Focus on Industry 4.0

- More robots, fewer rights?
- Algorithms, blockchains, data & the future of work
- Silicon Valley to Vietnam: big tech & labour exploitation
Canada signs key international bargaining and organising treaty

On 14 June 2017 Canada ratified ILO Convention 98, the key international treaty promoting collective bargaining and the right to organise.

"After 60 years, Canada has ratified ILO Convention 98. Canada now recognises why strong unions matter in creating a fair and inclusive country. We thank all those who have been fighting for this moment."

Larry Brown, President of the National Union of Public and General Employees (NUPGE).

The Convention calls for:

- protection against acts of anti-union discrimination
- protection for unions against interference by employers
- machinery to develop and promote collective bargaining

Convention 98 has now been ratified by 165 countries, including Canada
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In the 1770s, a chess-playing automaton known as the 'Mechanical Turk' began touring Europe and North America, winning matches and the awe of spectators. The deception, revealed after decades of speculation, could not have been simpler: there was a man hiding inside the machine. Without any trace of irony, in 2005 Amazon adopted the name Mechanical Turk for its new crowdsourcing platform. On the website, workers (or 'Turkers') bid to perform an array of ‘Human Intelligence Tasks’ for as little as one US cent in remuneration. The company's brazen adoption of a name synonymous with the obscuring of the human at work beneath the facade of a machine says quite a lot about the predication of labour in a world on the precipice of ever-deeper integration with artificial intelligence, automation and digital capitalism.

Coinciding with the ILO's centenary initiative on the Future of Work, there has been a proliferation of concepts attempting to predict the impacts of advances in new and sophisticated 'smart' technologies. Buzzwords like 'Industry 4.0' (first developed by German policymakers), the 'fourth industrial revolution', or the 'Internet of Things (IoT)' refer to a range of industrial applications of cyber-physical systems, digital, algorithmic and advanced automation technologies, with the potential to connect data and processes that are highly complex and geographically remote.

Apocalyptic predictions for the labour market abound. According to some accounts, every job under the sun will be automated: workers in factories and call centres, lawyers, civil servants and poets too. As tensions between labour and technology become increasingly difficult to ignore, even the 19th Century Luddites – once reductively maligned as machine-breaking technophobes – have enjoyed a minor resurgence.

Contributors to this issue of IUR weigh up these challenges in different ways. Perspectives from different regions and sectors lead to different prognoses. There is a shared awareness of the need to critically question deterministic approaches to technological development, as well as any further weakening of workers’ collective power.

Technological development is steered by human choices. An overarching concern is therefore how organised labour is able to shift the parameters of debate to put technology and (in)equality in the spotlight. As Jim Stanford notes here, it does not seem likely that technological progress will make work disappear. Rather it is workers’ labour that is being rendered increasingly invisible. The Mechanical Turk could hardly be a better metaphor.

It is little wonder then that organised workers across the globe are increasingly turning to digital communication – often tipped as the cyber-silver lining of hyper-globalisation – to make their struggles more visible and build global networks of solidarity. But as LabourStart's Eric Lee warns, competing for digital attention in an increasingly swamped global network of information is no substitute for organised workers acting collectively. And as new forms of algorithmic management emerge, workers also need to be diligent about their data privacy.

No one is keener to sell us a quick technological fix than big-tech and electronics companies themselves – who perhaps stand to profit most from the 'fourth industrial revolution'. Whether the 'fix' is an online campaign or 'block-chain provenance', a multi-million dollar industry that claims to solve the issue of supply chain certification, these digital technologies raise a number of questions about the control of information. And if we look at the sectors upon which 'Industry 4.0' is being built (big-tech, electronics manufacturing, and mineral extraction) we find a catalogue of labour abuses and anti-union practices. Taking the hype around Industry 4.0's all-encompassing vision of the future at face value, it would seem like the optimal moment to bring such issues in these sectors firmly into the spotlight. If we are asked to believe that 'smart' technologies will improve our future conditions of work, the fact that conditions of systemic barbarity prevail in the production of many of these technologies leaves some room for doubt.
Work Will Not Disappear. So We Should Make It Better

Workers everywhere worry about the future of their jobs. After all, for the vast majority, income from paid employment (in one form or another) is the dominant means to provide for the necessities of life. The availability, stability, and earning potential of paid work are essential to our well-being.

The world of work is being transformed by technology: machines and computers can perform ever-more complex tasks (including those involving judgment and learning), reigniting age-old fears that workers will be replaced by machines. Of course, workers have worried about machines taking their jobs since the dawn of capitalism. In historical experience, technological change by itself does not produce long-lasting unemployment: unemployment certainly does exist, but usually for other reasons (like failed macroeconomic policies). But technological change certainly causes dislocation and hardship for certain groups of workers – and the resulting costs are much worse if affected workers don’t get alternative job opportunities, mobility, assistance, and retraining.

There is nothing inevitable about how technology is developed, applied, and managed; the impacts of technology depend entirely on choices made regarding its design, implementation, and management. At present, most of those decisions are made unilaterally by the owners and top managers of private businesses, who have free rein (in most countries) to choose what technologies are implemented, to what ends, and who bears the resulting costs and benefits. Perhaps we should be less concerned with technology, and more with the unbalanced decision-making structure within which technology is presently governed.

Moreover, technology is not the only force transforming the world of work. The organisational and social context of work is also in major flux. Indeed, changes in work organisation and employment relations are having a more immediate impact on workers than the much-hyped advent of robots and artificial intelligence. A permanent, full-time, paid job with accompanying benefits (like job security, paid time off, and pension and health programs) is no longer normal practice in most labour markets – and is a utopian dream for most young workers. In its place, precarious work in many forms (including temporary, part-time, casual, irregular, and nominally independent or self-employed positions) is the new normal. In the extreme, precarious work is now organised through ‘gigs’: on-demand, piece-work tasks allocated and compensated through faceless digital platforms.

These twin disruptions – changing technology and changing working relationships – have led some observers to conclude that work, broadly defined, can no longer be the financial and social foundation of households and society. People will need to find other ways to support themselves, and/or fall back on income supports delivered by the state (perhaps through a guaranteed annual income). This vision of a workless future can be described positively (as a world in which humans have ample leisure time to pursue a range of interests) or negatively (as a dystopia in which wealth becomes concentrated amongst a narrow property-owning elite, while most people huddle at the margins seeking a way to survive). Both scenarios assume that paid work is diminishing in importance.

This assumption is misplaced.

Robots or no robots, work is here to stay

There are enduring features of paid work that ensure it will remain the cornerstone of the economy, and the major pillar of financial well-being for most households. The question is not whether or not work will somehow ‘disappear’: it can’t. The question is how society will choose to treat, protect, and compensate the work that will remain essential to its economic and social progress.

In the realm of digital platforms and ‘gigs’, for example, paid work is still very clearly the driving force of production and growth. Modern digital businesses rely on paid workers to produce their ultimate output. But those firms have developed clever systems to minimise or evade the risks, costs and obligations traditionally faced by employers (minimum wages, notice of dismissal, pension and health benefits, etc.). Contrary to the popular assumption that digital platforms are the ‘cutting edge’ of business innovation, their work practices are centuries old: including piece-work compensation, on-demand work scheduling, and labour hire systems that have been around as long as capitalism. In previous decades, limits were imposed on some of these work practices: through ambitious labour regulations, full-employment macroeconomic policies, and collective bargaining. The more recent resurgence of insecure work has not been driven by technology, but by the deliberate relaxation of those former constraints on employers. We can easily imagine better ways of compensating and protecting gig workers: starting by applying traditional protections (minimum wage, pension entitlements), just as in other paid positions. The barrier to better treatment is not technology, but the imbalance of power in modern economies.

The barrier to better treatment is not technology, but the imbalance of power in modern economies.

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The advent of new forms of robotics, artificial intelligence, and other innovations will never eliminate work in a general sense. They could substantially increase the productivity (and quality) of output. But robots and computers do not fall from the sky: they are produced by human labour, and continue to require inputs of labour at all stages (including design, engineering, manufacture, operation, and maintenance). Automation always involves replacing direct labour (at the final stage of production) with indirect labour (producing various inputs and intermediate goods used in production, including machinery). But even in highly automated processes, human labour is essential to all production.

If productivity surges thanks to new technology (and there is no evidence that this is occurring), then society will face important choices about how to capture and distribute the resulting gains. Higher productivity can support higher real incomes and hence higher material consumption; alternatively, it can facilitate less work. (Labour movements have traditionally demanded a bit of both: higher real incomes and less working time.) Of course, ‘less work’ can have positive or negative effects: attained through equitable reductions in normal working hours for all workers, or through concentrated (and painful) reductions in work time for particular groups of workers (namely, unemployed or underemployed workers). Once again, the outcome is not pre-ordained or technologically-driven. It depends on the choices we make as a society.

So far, however, that discussion is mostly hypothetical: despite all the hype, there is no evidence that workers are generally being replaced by a new wave of computers, robots, and intelligent machines. To the contrary, capital investment in the business sector has been very weak in most developed economies since the global financial crisis. In fact, the average capital-labour ratio in several advanced economies (including the US, the UK, Japan, and even Germany) has been declining since 2010 – indicating that the average worker uses less equipment and technology in their work, not more. This is partly because hyper-competitive labour markets still find new ways to employ low-cost labour in menial, degrading, and poorly-paid positions – despite the productive potential of technology. Consider, for example, the large numbers of new jobs in low-productivity private services like retail, hospitality, and personal services. Curiously, it seems that investment in new technology is too weak (not too strong). This opens the door to a deeper critique of modern economic management: instead of worrying that technology will take our jobs, we should demand more control of the investment process, aiming to elicit more investment, and the power to direct that investment for better economic, social and environmental outcomes.

The future of work depends on choices we make about how technology is developed, applied, and managed. ‘Technological determinism’ must be energetically rejected.

**Determining the future of work**

The benefits of technological change for workers could be enhanced, and negative effects reduced, through sensible, pragmatic measures – implemented at various levels of the labour market. Some obvious opportunities include:

- Strong rights to information, notice, and input, so that workers are aware of technological changes planned for their workplaces, and can prepare well in advance.
- Rights to negotiate adjustment measures, protections, and work practices relevant to new technologies as part of normal dialogue with employers.
- Limits on the use of electronic systems of employee surveillance, monitoring, and discipline.
- Strong commitment from employers to ‘internal mobility’, including redeployment of workers affected by technological change.
- Strong public support for ‘external mobility’, for affected workers who cannot find alternative positions within their current workplaces. This should include strong income protections, training, and relocation assistance.
- Larger and more effective investments by both governments and employers in lifelong learning, skills development, and vocational pathways for new and re-entering workers.
- It is much easier for workers to adjust to technological change when alternative job opportunities are amply available, and hence a commitment to full-employment macroeconomic policy by governments is critical.
- Work in human and caring services will account for more jobs in the future, due to growing demand and because these jobs are less amenable to automation. Governments should make the most of this trend by investing in expanded these services.

There is no doubt that work has a future. The economy cannot function without productive human labour: it is the only force capable of adding value to the resources we harvest (hopefully sustainably) from nature. Every society must decide how work will be organised, how workers will be treated and compensated, how innovation will be directed and new technologies implemented. None of those decisions are pre-ordained: the false sense of ‘technological determinism’ infecting many debates about the future of work must be energetically rejected. Decisions which are made ultimately reflect who gets to make them: will the future of work be determined solely by the interests of private investors and employers, or through a more participatory and democratic process?

A positive future for work is certainly possible, but only if we elevate the goal of decent, secure work to the top of the policy agenda – and empower workers to play a full role in the resulting social decisions.
The electronics industry is one of the largest industrial sectors in the global economy. As society becomes increasingly digitally connected and 'smarter', the sector continues to boom alongside Industry 4.0, which is now having a massive impact on workers and trade union rights. In Europe and Japan, it has been estimated that the Industry 4.0 could modify the jobs of million workers (possibly up to 54 percent of jobs) in the coming years. New technology, such as digitalisation of production with the Internet of Things (IoT), 3D printing, Virtual/Augmented reality, Big Data, Cobots (robots designed to cooperate with human beings) are developing and penetrating workplaces faster than unions imagination.

**The Big Two: Foxconn and Samsung**

Foxconn, Apple supplier and one of the world’s largest electronics manufacturers, had almost 1.3 million workers in 2014. Then the company announced that in-house developed robots called ‘Fox-bots’ would replace 30 percent of workers at their production lines. Today, the company employs 800,000 workers. More than the company’s expectation, 40 percent of workers has been rapidly replaced with Fox-bots. The robot costs USD $25,000 and could replace up to four workers who earn USD $24,000 a year (a standard worker's annual wage is USD $6,000 at the Foxconn Chongqing factory in China, in 2014).

Meanwhile, Samsung Electronics has become the biggest foreign direct investor in Vietnam. By taking advantage of the lower manufacturing costs and Vietnamese government’s preferential treatment, the company built the world’s largest smart phone factories there (manufacturing 50 percent of all Samsung smart phones) and employs more than 100,000 workers who account for one third of all Samsung workers worldwide. The standard wage for an assembly worker at the factories is USD $250 a month (in 2018), half that of the previously mentioned Foxconn worker in China. The number of workers continues to increase at the factories.

Foxconn’s and Samsung Electronics’ different approaches clearly illustrate the current trends in the electronics industry. China, once the world’s electronics production hub, is now losing out to South East Asia and India. Multinational corporations (MNCs) are shifting production to countries such as Thailand, Indonesia, Philippines, and Vietnam, and India, where wages for manufacturing workers are lower than China. At the moment, the monthly wage of USD $500 seems to be the turning point at which an electronics factory moves to the lower wage countries or introduces new technologies replacing the workers in manufacturing process.

The world’s top five highest earning ICT electronics MNCs (Apple, Samsung Electronics, Foxconn, Amazon, Hewlett-Packard) originate from countries that have not ratified the core ILO Conventions on freedom of association (No.87) and the right to collective bargaining (No.98). These MNCs also operate and/or outsource labour intensive production processes to suppliers located in countries where these rights are not respected such as in South East Asian countries and India. Absent trade union rights, these companies enjoy making profit for the benefit of their top management, who are ranked among the richest people in the world.

**We must fight back!**

The tide of Industry 4.0 will soon hit factories in these low-wage countries as the cost of new technology keeps going down. When that happens, the workers who have no union or low union density will not be able to negotiate with either management or government to protect their employment, or to get access to skills and training for adapting to new technology. Without that capacity, these workers will just lose their jobs or be forced into an even more precarious working conditions at a lower cost than robots. We must seriously ask ourselves, ‘what are 500,000 ex-Foxconn workers doing now?’

Industry 4.0 is reducing the existing manufacturing jobs of union members and increasing the number of unorganised white-collar jobs (such as IT designer, programmer, cloud worker). It is weakening the workers’ capacity to bargain collectively.

The question is ultimately who pays for, and who benefits from, a transition to Industry 4.0? Workers and trade unions need to be part of the decision making process when the fates of millions of workers are being decided upon. This means that international workers’ solidarity is more important than ever. Unions must fight back by organising and fostering strong negotiation power among the workers to secure a sustainable future.
When Algorithms Hire and Fire

Take a second and consider whether you would you have your job, if an algorithm had been in charge of hiring you? Think about your financial records, your health file, your friends on social media. Are you a member of a trade union? Do you own a Fitbit?

What are your shopping habits and what do you do in your spare time? And then ask, how would all of this affect your work life? Would you get hired, fired, disciplined or promoted?

What seems like a bizarre question is in fact one that we all need to think about and react to. ‘Management-by-algorithm’ is spreading, and more and more data from many different sources is used in HR processes. Critically, across the world, bar to a certain extent in Europe, there are very few regulations in place that protect the misuse of workers’ personal data in and by companies. Trade unions must fill this regulatory gap and put workers’ data rights on the agenda to hold management and governments accountable and responsible.

What’s all this about data?

The recent Facebook-Cambridge Analytica scandal all too clearly showed the value of (personal) data. Its importance for advertising, profiling and marketing is so high that it is brought and sold for an unknown figure every year. In 2014, the value of data flows was estimated to be 2.8 trillion USD. Now put that dazzling figure in relation to the fact that three years later in 2017, the World Economic Forum estimated that 90 percent of all data at that time had been produced since 2015. We can only imagine what the value of current data flows really is.

We are leaving a data trail behind us all the time. From our social media profiles, our likes and posts, to customer service phone calls, visits to the doctor, use of our GPS or cash withdrawals from the bank. We willingly give away our names and email addresses when we log on to free Wi-Fi hotspots in cafes, airports or train stations and we more or less have become so accustomed to ‘free’ digital services that we almost get irritated when a mobile app costs a dollar. The thing is, nothing is free. What we have been doing and still are doing, is freely and oftentimes willingly giving away our location, habits, activities and opinions. In other words, we are paying with our data.

But who is actually buying, reading, analysing and selling this data? The short answer is we don’t know, and we even can’t know. Insiders UNI has spoken to estimate that the big tech companies - Google, Amazon, Facebook, Apple, Microsoft and Alibaba - own more than 70 percent of the world’s combined data. This concentration of what is such a valuable asset is putting these companies into an unacceptable position of economic, digital, social and even political power.

Workers across the world have very few, if any, legal rights to demand insight and influence over the use of their personal data. We know of the existence of so-called data-brokers, firms that make a living out of buying and selling data. We know that companies are mining workers of their data. Do they then sell it? And if so, to whom? Who at the end of the day gets to know what your health file says, or how productive an algorithm or a company thinks you are? How is this data – which is apparently easily accessible to anyone who can afford to pay – being used by companies to manage workers?

Surveillance, manipulation and algorithmic control

Whilst our eyes have been slightly opened by the revelations of how data was used to target and manipulate voters such as in the US election and the Brexit result, politicians and experts afford very little attention to how data is used, and potentially misused, in relation to work. There is a sharp rise in the use of algorithms, data and artificial intelligence (AI) in human resources and productivity planning. Companies are popping up that offer AI solutions to cut costs on dealing with people. From autonomous sorting of job applicants and applications, to the use of extensive data to measure productivity, to employee mood testing, to ways to automatically find out what motivates you, and much more…

Whilst some of this can have positive effects, the risks to workers’ privacy and the risk of us being judged against a digital norm are plentiful. Will you not get promoted because of your health file? Will you not get a job because you are a union member, or have particular friends, or have personal characteristics that the algorithm has been told to reject?

This might all sound hypothetical, but unfortunately it is not. In UNI Global Union we are already seeing how these autonomous systems are having a detrimental effect on workers. Especially those in non-unionised workplaces, where there are no check-and-balance in the form of organised labour, and no means to reach agreements to rectify misconduct.

In one such case, bank employees in a customer service centre are subject to a system that measures the customers’ and workers’ tone of voice and mood. It then advises the workers on what to say, sale and do and monitors them for succeeding in doing the ‘right’ thing. For these non-unionised workers, the system has been catastrophic. Appraisal was linked to performance, but the system failed to recognise female voices as well as male voices, and down-scored ethnic minority accents relative to white men. Even though the workers could go through the
recordings with management, mistakes were seldom rectified. All of this was adding to the digital footprint of the individual worker and not only harming them in that current job, but potentially also making it harder for them to find another job.

There are plenty of other examples: one company equipped all workers with a FitBit in a contest to become a healthy company, but subsequently used the GPS data to caution an overweight worker, who apparently didn't move much in his spare time, of becoming a liability to the company. There are warehouse workers whose every hand and arm movement is tracked for their efficiency in packing goods, homecare workers who are cautioned if they spend too much time with a client, workers who get fired for no other reason than ‘the algorithm said we should’.

The union response
There can be little doubt that unions must act now. We need to organise, organise and organise. We need to build alliances with like-minded others and demand a share of the data wealth, and we must fill these regulatory gaps and demand workers’ data rights. This should be done on all levels: from collective agreements to national and international legislation and conventions. We should mobilise the ILO, the UN’s Human Rights Council, national governments, the social partners and companies themselves.

UNI Global Union is working on these issues across the world. We are discussing how we, the unions, can tap into the significance of datasets and benefit from the insights they can offer. We are raising our voices against the monopolisation of data ownership and asking whether data should be made a commons. A public good that can be accessed by us all. One thing is to protect our fundamental rights, the other is to take that one step further and demand a collective ownership of data. Both are equally important.

We have also written two key documents, namely, the Top Ten Principles of Workers’ Data Privacy and Protection* and the Top Ten Principles of Ethical AI†. The documents are interrelated and list the essential demands we must put in place to avoid a future where workers are subjected to algorithmic decision-making that is beyond human control and insight.

Workers’ Data Rights
These principles cover the essential issues of right of access, influence and consultation. In essence, they stipulate that workers must:

1. be informed prior to data processing,
2. have a right of explanation in connection with algorithmic decision-making,
3. have a right to data portability (i.e. workers must be allowed to take their data with them when leaving a company), and
4. have a right to object and question data processing.

In addition, companies should commit to the data-minimisation principle, and importantly to being transparent and accountable in their data usage. This latter point is important and remarkably absent in the EU’s General Data Protection Regulation.

Ethical AI
The term Artificial Intelligence covers here all automated/semi-automated systems, including algorithmic decision-making. Here our principles cover key issues such as transparency, responsibility and control. Firstly, we must demand that autonomous systems are traceable, meaning that the data sets used in the algorithm can be identified. All too often, you will hear data experts say that it is not possible to unpack the algorithm. This is totally unacceptable. Imagine what it implies: that neither management nor workers can demand to know on what basis (data) an algorithmic outcome has been built on. This in turn could lead to a situation where management, either deliberately or unintentionally, subordinate their control and responsibility to an algorithm with all of the risks and dangers this poses to not only workers but society at large. We must never reach the situation where management can simply shrug their shoulders and say, ‘the algorithm told me fire you, but I don’t know why’. Humans must at all times be in control over the system, not the other way around. Nor must we ever give in to the notion that autonomous system (robots, algorithms) can be made liable. Robots are things; they are commodities and must never be attributed legal responsibility.

Urgency of Now
There is a definite urgency of now. Unions across the world must address these fundamental issues. We simply cannot rely on others to do so. Digital technologies are developing at great speed, and our ethical demands to them must be clear. We cannot risk that people are prevented from working or thriving in the labour market due to an algorithm that nobody claims to control, and nobody can rectify.

UNI Global Union believes that a collective ownership of data, ethical AI and workers’ data rights are the key issues for unions. We must commit management as well as governments to take responsibility. Only by doing so can we ensure a digital world of work that is empowering, inclusive and open to all.

We cannot risk that people are prevented from working or thriving in the labour market due to an algorithm that nobody claims to control

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2. See https://www.weforum.org/agenda/2017/09/the-value-of-data
5. Available here in multiple languages: http://www.thefutureworldofwork.org/docs/10-principles-for-ethical-artificial-intelligence
Two Perspectives on Platform Work

Recognition comes from members, not courts
SEBASTIEN FLAIS

The common trend across the so-called ‘gig economy’ is a denial of rights, even when court judgements deem the practices unlawful. In the space of a few years, the Independent Workers Union of Great Britain (IWGB) has managed to achieve results with our Couriers and Logistics branch through a member-led combination of strategic litigation and campaigns. When we first formed the Branch, workers told us stories about a sector where companies were constantly taking advantage of their workers. This exploitation was not limited to apps. We have taken on some app-based employers, such as Deliveroo, but most courier companies operate in a more traditional fashion, using radios to allocate orders.

These companies claimed they were running their own businesses and classed their couriers as independent contractors. They argued this was necessary to provide couriers with flexibility, which the workers valued. But the couriers did not get to set their own rates of pay, had to wear uniforms and were fearful of not accepting jobs. They appreciated the flexibility, but they were definitely a part of someone else’s business.

We took out four cases against CitySprint, Excel, Ecourier and Addison Lee to the Employment Tribunal. We argued their couriers were ‘limb (b) workers’, or ‘workers’ for short. ‘Workers’ sit between employees, who have full employment rights, and independent contractors, who have no employment rights; they are self-employed but are also entitled to some rights, including minimum wage, holiday pay, trade union rights and protections against discrimination. The UK Supreme Court has drawn a distinction between the self-employed running their own business and the self-employed working for someone else’s. The Court has also declared that in determining the nature of the employment relationship, judges must consider the incredible asymmetric bargaining power that the company has over workers. Simply looking at the contract is not enough, otherwise ‘armies of lawyers will simply place substitution clauses, or clauses denying any obligation to accept or provide work in employment contracts, as a matter of form, even where such terms do not begin to reflect the real relationship’. In 2017, employment tribunals declared that the companies were unlawfully denying couriers rights in three of the cases, with Ecourier admitting liability as part of a settlement.

Earlier this year, we also secured our first trade union recognition agreement in the ‘gig economy’ with couriers for The Doctor’s Laboratory (TDL).

In our case against Deliveroo, however, things went differently. IWGB argued before the CAC that Deliveroo workers were entitled to a bargaining unit in Camden and Kentish Town (London), which would entail ‘worker’ status. Deliveroo’s lawyers successfully argued that their workers were independent contractors because of the workers’ ‘right to substitute’. In other words, the worker may be signed in to their Deliveroo account and accept an order, but someone else could perform the delivery. The CAC nevertheless wondered, ‘why would the question of substitution ever arise?’ Deliveroo’s contract offered large amount of flexibility, such as being able to stop an order during the delivery.

To us, the answer is clear: employers are placing bogus clauses in contracts so they don’t have to provide basic employment rights. They are in a disproportionate position of power and thus well placed to deceive their workforce when it comes to employment status. As it stands, the High Court has given the IWGB permission to appeal the decision, based on Article 11 of the European Convention on Human Rights.

Clearly unions cannot only rely on the courts because there is no victory guarantee. But a lack of recognition is not the end for unions operating in the gig economy – it is a call to creativity. We began organising Deliveroo workers in Brighton when they protested a lack of orders and demanded a recruitment freeze. Within a week, Deliveroo enacted a recruitment freeze. Indeed, before we had won a single case for the couriers, we secured a 25 percent pay rise across four of the biggest courier companies in the UK with a living wage campaign. We cycled with our couriers from client to client, protesting with mini-occupations in their receptions or just outside. The courier companies claimed their clients did not want to pay more for services, so they could not enact a pay rise. Some were happy to pay more for services if the result was a courier lifted above poverty wages.

The future of unions, with or without recognition, lies in how alert they are to the needs of their members. It’s only by acting on members’ demands that we have continued tackling the ‘gig economy’, with an ongoing case against private hire companies, such as Uber. Unions need to be more concerned with recognition from members than employers, as even without trade union recognition the old mantra is true – the workers united will never be defeated.
Governing ‘crowd-work’

MICHAEL ‘SIX’ SILBERMAN

In recent years, trade unionists, platforms, policy makers, and researchers have debated how to regulate digital labour platforms. Some policy makers have proposed European legislation; unions have made progress organising workers and establishing dialogue with platform operators; and many meetings, workshops, and conferences have been held. Artificial intelligence (AI) is the ‘hot topic’ this year, but it turns out that the ‘training data’ used to ‘teach’ AI systems how to tell, say, a dog from a muffin is produced by human ‘crowd-workers’ all over the world.

A consensus seems to be emerging in Europe about platforms for ‘in person’ services such as transportation, delivery, and domestic work. Mostly, courts and policy makers seem to agree, these workers should be classified as employees. Establishing worker rights in platforms for online ‘crowd-work’ may be a harder question. We know how hard it is to govern ‘global supply chains’. How much harder will it be when the only physical infrastructure needed for the work is a computer and an internet connection?

Online platform work may end up governed by a patchwork of national and international law, collective agreements, standards, and voluntary ‘codes of conduct’. Some online platform workers may be granted rights by laws that are ‘about’ other topics. In the EU, the General Data Protection Regulation (GDPR) may provide platform workers important procedural rights such as the right to transfer their work histories between platforms or contest inappropriate ratings. But the technically and legally ‘mobile’ nature of platforms for online work creates a world of possibilities for regulatory evasion for platform operators and clients. Global strategies for establishing and safeguarding workers’ rights are needed. What rights should these workers have, even if they are ‘self-employed’?

1 Right to minimum wage in the worker’s location (if there is no minimum wage, the wage provided by relevant collective agreement; if there is no relevant collective agreement, a living wage)
2 Right to explanation for declined account application
3 Right to protection from arbitrary account suspension, closure, or deletion
4 Right to advance notification and explanation of account suspension, closure, or deletion
5 Right to clarify or correct alleged violation of platform terms of service
6 Right to contest account suspension, closure, or deletion; right to mediation
7 Right to prompt pay-out of funds in the event of account suspension, closure, or deletion
8 Right to complete work history in the event of account suspension, closure, or deletion
9 Right to information regarding non-payment conditions; protection from arbitrary non-payment
10 Right to explanation for non-payment
11 Right to contest non-payment and request review from platform operator
12 Right to further contest non-payment; right to mediation
13 Right to ‘redo’ rejected (i.e., nonpaid) work
14 Right to relevant client information
15 Right to accurate, fair, transparent, fit for purpose evaluation, rating, and qualification
16 Right to comprehensive work history
17 Rights regarding potentially psychologically harmful tasks (e.g., review of social media for pornography or violent content):
   a Right to receive clear information, prior to accepting a task, that a task may be psychologically harmful, and why; and
   b Right to receive qualified psychological support and counselling services at the cost of the client and/or platform after having completed such tasks
18 Right to organise and negotiate collective agreements
19 Right to discuss pay, work processes, clients, tasks, and working conditions (i.e., restriction of nondisclosure agreements)
20 Right to participate in platform governance according to national labour law

How will these rights be established? Platform workers classified as employees are entitled to minimum wage. But for most this looks unlikely, including in the EU. As long as a significant number are classified as self employed, ‘voluntary’ client wage pledges could be worth exploring. Many procedural rights above could be seen as rights regarding the accuracy of personal data. In the EU context, some of these could be provided already by GDPR. For ‘truly’ self-employed workers, the proposed Regulation on Promoting Fairness and Transparency for Business Users of Online Intermediation Services could also be relevant. There is some legal uncertainty around the right of self-employed platform workers to negotiate collective agreements with platforms or clients. Policy action might be needed, or at least clarification of existing law. And we have to organise: workers must know what rights they have; and clients, platforms, and policy makers must be ‘encouraged’ to establish and safeguard these rights.

In the context of online, globally mobile platform work, there may be no ‘silver bullet’ for establishing worker rights. But platform workers are not ‘impossible to reach’, ‘somewhere in the cloud’, as one despairing trade unionist lamented in 2016. Neither are clients or platforms. We have a menu of options for governing this new global labour market. We should explore all our options. As the novelist Ann Leckie wrote: ‘No real endings, no final perfect happiness, no irredeemable despair. Meetings, yes... In the end it’s only ever been one step, and then the next’.

MICHAEL ‘SIX’ SILBERMAN

works in the Crowdsourcing Project at IG Metall (since 2015) and helps operate Turkptikcon, an independent client reputation system used by workers on Mechanical Turk, Amazon’s crowdsourcing platform (since 2008)
Today Silicon Valley remains the fortress of the country's most anti-union industry. High tech industry dominates every aspect of life. Its voice is largely unchallenged on public policy, because the workers who have created the valley's fabulous wealth have no voice of their own. Corporations like IBM, Hewlett-Packard, Intel and National Semiconductor told their workers and communities for years that healthy bottom lines would guarantee rising living standards and secure jobs. Economists still paint a picture of the industry as a massive industrial engine fuelling economic growth, benefiting workers and communities alike.

The promises are worthless. Today many giants of industry own no factories at all, having sold them to contract manufacturers who build computers and make chips in locations from China to Hungary. In the factories that remain in the valley, labour contractors like Manpower have become the formal employers, relieving the big brands of any responsibility for the workers who make the products bearing their labels. While living standards rise for a privileged elite at the top of the workforce, they’ve dropped for thousands of workers on the production line. Tens of thousands of workers have been dropped off the lines entirely, as production was moved out of the valley to other states and countries.

Apple Corp. has cash reserves in excess of $1 billion, while San Jose voters are told that there is no money to pay for the pensions of workers who’ve spent their lives in public service. The productivity of industry in the valley went up in the 2000s by 42 percent. But at the same time, average annual employment went down 16 percent. The upper income stratum of the valley benefited from this productivity growth, but there was no corresponding growth in jobs. Between 2000 and 2010 the number of households with incomes under $10,000 more than doubled, from 11,556 to 26,310.

But despite obstacles, for its entire history Silicon Valley has been as much a cauldron of resistance and new strategies for labour and community organising as it has been for the production of fabulous wealth.

### High-tech builds its anti-union model and workers respond

The anti-communist hysteria of the late 1940s and ‘50s bred a fratricidal struggle in the US labour movement. This led to the expulsion of the union founded to organise workers in the electrical industry—the United Electrical, Radio and Machine Workers of America (UE). While the new high-tech industry was growing in the Santa Clara Valley, the union that could have organised it, had it retained its strength and members won in the 1930s, was severely damaged. In the rest of the labour movement, support for workers organising unions in the expanding plants virtually disappeared.

From the beginning of the electronics industry in the late 1960s, high tech workers faced an industry-wide anti-union policy. "Remaining non-union is essential for survival for most of our companies... The great hope for our nation is to avoid those deep, deep divisions between workers and management", said Robert Noyce, co-founder of Intel Corp. The expanding electronics plants were laboratories for developing personnel-management techniques for maintaining 'a union-free environment'. Some of those techniques, like the team-concept method for controlling workers on the plant floor, were later used to weaken unions in other industries, from auto manufacturing to steelmaking.

A co-inventor of the transistor and founder of an early Silicon Valley laboratory, William Shockley, espoused theories of the genetic inferiority of African-Americans. As Shockley, Noyce and others guided development in the Valley, they instituted policies that effectively segregated its workforce. In electronics plants women were the overwhelming majority, while the engineering and management staff consisted overwhelmingly of men. Immigrants from Asian and Latin American countries were drawn to the Valley’s production lines. Engineering and management jobs went to white employees. African-American workers were frozen out almost entirely.

Starting in the early 1970s, workers began to form organising committees affiliated to the UE in plants belonging to National Semiconductor, Siltec, Fairchild, Siliconix, Semimetals, and others. Most of these were semiconductor manufacturing plants, or factories that supplied raw materials to those plants. "It was very hard organising a union in those plants, because the feeling of powerlessness among the workers was so difficult to overcome... It seems obvious that there has to be a long term effort and commitment, with a movement among workers in the industry as a whole, and in the communities in which they live", said Amy Newell, who helped start a rank-and-file organising committee at Siliconix, and later headed the AFL-CIO's Central Labor Council in Monterey County, just south of Silicon Valley.

By the early 1980s, the UE Electronics Organizing Committee had grown to over 500 workers. Romie Manan, who organised Filipino immigrant workers on the production lines at National Semiconductor, remembers that the union published 5000 copies a
month of a newsletter, *The Union Voice*, in three languages—English, Spanish and Tagalog. Workers handed it out in front of their own plants, or in front of other plants if they were afraid to make their union sympathies known to their co-workers. Committee members challenged the companies and won cost-of-living raises, held public hearings on racism and firings in the plants, and campaigned to expose the dangers of working with numerous toxic chemicals—all without a formal union contract. Eventually the semiconductor manufacturers, especially National Semiconductor, fired many of the leading union activists, and the committee gradually dispersed as its members sought work wherever they could find it.

The main strategic question, which the committee sought to answer, remains unresolved. In large electronics manufacturing plants, union-minded workers have long been a minority. Their organisation has to be active on the plant floor to win over the majority of workers by fighting around the basic conditions that affect them. But it has to be able to help its members survive in an extreme anti-union climate. In high tech, huge corporations insulate themselves from their production workforce so well that outside pressure has little effect on them. Most unions have simply abandoned the idea of helping workers in those plants to organise at all, saying that they are ‘unorganisable’.

Despite its lack of success in organising permanent unions, the UE Electronics Organizing Committee was a nexus of activity from which other organisations developed. The Santa Clara Committee on Occupational Safety and Health (SCCOSH), originally founded in the late 1970s, fought successfully for the elimination of such carcinogenic chemicals as trichloroethylene, and for the right of workers to know of toxic hazards in the workplace. SCCOSH sponsored the formation of the Injured Workers Group, which organised workers suffering from chemically induced industrial illness.

In 1982 the UE committee tried to mobilise opposition to the industry’s policy of moving production out of Silicon Valley. In 1983 the plants employed 102,200 workers; they employed only 73,700 people ten years later. While the number of engineers and managers increased slightly, job losses fell much more heavily on operators and technicians. “What this really meant,” said Romie Manan, “was that Filipino workers in particular lost their jobs by the thousands, more than any other national group”. Manan lost his job as National closed its last mass production wafer fabrication line in the Valley in 1994.

**Employers turn to contractors, unions to new tactics**

In 1993 Intel built a new $1 billion plant in Rio Rancho, New Mexico, instead of California, because New Mexico offered $1 billion to help finance construction. Lower wages were another determining factor. In Silicon Valley, the more permanent jobs in the large manufacturing plants began disappearing. But contractors who provided services to large companies, from janitorial and foodservices to the assembly of circuit boards, employed more workers every year.

Workers losing jobs in the semiconductor plants made as much as $11-14/hour for operators, even in the early 1990s when the minimum wage hovered just above $4/hour. Companies provided medical insurance, sick leave, vacations and other benefits.

By contrast, because contractors compete to win orders by cutting their prices, and workers' wages, to the lowest level possible, contract assemblers and non-union janitors got close to the minimum wage, had no medical insurance, and often no benefits at all. The decline in living standards made the service and sweatshop economy in Silicon Valley the subsequent focus for workers’ organising activity.

In Fall 1990 more than 130 janitors joined Service Employees International Union (SEIU) Local 1877 during an organising drive at Shine Maintenance Co., a contractor hired by Apple Computer Corp. to clean its huge Silicon Valley headquarters. When Shine became aware that its workers had organised, it suddenly told them they had to present verification of their legal immigration status in order to keep their jobs. Shine’s actions ignited a yearlong campaign, which culminated in a contract for Apple janitors in 1992.

Using the same strategy, SEIU went on to win a contract for janitors at Hewlett-Packard Corp., an even larger group than those at Apple. The momentum created in those campaigns convinced other non-union janitorial contractors to actively seek agreements with Local 1877. In September 1992, electronics assembly workers at Versatronex Corp. used a similar strategy to organise against the sweatshop conditions prevalent in contract assembly factories. The starting wage at the plant was $4.25 per hour, the minimum wage at the time. There was no medical insurance.

**Contracting out manufacturing and global competition**

Contract assembly provides a number of benefits for large manufacturers. Contractors compete to win orders by cutting their prices, and workers’ wages, to the lowest level possible. Today the contract assembly system, then in its infancy, has come to dominate high tech industry. Corporations like Hewlett-Packard and Apple have no factories at all. Their entire production is carried out by contract manufacturers in plants around the world.

Tactics like those used at Apple, USM and Versatronex have been at the cutting edge of the labour movement’s search for new ways to organise. They rely on alliances between workers, unions and communities to offset the power exercised by employers. Often they use organising tactics based on direct action by workers and supporters, like civil disobedience, rather than a high-pressure election campaign that companies frequently win. As...

...continued on Page 28...
Death by Overwork: Beyond Industry 4.0 in Japan

Under Japan’s ‘Society 5.0’ strategy, overtime will be unpaid and legally capped at a maximum 100 hours per month. But Research and Development workers are excluded from this cap.

Japan's Prime Minister Shinzo Abe has promoted a policy package called the ‘Work Style Reform’, in association with a ‘Society 5.0 Strategy’, collaborating with the CEO of the Hitachi group, Hiroaki Nakanishi, who was appointed President of the Japan Business Federation (JBF) in May 2018. Society 5.0 is defined as the fifth formation of society (after Hunting, Agrarian, Industrial and Information stages of society). The concept is hard to comprehend, as JBF President Nakanishi admitted, as it should be recognised as a system that consists of combining cyber space and physical space.

The Society 5.0 strategy mentions the development of automated driving systems using artificial intelligence, referring to Toyota by name. Akio Toyoda, CEO of Toyota, says now is the time for a great transformation in the century of the electric vehicle and automated driving system or connected system. He emphasises that his company not only competes with auto rivals, but also with IT companies like Google, Apple or Amazon.

Overtime Crisis: Karoshi

The average annual working hours of Japanese workers is around 1900 hours - 600 hours more than in Germany, according to OECD data (excluding part-time workers). The Japanese word karoshi, death from overwork, is now included in the Oxford English Dictionary. The Ministry of Health, Welfare and Labour officially recognise approximately 200 cases a year as karoshi, which are entitled to be compensated through an official scheme. The number seems to have been stable over the years.

The case of one young University of Tokyo graduate killed by overwork at Dentsu, one of Japan’s most powerful advertising firms, shocked Japanese society. Matsuri Takahashi jumped from the company apartment and killed herself on 24 December 2015. She wrote on Twitter: ‘It is 4am now. My body is shivering, may be dying. It is impossible to work anymore, too tired’. Her work record showed 130 hours and 99 hours overtime respectively in the two previous months.

The Abe administration’s ‘Work Style Reform’, submitted to Parliament early this year, ostensibly aims to address excessive working hours in Japan. It introduces the so-called Highly Professional Work System and is backed by Japanese business, but opposed by labour confederations like Japanese Trade Union Confederation (JTUC RENGO) and Zenroren. A new law will be implemented from April 2019, which unions have labelled the ‘Zero Overtime Pay Act’. It destroys the principle of an eight-hour day and forty-hour week described in the existing Japanese labour law. Under the new law, no matter how long workers’ work, no overtime pay is paid to them. The law will allow a maximum of 100 hours overtime per month. This is well over the Ministry of Labour's guidelines of 80 hours a month, above which is the de facto standard to recognise a death from overtime for official OSH accident recognition. In addition to unions, the association of families bereaved by karoshi requested a meeting with Prime Minister Abe. However, Abe refused to meet them.

Work Everywhere, All the Time

Even the legal 100-hour cap on overtime will not apply to certain designated jobs, such as Research and Development (R&D) workers. The rights and working conditions of R&D workers are now at stake. For them, there is no overtime limit.

The Japanese auto industry’s need for R&D workers is greatly increasing. Toyota now largely accepts applications for work on production technology or next generation battery development. Toyota implemented a so-called ‘Free Time and Location’ (FTL) Innovation last December, which is regarded as a pre-emptive measure for the ‘Work Style Reform’. It aims to lift any limitation on place or time to work. A ‘section chief class’ worker may work 80 hours overtime per month, or 540 hours a year. For undertaking 45 hours overtime a month, they are supposed to be paid by 50 percent more. This means workers should compete with others on the assumption of overtime work. Toyota’s existing discretion work system lets workers decide when to sign-in and out and to manage their work schedule, based on a baseline of a nine-hour workday. Most workers who used the discretion system have now moved to FTL system (2037 workers by April 2018).

Six cases of karoshi have been officially recognised so far at Toyota, including the case of a chief engineer of Toyota Camry. He died a day before his business trip to Detroit, during the 2016 New Year holiday. Toyota Motor Worker’s Union made an official statement of their commitment to eliminate karoshi. In Aichi Prefecture where Toyota’s global HQ is located, Toyota Action Committee including Aichi Prefectural Federation of Trade Unions is campaigning against the proposed zero-overtime pay scheme and the law adopted this year, in solidarity with workers of Toyota. They are campaigning for an overtime limit of 45 hours a month and 360 hours a year, as well as a guaranteed 11 hours rest between periods of work.
The Future Will Be Made of Copper...

Mobile devices, sensors, screens, chips, and robots… do not fall out of the sky. Much of the debate on labour and Industry 4.0 has centred on the application of new technologies across the labour market. Somewhat less attention is paid to the production of these technologies – and still less their dependence on the extraction of certain raw materials.

The electronics sector is increasingly linked to highly exploitative working conditions and practices, and significant risks of modern slavery in its supply chains. One recent report describes forced labour as the ‘backbone’ of global electronics manufacturing. In respect of its raw material inputs, companies appear more or less indifferent to where and how these are sourced. In 2016, the Australian Behind the Barcode project ranked fifty-six electronics companies ‘on the strength of their labour rights management systems to mitigate the risk of forced labour, child labour and exploitation in the supply chain’. One table in the report illustrates these companies’ scores at the point of raw material extraction: it is block red. Universally, the companies failed on questions of traceability, monitoring and labour standards. Not one company could guarantee a living wage, not one had a child labour policy, no collective bargaining agreement was recorded, and none reported that they based sourcing decisions on supplier labour conditions. Of the fifty-six, only one company achieves a ‘partial’ tick, for having at least a pilot labour grievance mechanism in operation in the extraction part of its supply line.

The Raw Materials of a Revolution

The mass expansion of technologies heralded under the title ‘Industry 4.0’ will clearly require a massive growth in mineral extraction. It is little surprise that the extraction needed for these technologies will take place in the Global South. According to some estimates, by 2035 demand for rare earths will increase three-fold, for lithium technologies will take place in the Global South. Massive growth in mineral extraction. It is little under the title ‘Industry 4.0’ will clearly require a massive growth in industrial demand for the raw materials that new technologies will require is bound to have social and environmental costs. Does Industry 4.0 simply spell a new ‘resource curse’ for countries rich in these raw materials? What impact will the growth in demand have on labour conditions already prevailing in the supply chains of these goods?

Discussions about ‘Industry 4.0’ could do well to heed the examples of the first industrial revolution. Industry 4.0 is deeply rooted in that revolution: the digital genealogy of machine code can be traced back to the Jacquard loom. Technology was central to Britain’s rapid industrialisation, and to the rise of cotton in textile production, replacing wool due to the advantages of newly mechanised cotton processing. By the middle of the 19th Century, cotton represented one tenth of all British capital investment and accounted for almost one half of British exports. A quarter of the British population was dependent on the cotton trade for their livelihoods. This relatively arbitrary technological advance also contributed significantly to the economic ascendency of the United States. The ‘prototype machine industry’ massively increased the demand for raw cotton from planters in the Caribbean and the Americas. Imports to Britain grew eightfold between 1780 and 1800. Mechanised spinning therefore created ‘rising demand for raw cotton resulting in the extension of the slave plantation system’.

Questions about labour rights and Industry 4.0 should require us to think about how different workers’ rights are differently impacted, including in the electronics supply chain. In the first industrial revolution, technology had variable impacts on existing labour practices. The introduction of weaving machines into British textile factories dealt a deathblow to the guild system of skilled craft workers and the economic relations that went with it. On the cotton plantations however, the late eighteenth century invention of the cotton gin reduced the labour required to remove seeds, but this efficiency gain only provoked a massive expansion of US cotton planting and with it the intensification – rather than any reduction – of slave labour. And for its importers, the use of slave labour on cotton plantations in the ‘New World’ provoked as much concern over the stability of cotton supplies as it did over the morality of the economy it helped establish.

Spinning a New Yarn?

What impacts on social and environmental conditions will a 300% increase in the demand for copper produce in copper-exporting states? Labour unrest in Chile’s copper sector regularly rocks the business pages of the international press. The world’s largest copper producer, Chile represents one third...
Argentina
On 21 August, over 3000 workers of the Astilleros’ Rio Santiago Shipyard held a demonstration to protest the suspension of their collective agreement and the threat of the shipyard’s closure. The workers took their protest to the office of the governor Maria Eugenia Vidal, whom they accuse of manipulating local media to smear their union - the Asociación Trabajadores del Estado (ATE) Ensenada. Police claimed that a small number of protestors outside the governor’s office engaged in vandalism, but their response was severely disproportionate. Protestors were attacked with tear gas, water cannons and rubber bullets, five of them were arrested and fifteen were injured. One protestors was reportedly run over by a police car and many peaceful demonstrators reported that they were victims of police violence.

ICTUR wrote to remind the government of its obligations under the ILO’s fundamental Conventions to protect and uphold the right to freedom of assembly. The Committee on Freedom of Association has held that any use of force should be limited to cases of genuine necessity and grave situations where law and order is seriously threatened.

China
In July, around thirty workers at the Shenzhen Jasic Technology Corporation were arrested and detained, alongside students and activists supporting the workers’ campaign to organise a union at the electronics manufacturer. Workers began organising a new union in May, and by July, some ninety employees had signed up, but in the meantime the company set up its own union. On July 12, two of the organisers - Liu Penghui and Mi Jiping - were prevented from returning to work, beaten by security guards and police officers, arrested and briefly detained. Workers and students began a demonstration outside the Yanziling Police Station and over the next weeks, protestors were arrested en masse on several occasions. At the time of writing, it is understood that some fourteen are still in detention, charged with disorderly behaviour and trespass. A number of workers were sacked for their union activities.

ICTUR wrote to the government to secure the immediate release of all of those arrested in relation to the union organising campaign, to drop the charges against them, and to comply with China’s obligations to respect and promote the principles of freedom of association and assembly and the effective recognition of the right to collective bargaining.

Colombia
Violence against trade unionists, human rights defenders and community leaders in Colombia has escalated alarmingly, in spite of a peace process intended to bring an end to the country’s long history of conflict. Colombia’s Human Rights Ombudsman recorded over 300 such murders between 1 January 2016 and 30 June 2018. Reports of endemic lethal violence, intimidation and death threats against trade unionists demand to be urgently addressed by the government.

ICTUR wrote to urge the Colombian authorities to immediately implement measures to ensure the fundamental human rights of trade unionists, human rights defenders and community leaders and to take prompt and effective action against armed paramilitary groups and any other parties responsible for these egregious crimes.

eSwatini (Swaziland)
On 29 June, police attacked a workers’ demonstration organised by the Trade Union Congress of Swaziland (TUCOSWA), leaving four TUCOSWA members with serious injuries. Protestors intended to deliver a petition to the Deputy Prime Minister’s office to protest the violations of the rights of sugarcane workers, and to demand a number of labour law reforms. Police deployed water cannon, rubber bullets, stun grenades, tear gas and batons to attack the demonstrators. One TUCOSWA member was arrested and later released.

ICTUR wrote to call on the government to promptly give effect to the recommendations of the ILO supervisory bodies, to drop the charges against all trade unionists unjustly targeted for their trade union activities, overturn their convictions, and ensure their swift release from detention as well as their access to remedy for violations of their rights.

Iran
Some 60 striking steelworkers workers at the Iran National Steel Industrial Group (INSIG) in Alvaz, Khuzestan Province, were arrested and detained on 11 and 12 June, during a protest over unpaid salaries and social security contributions. Strikers were beaten during the arrests; some were seriously injured, but denied medical attention; and one was tortured with a taser gun while in custody. It is understood that most of the workers were released on bail on 13 June, but six were kept in detention.

On 4 August, the Iranian Islamic Revolutionary Court sentenced Mohammad Habibi - a member of the board of directors of the Iranian Teachers’ Trade Association of Tehran (ITTA-Tehran) - to receive punishment of 74 lashes and ten and a half years in prison. Habibi is also banned from travel or any social and political activities for a further two years. Habibi was arrested on 20 May, at a peaceful gathering organised by the ITTA-Tehran.

ICTUR wrote to call on the government to urgently implement measures to ensure that it complies with eSwatini’s obligations under international law, and to protect the fundamental freedoms of workers to join and form unions and take action in defence of their interests.
International Union Rights

ICTUR IN ACTION | INTERVENTIONS

Philippines

The last two years have been marked by an alarming deterioration of trade union rights in the Philippines. A recent report of the Center for Trade Union and Human Rights (CTUHR) records a catalogue of egregious rights violations, including the extra-judicial killings of 28 trade unionists (primarily agricultural workers). Other cases include:

- On 22 February, Marklen Maojo Maga, a trade union organiser of the Kilusang Mayo Uno (KMU), was abducted by plainclothes police. He is still in detention and faces murder charges, which are believed to be politically motivated. Last year, President Duterte labelled the KMU (alongside other organisations) a ‘communist front’.
- In June and July striking workers at the NutriAsia plant in Marilao, Bulacan were violently dispersed by police and security forces. Workers are campaigning for regularisation as employees and for their right to form a union. Earlier this year, the Department of Labor and Employment issued a compliance order directing NutriAsia to regularise over 900 of its employees, but the company has not complied. Attacks by police and security forces on the peaceful picket led to mass arrests and severe injuries.
- On 30 July, Jessielou Cadungog, a vice president of the Trade Union Congress of the Philippines (TUCP) and long-term labour leader, survived an assassination attempt in Cebu. In self-defence, Cadungog’s driver and bodyguard shot and killed one of the assailants, who was later revealed to be a policeman. The Philippine National Police in Cebu claimed the incident was a legitimate police operation and opened an investigation against Cadungog and Macaslang for the policeman’s murder. The possible collusion of the Cebu police in attempted murder of Cadungog raises grave concerns about the administration of justice.

ICTUR wrote to urge the government to comply with its obligations under international law and in particular under the fundamental ILO Conventions, all of which the Philippines has ratified. Last year, the ILO’s Committee on Freedom of Association’s raised further concerns about the investigations into extrajudicial killings of three trade union leaders in 2013 (Antonio “Dodong” Peteacorn, Emilio Rivera and Kagi Alimudin Lucman) and requested that the government “take measures, if necessary of legislative nature, to ensure that crimes of such serious nature are investigated… so as to identify, bring to trial and convict the perpetrators so as to prevent the repetition of such acts.” (Case No 3185, Report No 383, October 2017 - Complain date: 05-FEB-16).

Zimbabwe

On 1 August, demonstrations were held in Harare to protest the results of the national election. Military and security forces fired on protestors, killing six of them and leaving dozens injured. During this violence, a slow-moving Zimbabwe National Army (ZNA) truck fired shots at the third floor office of the Zimbabwe Congress of Trade Unions (ZCTU), smashing its windows. The ZCTU’s security officer, Joseph Chuma, and its legal advisor, Zakeyo Mtimtema, both narrowly escaped being hit by the bullets, and were injured by the breaking glass.

ICTUR wrote to urge the government to initiate a prompt and independent investigation into this attack and to ensure adequate protection for the safety and security of trade unionists. Potentially lethal violence meted out against trade unionists constitutes an egregious violation of trade union rights. The ILO’s Committee on Freedom of Association has expressly stated that attacks against trade union premises and property ‘constitute serious interference with trade union rights’, and that ‘criminal activities of this nature create a climate of fear which is extremely prejudicial to the exercise of trade union activities’ (ILO Digest, paras. 46, 59, 184, 191).

UK

On 4 August, a group of twelve masked far-right protesters attacked the Bookmarks bookshop in London – the official bookseller of the Trades Union Congress. The incident follows an attack on 15 July against trade unionists belonging to the National Union of Rail, Maritime and Transport Workers (RMT) by right-wing nationalist thugs, also in central London.
The Lure of the Technological Quick Fix: Blockchain and the Case of Cobalt

We live in a time where new technologies seem to promise new solutions to old problems. One example of digitalisation that is very in fashion right now is blockchain technology. Blockchains are the subject of a lot of media hype: promising everything from the protection of privacy to its final destruction, from a new intrusion of artificially intelligent machines to the salvation of humanity.

As discussed in Industrial’s research paper, The Challenge of Industry 4.0 and the Demand for New Answers, mining falls into the ‘low’ immediate impact category of Industry 4.0. However blockchain technology ranks high among pathways proposed to address and tackle labour abuses and other unsustainable practices in mineral supply chains.

What is a Blockchain?

Fundamentally, blockchain is an information security strategy. It provides a different level of security than, say, defending a database at the perimeter of the computer it resides on. Blockchain security is at the level of specific records or blocks of data, structured in what are called ‘linked lists’. Each item on each list has identifying data and a pointer to the previous item and/or the next item. Each new block of data must authenticate itself at particular nodes by some kind of proof, for example performing a mathematical operation on the current block, in order to be added to the chain. This proof must be difficult to falsify but easy to verify, to discourage spammers and hackers.

This creates a data chain where one can be reasonably certain that each item was added in chronological order and not manipulated. It works fairly well with Bitcoin, for example. It is this property that makes blockchain seem attractive for the task of verifying the cobalt supply chain.

Cobalt mining and the DRC

New technologies such as smartphones and electric vehicles require batteries, and have greatly increased global demand for cobalt, a rare metal. It is estimated that over 60 percent of the world’s cobalt resources are to be found in the Democratic Republic of Congo (DRC). Industrial general secretary Valter Sanches recently described the working conditions at some multinational mining companies’ operations in the DRC as ‘appalling and disturbing’. In a letter to DRC President Kabila after a fact-finding mission to Glencore’s DRC mines, Sanches wrote that the global union was ‘saddened and outraged’ to discover ‘the daily experience of abuse and violation of fundamental labour rights of Congolese mine workers at these operations are in total disregard of the laws of the country and collective bargaining arrangements. The testimonies of around 80 workers represented by the union, offer clear proof of the abuse and violation of their labour rights and human rights, extending beyond the mine operations into their homes, families, communities and the surrounding environment’. A traceable and verifiable digital record of cobalt from its origin in mines in the DRC through to its installation in the battery of a Tesla would, proponents argue, enable anyone to know exactly when and in which mine – and potentially even by which miners – the particular cobalt in a particular battery was produced. This could provide assurance that environmental and social abuses, such as child labour, or abuse of trade union rights – were not used in the production of the cobalt, or if they were, enable tracing and tackling the abuses for remedy or punishment. Access to remedy is fundamental, and represents the litmus test for blockchain technology’s utility in bridging the divide between abuse and remedy.

Technological Limitations

It is worth remembering that even though we use terms like ‘blockchain’, in reality there is no abstract entity called a blockchain, it is just a network of physical computers, owned by a variety of people, using an agreed-upon authentication protocol. Where are these physical computers, and what are their characteristics? Are they vulnerable to failure or compromise?

The application of blockchain to the cobalt supply chain raises the problem of capacity. It can be assumed that most small-scale producers, particularly so-called artisanal miners, will not have the resources or capacity to participate as a node in the chain. Artisanal mining, even though it is legal in the DRC and forms a large part of the country’s mining landscape, presents a huge challenge for the supply chain of cobalt. The industry is forced to sell through bigger operators, creating new opportunities for corruption and questionable input data. Technology does not ensure trust in the human sense.

There are geopolitical boundaries within the internet, therefore public blockchains may be difficult to implement in some regions, as could possibly be the case with the Democratic Republic of Congo. Furthermore, there are developing countries to whom rich countries or multinational corporations will try to sell specific implementations of data infrastructure. This may lock a developing
country into one standard that is incompatible with others. Intercommunication and standardisation between potentially thousands of actors in different regions in a value chain may be a problem.

Immutability is one of the words frequently used to describe blockchain, and it is this characteristic that makes it suitable for cryptocurrencies. However, it remains vulnerable to fraudulent or misidentified data, particularly at the beginning of the chain. Given the lengths that some employers have gone to avoid or falsify social audits, and the resources that some corporate and government actors have to undermine any system that restricts their behaviour, it would be naive to assume that this will never be attempted.

It all comes down to ensuring the integrity of not just the technology, but also the data that is input in to the technology. The current players in the DRC cobalt mining industry do not, at least for now, inspire confidence towards ensuring that integrity. With the emergence of the supply chain sustainability standards, could blockchain technology be the bridge between abuse/violation and remedy? That possibility will remain only aspirational unless this technology can be fully adapted to the non-mathematical characteristics of sustainability's social dimension – and the quality of input data is assured. Blockchain technology does not alter the principle of ‘garbage in; garbage out’.

Unintended Consequences

The traceability and verifiability of blockchain raises concerns about personal privacy. Granted, privacy is not an objective of its application to a value chain such as cobalt. However, it could be problematic if someone identified in the chain were to invoke the EU’s ‘right to be forgotten’ legislation, for example. Removing one piece of data could potentially damage the entire chain. Businesses, too, have privacy concerns. How will these be addressed?

Is the proposal for a public blockchain, or a private one? If the former, who will set the rules and standards that govern it, and can they be enforced on a network of independently controlled nodes? If the latter, who would own it? There are at present different proprietary systems. Who will own the data?

Suppose that a particular lot of cobalt is identified as having child labour in its production and/or violations of the rights of workers, what then? Will blockchain help law enforcement? Will the cobalt itself be forever tainted, or will it be used nonetheless? A complication is that the metal can be melted and added to any other, becoming physically and chemically untraceable at that point – emphasising the importance of chain-of-custody (the ‘paper trail’) in sustainability reporting.

The proposal to use blockchain technology to trace a problematic raw material like cobalt emphasises the difficulty that those most expert in blockchain are data specialists, computer scientists, and cryptographers. Cryptocurrencies can be viewed as products of pure mathematics. However, the environmental and especially social dimensions of sustainability are not so neat and tidy. Social scientists, human rights lawyers, and ecologists are not typically experts in the technology. This gap would need to be bridged.

Is Blockchain a Credible Solution?

Blockchain is a technology. The problems in the cobalt supply chain are social, cultural, environmental, political and economic. We must always be wary of unintended and unforeseen consequences, for example an explosion in energy consumption to support the blockchain, or the confounding of certification with truth, or corruption. If evidence of human rights abuses arise after the initiation of a blockchain, will its immutability become a liability rather than an asset?

Much of present knowledge of blockchains arises from cryptocurrencies. In contrast, performance in the social dimension of sustainability is notoriously difficult to evaluate. Typically, the data will be qualitative rather than quantitative, and to a degree subjective rather than objective. This does not make these social indicators less important than economic or environmental ones that are easier to measure and track. However, the attempt to apply blockchain to this problem is to try to apply a solution worked out for an easily quantifiable item – a unit of currency – to a social problem. There are at least two concerns here. One is the assumption that something that has social value can be assigned a value that everyone would agree on. This is rarely, if ever, the case. Furthermore, even if we pretend that we are only assigning a numeric rating with no implied financial value, it becomes a ‘hard’ number that falsely suggests a degree of scientific certainty.

The conditions of production of a particular commodity can only be established by audit. There is an entire industry of people and organisations specialising in social and environmental auditing, some connected to the traditional financial auditing houses, many independent of them. Blockchain will not change that. It is the output of such audits that will become part of the digital signature of a particular lot of cadmium, an electronic tag on that lot. Unfortunately, it will prove easier to verify the authenticity of the tag, than the real-world conditions under which the commodity was produced.

In the case of cobalt, managing the value-chain data could also be accomplished with a database, or a distributed ledger, without blockchain. One question to ask is, what value does a blockchain add that these other approaches lack? Are blockchains the best solution to the problem of verifying behaviour in the cobalt value chain? Although there is promise in the use of protocols such as blockchain to verify or certify the value chain for cobalt, we should be cautious. It may not add very much benefit versus other, less complicated technologies. Finally, we should not confuse issues of traceability or certifiability with those dimensions of sustainability that will remain complex and difficult to quantify.

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FIM-CISL vs. Industry 4.0

Historically, the FIM-CISL union (Italian Metalworkers Federation) has always been open to technological and organisational changes. So too with Industry 4.0, our union has adopted an optimistic perspective, regarding both the possibility of reviving the manufacturing industry even in high-wage countries, and the chance for people to be emancipated themselves in the experience of work. Coming from a family of fishermen and sailors I remember a typical expression, which explains very well our way of facing innovation: ‘If we cannot stop the wind with our hands, it is better to learn to sail in the wind’. For this reason the FIM-CISL is very proactive on issues of automation and digitalisation in production. The metalworking sector in Italy is one of those sectors potentially most impacted by Industry 4.0.

The first initiatives of the FIM-CISL (in the form of events and a thematic booklet) were carried out by the union even before the launch of the National Industry 4.0 plan by the Italian Ministry of Economic Development. This fact demonstrates that the interest of the FIM-CISL in Industry 4.0 is not driven by the content of specific governmental measures; but by the attention the union has paid to the issue since the first half of the 2010s, and that of researchers, experts and managers, with whom FIM-CISL has relationships. The approach adopted by FIM-CISL in relation to Industry 4.0, and in general about technological and organisational innovation, is one of willingness to anticipate change so as to make it sustainable for all. The dialogue with some Italian experts and researchers has informed this approach, as well as considerations we take from encouraging experiences of other workers, such as in Germany and Scandinavian countries.

Importantly, this is a conceptualisation of Industry 4.0 as a phenomenon that can still be shaped while potentially bringing benefits to companies and workers in terms of flattening of hierarchies, disappearance of repetitive and routine work and growth in cognitive skills. This ultimately emphasises the relevance of some aspects that are traditionally of prime concern to FIM-CISL – namely, employee participation in decision-making processes; decentralised collective bargaining, conceived as closer to companies and territories, thus potentially more capable to address companies’ and workers’ specific problems; worker skills’ development, and so on. Industry 4.0 hence has come to be perceived by FIM-CISL officials as an enabler not only of Italian firms’ territorial competitiveness, but also of FIM-CISL’s own desire for a human-centred society and people’s self-fulfilment within the experience of work, thanks to a special focus on workers’ participation and knowledge.

The expectation that Industry 4.0 could achieve some goals inherent to FIM-CISL’s traditional vision and mission, clearly has the merit of promoting FIM-CISL to actively engage on the topic, rather than reducing it to fear of technological advancement. On the other hand however, this might cloud FIM-CISL’s judgement on certain occasions. If not accompanied by a constant, critical analysis of the situation in companies and territories, it might draw FIM-CISL and its ideals away from workers and their concrete experiences.

A crucial challenge for FIM-CISL, especially in the light of non-encouraging membership rates, appears to be that of bridging the gap between the union’s ideal perspectives of the future of work and workers’ actual needs and interests: an effort though already initiated in the latest round of contractual renewals. It seems urgent for FIM-CISL to keep on converting their ambitious objectives in Industry 4.0, once clearly defined and communicated, into more concrete practices of collective bargaining and workers’ representation: union organisational structure and union capacities need to be renovated and made consistent with union purposes in a changed scenario, in order not to lose internal legitimacy.

Collective Bargaining for ‘Individual rights to professional training’

Among the results achieved in this proactive commitment from FIM-CISL is the inclusion of an ‘individual right to professional training’ in the national collective bargaining agreement (CBA) signed in November 2016.

That is an absolute novelty in the world of labour relations in Italy. The social partners (companies and unions) have become aware of the strategic importance of the continuous updating of workers’ professional skills, in the light of the digital revolution that is rapidly and radically transforming the world of work. The continuous updating of skills is a factor of competitiveness for the company, a factor of employability and greater professional power of the worker in the labour market.

The CBA includes a ‘right to education’ providing for 250 hours paid over the three-year CBA period (2017-2019) for literacy courses, fulfilment of educational obligation, Italian courses for foreigners and 150 hours paid for professional, technical, high school diplomas and university and master’s degrees. It includes ‘leave for training’ providing for eleven
with several research institutes, universities and other development of Industry 4.0 and unions. ‘SUNI – Commission - on the relationship between the coordinating a project - co-funded by the European white papers, events, projects, etc.). achieved concrete outputs (i.e. books, green and communication, training, and lobbying. 2015 maintained initiatives in the own professional development. was introduced and of self-determination of one’s agreement the concept of active worker participation relations in Italy, with the new national collective maximum of case, must contribute to the cost of training for a region or on online platforms. in independently training opportunities available in the or online. The company, in this case, must contribute to the cost of training for a maximum of €300 per worker. For the first time in the history of industrial relations in Italy, with the new national collective agreement the concept of active worker participation was introduced and of self-determination of one’s own professional development.

**Smart Unions and Workers’ Representatives 4.0**

Beyond collective bargaining, FIM-CISL has since 2015 maintained initiatives in the field of research, communication, training, and lobbying. These have achieved concrete outputs (i.e. books, green and white papers, events, projects, etc.). Since the beginning of 2018, FIM-CISL is coordinating a project - co-funded by the European Commission - on the relationship between the development of Industry 4.0 and unions. ‘SUNI – Smart Unions for New Industry’ is developed jointly with several research institutes, universities and other industrial unions.¹ The main objective of this project is to strengthen the capacity of the unions to face the challenges arising from the digitalisation of production, thus creating the conditions for the spread of Industry 4.0, and contributing to the reconversion and innovation of factories to be more competitive.

The first phase of the project focused on coordinated research work in Germany, Italy, Spain and Sweden, culminating in the publication of four national reports and a comparative report on Industry 4.0 and unions in these four countries. The project is now developing with the planning of a common (one week) training path shared between all the partners, which will be carried out by FIM-CISL, FICA-UGT (Spain) and IF Metall (Sweden) in their respective countries. The course is involving 15-20 unionists and/or worker representatives of each country. After sharing/discussion by the partners on the results of the training course in the different countries, they will undertake a study-visit to Germany to look at the competences and tasks of the ‘workers’ representative 4.0’. The Associazione per gli studi Internazionali e Comparati sul Diritto del Lavoro e sulle Relazioni Industriali (ADAPT, Association for International and Comparative Studies on Labour Rights and Industrial Relations) will produce ‘Guidelines’ on the skills and activities of the workers’ representative 4.0 and share it with partners who will translate the Guidelines from English into their national languages (Italian, Swedish and Spanish). Finally, in May/June 2019 a final meeting will be held at the Industriall Europe headquarters to present the results of the project and plan the dissemination phase. The representatives of the EC and the European federations of the manufacturing companies will also take part in the meeting.

**Unions must re-invent themselves at all levels**

It is the FIM-CISL’s view that, faced with the challenges of Industry 4.0 and the digital revolution, unions must reinvent themselves - both in terms of organisation and collective agreements - at all levels: workplace, local, national and global.

At the workplace level, unions must promote opportunities for professional qualification and organise the direct employee participation, thus adding value to firm performance while protecting workers’ interests. This means developing collective bargaining at company-level on issues such as workers’ training, work organisation, health and safety, etc.

At the local level, unions must assist workers throughout their job shifts and the other major changes that occur through their lives. This means developing (sectorial and multi-sectorial) collective bargaining at local level on welfare, income protection, active labour market policies and school-to-work transition, social dialogue/multi-stakeholder cooperation on technological and social innovation.

At the national level, unions must organise and represent new types of workers, as well as provide scope for new types of membership and to strike a balance between efficiency (economic objectives), equity (fair and just treatment of workers) and voice (workers’ involvement in shaping their work environment) under the umbrella of sustainability as an overarching principle. This means developing (sectorial and multi-sectorial) collective bargaining at national level on next generation rights (right to training, right to disconnect, privacy by design, information and consultation) and social dialogue / multi-stakeholder cooperation on technological and social innovation (universalisation of welfare provisions and income protection, active labour market policies and training).

At the global level, unions must protect and advance workers’ conditions and rights along the whole global value chains to guarantee a responsible re-shoring of manufacturing activities. This means developing the Global Union Networks in the multinational companies; ensuring that transnational collective bargaining on labour standards is respected including among subcontractors; and building up international cooperation between unions over practices of representation and workers’ empowerment, as well as global ‘name and shame’ campaigns.

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¹ RUB – Ruhr- Universität Bochum, Germany; ADAPT Modena, Italy; LTU – Luleå Tekniska Universität, Sweden; UDIMA – Universidad a Distancia de Madrid, Spain; IF Metall Sweden; FICA-UGT Spain; IG Metall Germany; Industriall Europe.
FOCUS | INDUSTRY 4.0

The Future of Work is Ours

Unifor recently held a one-day conference on Automation, New Technology and the Future of Work. As part of this event, the union released a discussion paper called The Future of Work is Ours: Confronting risks and seizing opportunities of technological change. With 315,000 members across the country in almost every sector of the economy, Unifor is Canada's largest private-sector union. The union's response to technological change is very much a work in progress, and the conference and discussion paper serve as a starting point in this process. The fundamental question at hand: how do we develop a worker-led program allowing us to get the best of technological change while avoiding the worst?

We know that working people in Canada and around the world have been experiencing the negative impacts of technological change, and are feeling threatened and afraid for their own futures. At the same time, we have seen incredible opportunities for new and better jobs, union growth, and advancements in workplace health and safety due to technological change. Our responsibility as workers and as a union is to take control of this conversation and move from a position of fear and defence to a position of power and action.

Making the transition means first understanding the problem, and a portion of our discussion paper and day-long conference focused on deepening our understanding of exactly what we're talking about when we discuss technological change at work. Of course, our members know that technological change is nothing new. We have always experienced the effects of technological change, from the invention of the printing press, to the Industrial Revolution, to the invention of the modern computer. But what is new is the speed of that change. In just a generation, we've seen the invention of the internet and artificial intelligence, so-called 'big data' and the advent of mass surveillance, and the widespread use of advanced robotics and other automation.

A flurry of negative headlines have made wild claims about the coming 'robot apocalypse', where millions of jobs would be replaced by automation. However, more recently we have seen a more nuanced analysis emerge. This revised analysis focuses on the difference between a task and a job. A task is a discrete segment of work done as part of a worker's duties of employment, while a job is a bundle of tasks assigned to a worker who performs those tasks and exchanges their labour for pay. A recent report from McKinsey Global Institute estimates that fewer than 5 percent of existing occupations are candidates for full automation. Frequently, rather than completely eliminating jobs, automation and artificial intelligence will replace some tasks, requiring workers to adjust their level of skills and knowledge used in the workplace. In terms of the Canadian context, four separate think tanks estimated the share of tasks susceptible to automation in Canada as ranging between 35 percent and 47 percent. This is across all sectors of our economy.

Understanding the Impacts

Part of the challenge we identified was how to create an analysis that allows our members to engage in a meaningful way. We created a framework that identifies six general areas of impact – both positive and negative – to make this issue more digestible.

The first, and probably most obvious, impact is job loss or displacement, and job estrangement. Job loss or displacement is what most of us think of when we consider tech change at work – 'I was fired from work and replaced by a robot'. But as we've seen, the situation is more complex, and often less dire, than that. Less obvious is what we've called job estrangement, where a worker's role in her workplace changes due to technological change, leaving her feeling alienated from her work, where her skill and knowledge are no longer valued.

The second major category of impact is changes in work organisation and required skills. These are impacts that many of us have experienced already. We've probably all heard about, and perhaps even participated in, 'up-skilling', when workers displaced by technological change upgrade their skills to fill new roles that complement and support new technologies. But the flip-side to up-skilling is 'de-skilling', which is the slow erosion of skill requirements and experience due to increasing automation.

The third category of impact is productivity, which we frame in the context of productivity versus workload. We've all been told that technological change, and especially automation, is meant to improve productivity, and therefore profits for our employers. However, workers can experience this increase in productivity as an increase in workload, despite the claims of improved efficiency through automation.

Unifor members across many sectors have experienced the same thing – there are fewer workers doing more work. Even in some sectors where workers struggle to get enough hours to get by, when workers do work, they're doing more work than ever before. But, undertaken differently, automation could also free up workers to fill more technical/support roles, interact with customers/clients more, or even work shorter weeks.
The fourth category of impact is surveillance, and specifically increased surveillance. We’re all seeing increased surveillance at work, whether it’s digital cameras in all corners of the workplace, GPS trackers in work vehicles or digital devices, gas mileage trackers, and so on. At issue is the balance between an employer’s desire to monitor its employees, and a worker’s right to privacy, even in the workplace. And of course, there’s the issue of data security: there are important questions about how all this data is gathered, stored, secured, and safely destroyed when no longer useful.

The fifth category of impact is in health and safety. This is one area where technological change has offered numerous benefits to working people. Increasing automation means more workers transitioning from physical labour-intensive jobs towards less physical work. Technological change has sometimes led to safer workplaces, but we will face new challenges. Workers in both physically and non-physically intensive industries may face increased psychosocial loads, increased pace of work, and other as-yet unanticipated threats to personal health and safety on the job.

And finally, the sixth category of impact is changes in pay and employment security. As is true in every jurisdiction, an increasing share of workers in Canada experience involuntary part-time work, temporary and contract work, hours that vary week to week, misclassified self-employment, and working multiple jobs to make ends meet.

Technological change is driving work to become increasingly unbundled – and so we see the rise of the so-called ‘gig economy’. What we’re seeing is that worker expectations around jobs have declined from a life-long career, to contract work and even micro-tasks. This is especially true for young workers and freelance workers.

**Developing Solutions**

One of the most obvious ways we can address technological change in our workplaces is through the collective bargaining process. As our members will attest, Unifor has already been doing this for years. Our union has bargained provisions in our collective agreements to ensure workers have the right to participate actively in the implementation of new technology and to negotiate the terms as they related to technological change.

The fundamental principle underlying this approach is that workers deserve to have early notice of upcoming technological changes, the right to participate in and benefit from new opportunities, and the right to negotiate new language arising from those changes.

And then, of course, there’s also the critical role of government regulation. All levels of government must continue to play a role in making sure the right laws and regulations are in place to protect working people from the adverse effects of technological change, while still embracing the need to be competitive and innovative in the global economy. We know that new technologies, and especially so-called ‘disruptive’ technologies like Airbnb or Uber exist in – and because of – regulatory ‘grey areas’.

Our governments must address these legislative and regulatory grey areas, and we must be prepared to help them to do so, by reaching out to elected officials, sharing our experience and knowledge, and presenting effective policy options. Rules and regulations have been established over the years to protect residents, workers and consumers. We must encourage our elected officials to establish a level playing field for existing and new technologies, one that doesn’t diminish hard-won protections for everyone.

We can’t forget that any solutions to technological change in the workplace must advocate for good jobs, decent work and an equitable future. Immigrants, women, people of colour, and people with disabilities are already left behind in Canada’s labour market, and technological change can often make this marginalisation worse. But periods of intense economic upheaval and labour market transition often create opportunities for huge leaps forward in social and worker justice. Any strategy to address and embrace technological change in our workplaces must emphasise the fight for good jobs, decent work, and especially, equity.

At the end of our discussion paper, we suggest several simple next steps Unifor will undertake. We’re in the process of developing basic educational and training modules to make sure our rank-and-file members and local union leaders have the tools to assess and anticipate the potential for technological change in their workplaces. We’re going to develop sector-specific strategies to address technological change at work, in an acknowledgement that tech change impacts us in vastly different ways from sector to sector. We’re also developing a suite of public policy initiatives that we can take to all levels of government, to advocate for the laws and regulations we need to protect our quality of life at work, at home, and in our communities.

The only way to build a just and equitable response to technological change at work – especially for immigrants, women, people of colour, indigenous peoples, and people with disabilities – is if workers stand up together and lead the way. We can’t rely on our employers, corporations, or even governments, to respond to tech change in a way that includes us, our needs or our rights. If we don’t make our voices heard, we will not be able to play a role in shaping the economy of the future. The labour movement is well positioned to be the voice for workers as we fight together to make sure that the future of work really is ours.
Work and Technology: Student and Union Perceptions in Portugal

When expressed in terms of technology, the question of the ‘future of work’ points to several possibilities, and multiple uncertainties. Based on the Portuguese context, this article highlights the perspectives of university students (who are, after all, the main protagonists of future work) and the perceptions of trade union representatives.

A trail-blazing simulation in the academy

During the academic year of 2016/2017, the University of Coimbra undertook a simulation of the International Labour Conference (ILC) – the first time in a European university. The event was inspired by the Future of Work report of the 104th Session of the ILC. The initiative mobilised 300 undergraduate, master and PhD students in economics, sociology, management, international relations, law, etc. – who, in accordance with the tripartite structure of the ILO, were tasked to act as representatives of governments, employers or workers.

One of the debates highlighted by the simulation was the impact of technological changes on work and employment. Some of the topics underpinning this debate were: the role of industries of the future; types of digital work; implications of productive automation for working lives; individualisation processes in the management of working hours and non-working time; technological unemployment; requirements with regard to new skills; tensions between traditional service activities and technological platforms (e.g. taxi drivers vs. Uber).

A set of proposals on the future of work emerged from these discussions:

- Companies and governments should implement a co-financing programme enabling workers to benefit from the necessary training (without redundancies) in the event of changes due to the operationalisation or introduction of new technologies;
- Government and company policies should maximise investment in research and development to optimise the potential of new technologies as promoters of social welfare and job creation;
- Enhanced coordination between universities and the needs of the labour market should be established (adjusting teaching practices and programme contents to real needs, reinforcing the technological component of educational institutions or maximising vocational training to provide future workers with more technical skills);
- Governments should examine and act on gender inequalities created by the incorporation of new technologies into labour markets and channel those technologies to reduce gender pay gaps;
- Social partners should define limits concerning the type and number of machines that might directly replace jobs;
- Public investment should be reinforced in the creation of technological incubators of the solidarity economy in universities, communities and social organisations.

Trade union representatives’ perceptions

One of the aims of a project at the Centre for Social Studies of the University of Coimbra – entitled ‘Rebuilding trade union power in the age of austerity: three sectors under review’ – is to capture the importance attributed to ‘digital trade unionism’ in the metallurgical, transport and telecommunications sectors. This is an especially timely challenge in a trade union movement still very much characterised by ‘old’ practices: predominance of men (both at the top and base of the union hierarchy); low staff turnover; excessive proximity to political parties; qualification deficit of trade union staff; relatively low unionisation rate; timid focus on cyber-activism of social networks, etc. Confronted with the challenge of innovation, trade union representatives in these three sectors expressed a mixture of optimism and pessimism.

Between a modest optimism...

Some trade union officials recognised the merits of the digital age, in particular the following aspects:

- The Internet helps organisations communicate quickly and cheaply to a broader audience and to create digital archives of materials developed by workers’ organisations around the world;
- Unions’ mobilisation efforts have become more visible through the capacity to transmit information in real time, such as denouncing workers’ rights violations, sending out calls for action, or raising awareness of workers’ issues;
- In the era of Industry 4.0, workers may gain more autonomy and perform more interesting and less arduous jobs;
- There is a greater flexibility and reconciliation between employment and family life;
- “A good website solves the issue of membership decline, as well as the format and level of communication” (interview with former trade unionist).
unionist from Sindicato dos Trabalhadores e Aviação, SITAVA - airport and aviation workers' union; January 2018).

■ “It is easier for people to seek clarifications on labour issues or any other issue through Facebook” (Interview with the vice-president of Sindicato Nacional do Pessoal de Voo da Aviação Civil, SNPVA - national trade union for civil aviation workers; January 2018).

... and a realistic pessimism

Despite this willingness to engage in online activities, trade union leaders are sceptical with regards to the effectiveness of digital methods. There are many other challenges: digital illiteracy; the democracy deficit in the workplace, which limits workers’ access to the Internet; language barriers; and competition for attention in an increasingly data-driven environment.

Specifically regarding Facebook, there is much mistrust, because it “anyone can create an anonymous profile and spread a rumour. It is preferable to communicate through the mailing list as a way to ensure that we know who is the person on the other side!” (Interview with trade union representative from Sindicato dos Técnicos de Manutenção de Aeronaves, SITEMA - union of aircraft maintenance technicians; June 2018). The national secretary of a trade union for communications and media professionals (Sindicato Democrático dos Trabalhadores dos Correios, Telecomunicações, Media e Serviços, SINDETELCO) affirmed that: “If I see a person post a question, I send them an invitation to talk personally. I don’t like to stay behind the computer screen!” (Interview; February 2018). Similarly, the Portuguese general secretary of the European Transport Workers’ Federation emphasised that: “the Internet, blogs, WhatsApp and all that cannot substitute for physical involvement with workers, for working together with them to learn about their issues. Even Nordic unions come tell us in our meetings that they are learning a new way of working, which is being close to the workers, meeting them outside the workplace” (Interview; January 2018).

The pragmatism of the previous statements indicates that, in spite of the Internet consisting of an unavoidable tool for union recruitment and mobilisation strategies, the ‘virtual’ unionist is still far behind the ‘real’ unionist. Even if numbers of trade unions using the web to communicate are increasing across the globe, it would be useful to conduct an Internet census to measure the extent of access by trade unionists, since there are important differences between countries, sectors and trade unions, as well as different frequencies of Internet use. Moreover, it would be useful to determine the weight of online mobilisation in achieving concrete gains for workers.

Futures of hope

If the (unavoidable) mixture of feelings stimulated by the debate around work and technology was present at the academic simulation, it became more evident in trade union discussions. It appears that the opportunities for work brought about by technology are more widely accepted among students at the academy than among trade unionists. But the motto ‘the Internet belongs to everyone’ (the title of Eric Lee’s seminal book) is more valid than ever and can be used as an instrument for collective struggle. The challenge is convincing workers and trade unions that it can also be a way to achieve practical results.

Despite the defensive perceptions of Portuguese trade unions, several conditions (if accomplished) could turn the future of work into a future of (well-founded) hope. Some principles that may help guide that vision are:

■ The Internet and all online social networks should not be embraced as a mere technical tool, but also as an ethical principle towards more democracy at work;
■ One-time online engagement is no longer sufficient to get a message across. It has become necessary to continuously create and curate content that is tailored to the specific audiences that trade unions intend to reach;
■ Traditional trade unions need a more daring attitude, for example, by combining their strategies with those of the trade unions interested in defending the interests of the platform workers;
■ Trade union representatives need to incorporate cognitive capacities that motivate them to use technology as an element of valuing work, rather than simply a source of feared job destruction;
■ It is crucial to intensify online membership applications, social media pages, blogs, videos and petitions;
■ The fulfilment of the proposals developed in the aforementioned ILC simulation would provide an impetus for trade unionism to approach the future of work in Industry 4.0 with a more lasting optimism.

4 Lee, Eric (2000), The Internet belongs to everyone. Available at: http://www.labourstart.org/icann/ericleebook.shtml
5 Carneiro, Bia S. (2018), Trade unions and Facebook: The need to improve dialogue and expand networks. ETUI Policy Brief 5. Brussels: European Trade Union Institute
Digital Solidarity or Complacent Clicktivism?

Trade unions have been using information technology to promote global solidarity for more than three decades. When I began researching and writing about this in the early 1990s, I found an already existing community of activists who had been using email and other online tools for years. In fact, by the early 1990s, they had already held a couple of international conferences to discuss what had been done and where to go next.

So we’ve learned a lot, and we have decades of experience behind us. We’ve learned about some tools that work very well, and others that don’t. LabourStart has been a laboratory of sorts, where we’ve tried out many of the new technologies.

**What works, and what doesn’t**

Let me start by giving a couple of examples of things that did not work out very well.

One was called ‘Second Life’ – an immersive, 3-D online environment which was all the rage a few years back. Some unions decided that this ‘virtual world’ was the next big thing and didn’t want to be left behind. Something called ‘Union Island’ was created to much fanfare. I tried to be supportive, and signed up to use ‘Second Life’ only to discover that I couldn’t figure out how to equip my online avatar with clothing. As a result, my unclothed character stood neck-deep in the sea surrounding ‘Union Island’ cheering on those few who had managed to get ashore with their clothes on. ‘Union Island’ quickly disappeared under the virtual waves and has not been heard of since.

When Facebook took off, many of us realised some of its limitations – more on this in a moment – and thought it would be better to build a social network and apps, the reality is that websites remain incredibly powerful tools. Just ask Amazon.

So we’ve learned a lot, and we have decades of experience behind us. We’ve learned about some tools that work very well, and others that don’t.

**Credit where credit’s due**

After a successful organising drive at DHL Express, the Turkish Motor Vehicle and Transport Workers’ Union (TÜMTIS) filed for trade union recognition. Despite TÜMTIS organising the required number of workers under the Turkish labour laws, DHL refused to talk to the union. TÜMTIS members were on the picket line for a full year, from 17 July 2017. Eleven months into their struggle, they approached LabourStart through their global union federation, the London-based International Transport Workers Federation (ITF).

Their campaign was launched on LabourStart on 8 June 2018. It was translated by volunteers into 14 different languages. 6,769 people sent off messages supporting the workers. By 23 July, just 45 days after the campaign went live, the company had caved in to the union demands. As the company and union put it in a joint press release with the ITF, ‘DHL, Turkey and Tümtis have agreed to start negotiations on a collective labour agreement ... both parties have met for first, informal talks over the last weeks. In these talks, which were also attended by the ITF, Tümtis and DHL both expressed their willingness to enter into a trustful and sustainable relationship.’

Some campaigning organisations would have promptly announced that it was their effort which
made the difference, and used this as an excuse to send out a fundraising appeal. LabourStart, which works as part of the trade union movement, has to behave according to a different standard. In a message which we sent out announcing the victory, we wrote: 'The main reason for this [victory] is, of course, the determination and courage of those union members in Turkey. The support given by the ITF and its affiliate unions around the world was also hugely significant.' We also thanked those who supported the online campaign, but we put things in perspective. Their support ‘certainly played a role in the last few weeks as we aimed to convince the company to finally come to the negotiating table’. But the workers in Turkey, on the picket line, had to be given full credit for their victory.

Online overkill?

Possibly the biggest mistake we're seeing today in how trade unions use the net for global solidarity work is the over-reliance on social networks and Facebook in particular. Let's be clear about the difference between Facebook and tools like the web and email. The web and email are standards. Anyone with a web browser like Firefox or Chrome on their computers or phones can access a web page. Any email client, like Outlook, can send and receive email. The web is a public space, not a private, walled garden. Facebook on the other hand is like the old, 1990s version of online communities before the Internet arrived on the site. It's like Compuserve or America Online. It's not an open standard, but a privately-owned, profit-making business.

And Facebook will not be around forever. Its growth among young people has ground to a halt as other, more popular social networks take its place. Facebook itself grew out of the collapse of another hugely popular network, MySpace, which has now effectively disappeared.

But even before Facebook enters its decline (which may already have begun) it can behave as it wants and no one has a right to challenge it. We've seen cases of unions creating platforms on Facebook to criticise companies, and then these being taken down by Facebook at the request of the company. Today, with tremendous pressure being put on Facebook to deal with the problem of ‘fake news’ and attempts to influence elections, we may see much more of this kind of thing.

And of course on Facebook, unlike the web or email, where are our archives? How easy is it for a union to look up what it did in a campaign, what worked and what didn’t? As we outsource our collective memory to this private company, we give up an invaluable asset.

But it's not only Facebook which is the problem. Even the tools that work – email and the web – are facing challenges. Ten or twenty years ago, an online campaign was relatively rare and would excite activists. Today, our inboxes are full of appeals from a very wide range of organisations and campaigns. It's hard to support them all, and one grows tired of the repetitive messages. Much as I care about the declining number of bumblebees in England, I'm not sure I need to be reminded of that fact every day. Or that a progressive candidate running in a primary election in New York needs a donation from me, and apparently needs that donation every single day.

No substitute for mobilisation

We need to remember that putting those online tools aside, our strength as a labour movement is in our numbers. Our campaigns succeed or fail based on whether we can mobilise our own members.

In a recent campaign we were given by a union, it seemed as if the union was simply outsourcing the campaign to LabourStart. We managed to get over 6,700 people from around the world to support the union's campaign. But when analysed those results, it became clear that only one in six supporters came from the country concerned. And only 16 – out of 6,700 – were members of the union which had asked for the campaign. And that's a union which claims over 100,000 members.

It's a campaign that is unlikely to achieve its goal for that very reason. What works is not this or that technology, though some (like email) are better than others (Facebook). What really matters is whether unions are prepared to reach out to their own members and encourage them to take the few seconds needed to sign up to support a campaign.

Our members are our greatest strength. We win campaigns when we mobilise them.
Belarus
As reported previously in IUR 24.3, two officials of the Radio and Electronics Industry Workers Union (REPAM) have been on trial for alleged tax offences, following raids last year on the offices of REPAM and the Belarusian Independent Trade Union (BNP). On 24 August 2018, REPAM chairman Henadz Fiadynich and chief accountant Yhar Komlik were each sentenced to four years’ suspended imprisonment, a ban on holding senior positions for five years, and fines of over USD $23,000 plus the costs of the trial. Fiadynich and Komlik believed they were targeted for their trade union activities and in particular in retaliation for their involvement in 2017 protests against a Presidential Decree targeting the unemployed (labelled ‘social parasites’). Responding to the case, ITUC General Secretary Sharan Burrow said, ‘this is a blatant anti-union case, with no foundation in the rule of law’.

European Trade Union Institute
The ETUI has published a number of new policy briefs relevant to discussions on digital technology and union mobilisation: The untapped possibilities of YouTube as a trade union tool, Trade unions and Facebook: the need to improve dialogue and expand networks, and The power of social media as a labour campaigning tool: lessons from OUR Walmart and the Fight for 15. Alongside these, there is a new Working Paper, entitled Will trade unions survive in the platform economy? Emerging patterns of platform workers’ collective voice and representation in Europe. All publications are available to download from www.etui.org.

Germany strike ban
On 12 June, Germany’s Constitutional Court upheld a strike ban for Beamte – a particular class of civil servants who enjoy special constitutional status. Among them are some 600,000 teachers. The court case was brought by several teachers who had received disciplinary fines in recent years for participating in strikes. The justification for the ban – which is rooted in eighteenth century policy to promote professionalism and loyalty in the civil service – is that this class of workers has a privileged status, and that their collective rights to take action are superfluous. The unions for educational workers (GEW, Gewerkschaft Erziehung und Wissenschaft), service sector workers (ver.di) and the national confederation (DGB, Deutsche Gewerkschaftsbund) have long argued that rights to collective bargaining and to strike are fundamental human rights, and that the ban is inconsistent with ILO norms and the jurisprudence of the European Court of Human Rights. According to ILO standards, such restrictions should only apply to public servants exercising authority in the name of the state. The federation for civil servants (dbb – beamtenbund und tarifunion) welcomed the judgement, stating that the right to strike for Beamte would lead to the erosion of the particular conditions laid down in law for workers in the civil service.

ILO McDonald’s Partnership
‘ILO’s corporate partnerships put global standards at risk’. That is how the International Union of Food and Allied Workers (IUF) responded to the announcement in August that international fast-food chain McDonald’s has partnered with the ILO for its Global Initiative on Decent Jobs for Youth. The IUF and ITUC have asked for ‘an urgent meeting with the ILO Director General’ to discuss the decision. The company’s own website states: ‘we don’t currently work with any specific trade union because we have a number of internal methods that we use to speak to our employees all the time’. Ian Hodson, President of the UK’s Bakers Food and Allied Workers Union (BFAWU) – which supported a strike by McDonald’s workers earlier this year over low wages, zero hours contracts and union-busting – expressed disappointment at the move and urged the ILO to ‘withdraw from endorsing McDonald’s as a reputable partner – and to scrutinise all other corporations signing up to this pledge’. Nestle signed up to the ILO youth initiative last year.

International Transport Workers’ Federation (ITF) Congress
The ITF’s 2018 Congress will take place in Singapore from 14 to 20 October. Representatives of the 19.7 million transport workers from ITF affiliates will meet at the global union’s 44th summit, which takes places every four years.

Just Transition?
The renewable energy sector is central to the effective transition to a low carbon economic, and essential to tackling global climate change. However, a number of labour and human rights concerns about the sector have been raised in a new report from the Business and Human Rights Resource Centre, Renewable Energy Risking Rights & Returns. According to their analysis of 59 solar, bioenergy and geothermal companies, almost half have no basic policies in place to protect communities and workers.

Some 54 percent of companies have policies in place on anti-discrimination, around 40 percent have policies on child labour, forced labour and modern slavery, but only 36 percent have a policy on collective bargaining and freedom of association. Only 5 of the companies fulfilled the four basic human rights criteria used in the assessment. With regard to labour rights, the report notes particular concerns about the production of bioenergy (derived from sugarcane, oil palm, beets, and corn) and the risks of forced labour and child labour. The report concludes with recommendations for companies, investors and governments to better regulate the renewable energy sector to ensure that the energy transition is underpinned by principles of fairness and justice. It is available to download here: www.business-humanrights.org

Mexico
Napoleón Gómez Urrutia, a member of Industrial’s Executive Committee and the general secretary of the Mexican Union of Miners and Metalworkers’ Union, Los Mineros, has returned to Mexico after a twelve-year exile, to take up the position of senator in the new government of President-elect Andres Manuel Lopez Obrador. Gómez fled Mexico in 2006 after receiving death threats and being removed as leader of the union by the government, in retaliation for his outspoken criticism of their handling of the
disaster at Grupo México’s Pasta de Conchos coal mine, where 65 trapped miners were left for dead. Despite being in exile, rank and file members of Los Mineros repeatedly unanimously re-elected him to union office. Gómez was sworn in at the end of August. On 20 September, the Mexican Senate decided to ratify ILO Convention 98 on the Right to Organise and Collective Bargaining. The US is now the only country in the Americas region not to have ratified the Convention.

**Slavery and Electronics**

The Australian Walk Free Foundation has published its annual Global Slavery Index. Based on data for eighteen of G20 states, the latest report classifies ‘laptops, computers & mobile phones’ as the number one category of imports at high risk of being produced under conditions of modern slavery. This category of electronics products – the material basis for ‘Industry 4.0’ – represents over half the value of all at-risk products imported into the G20 (some USD $200 billion of a total $350 billion of goods). The report is available to download from www.globalslaveryindex.org.

**Spain**

The Spanish government’s announcement of its intention to revoke the registration of a union of sex workers, La Organización de Trabajadoras Sexuales (OTRAS), has re-ignited a national debate about prostitution, exploitation and the fundamental rights of workers to organise. The OTRAS union became the first such union to be officially recognised by the Labour Ministry in August. The Labour Minister quickly vowed to overturn OTRAS’ registration. Presently sex work is tolerated but not regulated and the new socialist Prime Minister Pedro Sánchez has further committed to abolish prostitution. A self avowed feminist who describes the March 2018 feminist strike as a watershed moment in the country’s history, Sánchez has put in place a 65 percent female cabinet.

Spain’s major unions entered the fray, with the Unión General de Trabajadores (UGT) expressing its strong opposition to any legalisation of ‘a business formula in which the

merchandise is the body of human beings, mainly women’. The Comisiones Obreras union (CCOO) raised concerns over human trafficking, as well as issues of health, exploitation, mistreatment and equality of opportunity, while recognising that the right to organise is a fundamental right contained in the 1978 Spanish Constitution. Debates as to whether prostitution should be considered ‘work’ have long proven controversial for unions. Way back in 2005, IUR dedicated a special issue to the subject of sex workers organising (IUR 12.4).

**UK - Blacklisting**

The London Metropolitan police admitted in March this year that its undercover Special Branch officers had spied on trade unionists and supplied information to The Consulting Association (TCA), a blacklisting firm run by over forty major construction firms. In 2009 a list was found during a raid on the TCA premises, naming over 3000 workers and detailing their political and trade union activities. Some of those named had been refused work for decades as a result.

The union Unite negotiated a £10m compensation settlement with construction firms in 2016. Trade unionists have long campaigned to reveal any police collusion, which was confirmed this year following a complaint from the Blacklist Support Group to the Independent Police Complaints Commission. A BBC report in June further revealed that the identities of workers spied on by the police are contained in the report of a confidential police inquiry, but the Met has refused to share the report with victims. A former Special Branch officer turned whistleblower told the BBC that hundreds – maybe even thousands – of workers had been spied on by police.

**UN Binding Treaty**

In June, the Executive Committee of the European Trade Union Confederation adopted a position on the development of a United Nations Treaty on Transnational Corporations. The ETUC emphasised the need for the EU to engage fully with the intergovernmental working group negotiating the draft treaty. In particular, the ETUC has demanded that the treaty:

- include ‘all internationally recognised human rights, including workers’ and trade union rights, as defined by international labour standards, including the right to strike and take cross-border industrial action’ and applies to all business enterprises
- provide for parent company-based extraterritorial regulation in order to ensure access to effective judicial recourse for victims of human rights violations
- prohibit transnational corporations from infringing on the human rights of others and obliges them to address adverse human rights impacts with which they are involved
- oblige states to adopt regulatory measures that require businesses to adopt and apply human rights due-diligence policies and procedures set out in the UNGPs
- establish an international monitoring mechanism which collaborates with the ILO supervisory mechanisms on labour issues.

The position is available to read in full on the ETUC’s website: www.etuc.org

**US – Prison strike**

Prisoners in the US participated in a 19-day strike in August and September to demand an ‘immediate end to prison slavery’. They further protested conditions and racial discrimination, and called for the restoration of the voting rights of convicts and ex-convicts, and the repeal of a federal law that prevents prisoners from raising grievances.

The Incarcerated Workers Organising Committee reports that strike action took place in sixteen states. Unlike previous strike action organised in 2016, this year the prisoners have garnered widespread media coverage. Under the US constitution, slavery and involuntary servitude are prohibited, except ‘as punishment for crime whereof the party shall have been duly convicted’. With US prisons representing over 20 percent of the global prison population, compulsory prison labour has grown into a multi-million dollar industry, and a majority of states have legalised the contracting of prison labour to private corporations. In some states, such as Louisiana, inmates may receive just 4 cents an hour in remuneration.
workers organised around conditions they faced on the job, they learned to deal with issues of immigration, discrimination in the schools, police misconduct, and other aspects of daily life in immigrant communities.

Electronics manufacturers have been forced over the years to permit outside contract services, like janitorial services and in-plant construction, to be performed by union contractors. Nevertheless, the industry has drawn a line between outside services and the assembly contractors who are part of the industry’s basic production process. In one section, unions can be grudgingly recognised; in the other, they will not be. Workers, communities and unions need a higher level of unity to win the right for workers to organise effectively in the plants themselves.

In the heyday of the UE Electronics Organizing Committee, the National Semiconductor plant had almost ten thousand workers, working directly for the company. By the time Ronie Manan was laid off, employment had fallen to 7000. Over half worked for temporary employment agencies, including almost all production workers. Manpower, the temp agency, had an office on the plant floor. According to Mike Garcia, then president of SEIU Local 1877, “high technology manufacturing doesn’t create high-wage, high-skill jobs. It patterns itself after the service sector. Contractors in manufacturing compete over who can drives wages and benefits the lowest”.

of the world’s supply of the commodity. Copper accounts for 60 percent of Chiles exports and 12 percent of its GDP. State-owned copper company Codelco’s strategic economic importance is underlined by the fact that 10 percent of its export revenue is automatically allocated to Chiles military budget, a practice dating back to the 19th Century. In August this year, when workers at the Codelco’s second largest mine went on strike, one of the union leaders subsequently received a written threat – attached to the rock thrown at his car. In 2015, Nelson Quichillao López, a contract worker at another Codelco mine, was shot dead by police during a strike.

Building a highly advanced technological infrastructure for the global economy that is deeply reliant on supplies of certain metals and rare minerals is certain to further politicise the rights of such workers in the extractive sector to organise, collectively bargain and to strike. Industry 1.0 was haunted by the dread of slave insurrection at the source of its raw inputs. For trade unionists at the ‘other end’ of the Industry 4.0 telescope, debates about the desirability of technological innovation in their workplaces should not be divorced from the labour conditions that prevail in the production of such technologies.

Similarly, these dynamics should prompt us to think about how racism and global inequality shape the impacts that technological ‘progress’ has on workers’ rights, across the international economy. In the US this summer, Las Vegas hospitality workers went on strike to demand certain stipulations in their collective agreements on automation – and in so doing, made explicit that automation disproportionately threatens the jobs of black, ethnic minority and migrant workers. In 2008, Google fired a subcontracted filmmaker after he made a rudimentary inquiry into the poor working conditions and marginalisation of Google’s book-scanners (predominantly people of colour) relative to Google’s white-collar workers. US tech entrepreneur Jerry Kaplan has pitifully claimed that ‘automation is blind to the colour of your collar’. On the cusp of a fourth industrial revolution which is just as embroiled in the practices of slavery as the first, one might counter that Industry 4.0 does not however appear to be blind to the colour of your skin.

6 See Industrial, Copper workers face threats in Chile. 3 Sep 2018. Available at: http://www.industrial-union.org/copper-workers-face-threats-in-chile
7 On the Vegas campaign of the Culinary Union and Bartenders Union (affiliated to Unite Here), see S. M. Daniels, -threats-in-chile
8 A. N. Wilson, Workers Leaving the Googleplex (film). Available at: www.andrewnormanwilson.com/WorkersGoogleplex.html
9 J. Kaplan, Humans Need Not Apply. (Yale University Press, 2015)
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