feel the market owners power.

Source of inequality

Thinking this development through exposes Big Tech as a source of social inequality. The leading companies of digital capitalism offer the blueprint for the transformation of our economy and welfare system. Their key business innovation is proprietary markets, with the help of which they extract rents from the economic cycle.

The tributes producers pay the market owners are hardly taxed and pile up in gigantic cash reserves, where they aren’t available for distribution in wages.

So far, this has steered activities of political regulation in several arenas towards anti-trust legislation. While this could proof useful for taming Big Tech’s power in the short run, the political lessons to learn in the end might be quite different.
In the context of the ‘double crisis’ of capitalism, economic and ecological, without deep interventions in markets a social and environmental transition has little chance of working out. Neoliberal market design alone won’t do.

Big Tech presents the template for a deep and efficient governance of markets. We need to think about using it not for the sake of rent-seeking but to achieve democratically agreed goals.

Philipp Staab is professor of the sociology of the future of work at Humboldt University Berlin and Einstein Center Digital Future. His work covers issues of technology, labour, political economy and social inequality.
Covid-19 has all too clearly shown how digital tools have become an integral part of work—be they used for online meetings or for the increasing surveillance and monitoring of workers at home or in the workplace. Indeed, as businesses try to mitigate the risks and get employees to come back to the workplace, they are introducing a vast array of applications and wearables.

In many cases, employees are left to accept these new surveillance technologies or risk losing their jobs. Covid-19 has thus expanded a power divide which was already growing, allowing the owners and managers of these technologies to extract, and capitalise upon, more and more data from workers.

Strong union responses are immediately required to balance out this power asymmetry and safeguard workers’ privacy and human rights. Improvements to collective agreements as well as to regulatory environments are urgently needed. Co-
ordinated action is needed to defend workers’ rights to shape their working lives, free from the oppression of opaque algorithms and predictive analyses conducted by known and unknown firms.

The acclaimed author of *The Age of Surveillance Capitalism*, Shoshana Zuboff, is adamant we should make the trading of human futures illegal. Our politicians should act to do. In the meantime unions should immediately engage to limit the threats to workers’ rights, by negotiating the various phases of what I call the ‘data lifecycle at work’ and securing co-governance of data-generating and data-driven algorithmic systems. Wider adoption of such gains can be advanced through improvements to regulation.

Data lifecycle

The figure below depicts the data lifecycle at work. Some of the demands under each of the four stages, though far from all, are covered for workers in Europe’s General Data Protection Regulation zone. For workers in most other jurisdictions, these rights—if negotiated—would be new.
The data-collection phase covers internal and external collection tools, the sources of the data, whether shop stewards and workers have been informed about the intended tools and whether they have the right to rebut or reject them. Much data extraction is hidden from the worker (or citizen) and management must be held accountable.

In the GDPR area, companies are obliged to conduct impact assessments (DPIAs) on the introduction of new technology likely to involve a high risk to others’ information. They are also obliged to consult the workers. Yet very few unions have access to, or even know about, these assessments—unions should claim their rights to be party to them.

In the data-analyses phase, until trading in human futures is banned, unions must cover the regulatory gaps which have been identified—namely the lack of rights with regard to the inferences (the profiles, the statistical probabilities) drawn from algorithmic systems. Workers should have greater insight into, and access to, these inferences and rights to rectify, block or even delete them.

Such inferences can be used to determine an optimal scheduling, wages (if linked to performance metrics) or, in human resources, whom to hire, promote or fire. They can be used to predict behaviour based on historic patterns, emotional and/or activity data. Access to the inferences is key to the empowerment of workers and indeed to human rights. Without these rights, there will be few checks and balances on management’s use of algorithmic systems or on data-generated discrimination and bias.
The data-storage phase is important but will become more so if e-commerce negotiations on the ‘free flow of data’, within, and on the fringes of, the World Trade Organization, are actualised. This would entail data being moved across borders to what we can expect would be areas of least privacy protection. They would then be used, sold, rebundled and sold again in whatever way corporations saw fit.

The 2020 European Court of Justice ruling invalidating the EU-US Privacy Shield can be seen as a slap in the face for proponents of the unrestricted flow of data but the demand is still on the table. If it were to be realised, and workers had not secured much better data rights via national law or collective agreements, their access to and control over these data would be weaker still.

Unions must also be vigilant in the data off-boarding phase. This refers to the deletion of data but also the sale and transfer of data sets, with associated inferences and profiles, to third parties. Unions should negotiate much better rights to know what is being off-boarded and to whom, with scope to object to or even block the process—this is hugely important in light of the e-commerce trade negotiations. Equally, unions should as a minimum have the right to request that data sets and inferences are deleted when their original purpose has been fulfilled, in line with the principle of data minimisation recognised in the GDPR (article 5.1c).

Seat at the table

Negotiating these rights is intrinsically linked to the next vital goal—mandatory co-governance of algorithmic systems at
Many shop stewards are unaware of the systems in place in their companies. But management too is often ignorant of their details and fails to understand their risks and challenges, as well as potentials. To fulfil the European Union’s push for human-in-command oversight, unions must have a seat at the table in the governance of such systems.

The figure below depicts a co-governance model, which can be adapted to particular national industrial-relations systems and structures, such as a works council.

Shop stewards must be party to the *ex-ante* and, importantly, the *ex-post* evaluations of an algorithmic system. Is it fulfilling its purpose? Is it biased? If so, how can the parties mitigate this bias? What are the negotiated trade-offs? Is the system in compliance with laws and regulations? Both the predicted and realised outcomes must be logged for future reference. This model will serve to hold management accountable for the use of algorithmic systems and the steps they will take to reduce or, better, eradicate bias and discrimination.

The governance of algorithmic systems will require new structures, union capacity-building and management trans-
transparency. Without such changes, the risk of adverse effects of algorithmic systems, on workers’ rights and human rights, is simply too large. Under the GDPR, workers already have some rights which unions can utilise. In relation to the DPIAs mentioned above, unions must demand a role in their preparation and periodic re-evaluation. No employer can assess fairness unilaterally—what is fair for the employer is not necessarily fair for the workers.

Further, unions can co-ordinate on behalf of their members a Data Subject Access Request (DSAR), as stipulated in article 15. While the GDPR gives the individual these rights, there is nothing stopping a union co-ordinating requests in a given company. To fully benefit from such a coordinated approach, they should have access to legal and data analyses experts. (Note that inferences based on personal data are themselves treated as personal data if they allow the person to be identified, and so GDPR rights apply.)

Trade unions, especially within the GDPR zone, have a range of rights and tools to limit the threats to workers’ privacy and human rights. These should be utilised and urgently prioritised to prevent the further commodification of workers. Moving towards collective rights over, and co-regulation of, algorithmic systems is an important step in maintaining the power of unions. As the demand for digital tools to monitor and survey workers continues to rise, unions simply cannot afford not to give these issues utmost priority.
Dr Christina J Colclough is an expert on the future of work and the politics of digital technology. She has developed some of the first global union policies on the governance of data and artificial intelligence from the workers' perspective.
States which experience the power of nature, through tsunamis, hurricanes and other devastating weather and geological events, mostly have well-established warning and safety strategies to anticipate the damage and limit the loss of life. As trade union leaders representing Europe’s industrial workers, we know the vital importance of anticipating restructuring: if badly managed it can wreak damage, on those who lose their jobs and on those who ‘survive’, lasting for generations.

Yet Europe’s tools to anticipate economic change are woefully inadequate—often limited to broad skills strategies. Just as European leaders seem eventually to have learnt the lessons of 2008-09, in terms of endorsing Keynesian capital investment, now they need to learn quickly the lessons for restructuring posed by the pandemic.

Since its onset, but especially over recent weeks, we have been sounding the klaxon to warn policy-makers and politi-
cians of the coming tide of company restructuring. It’s a klaxon we have used before.

In January 2013, after three years of the devastating eurozone crisis, the Spanish Socialist MEP Alejandro Cercas presented a unique proposal to the plenary chamber in Strasbourg. Using the new parliamentary right to initiate legislation (under article 225 of the Treaty on the Functioning of the European Union), he advanced draft legislation on ‘Information and consultation of workers, anticipation and management of restructuring’. The aim was to minimise the social costs of restructuring for workers and local and regional authorities.

The draft set out measures to anticipate change, ensuring the sustainability of the company concerned and the employability of its workforce, recognising the need for detailed social plans in cases of restructuring with clear roles for all stakeholders (social partners and public authorities). It also targeted business, as the costs of poorly managed restructuring—for those made redundant as well as those remaining in the company or workplace—have negative impacts on firms.

National and regional policy and legal frameworks in the EU differ regarding the management of change, which tends to increase inequalities between workers and create distortions between companies. In that context, the Cercas initiative aimed to establish a level European playing-field, by setting minimum standards promoting a proactive and socially responsible approach.

The Cercas report thus called for an EU legal framework, relying on five key elements:
- strengthened rights to information, consultation and participation for workers’ representatives / trade unions, to ensure the long-term viability and sustainability of European workplaces;
- individual rights to training and the promotion of negotiated training programmes (at company and sectoral level);
- long-term corporate strategic planning, taking into account employment and skills needs;
- social dialogue and collective bargaining to negotiate fair solutions through tailor-made agreements, with public authorities playing their part where necessary; and
- support mechanisms for workers who fall victim to economic change, facilitating transition from one job to another.

Speaking ahead of the adoption of his report by the European Parliament, Cercas said: ‘In these three years we have lost two jobs for each of those created and we have already lost 10 per cent of the industrial fabric of the European Union. We must do something to make it better and so that the despair that pervades millions of workers today, in dozens of regions, in towns and industrial zones, changes.’

Major announcements

The coming tsunami of restructuring will likely dwarf these statistics. Already major announcements in the automotive and aerospace sectors outstrip the past economic crisis; after
the summer, the trickle-down effect will be felt through supply-chains and regional economies.

The pandemic is accelerating existing structural changes in many sectors, although in some these have been interrupted. Either way, we are witnessing massive and simultaneous sectoral restructuring across our economies—leaving us, as Cercas said in 2013, with a choice between ‘civilisation and barbarism’. The political consequences of the latter are difficult to gauge.

In a sad twist of fate, the architect of the 2013 draft legislation (as of most EU legislation on information and consultation), the European Commission labour lawyer Fernando Vasquez, died at the beginning of the summer. He was a passionate believer in social Europe. He worked with us ‘off the record’, as we tried to mobilise support for the measures, against internal commission inertia and employer opposition.

Ultimately the proposals were killed by those forces, despite a significant parliamentary majority for the report. The failed attempt silenced the debate on the need for a legal toolbox on restructuring—for too long.

Real toolbox

Today we are increasingly hearing commission and employer voices make the case for ‘managed transitions’ and Just Transition—these are pseudonyms for anticipating change. Rarely is the link made to the need for a real toolbox to ensure that transitions are smooth for individuals. While many companies learnt the importance of keeping their workforce close
through the crisis in 2008-09—hence the corporate and widespread public support for short-time working schemes—Europe’s legal framework on economic restructuring is fraying at the edges.

In several countries we have witnessed announcements to cut thousands of jobs, without informing European and local works councils—let alone giving them the possibility to discuss alternatives with real decision-makers. We hear about companies adopting Europe-wide cost-saving plans, with major impacts on salaries and working conditions, without engaging in discussions with trade unions at local and transnational levels. Together with the European Trade Union Confederation and other European union federations, we have made the case to the commission that while existing rights must be enforced that will not be enough—it wasn’t in 2008-09.

Perhaps now is the time to revisit the Cercas report before the Covid-19 tsunami of restructuring cases drowns out our warning klaxons. We need to anticipate economic change and lift all those affected to safe ground—and quickly.

Judith Kirton-Darling and Isabelle Barthès are deputy general secretaries of industriAll European Trade Union.

Kirton-Darling was a British member of the European Parliament (May 2014 - January 2020) and confederal secretary of the European Trade Union Confederation. She also built European trade union experience in the European Mine,
Chemical and Energy Workers' Federation and the European Metalworkers' Federation, where she worked as policy adviser.

Barthès joined the EMF in 1996. As EMF and later industriAll Europe senior policy adviser, her responsibilities included company policy, collective bargaining and social policy.