

DIRECT II

Direct participation in time of the digital transformation of work.

The Italian case

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Abstract in English

The study that we present in this working paper is the product of a research that was carried out between 2020 and 2021 as part of a European project (entitled DIRECT II)¹, dedicated to the theme of direct participation of workers, in relation to changes socio-technical induced by the ongoing technological revolution. It unfolds according to a thematic and expository order shared with the partners of the other five countries involved. After a brief theoretical overview of what is meant by *direct participation*, we move on to correlate this form of work organization with the others, specific and more typical of our industrial relations system, in the field of representation

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and involvement. There is also a chapter dedicated to the topics of automation and digitalization of work, with some basic information and, above all, examining the major repercussions on work, in our academic and trade union debate. The second part is dedicated to two case studies, in which the link between the business model, new technological challenges and the participatory system appears rather significant. These are Electrolux and Autostrade per l'Italia, where some interviews were held with representatives of workers, trade unions and top management. Finally, in the third and last section, we try to draw some conclusive considerations, around the question of whether the socio-technical change underway is really producing a greater humanization of work, and whether the trade unions may still be able to exercise a leading role in the governance of this complex transition. Overall, a chiaroscuro picture emerges, marked by strong dualisms and ambivalences, in which opportunities and pitfalls intersect even within the same work environment. And in which the trade union, challenged in its role of collective representation and intermediation, must find the capacity and strength so that the cognitive and liberating potential of some technological innovations is not translated into more pervasive and disguised forms of exploitation.

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Section I – Theory and practices of direct participation in Italy: what are the links with digitization?

1. The direct participation of workers in the company: a preliminary theoretical framework

Workers participation and involvement in companies management is one of the clearest signs of a mature system of industrial relations. In recent years, in all the more industrialised countries, we have witnessed a proliferation of various forms of such involvement and participation. In post-Fordist economies, they are in fact considered key factors in innovation and competitiveness. Thanks to new socio-organisational paradigms, oriented towards *High Performance Work Practices*, some of the traditional fault lines that have long demarcated the modern world of work seem to be losing – or lessening – the dualistic clarity of their edges. For example, between idea and execution; living and work; juridical autonomy and subordination.

Unlike in the past, workers are no longer considered as a mere constraint, to be regimented in a rigid framework of control, as happened in Taylor-Fordism, but as a fundamental resource, endowed with advanced and indispensable problem-solving skills. The requirement, however, is to know how to adequately stimulate and activate them, through an appropriate series of HRM techniques. From now on, these will be focused, as never before, on the motivational and environmental quality of working conditions (ergonomics, health and

safety, wellbeing, social climate) on the one hand, and wider margins of executive discretion on the other. The chain of command is shortened on its vertical axis, reducing the number of hierarchical levels, to widen on the horizontal one, through greater collaboration in work groups or teams.

The traditional forms of representation and *indirect* participation, based on delegation and union-type mandates, are flanked and expanded by new forms, this time *direct*, i.e., not mediated by a formal mandate and delegation, and based on more or less direct collaboration between workers and management (Eurofound, 2015; Lippert, 2014; Cremers, 2011; Regalia, 2006). In this other, meaning, participation consists *“of the opportunities with which the company management, in the workplace, delegates some of its prerogatives and decision-making authority to workers, be they individuals and/or groups or teams, with regard to the immediate execution of tasks, production objectives and work organisation methods”* (Eurofound, 1994).

Compared to that exercised in the indirect form of information and consultation rights, direct participation is today considered by several Italian experts to be a new method of “bottom-up participation” (Caruso, 2020; Ponzellini, Della Rocca, 2015), in some ways innovative and experimental in terms of involvement and democracy at work (Carcano et. al., 2017). Its themes are largely those of autonomy and control, based on that informality and self-activation which was long and systematically denied by the old Taylor-Fordist organisation of work.

It unfolds thanks to the adoption and dissemination of “lean production” models, inspired by the *Toyota Production System* (TPS) principles of *kaizen* (Ohno, 2004), that is, of *continuous improvement*, now declined, especially in the manufacturing sector, under the banner of *World Class Manufacturing* (WCM) techniques (Pero and Ponzellini, 2017; Roà and Pallante, 2017). These are integrated systems for excellence in the entire logistics-production cycle, with a very precise definition of techniques and working methods, in which – in addition to just-in-time and the elimination of defects and conflicts – the spontaneous self-activation of workers is pursued. The socio-organisational corollaries of this new paradigm, on the part of the workforce, lie in the unprecedented value attributed to professional skills, to the orientation to results and performance, which can be measured in detail, to collaboration and “team building”, and to the reduction of every “porosity” that – ultimately – does not directly lead to the creation of added value.

In the new scenarios of lean production, every worker is evaluated not only by their bosses, but also by their colleagues. In the workplace itself, and within their team, in the manufacturing world, and even by consumers/users, where rating systems are in place, in services and in the gig economy. With the result of feeding a circuit of involvement and mutual accountability, but also of individualistic emulation, control and widespread surveillance.

All this should lead to “zero-sum” structures that are no longer conflictual, as in the 20th-century tradition of industrial relations, but to new scenarios of collaboration between capital and workforce, in which – in a win-win situation – the needs of the company for a

quantitative-qualitative increase in production intersect virtuously with the workers' need to see the value of their creative and professional contribution enriched and recognised (Lopes et al., 2015), after being long mortified by the alienating and dehumanising seriality of the Taylor-Fordist organisation of work (Braverman, 1974).

The resulting advantages for trade unions are much less evident, with the risk of their progressive marginalisation in terms of the organised mediation of representation, as well as their democratic legitimacy through formalised procedures for investiture. A risk with respect to which the trade unions are generally committed to affirming and reiterating the always complementary and never alternative role of direct participation, compared to indirect participation.

2. Direct participation and representation in the Italian system of industrial relations

The Italian system of industrial relations is based on a low level of state interventionism in almost all areas of the private sector, and, instead, on a high degree of voluntarism, centred on the primacy of collective autonomy (Bordogna, Pedersini, 2019). Issues such as representation in the workplace, representativeness to sign collective agreements, and the extent of their effectiveness, minimum wages, worker participation, strikes – although all dealt with in the 1948 Constitution – over the decades have received only a very partial translation on the part of the legislator; essentially, in the public sector or – in relation to strikes – in that of the essential public services. Instead, social concertation and collective bargaining have played a fundamental substitutive role. Tripartite and/or bipartite and peak level cross-sectoral agreements

have defined the general rules for the functioning of industrial relations. We will now see how.

Representation in the workplace

A 1970 law, known since then as the “Workers’ Statute”, transposed the constitutional principle of trade union freedom (Art. 39.1) and translated it into a series of individual and collective rights in the workplace, including the right to elect trade union representatives in production units with over 15 employees (5 in agriculture).

A decades-long practice in Italy has led to a tendency towards a “single channel” model, that is, a council elected by all the workers, with no distinction between trade union members and non-members. A tripartite framework agreement, signed in July 1993, ruled the nature and functioning of this work council, now called the “*Rappresentanza Sindacale Unitaria*– RSU” (Unitary Trade Union Representative Body), in confirmation of its plural but unitary composition. Lists of workers of any orientation can participate in elections; normally articulations in the workplaces of trade union associations that are signatories to national agreements in the sector or otherwise able to collect the signatures of 5% of the employees in a given workplace.

The RSU has rights and prerogatives both to negotiate company-level collective agreements and to exercise information and consultation rights. Furthermore, it has the power to call a strike, without particular procedural constraints, if it is not an essential public service.

Collective agreements are considered binding for the entire workforce if supported by 50%+1 of the members of the RSU, with the possibility of a referendum at the request of a qualified minority. For

small businesses, or where work is particularly intermittent (construction, tourism, retail, craft) multi-company territorial trade union representation is envisaged. It is common in medium to large companies to establish joint committees on the basis of collective agreements. These committees have technical and consultative rights, and cannot be considered a proper second channel of representation.

The minimum threshold of 15 employees affects the number of these bodies in small and very small enterprises, which make up the overwhelming majority in Italy. In fact, only a minority of companies and workers use them, thus jeopardising the possibility of having decentralised collective bargaining and more structured industrial relations in a company.

Collective bargaining

In Italy this is the real fulcrum of the whole system. It is articulated at two levels centrally coordinated by the higher level – national for the sector and company or territorial. The national level usually lasts three years and establishes the standards of regulatory and economic treatment throughout the country.

The national contract does not formally have an *erga omnes* legal effect, but is merely of a “private” nature, and is binding only for the affiliates of the organisations that have signed it. However, according to established practice, its main contents – for example, the minimum wage for each level of employment – tend to be more or less spontaneously extended to employers not associated with the signatory organisations. This is because they constitute the terms of reference for each court which – at the request of the worker and their union – has to apply the principles of “commensurate” remuneration

("proportional"), based on the quantity and quality of the work performed, and "in any case, *sufficient*, to the worker and his/her family needs", as provided for in the Constitution (Art. 36). The Social Security Institute (INPS) also uses the minimums established in the most representative national contracts to define contributions for pension purposes. Up to now, this system has made it possible to replace the twofold and peculiar absence, in Italy, of both a mechanism for administrative extension and a statutory minimum wage (Leonardi, 2018).

The coverage of national agreements is estimated to be over 80% of employees. Filed with the institutional body responsible for this (National Council for Economy and Labor – CNEL), there are today almost a thousand national contracts (November 2021), of which – in a regime of pluralism – less than a third are signed by the comparatively more representative trade union associations (CGIL, CISL, UIL). However, their agreements cover over 80% and even over 90% of their respective sectors. All the others are signed by minor organisations, and their coverage may extend to only a few dozen companies. Their function is to provoke a downwards slide in the major contracts; a factor of internal "wage dumping", viewed with great concern by experts and the major social partners.

The decentralised level of collective bargaining is not mandatory, and in fact covers no more than 20% of companies with over 10 employees and 35% of workers. It incorporates and integrates what is delegated to them by the national contract for the sector, according to expressly defined distancing procedures and margins. For the workers, the RSUs negotiate and sign, sometimes supported by the territorial

sectoral unions. Typical of this second contractual level is above all dealing with the so-called “variable” part of remuneration, linked to productivity or quality objectives, but also with new issues, as in the case of supplementary welfare, wellbeing at work and work-life balance. It is at this level that the themes of work organisation are mostly dealt with, and therefore of the various forms that workers’ involvement might involve.

Workers’ participation

Although a full article of the 1948 Constitution (Article 46) provides for the right of workers to “collaborate” in the company, no law has ever translated that objective into forms of employee representation on company boards, not even in those that are publicly owned. Shareholding has also always been marginal. The real pillar of the “*Italian way of participation*” is constituted by the rights to information and consultation, provided for by law in certain specific cases, almost always of EU origin (collective redundancies; company transfers; health and safety), but above all by collective agreements; national and decentralised. In the so-called “first agreement sections”, the negotiating parties define in detail the exercise of these rights, through the provision of periodic meetings (one or two a year), the list of subjects to be discussed, the appointment of observers and joint commissions. The subjects are generally related to the current and expected employment situation, health and safety interventions, technological innovation, equal opportunities, ongoing professional training and supplementary welfare.

Direct participation is rarely adopted on the basis of firm-level collective agreements, where the unilateral initiative of management

prevails, which uses it more or less informally as part of its human resource management techniques. The relatively more widespread form is that of the suggestion box, of internal surveys on the corporate atmosphere and wellbeing, but above all of teamwork, which is gaining momentum particularly, in conjunction with the adoption of those socio-organisational paradigms mentioned above (Pero and Ponzellini, 2017).

Today, both employers' associations and trade unions – albeit from different points of view and ideas – seem very active in Italy in reconsidering the meaning and value of participation, in all its possible forms. In the documents of the major associations of the social partners, a profound cultural change is often invoked, aimed at enhancing a trait considered to have been lacking for too long in our system of industrial relations. In the Protocol of January 2016, CGIL, CISL and UIL together ask for a greater role in corporate governance, also by means of a law, in all its possible forms: organisational, financial and strategic. Part of this list of objectives was negotiated and transposed into a new framework agreement at the cross-sectoral level, with the largest and most influential association of employers (Confindustria) in March 2018, called the “*Factory Pact*”.

Contrary to the original ambitions of the trade unions, with the intention of achieving the three forms of participation, the social pact agreed with employers has implemented and underlined the importance of “*organisational participation*”, while there is no mention of the financial. *Strategic participation* is vaguely mentioned as a possible opportunity, never in the forms of representation of workers at

a collegial level, but only in the weaker and more voluntary form of joint consultation.

With regard to direct participation, companies and their associations consider it an indispensable step towards that authentic “cultural revolution” they aspire to in the field of industrial relations. In the union, judgments vary. The more favourable, for example the metalworkers of CISL (FIM), consider these forms of participation a factor of modernisation in industrial relations, in the direction of increasingly smart and stimulating working (Bentivogli et al., 2015). The more sceptical, for example the metalworkers of CGIL (FIOM), see the risk, in addition to intensifying work levels, and therefore the effort to carry it out (Gaddi, 2021), of the possible gradual replacement of the figure of the union delegate with that of the team leader (Bubbico, Garibaldi, 2020).

2.1 Direct participation in the main areas relating to working conditions

We will now try to briefly examine the link between participatory structures of various types and levels and some of the main themes that make up working conditions and the rules that govern them.

Health & Safety

In Italy, all this topic is the subject of a very intense and specific legal and contractual discipline². A framework law of 2018 establishes in an

² With the outbreak of the Covid-19 crisis, the Italian social partners have played a decisive role, signing a couple of tripartite protocols with the government (March 2020; September 2021), implemented in as many legislative decrees, in which a list of obligations, duties and recommendations, aimed at averting the risk of contagion at work. With the trade unions, the Government has defined a series of measures, such as the decree of the list of all production sectors that could have continued, during the months of almost complete lockdown (March-May 2020); the rules on social distancing; the provision of individual safety devices, the use of smart-working whenever this was possible. The social partners, at the level of individual sectors and companies, have implemented and further clarified these preventive measures, through the creation of joint works councils, responsible for their preparation and supervision of their

extremely extensive and detailed way the obligations of employers and the rights of workers and trade unions, regarding the prevention of any risk to health and safety in the workplace. That text also provides for *Workers' Safety Representatives* (RLS), at company or alternatively territorial level, who work alongside the RSU, where present. Wide-ranging and very important prerogatives are recognised for indirect participation, for example through the recognition of bilateral bodies and joint commissions. On the other hand, nothing or almost nothing is left to direct participation, which can play a role in the matter, only as a result of changes in the organisation of work, on which instead it exercises a certain influence.

Wages

In Italy, are wages composed of a fixed part (about 85%), defined in the national collective agreements for the sector, based on the level of individual qualification, and a part is variable and supplementary. The variable component can be negotiated collectively at a decentralised level – usually in medium-large unionised companies – or given by the company, usually on an individual and informal basis. The so-called “performance bonus” is defined on the basis of productivity, profitability and quality indicators negotiated at company level, and is the most common form, the fulcrum of decentralised collective

full compliance, with a check list of what to do and not to do. do to work in complete safety for health (Di Vittorio Foundation, 2020). Starting from October 2021, and until a date to be defined, the Government has ordered the obligation of the Green Pass to access the workplace, thus certifying the vaccination or, alternatively, a negative effect on the tampon, to be carried out at own expenses, with a duration of 48 hours. The worker who presents himself without at least one of these certificates will be banned from accessing the workplace and, from the fifth day onwards, judged to be unjustified absent, with suspension from salary until the moment in which he can demonstrate possession of the requisites required. . The social partners have critically judged this measure, having rather preferred a legal obligation to vaccinate, as - first in Europe - has happened since February 2022, for the entire population of over-50s.

bargaining. In these cases, the agreement tends to concern the correlation between negotiated changes in the organisation of work and objectives in terms of company performance.

Companies today tend to develop increasingly individualised forms of variable remuneration, and outside of collective bargaining, based on their own evaluation criteria, in terms of *competence*, *contribution* and *merit* (Gabrielli, 2017). In these cases, the remuneration assumes a rather evident link with the forms of direct involvement. Thanks also to tax regulations that incentivise it, workers can opt for forms of non-monetary supplementary remuneration, in the form of benefits and company welfare. The unions are aiming to link these improvements with greater influence on the organisation of work.

Skills and professional training

Collective bargaining, at all levels, recognises the strategic importance of ongoing training as an indispensable condition for the updating and requalification of employees' skills. It is part of the "anticipation of change" which is a fundamental objective in the union strategy of managing consensual change.

Vocational training is also recognised in national legislation, which provides for the compulsory disbursement of a share of 0.3% of the salary, to be allocated by employers to cross-sectoral bilateral funds – managed directly by the social partners – who decide on its use, on the basis of training plans agreed by the companies and trade union representatives at company and production unit level.

For the social partners, lifelong training is a decisive tool in facing the enormous transformations – in processes and products – which are

affecting the entire world of work in both manufacturing and services. The national agreement for metalworkers, since 2016, has introduced the principle that ongoing education is a “subjective right” for all workers, and now other sectors are moving in this direction as well (8 hours per year, at least).

The biggest challenge is obviously represented by the new technological revolution, through the growing diffusion of robotics, digitisation, the use of algorithms and remote working. In various sectors, and especially in large manufacturing groups, in the financial and telecommunications sectors, ad hoc plans and protocols have been stipulated to promote the dissemination of digital literacy and skills.

Where direct participation returns to play a significant role here is in the specific training aimed at middle and senior managers by the companies themselves, which emphasise its strategic value in terms of a new culture of industrial relations and HRM. Some large groups have set up their own schools or academies, in which, often with the assistance of Japanese consultants, the values of the centrality of human capital are transmitted and the principles of the *Toyota Production System* (TPS) – Kanban, Gemba, Muda, etc., – are taught, in which the involvement and responsible, high-performance self-activation of staff constitutes an authentic pillar (Sai, 2017).

Organisation of work.

Collective bargaining and traditional indirect participation play a primary role together in the field of work organisation. For example, through the exercise – here as well – of the rights to information and

consultation, in periodic discussion sessions or within ad hoc joint committees.

Of all the possible areas, this is undoubtedly the one in which the greatest possibilities appear for involvement and direct participation. There is a variety of empirical evidence – more through qualitative case studies than from the quantitative monitoring of company bargaining – to attest to this general trend, and not only in Italy, for the general transformations that we evoked initially.

The 2016 and 2017 budgets laws introduced a 10% tax reduction for that part of the salary relating to an objective of increasing productivity, also through collective agreements for the creation of forms of participation in the company. These are *Participatory Organisational Schemes for Innovation* (“SOP”), relating to project groups, targeted training and communication campaigns for innovation; or *Participatory Management Programmes* (“PGP”), to be understood as planned teamwork, smart-working, community of practices and corporate social networks. From 2017 to date, thousands of corporate agreements have been signed, thanks to these incentives.

Digitisation

The provision of laptops, tablets and smartphones, cobots, optical scanners and other hi-tech equipment has become a common way in which companies change the organisation of work. The recent and sensational use of smart working has accelerated this trend, which has extended – in varying ways – to almost all office work, especially in sectors such as the public administration, banking and insurance, communications and research institutes. Areas in which the unprecedented use of remote digital tools has been combined with a

radical transformation in working hours, with the related theme – for collective bargaining – of the right to the reserved use of personal data, to the right to disconnect, to the security of the instruments that are made available. The link of all this with direct participation lies in making it more possible than in the past, by establishing a direct connection between the command incorporated in robotic or algorithmic technology, the corporate hierarchy and the workers.

Sustainability and wellbeing at work

In Italy these concepts are being extensively developed, around so-called corporate welfare policies, which in the last few rounds of collective bargaining have represented one of the most important innovations. The specialised literature (Carcano et al., 2017; Treu, 2018) and the media now refer to a wide range of companies in which corporate welfare schemes have been adopted, with the offer of very interesting packages of goods and services for workers. Corporate welfare identifies a varied set of initiatives, services and goods – mainly of a non-monetary, but tangible nature – which is added to the variable part of remuneration. These welfare services aim to respond to the different needs – both organisational and social – of workers and increase their level of satisfaction and motivation.

Tax legislation favours agreements that regulate the transformation of productivity gains for the company into non-monetary goods and services. In general, these are aimed at greater wellbeing for the worker, in the area of supplementary services for the person, health, culture and sport, and work-life balance.

In addition to savings for companies, these tools lead to a “welfarisation” of productivity and a personalisation of remuneration

(Guglielmi, 2017). Since the worker joins on a personal and voluntary basis, the role of bargaining and representative participation is considerably reduced in favour of a more direct and non-mediated one.

2.2 Direct participation and quality of work: some evidence from empirical studies

Direct participation, as such, rarely appears in the texts of collective agreements, including those at company level. Precisely because of its intrinsically informal nature, it is fairly unlikely that it will receive separate attention in the texts of the agreements. Instruments such as “the suggestions box”, audits and team work, usually come under the organisational choices of management, with respect to which it is likely that there is a consultation with the workers’ representatives where, in companies or offices, there are joint commissions on the organisation of work.

Quantitative reports and qualitative analysis converge in underlining how information and consultation rights still represent the most widespread form of involvement, and are also recognised in decentralised agreements. As regards the surveys carried out by the employers’ associations, the one carried out by Federmeccanica (2018) reveals how management provides information about its choices with frequency and transparency (69% for managers, 65% for workers), and takes due account of workers’ proposals (61%). On the side of trade union investigations, the reports of the FDV-CGIL, based on a sample of about 1,700 texts signed in the last three years, show how 43% of the agreements contain provisions on involvement and participation.

According to the OCSEL-CISL reports, the matters covered by these rights mainly concern the economic performance of the company, followed by some distance by investments, employment and training. Direct involvement is present only in 1% of the texts, 1.2% in the case of the introduction of new technologies, 1.1 % of quality systems, and 0.3% for teamwork. Interesting data also comes from European surveys, such as the one carried out by the Dublin Foundation on working conditions. From the data that emerged in 2015, Italy ranks quite low in the table for the quality of involvement (Eurofound, 2015).

Things seem more encouraging if we examine a number of case studies (Carrieri and Treu, 2015; Pero, Ponzellini, 2017; Unipolis Foundation, 2017; ANPAL, 2017; Carcano, Ferrari, Volpe, 2017; Gramolati, Sateriale, 2019). These are usually classic best practices, in medium-large and relatively well-known companies, particularly focused on global markets and process and product innovation. A rather varied series, with a mix of instruments, both indirect, including some limited cases of participation in governance, in the banking sector, as well as direct, where the most significant form is undoubtedly represented by teamwork (Pero, 2015; ANPAL, 2017).

Finally, it is worth noting the important survey on the quality of work, conducted by the National Institute for the Analysis of Public Policies (INAPP, 2015), inspired by those of the Dublin Foundation, with its references to the extent of participation, autonomy and control. This shows that 26.8% of the sample of local businesses use *Organisational Participation Practices* (OPP); 94.9% foresee regular meetings between management and workers; 78.4% contemplate the sharing of certain decisions; and 69.9% provide training initiatives. Businesses with over

250 employees (42%) are most involved. The correlation with performance – productivity and quality – is highly relevant, as it is also with regard to the introduction of new processes and new technologies. The conclusion of the survey is that the adoption of participatory organisational practices produces benefits – both for workers (a higher quality of work) and for employers (better performances), especially in the crossover with processes of technological innovation (Canal, Gualitieri, 2020)

3. Work and digitisation: preliminary issues

It is first of all useful to clarify a difference between the target of *Industry (or Work) 4.0*, and that made up of the *platform workers* of the Gig economy. Although both are facing the new challenges of digitalisation, of artificial intelligence in the work process, all the other challenges – in terms of employment relationships, working conditions and industrial relations – differ greatly. For workers hired on standard contracts in the manufacturing sectors, the biggest challenge comes from automation and the growing and massive adoption of new digital technologies in the routine and organisation of work. Here the workers' representatives, including the trade unions, are called on to participate in anticipating changes and innovation in work, through the traditional tools and channels of both representative and direct participation. The picture is very different with regards to employment relationships in the Gig economy. Here the problems are even more radical, and concern legal status, access to the protections of the welfare state, digital Taylorism and the “tyranny” of algorithms. Furthermore, there is an enormous problem of representation, as it is very difficult to bring

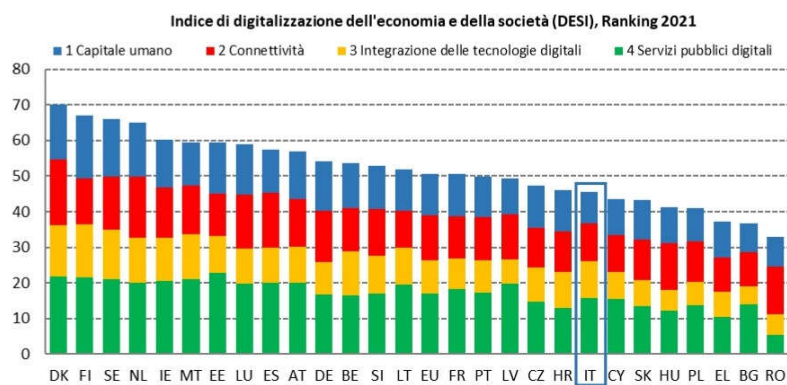
together these dispersed and very fragile workers in the labour market. (Lassandari, 2017; Forlivesi, 2018; Faioli, 2018; Vandaele, 2018).

3.1 Some general data relating to Italy

Today there is a vast and constantly expanding international literature on Industry 4.0, platform economics and digital working (Valenduc and Vandermin, 2016; Huws et al, 2017; ILO-Eurofound, 2017; Eurofound, 2018; Aloisi, Di Stefano, 2020). With regard to Italy, it is necessary to start from some data on its diffusion in the economy and society. With respect to the data on digital and socio-technical innovation, Italy confirms itself as a country with strong dualisms. While some areas of excellence today are able to compete with the best international experiences, there is a still a significant reality based on traditional organisational models. The European DESI index (2021) shows a situation of improvement for Italy, placing it in 20th place out of 27, compared to 25th in the previous ranking (Fig. 1). What weighs negatively is human capital, which sees the country in 25th place. Only 42% of people between 16 and 74 have at least basic digital skills and only 3.6% of employees specialise in ICT. On the connectivity front, Italy ranks 23rd in Europe, with an overall score of 42.4 (EU average 50.2). In Italy, only 76% of the adult population has used the internet in the last three months, compared to 87% in the rest of Europe. The integration of digital technologies, instead, sees Italy in 10th place. On the other hand, the performance of Italian companies in the use of big data and artificial intelligence is not as positive: the former is used by 9% of companies, compared to an EU average of 14%; the percentage of the second instead is 18% against the EU average of 25%.

Fig. 1 – Index of digitalisation of the economy and society (DESI), ranking 2021

	Italia	UE
	posizione in classifica	punteggio
DESI 2021	20	45,5
		50,7



Significant improvements, at household and business level, are underway thanks above all to the growth of digital payments and e-

commerce, as well as the sale of notebooks during lockdown and distance learning.

According to the annual report of the ICT employers' association (Anitec-Assinform, 2021), there is too large a gap in investments between large companies (+1.2% spending) and medium and small (-24% and -5%). The average size of companies in Italy remains very low, and consequently so does the propensity to invest in technological innovation. Low labour costs are preferred, with occupations characterised by low levels of skills and specialisation.

If we consider the propensity of companies for digital transformation, a trade union analysis on the data of the ISTAT Report on the competitiveness of the production sectors (2018) identifies five types (Gremolati, Sateriale, 2019):

- 1) The indifferent, who neither make investments nor consider them relevant (63%)
- 2) Sensitive constrained: they are thinking of investing, but have a medium-low endowment of physical and human capital that holds them back (22%)
- 3) Unfinished digital: where digitisation is present, but has not yet affected productivity (2.3%)
- 4) Sensitive: with a medium level of digitisation and a high endowment of physical and human capital (9.7%)
- 5) Digital accomplished: where there is a strong perception of digital technologies as important tools, for the business and for the future (3%).

Based on these analyses, only 13-15% of Italian companies have now seriously embarked on the path of progressive digitisation. Most of

them are medium-large companies in the Centre-North. The automotive, pharmaceutical and biomedical engineering, and robotics sectors are considered highly innovative, “4.0” sectors.

Then there is the problem of companies that are unable to find personnel with the required skills. According to the latest Unioncamere and Anpal report (2021), companies are unable to find staff for a total of 5% of posts, the equivalent of 505,000 jobs, especially in the ICT sector, and this while there are 2.4 million unemployed. A mismatch between job supply and demand has been accentuated, especially for the more specialised profiles.

3.2. The repercussions for work: the Italian debate

The main challenges, in the Italian public discourse, are the following: investments in Industry 4.0, the impact on employment levels, the legal status of the digital workers’ platform, individual and collective rights and protections, the effects of the new ICT on workers’ privacy, and health and safety at work. We will try to summarise them point by point.

1) Investments in Industry 4.0.

Italy is considered by commentators to be seriously lagging behind in this process. Public investment in infrastructure is urgently needed, with a digital agenda that includes industrial and employment policy objectives to strengthen the country’s industrial skills. For the unions, the country needs a national strategy for smart specialisation. Two objectives are considered essential for the development of innovation

and Industry 4.0: a) to accelerate the creation of the necessary physical infrastructures for broadband and ultra-broadband; b) to relaunch an investment plan on worker skills and training. The pandemic emergency has provided an extraordinary acceleration in the use of information and digital technologies. In general, the issue of digital skills and technological upgrading represents a major emergency, and is considered one of the main challenges facing the country. With the decree to adopt the “*National strategy for digital skills*”, in 2020, there was a move in this direction. In 2021, the National Plan for Restart and Resilience, financed through the 209 billion euros of the Next Generation EU programme, dedicates one of the three strategic axes of the planned enormous investments to digitalisation (the other two are ecological transition and social inclusion), for a total of 49.2 billion euros. Of the six missions that make it up, digitisation, innovation and competitiveness is the first on the list. The guidelines envisage the digitisation of the public administration, the completion of the national fibre-optic network and interventions in support of 5G networks. This last in particular, nearly 100 times faster than 4G, is considered the next great leap forward.

2) The impact of digitalisation on employment.

This is the most troubling and controversial, centred on the risks for a jobless society, disruptive innovation and technological unemployment (Frey & Osborne, 2013; Bryniolfsson & McAfee, 2014; Ford, 2017). Italian experts and social partners share the idea that not being involved in digital innovation would be absolutely negative.

As everywhere, in Italy too it is difficult to quantify employment in the digital economy, because the job statistics do not yet take this into

account. On the more innovative side, for example the hi-tech Made in Italy in the manufacturing sector, it is estimated that this involves 1.6 million workers. According to the International Federation of Robotics, Italy is the 7th country in the world for new installations, and the 4th in Europe, with 190 robots per 10,000 workers; similar to the USA and Taiwan; more than France and China.

At the other extreme is digital work via platforms, perhaps the most visible and debated. In just over a year – thanks above all to the exponential spread of e-commerce throughout the time of the pandemic – their number has more than doubled. According to recent estimates (INPS 2021), between delivery riders and crowd workers, the number of employees in the so-called “gig economy” is just under 600,000; 1.6% of the active Italian population.

Automation and digitisation do not in themselves constitute a guarantee of progress and social inclusion. According to the latest Censis report (2021), 60.7% of Italians think that, in the absence of adequate state interventions, digitisation will increase unemployment and inequalities. In a recent scientific study on the risks of automation for employment in Italy (Bannò, Trento, Filippi, 2021) it is estimated that 33% of Italian workers (about 7 million employees) already run a high risk of being substituted. According to this analysis, Italy is one of the countries where the risk of technological substitution is greatest. The reason lies primarily in the delays accumulated in the introduction of new technologies. Among the professions least substitutable by robots are those with the highest level of education, and the lowest, while intermediate jobs, typical today of industrial manufacturing, are at the greatest risk. The fear that digitalisation, together with energy

conversion, will cause major occupational trauma is great. There are already numerous cases of companies that have been forced into crisis, due to technological and green transitions; especially in the automotive engineering sector and the mining and energy sectors. Their conversion could have a major impact from the point of view of job losses.

The Italian social partners share the idea that not being involved in digital innovation would be absolutely negative. The main employers' associations are very committed to raising awareness about the strategic importance of the new collaborative quality of employment relationships and human resources. The Confindustria website reads: *"The industry of the future is innovative, sustainable and interconnected. It integrates the results of scientific advances in products and services, removes environmental constraints, increases the development potential of ICT technologies and improves efficiency and production capacity. Industry 4.0 is a challenge that can relaunch the Italian production system, enhancing its characteristics."*

The trade unions are more prudent. There is great concern about the impact this could have on employment and working conditions. The combination of digitalisation and energy transition could have disruptive effects on employment. But, on the whole, a certain optimism seems to prevail, for which, the shared management of innovation will be an opportunity that will increase the wealth produced by companies, the work and wages of workers.

In March 2017, the three major Italian trade union confederations – CGIL, CISL, UIL – drew up their own document entitled *"An Italian way to Industry 4.0 that looks to the most virtuous European models"*. It

expresses the belief that ongoing innovation is a challenge with no alternatives and the new frontiers of global manufacturing competition are an indispensable condition for increasing the quality and competitiveness of Italian production. The goal is to carry out industrial plans in concert with the Government, following the examples of Germany and France, with investments that allow industrial reconversion and job retention.

3) The legal-employment status of platform digital workers

Its classification is one of the main issues when dealing with the growing segment of work via digital platforms (Perulli, 2017; Donini et al., 2017; Signorini, 2018; Aloisi, Di Stefano, 2019). The reality of most of these jobs is often seen as a hybrid; a “grey zone”, with vague boundaries between self-employment and subordination.

In Italy, Legislative Decree no. 81/2017 aims to better identify the contents of a genuine autonomy of self-employment, investigating collaborations in the event they are bogus, insofar as the worker has no control over the organisation of work. The special sector regulations introduced by Law no. 128/2019 were conceived on the assumption of an assured connotation of autonomy, reinforced by the requirement for the occasional nature of the services provided by the couriers. A number of court decisions, in Turin and Milan, sanctioned the autonomous but not entirely independent character of courier work, extending various and important protection measures which are typical of subordinate work. Other sectors of doctrine and the courts, however, question the independent status of platform workers, maintaining that these workers should be brought into the framework of subordinate work, and its solid support for rights and prerogatives (Voza, 2017; Bavaro, 2018; Lassandari, 2018): subcontracting self-employed status

is merely a way to circumvent existing rules on employment, social protection and business taxation. The old inclusive concept of subordination in the Civil Code (Article 2094), from this perspective, is still ready to respond to the challenge of new forms of work. According to another perspective, still, it is not central to dispute the legal status, but to guarantee social protections and the application of the rules on subordinate work (Giubboni, 2020).

Given the heterogeneity of platform work, situations should probably be evaluated empirically, on a case-by-case basis; online micro-crowd workers, performing low-skilled micro-tasks such as data entry or food delivery, are not the same as graphic design, editing or translation work. What is deemed necessary and urgent is to increase and expand social protections, from the perspective of a new flexicurity and capabilities approach (Perulli, 2017; Caruso, Del Punta, Treu, 2020)³.

4) Individual and collective rights and protections.

For scholars, freedom of association and the right to strike should be considered as proper human rights, while legal restrictions on the organising and collective bargaining of atypical workers should be removed (Di Stefano, Taes, 2021).

³ Worthy to note the recent initiative of the European Commission, which on 9 December 2021 presented a proposal for a Directive on the improvement of working conditions for platform workers (COM (2021) 762 final). One of the objectives of which is that of a correct classification legal status both for work performance in real physical places, offline, typical of gig work or work on-demand (riders), and for those entirely virtual and online, such as crowd-work and cloud-work). For the European Commission there is, for these works, a legal presumption of subordination (Article 4.1), with the burden of proving the opposite for the employer. On this basis, the objective is to ensure greater correctness, fairness, transparency and accountability in the functioning of the algorithmic procedures that govern digital platforms, introducing individual and collective rights of information and consultation (Article 9), suitable for promoting some form control over these automatic processes, dominated by artificial intelligence. The aim is to regulate "algorithmic management", preventing the worker from being subject to fully automated decisions, without any human supervision, making him "less opaque and more controllable" (Giubboni, 2021).

Collective labour rights, established by Italian law (1970 Workers' Statute), should be updated to include the realities of the new work platform: collective bargaining, both at sectoral and company level, the promotion of solidarity, secondary action, digital assemblies and enforceability (Faioli, 2017; Engblom, 2017).

The platform operators in the delivery and transport sectors, the "riders", have become in Italy the symbol of work on a digital platform and the cornerstone of a multiplicity of actions and proposals (Tassinari, Maccarrone, 2017; Donini et al., 2017; Recchia, 2018; Martelloni, 2018; Di Nunzio, 2018). The couriers demand a reconfiguration of the random system of payment on delivery, by the piece, with a guaranteed number of hours and a minimum hourly wage, insurance for damage and accidents, safety at work, abrogation of the ranking system, and free choice of working hours. A new law, which came into force in autumn 2020, finally recognises a labour rights plan for these workers, while some court rulings are granting these workers the status of employees, in contrast to the self-employment status demanded by their companies.

5) Worker privacy and transparency in the management of big data and digital technologies

Wearable electronic technologies allow algorithmic management to constantly monitor and track the worker in all their movements, evading or in open violation of the laws on control at a distance and health and safety (Art. 4, "Workers' Statute" of 1970). One sensational case was that of the Amazon workers, not a Gig economy platform but the global e-commerce and logistics giant, known for long hours, punitive quotas and minimal rest periods during shifts. The company's

request to enforce the use of a GPS device to be worn on the body, allowing management to constantly follow workers' every single movement, caused a revolt in the media and was eventually abandoned.

Algorithms can become a source of discrimination, such as when AI arrives at decisions influenced by the personal biases of those who collect, select and enter data; or with occult or subliminal practices, for example at the time of hiring, where women or ethnic minorities were penalised, as happened with a number of professional advertising platforms. Then there is the problem of “ratings”; the Court of Bologna, on 31 December 2020, on an appeal by Filcams and Nidil Cgil, condemned Deliveroo for having assigned scores based on the speed of deliveries, including among the data collected and used participation in a strike.

6) Occupational health and safety, special working conditions, smart working

Law no. 81/2018 (Art. 2) governs the new profile of “smart working”, still subordinate but carried out at a distance, and aimed at combining the competitiveness of businesses with better wellbeing at work and work-life balance. Here the goal is to guarantee the absolute voluntariness of the choice of the worker, guaranteeing all the rights of their usual conditions, including those relating to trade union rights, with the provision of the right to sociality – with periodic returns to the workplace – and to disconnection outside working hours. From a gender perspective, smart working must not turn into a massive return to women working at home, which instead of favouring conciliation, can turn into the burden of double work. At the start of the COVID-19 pandemic, the number of smart workers was estimated at half a

million; two months later they numbered nearly 8 million. As the situation has improved, this number has progressively fallen, but there is substantial agreement between the social partners on the now structural and irrevocable character in the use of this tool, which has not affected productivity and has raised the degree of worker satisfaction. However, there will be a need to define a more adequate legal and collective contractual framework.

4. Technological change and industrial relations: the organisational policy of the Italian trade unions

The issue of digitisation has pushed its way on to the strategic agenda of the trade unions, as shown by a European survey conducted by the ETUC, according to which Italian trade unionists come first for the attention they now place on the negotiating and participatory level, almost the double of their French and German colleagues (ETUC, 2018).

The Italian trade unions have launched a series of interventions at national level, set up specialised departments, observatories on innovative companies, created online tools dedicated to digitisation and Industry 4.0 and manuals for negotiating technological innovation. To face the challenges of digitisation, one of the paths is to invest in the training of officials and delegates, to spread awareness, new skills and good practices.

The CGIL has created an online collaborative platform (“*Idea-diffusa*”), with the aim of providing tools to understand the changes and negotiate an innovation model considered fair and sustainable,

with a union “toolbox” for working with artificial intelligence (Maiolini, De Luca, 2021). The CISL has done likewise with its “*Industry 4.0 Laboratory*” which was launched in 2017. This involves experts from the Milan Polytechnic, who have been very active in recent years in monitoring and studying changes in the workplace (Campagna, Pero, Ponzellini; 2017). The metalworkers’ federation FIM-CISL, with the slogan “*Smart Union to Drive Change*”, has launched a “digital union charter” project and a “digital check-off” process, based on blockchain technology. The UIL services sector federation has set up “Networkers”, an online trade union platform aimed at web professionals and ICT workers.

The issue of digital skills is considered by all the experts, policymakers and social partners to be the most urgent and necessary. The trade unions demand public policies in support of lifelong training, for the permanent retraining of workers. It has to be a “subjective right” of every single employee, as established in the national metalworkers’ contract, wherever they work, at any age or stage of their career. The new national contract for metalworkers develops a plan for digital literacy with the project “*DigitalMEC Digital literacy for workers in the metalworking and systems installation industry*”⁴.

⁴ The new workforce, atypical, freelance and digital workers, is also trying to create their own forms of direct representation, outside the traditional unions (Donini et al., 2017; Tassinari and Maccarone, 2017). These organizations are “quasi-union” and are characterized as associations based on a strong professional homogeneity, on the voluntary work of activists and on a “liquid” membership (Forliversi, 2018). Often in open dispute with the big confederal unions, accused of not having done enough to protect their condition so far. Forms of digital cooperativism are spreading (Scholz, 2016), in which platform workers use the same tools as server owners. They aim to raise customer awareness and stimulate critical consumption. They target the reputation data of digital companies, reporting abuse with negative feedback and social media campaigns. With the same tools they work with, they organize twitter-storms or flashmobs.

The issue of digitisation is closely intertwined with that of industrial relations. For the main Italian trade union confederations, the political and negotiating objective is above all to acquire new information and consultation rights, on the one hand, and to train trade unionists in new contractual skills, on the other. *“Technologies are not neutral,”* underline trade unionists, especially with respect to the use of algorithms, the programming of which always finds individuals in flesh and blood, which elaborate and plan on the basis of input that today originates almost exclusively from the side of management. For the CGIL, the slogan is *“Let’s negotiate the algorithm!”* or *“Contract digital innovation”* (Gramolati, Sateriale, 2019). For the CISL, direct participation, based on teamwork and suggestion schemes, will be a key factor in productivity and competitiveness. In the smart factory and 4.0 eco-system, participation has to become the cornerstone of a new wave of trade unionism and its role in companies (Bentivogli, Pirone, 2021; Benaglia, Campagna, Pero, 2021). In general, the key idea of the Italian trade unions recognises the importance of informality in the new quality of HRM and industrial relations at work level, but they are aiming sooner or later for this to be abandoned and for it to be codified in agreed and precise rules.

Section II – Case studies

Electrolux⁵

1. The company

Electrolux is a Swedish multinational specialising in the production of household appliances. Founded in Stockholm in 1910, under the name of Elektromekaniska AB, it took the name Elektrolux after its merger with Lux in 1919, before adopting its new name and trademark in 1957. Since then, decade after decade, this Swedish group has become one of the top three global producers in the sector, acquiring control of historical brands and authentic icons of the old national industries (AEG, White-Westinghouse, Frigidaire, Kelvinator), including – in the ‘90s – the Italian Zanussi⁶.

Worldwide it has 35 assembly plants and 5 for the production of components and accessories. The total number of its employees is currently (2020) 47,543, with its highest numbers in Brazil (6,999), the United States (6,610), Poland (5,461), Mexico (4,829) and Italy (4,611).

In the mid-‘90s, the household appliances sector had about 130,000 direct employees in Italy, making it an international leader in the

⁵ Thanks to Dr. Ruben Castagner (Electrolux Italy Industrial Relations Manager), Francesca Re David (Gen. Segr. . Fiom-Cgil), Michela Spera (National Fiom-Cgil), Alberto Larghi (Fiom-Cgil Lombardia Regional Secretariat), Roberta Turi (Gen. Fiom-Cgil Milan Secretariat), Giovanni Ranzini (Fiom-Cgil Milan Secretariat), Rosy Cuomo (RSU Delegate, Solaro), Walter Zoccolan (RSU Delegate, Porcia), Elena Guidi (RSU Delegate, Forlì), as well as Dr. Antonio Famiglietti (sociologist and curator of another case study on Electrolux). And again, for their contributions to the Milanese workshop: Prof. Adalberto Perulli (University of Venice), Prof. Fabrizio Pirro (University of Rome “La Sapienza”), Dr. Matteo Gaddi (Researcher of the University of Alessandria), Dr. Tiziana Canal (Researcher INAPP).

⁶ In 2020, the Group achieved a turnover of 115.9 billion Swedish kronor, equal to 11.3 billion euros and 13.4 billion dollars, and a net profit of 5.7 billion Swedish kronor, equal to 560 million euros and 660 million dollars. Its sales are able to reach 60 million buyers in 150 countries on all continents.

sector, with brands that left a profound mark on industrial, social and trade union history: Ignis, Zoppas, Indesit, Candy, Ariston and Merloni. Today there are less than 35,000. The Swedish Electrolux and American Whirlpool have taken control of almost all the old brands, with closures, relocations and many job cuts that have plagued a large part of the Italian manufacturing industry in recent decades⁷.

From 2009 to 2020 Electrolux Italia underwent a severe downsizing, and the total employees decreased by about 50%. The most difficult phase – which culminated in 2014, with the announced closure of the historic factory in Porcia – seems to have stopped for now. That site is currently experiencing a significant relaunch, testified to by significant new investments, while the group has purchased two new factories in Italy.

Despite having lost its first place in Europe to Poland, the presence of Electrolux in Italy remains among its most significant, both in terms of the market and of jobs. Just under five thousand employees (4,611), distributed between five main factories⁸. For each direct employee it is estimated that there is at least one other in the local supply chain. About two-thirds of the employees are male. The average salary is around 28,000 euros gross per year, roughly the EU sector average.

Today the group aims at high-end production, thanks in part to an unprecedented use of automation and digitisation. The goal is to increase production and sales volumes in the European and world

⁷ Whirlpool has recently ordered the closure of its plant in Campania, and the dismissal of its approximately 400 employees.

⁸ Porcia (PN), where washing machines and washer-dryers are produced; Susegana (Treviso), for refrigerators and freezers; Solaro (Milan), which produces dishwashers; Valledoncello (PN), for industrial kitchens; Forlì, for hobs and ovens - plus Modena, for coffee machines, and Maniago, where there is the spare parts warehouse and the headquarters of large plants, kitchens for catering.

markets. In the largest Italian plant in Italy, Susegana, Electrolux has allocated investments of 130 million euros in two years, and another 90 million for Porcia, aimed at achieving a powerful technological breakthrough, with process and product innovations, in that which was perhaps the factory-symbol of the old Taylor-Fordist assembly line.

In 2021, after a forced shutdown because of the pandemic, the market is responding with a strong demand for products. This situation favoured the signing of the new supplementary company contract, on 23 April 2021. The last one dated back as far as 2007.

1. Industrial relations

Unionisation in the Italian Electrolux factories is estimated at around 50% on average. In the elections for the RSU, it is above all Fiom-Cgil and Uilm-Uilm who contend for first place. Trade union cultures and practices vary historically between different sites; in that of Susegana, for example, a conflictual orientation is particularly strong among the delegates. The others are more willing to practise participatory industrial relations.

Electrolux applies the Federmeccanica-Confindustria national agreement for the metalworking sector, the last of which was signed on 5 February 2021. In companies that employ a total of more than 1,500 employees, and with at least two production units with more than 300 employees, at the request of one of the parties, a Joint Participation Advisory Committee is set up, with the task of examining: the structure and trends of the markets on which the company operates; industrial strategies and organisational changes;

employment trends and types of hiring. In accordance with the law, for companies with over 50 employees, the participation of workers highlights first of all, in its indirect and trade union form, rights to information and consultation, as well as the rights of joint observers and commissions. Among the matters subject to discussion between the parties, the substantial changes in the production system that have a decisive effect on the technologies adopted or the overall organisation of work.

Among the most important innovations of the new industry-wide agreement is the change in the system of professional classification. In this, the concept of “role” becomes central, and no longer the Fordist one of “job”, in which more and more professional requirements such as autonomy, multifunctionality, contribution to continuous improvement and innovation can be detected, also with regard to an active participation in working groups.

From the previous sectoral contract of 2016, metalworkers have the “subjective right” to 8 hours a year of professional training. In 2021, with the very active contribution of the Electrolux management, the signatories launched the project “*DigitalMEC Digital literacy for workers in the metalworking and systems installation industry*”. The objective is to:

- a) acquire the basic skills that allow people to work independently with the most popular information tools, both inside and outside the workplace;
- b) create digitally literate workers, also for the purpose of making the best use of the digital communication tools present in the company;

c) acquire intermediate and advanced skills in order to promote the development of a digital culture.

The organisational methods include intermediate and advanced modules, which can be used remotely via webinars.

2. The Electrolux participatory model: a national best practice

In the panorama of Italian industrial relations, Electrolux represents one of the most significant and studied models, thanks to its peculiar participatory model, which makes it a sort of national best practice⁹. The origin of this reputation dates back to the mid-1990s, although relatively advanced forms of collective bargaining had already been introduced in the organisation of work by the trade union struggles that followed the “hot autumn” of 1969. For example, through the creation of “elementary technological units”, with the aim of reducing the number of errors and rejects, as well as absenteeism and, above all, industrial conflict, which was particularly severe and widespread in some plants. Between 1995 and 1997 a Zanussi “*Consolidation Text for Participation*” was launched, under the name of the then most representative brand taken over by the Swedish multinational. An authoritative labour lawyer, a man close to the trade unions and the CGIL in particular, participated in its drafting: Luigi Mariucci. Shortly after, the new Swedish owner further stimulated the adoption of participatory management models, together with the socio-technical

⁹ See at regard. A. Famiglietti, *Delusioni e speranze della partecipazione: i casi di Electrolux e Finmeccanica*, in M. Carrieri, P. Nerozzi, T. Treu (a cura di), *La partecipazione inclusiva*, ASTRID, Il Mulino, 2015. About the past, L. Mariucci, *Le relazioni industriali e il caso Zanussi*, “Lavoro e Informazione”, n. 10/1997. A. Perulli, *Il Testo Unico sul Sistema di relazioni sindacali e di partecipazione della Electrolux-Zanussi*, “Lavoro e diritto”, 1999.

suggestions that had been coming to Italian industry for some years from Japan, with its lean production models.

The fulcrum of that system lies in the creation of a number of joint commissions, charged with discussing and resolving a series of technical issues, reducing the overload of functions of collective bargaining and partially separating it from the new channels of participation, where it is possible to deliberate, but unanimously, on individual issues.

The granting of decision-making powers to the joint committees immediately posed a problem which would be taken up by the main union in the group, FIOM-CGIL¹⁰. In fact, its national and local leaders were opposed to transferring the powers and prerogatives of representation and collective negotiation to the participatory schemes of the commissions, claiming the primacy – democratic and functional – in collective bargaining. On this obstacle that first participatory attempt was to crash, since management had intended the commissions just to be the quickest and most effective channel for identifying and solving technical problems, especially in the decisive area of work organisation, which was dealt with by the “CoTePa”, the technical commission.

The initial relationship of trust, which they had attempted to build, was at the same time compromised by the increasing pressures that the company exerted to increase the productivity of all its plants, making increasingly pushing and threatening – this time starting from the headquarters of the Swedish company – the risk of closures and relocations, as indeed would happen repeatedly over the last 20 years.

¹⁰ S. Leonardi, *Note critiche sul modello partecipativo Zanussi*, “Lavoro e Informazione”, 1997

From this point of view, the lively protests of some national trade unions and the European Federation of Metalworkers denounced the behaviour of the Swedish multinational, complaining – within its own European Works Council as well – of a certain corporate and nationalist consociation among the top management of the group in Stockholm and the Swedish trade union in the sector and corporate. According to this point of view, they were not very supportive in dealing with the unhappiness and complaints of the representatives of various establishments in Germany, Italy and Spain.

In the meantime, two factories were closing – Mel and Scandicci – judged to be among the most collaborative of the group, where industrial conflict often spread and exploded. It would not be enough to avoid that sad fate.

In 2014, the Porcia plant would also be closed, threatened by the relocation of its production to Poland. The whole group was shaken by a phase of conflict, as seen by over 100 hours lost to strikes, and ended with the safeguarding of that site and most of its employees, thanks also to the intervention of the national and regional public authorities.

In spite of these impasses, the strong participatory imprint that management tended to employ in industrial relations remained basically unchanged. Amended in some of its parts, the 1997 Joint Text continues to constitute a pillar for industrial relations in Electrolux today. The latest supplementary company contract signed on 23 April 2021 includes a *New Text on Participation*. Its last update was in 2003, and various factors contributed to unblocking the situation, including: the favourable market situation, the willingness of management to make information-sharing a pillar of its human resources management

strategy; the desire of the trade union to enhance and stabilise the best practices implemented in the various sites in recent years at the level of the whole group. To make the “Electrolux model” a sort of best practice for the entire Italian engineering sector.

Between the first Consolidated Text of 1997 and that of 2021, despite the enormous and epochal transformations that have taken place in these 24 years, there is a strong continuity, both from the point of view of the general aims and of the tools to achieve them.

Among the corporate objectives there is undoubtedly that of limiting conflict and more generally any unilateral action completely. The principles of fairness and good faith between the parties are strongly emphasised in the text of the agreement. The corporate head of industrial relations emphasised “*the threats*” to the system from the more antagonistic sectors of the union and some factories in particular¹¹, and the need to overcome these, with the help of the trade union sectors more willing to collaborate, with which both the supplementary agreement and the new Joint Text were signed.

Indirect participation continues to be exercised mainly in the form of information and consultation rights. The fulcrum of the system is represented by the joint commissions: the one on technologies (CoTePa), the one on health, safety and working environment (Ecos) and the one on equal opportunities (Ipazia). The agreement provides for ergonomics and training commissions, but these are not yet operative. For union delegates, they represent “*a useful filter for collective bargaining*”. Especially since, in 2003, the autonomous

¹¹ R. Campagner, during the workshop dedicated to this experience, held in Milan on 13/12/2021, as part of the initiatives of the DIRECT II project.

decision-making power, which applied only to negotiations with the RSU, was abrogated, to be replaced with a purely consultative and technical function. In addition, the committees have a role and power in the executive implementation phase of the agreements.

3. Characteristics of direct participation in the company

Direct participation is widely, though inexplicitly, discussed in Article 7 of the new supplementary company contract, in the section relating to the *Electrolux Manufacturing System (EMS)*. The EMS represents the translation of lean production into the group, and is strongly focused on the “*full involvement of the workers*”, as well as on the “*sharing at all levels of the objectives and their achievement*”. The application of the EMS in the individual plants makes it possible to establish the *Innovation Plan*, which in turn is declined annually through the *Business Plan Development (BDP)*, which defines general objectives on safety, quality, costs, people, monitoring of performance trends, and the sharing of action and improvement plans.

The improvement objectives include the annual definition for each site of the “*Plan of participatory actions, and related investments, aimed at improving the expected results of the various indicators of productivity, safety, quality, costs and people*” (Art. 7).

The BDP

guarantees the “equal” involvement of all workers on three different levels. The objectives are defined at each level in a synergistic manner, planned through a standard scheme that follows the “plan-do-check-

act” cycle, which can be viewed by everyone through the members of the team at each level, and an info-board, present in all work areas.

EMS Way

is a working methodology based on the concept of *operational leadership*, which provides for active interaction between the various organisational levels, in order to define the improvement objectives and allow each team to work “independently” to achieve them. “*The purpose – reads the text of the company contract – is to establish, for each organisational level, routines that allow the constant improvement of company performance through regular moments of support between managers and the EMS Focused Team*”.

EMS Focused Teams

are homogeneous groups of workers led by a team leader, who periodically share information on the trends of pertinent indicators, on conditions and safety standards, and identify corrective actions to be implemented. Focused Team activities take place through meetings, at least once a month, lasting 10-15 minutes, in the work areas where each member of the team can make their own contribution through suggestions, requests for clarification or proposals for improvement.

Participation Systems (Problem Solving – Audit – Before & After – EMS Forum)

The participation system is based on the EMS “5s Technique”. It is a method that assigns each individual worker the role of controlling their workstation/work area, through: identification of the workstation standard; identification and reporting of critical issues from the point of view of safety, quality, breakage position (red tog); control,

recognition and daily reporting of abnormal conditions; internal audits to verify the conditions and their maintenance.

Suggestion management

takes the form of the possibility for workers to prepare structured suggestions for improvement with the support of the company managers, or rather the team leaders, responsible for timing and methods, prevention and protection, who evaluate the feasibility and, if necessary, proceed to completion, usually within a week. Through an inter-functional activity, the different teams thus have the opportunity to be an active part in the structured resolution of the problems of their area.

EMS Forum

All the participation and improvement initiatives proposed by the workers are presented to the other company functions and to the management team as part of the EMS Forum. The Forum meets on a weekly basis and the content discussed is shared through the internal communication channels: notice boards, monitors, apps.

The correct application of the EMS tools is also guaranteed through a specific training programme, graded by company levels and roles, and divided into five standard modules, with certification, suitable for demonstrating the achievement of certain standards of knowledge and the application of the system.

4. Workers, trade unions and direct participation

The trade unionists we interviewed confirm the rather extensive use by management of both the system of audits, almost daily with

employees, and the use of suggestions, and – last but not least – the organisation of work in teams.

Teamwork is spreading across all plants; in particular in that of Susegana. In Solaro, workers are organised with two team leaders, chosen by the company, and a line manager in charge of about 60 people.

In the opinion of the trade unionists interviewed, however, *“The decision-making power of the workers within the teams remains low, even if the workers solicit, with suggestions, possible improvements. Finding no response from the team leaders, the workers subsequently tend to turn to the union.”* Management takes into account suggestions *“only if they are aimed at greater productivity, without affecting remuneration. For workers, since it is not gratifying, this is perceived as not very stimulating for company participation and they limit themselves to putting up with it”* (delegate from Solaro).

As for the incentive of suggestions, it is used more in the factory where industrial kitchens are produced, and this is done through a correlated individual performance bonus, after each idea has been evaluated by the joint commission.

The opinion on the relationships between intermediate management and employees varies between the different plants and, within each, is affected by the different cultures and inclinations among the workers and the trade unions; more collaborative in Porcia, Forlì and Solaro, more conflictual in Susegana. In the more collaborative sectors of the trade union *“the participatory model represents an additional resource, certainly capable of leading to results”* (delegate from Forlì). *“It’s convenient for both parties. A real, concrete benefit has already*

been drawn from it” (delegate from Porcia). For the more conflictual part, it is simply a way to get more commitment and productivity from workers, without substantially changing working conditions. The number of pieces to be produced every hour, for example in Forlì, has increased, and the only real variation was the change of location every hour.

In general, however, even among the less conflictual, the assessments that seem to prevail are that the new forms of direct participation are not significantly expanding the autonomy and control of workers over their jobs. Workers are not adequately involved in anticipating and managing technical and organisational change. Union delegates *“hope for a streamlining of the company structure, where the chain of command is leaner and more involved in welcoming workers’ requests for production improvements with a redistribution of the wealth produced and professional growth”* (delegate from Solaro).

Regarding direct participation, the idea of the trade union is that this must in any case provide for a preliminary involvement of the trade union, in order to establish the framework and some fundamental rules. Otherwise, it risks becoming “a subordinate form of involvement”, aimed only at integrating the workers into the logic and ideology of management, for the sole purpose of preventing and obstructing any expression of autonomy and, if necessary, of conflict (Gen. Sec. FIOM-CGIL at the national workshop of Milan). This will certainly require changes in trade union culture, but also – and no less powerfully – in that of management. To do this *“it is necessary that there be the will, with an awareness that each situation has its own peculiarities, and that therefore the same model may not work in the same way, from*

one establishment and another". In any case, this has constituted a real mutual advantage, with an authentic enhancement for workers and a respect for the role and prerogatives of their trade union representatives.

5. The introduction of new technologies and their impact on employment relationships

Work organization in the household appliance sector has always been among the most classically Taylor-Fordist: strongly linked to the assembly line and very intense levels of saturation and speed in the execution of tasks, which are rather simple and very repetitive. The number of workers with reduced working capacity, due to the strain caused by work, has always been quite high here: in particular, carpal tunnel and musculoskeletal disorders. The adoption of increasingly robotic and automated systems on the assembly line has made the job less burdensome and the work tools lighter, with substantial benefits from a workload point of view.

Over the past year, the group has made significant investments to encourage technological innovation in all its Italian plants. In the largest, Susegana, work was carried out on the 1,200 metres of the assembly line, divided into two sections, in which manual processing in manufacturing was reduced by 51%, in line with the new paradigms of Industry 4.0. Today that plant produces 800,000 units a year. When fully operational, in three years, it will produce a million. According to the technicians of the Susegana plant, considered the jewel in the crown of the group in Italy and perhaps in Europe, the investment made and the plans in the pipeline should provide long-term guarantees for the

current number of employees, about 1,500, also including clerical and administrative staff. With a project called “Genesi”, Susegana has become “*the most automated plant of the Electrolux system in the world*” (M. Ranieri, CEO, Electrolux Italia)¹². The workers, in three shifts, are organised in small teams and, often equipped with a tablet, communicate with robots and their colleagues, the closest of whom are a hundred metres away. Gone are the old wrenches, the screwdrivers, the oxyhydrogen torches. At the end of the long chain, what comes out – 94 times an hour – is a latest-generation refrigerator, much more efficient in energy consumption and humidity control for longer food storage, and therefore with less food waste. Another way in which digitisation is spreading among the employees of the group is in the use of specific apps on their smartphones, to acquire information regarding the benefits of corporate welfare and regarding the training courses that are organised.

“What will change is their way of working; and therefore the requalification of current staff and the progressive replacement of retired operators with figures of different specialisations. In the last two years, 130 new employees have been hired including connectivity, robotics and maintenance technicians and automation and quality managers.” All this “in profitable agreement with the trade unions, which have also made it possible to define the best work organisation schemes, which have helped us to fine-tune the ergonomic aspects of the workstations” (M. Ranieri, CEO, Electrolux Italy)¹³.

¹² G. Favero, *Electrolux, fabbrica 4.0 comandata dai tablet: operai fra i robot*, “Corriere del Veneto”, 22 October 2021

¹³ Ibidem

From the point of view of the impact on the quality of work, there has been some enrichment of professional skills and knowledge, in particular the use of job rotation, strongly desired by the trade unions, and now more widespread than in the past. In Forlì, the assembly line workers change positions approximately every hour. *“This was a sea change for us workers. In fact, this allows you to vary a little the tasks as well as the colleagues around you. This makes the operations a little less repetitive and boring”* (delegate from Solaro).

But there are also those who critically underline how job enrichment today is *“more theoretical than practical”*, since it is mostly a job that is still very much tied to the assembly line. Experts who have carried out surveys on work in metalworking factories observe how the use of job rotation can certainly be a way to make work more varied and less monotonous, but it is also a device with which working time is more saturated and intensified¹⁴.

At the level of the working environment, air-conditioning systems have been introduced, particularly necessary and requested by workers for the summer months, and the bathrooms have been refurbished. These are areas in which there has therefore been some significant progress.

The perception of the staff about work, that is, whether it has really become more autonomous and rewarding, is viewed by the delegates with a degree of scepticism, and the workers – in general – do not feel that they actually matter more.

An ambivalent framework, therefore, in which the delegates, on the one hand, admit the acceptance of some of their claims in the field of

¹⁴ See the work sociologist Matteo Gaddi, at the workshop DIRECT II of Milan, 13/12/2021.

work organisation (job rotation and enrichment), but on the other hand they still consider the role of the delegates in anticipating change “largely limited”, if not “null and void”, too characterised – in their opinion – by the unilateral choices of management.

6. The impact of COVID-19 on industrial and labour relations

All the negotiations that led to the supplementary agreement of 23 April 2021, and the new text on participation, took place online. And this is a first fact that needs to be underlined. The other is the leading role that Electrolux played in drafting one of the first national protocols for the immediate safety of workers’ health in the workplace. The participatory model, from this point of view, proved to be of great benefit in the search for and adoption of solutions shared between the parties. As early as March 2021 the obligation to wear masks was introduced, along with the installation of plexiglass barriers in the departments and company canteen; staggered entry and exit times to avoid people gathering at shift changes. But then there were some critical issues, especially in Susegana, which is also home to the “hottest” union. The RSU in that factory raised strong objections to the use of masks during work, since they are very uncomfortable on the lines during the hottest months of summer. And then, more recently, by leading the revolt against the imposition of the Green Pass to access, first the company canteen, and then directly daily work, after this obligation was imposed by the Government starting from 15 October 2021, a measure that aroused widespread protests, with the workers of Susegana among its fiercest opponents.

Smart working, with the possibility of working remotely, was introduced for administrative staff.

COVID-19 has not had a negative impact on the appliance market, which instead experienced strong sales growth in the last year. This is a fact that has helped to encourage new investments in production as well as in industrial relations by the management. The breakthrough in negotiations and the signing of the supplementary agreement of spring 2021 can also be interpreted in this light. Furthermore, the crisis of this last year has revealed the weaknesses of some of the strategies of the past relating to relocations. The pandemic in fact caused frequent interruptions to the supply chain of components, with repercussions on the continuity of the working cycle in the European and Italian plants. A problem that has affected all industrial manufacturing and is pointing to a reversal of the trend in recent years to relocate, even far away, in view of the significant savings in labour costs, and to bring the production of components for assembly back to more local sites (reshoring).

7. Conclusions

The corporate-level agreement for all the group's plants in Italy, 13 years after the last, marks an important milestone, welcomed positively by both the company and the trade unions, which also encountered some difficulties in getting it approved by the workers, with, in the end, a rather narrow majority of votes. And the strongest resistance was in the plant that saw the greatest investment in innovation; the highly unionised and combative one of Susegana. In this way, Electrolux renews its reputation as a participatory model in the Italian system of

industrial relations. What are, in conclusion, the factors – exogenous and endogenous – that favoured the participatory choice of Electrolux, its drivers, and what are the criticalities?

Drivers

- The business model. For a sector that traditionally has a low added value per unit, the containment of labour costs has always been a goal in its business strategies. Hence the extensive use of relocations. The alternative is to respond to the challenges of competitiveness in the field of high-end production. A “high road”, which is what Electrolux seems to want to do in Italy. This implies an unprecedented attention to the quality of the product, and therefore even earlier, of the process. This objective cannot be separated from the adoption of a new socio-technical paradigm, in which the Taylor-Fordist scheme typical of this sector absorbs increasingly important elements of lean production. Quality and continuous improvement cannot be separated from the involvement and self-activation of the entire workforce, as individuals and at team level.
- The style of management, the culture with which it is impregnated. The introduction of highly structured forms of participation stems, since the mid-‘90s, from a powerful managerial push in this direction, generally shared by the trade unions which, over time, have lessened their initial reluctance and opposition. The Swedish management culture has strengthened and extended this approach, as the trade unionists themselves recognise. Among the corporate objectives there is undoubtedly that of limiting conflict, and more generally any unilateral action, completely. Respect for the principles of fairness and good faith, and the procedures for cooling any conflict, are emphasised strongly in the text of the agreement.

- The COVID-19 pandemic has not produced that negative impact on the Italian appliance market that has been recorded in many other sectors. Sales have grown significantly, and this has required additional effort from the workforce, in a context of health risk and contagion in the workplace. This prompted management to seek the involvement and consent of workers, offering in exchange new opportunities in the field of greater and better information. The opening of the negotiations and the signing of the supplementary agreement of spring 2021 can also be interpreted in this light.
- Another driver is certainly the maturing, throughout the Italian trade unions, of a convinced choice in support of worker participation in the company. There are organisations, and even individual production plants, where this approach is stronger and more rooted; others in which the traditional combination of conflict and collective bargaining prevails. In general, the union shares the goal of redefining work and industrial relations, aware that this is the way to win the challenge of global competition. The only condition is that this involvement in change and its anticipation is effective and not merely rhetorical. Conflict and bargaining must not disappear, but have to converge towards a greater degree of knowledge and sharing of the most important choices.
- Italian tax legislation, since 2016, favours those companies that correlate production bonuses to the adoption of participation plans, among which, in fact, we find new forms of group work or team working. Teamwork is spreading across all plants; in particular in the highly innovative one at Susegana.

Critical issues

1) For the company, the biggest obstacle is represented by the persistence of strong areas of resistance on the part of workers and delegates in some factories. An authentic “threat” (according to a manager), as demonstrated by the strikes called outside and against the spirit and letter of the supplementary agreement.

2) The perception of involvement, the judgment on its overall quality, very much reflects the trade union cultures and ideologies of workers and trade union delegates. The traditions and models of industrial relations in individual plants matter quite much, with major differences between situations in which a greater willingness to collaborate prevails and others in which approaches are more radical and antagonistic.

3) Participation, correlated to the paradigms of lean and continuous improvement, can have critical repercussions on work, with relative psycho-physical stress. Job rotation itself can certainly make jobs less repetitive and monotonous, but it can also accentuate the saturation and intensity of individual commitment.

4) Participation requires a relationship of trust between the parties. In the past, Electrolux has not hesitated to resort to relocations to place individual plants in competition. They closed several (Mel and Florence in Italy) and threatened to do the same with others (Porcia). In the current positive market situation, today it seems to be aiming for a serious relaunch of the Italian plants, but this could quickly change if the trend were to alter. From this point of view, participation is always a temporary shelter, the stability of which depends on too many factors to make the return to conflict inconceivable.

5) The perception of employees of work, that is, whether it has really become more autonomous and rewarding, is judged by the delegates

very sceptically, and the workers – in general – do not feel that they actually matter more. In the opinion of the unionists interviewed, however, *“the decision-making power of the workers within the teams remains minimal, even if the workers solicit, through suggestions, possible improvements. Finding no response from the team leaders, the workers subsequently tend to turn to the union”*. Management takes suggestions into account *“only if they are aimed at greater productivity, without affecting remuneration. For workers, since it is not gratifying, this is perceived as not very stimulating for company participation and they limit themselves to putting up with it*

Autostrade per l’Italia-ASPI¹⁵

1. The company

The “Highways for Italy” (*Azienda Autostrade per l’Italia – ASPI*) is an Italian joint-stock company that deals with the concession management of sections of the motorway system, as well as carrying out related maintenance. Founded in the early 1950s as a company owned by the public holding IRI, it was privatised in 1999 and then established in its current form in 2003. For 22 years, it was a private company controlled by the Benetton family holding, Atlantia, a global leader in the motorway and airport transport infrastructure sector,

¹⁵ We thank for the interviews granted: Cristina Settimelli (National Secretariat FILT-CGIL), Cristiano Tardioli (National Department of Viability FILT-CGIL), Valter Sensolini (Responsible and delegate FIT-CISL ASPI), Antonio Cavallera and Marco Micaroni (Dir, Head of HRM and Industrial Relations, ASPI). On the occasion of the (2nd European round table of the DIRECT II project, held in Rome on 5/11/2021, this case was publicly illustrated and debated by Marco Micaroni and Cristiano Micaroni.

which holds 88% of its shares, having sold, in 2017, 12% of its shares to the Allianz Capital Partners consortium and the Silk Road Fund.

Following the dramatic collapse of the Morandi Bridge in Genoa in August 2018 (which left 43 people dead), and the bitter public controversy that ensued, a complex discussion began in Italy about the need to remove the Benetton family from ownership of the group, through the revocation of the concession, which was to be brought more or less directly under the control of the state. The long and exhausting negotiations between Atlantia, the Government and the consortium ended in June 2021. The result was that, starting from March 2022, ASPI will become part of Holding Reti Autostradali, with the majority of the shares held by the *Cassa Depositi e Prestiti*. Not really a nationalisation, but certainly a passage to being under the indirect but substantial control of the public player.

Today ASPI is one of the major European concessionaires for the construction and management of toll motorways and, with its new industrial plan, aims to be a leader in integrated and eco-sustainable mobility services¹⁶. The employees of the group number approximately 5,000. Overall, also considering the subsidiaries, we arrive at a total of 9,000 employees. The ASPI plan foresees, and has already begun, the creation of 2,900 new jobs. The figure of the toll collector was, and in part still is, the most typical and recognisable figure of this company, with a number of employees today of about 1,200 workers, in constant decline since an increasingly large share of this service is carried out by automatic means of payment.

¹⁶ In Italy, approximately five million travelers pass through its network every day which, also considering the subsidiaries, extends for over 3,000 kilometers, more than 50% of the Italian motorway network.

A few years ago, and since the last in particular, a process of profound technological and organisational modernisation began, under the banner of automation, digitisation and investment in personnel training and qualification (Autostrade Tech)¹⁷. The 2020-2024 Business Plan provides for the transformation of the company into an integrated mobility operator, to be carried out with an investment of €14.5 billion, and a new organisational structure, with the transformation or creation of new subsidiaries to oversee the strategic development plans¹⁸.

2. The industrial relations

The industrial relations system here is articulated – as is usually the case in Italy – on two collective bargaining levels: national-sector and company, which in the case of large groups, is in turn articulated with dealings at the level of individual production units. The national agreement of reference is that for personnel employed by companies and consortia concessionaires of motorways and tunnels. The one currently in force was signed on 16 December 2019.

National-sector bargaining assigns a very broad and important set of prerogatives and powers to company bargaining. At that level, the signatory parties reaffirmed the “strategic centrality” of a renewed relationship with the trade unions and of the “enhancement and motivation of human resources”, in the process of a more

¹⁷ This is *Autostrade Tech* for technological solutions and innovative systems; *Tecne*, for engineering projects for the transport network; *Nuova Pavimental* for the construction and maintenance sector; *Free to Xperience*, for innovative services for travellers, such as the installation of electric recharges on the 3,000 km of motorway network.

¹⁸ R. Tomasi, Amministratore Delegato di ASPI, *Viaggio nella mobilità del futuro*, in “Agorà”, n. 28, agosto 2021; p. 34-36

comprehensive redefinition of corporate missions and objectives. At group level, annual meetings are planned for the exchange of information and consultation, also as concerns intervention projects on the technological and organisational structures “which involve changes to the production structure”, for example, the introduction of new technologies. In these cases, the company will give “special prior communication” to the trade unions, which may be followed by a meeting for an examination of the effects on employment and working conditions. In these circumstances, any “professional refresher programmes” identified “in support of technical and organisational innovation” will be illustrated. The creation of a “joint corporate observatory” is also envisaged, the tasks of which will include monitoring the evolution of technologies, with interventions aimed at promoting “cultural change” and “adaptation to levels of professionalism consistent with the organisational and technological evolution of the company”. At the level of the single production unit, information rights are envisaged on the repercussions of the effects of automation on timetables and types of contracts.

In ASPI there are joint committees on health and safety, quality of services, continuous training, corporate welfare, and – very recently – on the issue of diversity, equal opportunities, the fight against bullying and sexual harassment, and conciliation.

In November 2021, the “*Bilateral Committee for Strategic Development*” was established. This will be called upon to express its prior advisory opinion, especially proactive on the central points of the progress of the ASPI industrial plan. Semi-annual meetings to discuss the proposed production and consequent investment forecasts,

updates on ongoing projects, with the implications for employment, conditions and safety at work.

Unionisation in ASPI is quite high, even compared to the Italian average; approximately 3,000 employees out of just over 5,000 are members of a trade union organisation. The core of the membership is represented by the employees at the medium-low levels of the professional classification; mainly toll collectors and motorway and plant-engineering maintenance personnel. Their reduction is having repercussions on the total number of members.

With regard to the forms of participation, the experience of shareholding (generally not very common in Italy) of the roughly 12,000 employees of the Atlantia Group which, consequently, also involved the employees of ASPI, should be highlighted. 90% of employees joined the plan. *“This is a particularly significant operation – the company declares – aimed at further strengthening the bond with its employees and making them protagonists of a company, architects and at the same time beneficiaries of the renewal initiated by the group”*.

The group has a robust supplementary (occupational) welfare system for all employees, at the level of health insurance and supplementary pensions.

Finally, again with regard to the industrial relations system – this time at an international level – we would point out that ASPI has set up its own European Works Council (EWC), made up of Italian and Polish representatives from the group.

3. Characteristics of direct participation in the company

For some time, the group has been engaged in a profound reorganisation process, at the centre of which are a series of objectives and values, specified and set out in a series of documents and guidelines. The Strategic Transformation Plan 2020-23 lists principally four: transparency, quality, accountability and performance. Thanks to them it is intended to encourage collaboration and sharing, fostering an “open and constructive” feedback culture. In this way, the aim is to encourage decision-making at all levels, with transparent systems for measuring performance and results through clear, measurable and accessible criteria.

For management, the goal is to proceed quickly to a new definition of organisation, through a review of HR processes, in which it is possible to strengthen people, in order to guarantee an ever greater empowerment of individuals, relative to their range of activities, enhancing a spirit of individual initiative and collective work interdependence.

Direct participation, from this point of view, is an indispensable corollary to achieve these results, through various forms of activation, at both individual and collective level. Its design and introduction therefore stem from the initiative of the company and its HRM office. Among the forms of direct participation, we can include the extensive use of audits and opinion surveys among staff, cultural training, mapping of professional skills, team working and corporate welfare.

The group first of all promoted moments of listening and discussion with employees, from which useful ideas emerged to progressively refine the interventions to support staff. For example, on work

experience during the pandemic and to map needs in a phase of profound change for the world of work. With the “*Dare Valore*” listening and training project, a focus group of 200 people was set up, supported by external experts and consultants, and over 1,000 employees (approximately one-fifth of the total) participated in a survey with questions on organisational change. The task of guiding people in this transformation has been entrusted to 160 colleagues who, with different roles, will be the main players in the project and the first agents and promoters of change.

The transformation in progress is based on an extensive and preliminary work of mapping and classifying work and professional skills. The workers were involved in this complex transformation plan, through surveys, focus groups and audits. Management defines it as an “employee journey”. The plan provides for a digitisation of the recruiting process, the so-called employer branding, with the identification of 12 professional families, 180 professions and 400 skills in the company; for a total of 600 job profiles. One of the objectives is to set up a performance measurement system for 2,700 people. This implies that in the evaluation system each worker is evaluated by their boss, but also by their colleagues, and therefore – first of all – by themselves, through self-assessment. In this way, process integration is achieved through an active feedback system within the organisation.

The audit tool represents the organisational function through which, under the coordination of a person responsible, there is an annual check on whether the expected behaviour ultimately coincides with the rules and programmes defined. This is done on a sample basis, on the processes and on the line.

“It is not a simple operation – admits a management representative – but it has to be carried out with people’s active participation. It is necessary to explain to all the stakeholders – starting with the workers and trade unions – the meaning and objective of this strategy. It will have to be a trauma-free transformation. This is why we listened to our employees through internal surveys. We wanted to understand their expectations of management, of change. And from their replies emerged the request that it be conducted with criteria of transparency, meritocracy and sense of responsibility. And this is what we have tried to translate into our plan” (a manager).

4. Teamwork

The entire corporate transformation programme was planned and managed through the creation of inter-functional work groups, ranging from the top level of the CEO to the lowest level of the organisation. Teamwork is widespread in the higher branches of the business organisation, especially those involved in computer and engineering design (Autostrade Tech). Thanks to them, the focus is on operational excellence in all business processes, from planning to maintenance management to monitoring.

This way of working involves the offices in all nine sections into which the ASPI management of infrastructures is divided. Here the teams are called “rooms” (*Stanze*). In each direction there are 9 rooms, each made up of about 30 people, of all the various levels of classification; their aim is to coordinate and achieve agreed goals. The team room works more or less like this: there is a room leader; with their group they discuss and share a vision, which translates into a two-year programme. A road map is drawn up, its implementation, and on the

basis of all this, a general investment plan is arrived at. Each “room” meets every fortnight, and once a month all the room heads meet, together with the chief executive officer, to take stock of the situation. Room no. 9 is the one that deals with human relations. In terms of digitisation, there is a team that has already carried out numerous assessments with internal contacts to draw a map on current processes and define areas of intervention and improvement.

This listening model is considered essential to initiate change and will always be active so that those involved are ready to receive new suggestions, in all sectors, to improve the entire corporate ecosystem. *“This is the form of group work we employ; it’s pure team working”* (HRM).

Among the initiatives aimed at creating working environments inspired by the principles of sharing, innovation, identity and employee wellbeing, the inauguration in Milan of the first *“smart spacing”* of the ASPI Group in the new Tecne offices deserves a mention. Through a new and different architecture of spaces and offices, they sought to create *“a completely new way of conceiving of the work environment, in order to make it more recognisable and more shared, because the ultimate goal is to facilitate interaction; with digitisation that facilitates the generation of new, more sustainable and comfortable ideas and is more attentive to the needs of employees, their psycho-physical wellbeing and their natural need for interaction”*¹⁹.

5. Introduction of new technologies and their impact on employment relationships

¹⁹ *Smart Spacing, un nuovo modo di lavorare*, su “Autostrade Informa”, n. 2/2021; p. 14.

For some time, in ASPI, a robust professional and generational turnover of personnel has been underway, especially among the medium-low jobs of toll collectors and maintenance workers. Over the last 15 years, the main technological innovation, which has had a powerful impact on work, has been the replacement of the payment of motorway tolls through the presence of toll collectors onsite in cabins, with new and different systems, based on automatic toll booths, the Telepass system, credit cards and other forms. Today manual collection makes up no more than 15% of the total transactions. But even this share could be further reduced, to the point of perhaps almost disappearing, justifying the possible abandonment of the guarantee of 24-hour supervision, at least in the night-time slot. The control of any malfunctions, at the booths, will increasingly be exercised remotely, by a relatively centralised number of surveillance points for individual sections of the motorway, with the aid of itinerant forms of supervision on the same sections, like that guaranteed by breakdown assistance services. The old figure of the “toll collector”, responsible for manually collecting money, is clearly being reduced in number, and those who remain have to be able to perform new and wider “problem-solving” functions, providing surveillance to ensure that everything is running smoothly: a change that has encountered and is encountering quite a lot of resistance from the employees affected.

It should be emphasised that the profound restructuring of recent years has produced limited employment and social effects. There have been no mass redundancies and the use of tendering and outsourcing has also been kept under control. Thanks to an extensive use of trade union negotiation and the tools provided by the legislation in these cases, it was largely possible to relocate the staff replaced by the new

automatic means of payment to other duties, blocking the turnover of those who retired.

The strategic objective of ASPI today is for an integrated management of the life cycle of infrastructures, through an industrial logic based on research, engineering, construction, operation and maintenance of the works. Tecne, as mentioned earlier, is the new company of the group that brings together in a single organisation the activities of study, design, construction management and coordination of safety throughout the country. Thanks to its data-mining and artificial intelligence systems, it will become possible to revolutionise maintenance management with fully digitised engineering processes.

Through digital transformation, ASPI aims to anticipate technological and social trends by investing in new technology and research. Digitisation is one of the seven guidelines of the 2023 Strategic Transformation Plan. With the aforementioned *“Digital Transformation. Let’s make a road for the future”*, the company aims to achieve digital maturity within five years that will produce benefits in all areas of the company’s business. The overall investment in the new system will eventually be over 60 million euros. The *“Next to Digital”* vision is based on nine business capabilities, in a transversal and cross-functional logic, including *Augmented Fieldforce*. It provides for the introduction of new tools to support operational staff, with the aim of increasing collaboration, the ability to monitor the activities carried out to ensure a greater level of safety, and the productivity of resources.

Among the major technological innovations, the greatest probably concerns the creation of an artificial intelligence platform by IBM, which will allow the monitoring of 4,500 works on the ASPI motorway

network, including 1,943 bridges, 2,000 flyovers and 587 tunnels, through the use of drones equipped with an automatic flight plan, topographic laser-scanners and very high resolution cameras. The Internet of Things (IoT) and 3D digital modelling will also be employed. In this way it will become possible to carry out real X-rays of materials, capable of preventing any possible deterioration, and with this the risk of collapse.

The use of these technologies and software is therefore destined to change the way of working of a very significant part of the current workforce in ASPI. The work once carried out by maintenance departments will now be carried out with precision instruments, in relation to which human use should be much more reduced, but also precise and rapid. In the face of this reduction in personnel employed up to now for maintenance, to be achieved gradually through retirement, relocation and blocking of turnover, a plan is already in place which in the coming years will lead to the hiring of over 2,900 engineers, technicians and researchers. The inspectors will be equipped with a tablet, in which the new digital system will be inserted directly, with all the details and photos taken during the inspection, making the company structures immediately available. All workers are encouraged to make ever-more extensive use of the digital tools provided by the company. The trade union agreement of 15 April 2021 on the performance bonus, for example, calculates a share of this on the basis of the number of accesses that the individual worker will make each month, using a special counter.

To do this, the focus is on increasing the skills of human resources (upskilling) and developing skills by filling new roles (reskilling), also

through the use of forms of *job rotation*. Another very recent trade union agreement concerns the possibility of making use of the *Fondo Nazionale Nuove Competenze (National Fund for New Skills)*, aimed precisely at supporting this kind of intervention. Today, this commitment translates, on the one hand, into a rejuvenation of the workforce, through a recruitment plan which, over the next four years, should involve just under 3,000 employees, which 2020, during the pandemic, has already seen the arrival of 800 new professionals. The data provided by the company speak of 124,000 hours of training carried out already (Oct. 2021).

6. Role of delegates in anticipating and managing socio-technical change

The unions have negotiated these transformations with the company, and are continuing to do so. A series of company collective agreements move in this direction, as in the case of the new performance bonus system, in terms of investments in new skills, smart working, and policies relating to “diversity”.

The trade unionists who follow this group nationally refer to workers’ resistance to technological change and its impact on the organisation of their work. In many cases they see the use of tools that are not part of what they have learned so far in many years of working practice as a challenge or a threat. This is especially true in the case of older workers who are nearing retirement, who, moreover, constitute a large share of union members.

The managerial emphasis on cultural change also stems from this awareness. Which is admitted by the trade unionists themselves, who claim to understand it, but also consider it as necessary to overcome.

“The problem is to manage change together. The company is running and we cannot be left behind or pushed aside.”

Overall, there is agreement on the need for a substantial modernisation of the production system and work organisation, as well as with regard to the increasingly widespread adoption of digital technologies. Its effects on the enrichment of skills and professional knowledge (job rotation or enrichment), as well the commitment to safety and health, both of workers and users, and also for continuous training, are appreciated. They think that some of these transformations will serve to raise workers’ average satisfaction with their jobs.

Unions today have the need to prevent outsourcing and fragmentation processes from taking place in the name of organisational change, which are capable of eroding the unity of the contractual border that today regulates in a unitary manner all the professional categories linked to the infrastructural and maintenance cycle of the motorway network. They aim to coordinate change, anticipating and closely following its planning and implementation. They fear that through an overly accelerated generational and professional changeover, the representativeness of the union in the company could be significantly reduced, with consequences that will be felt by everyone, in terms of guarantees and quality of work.

7. Impact of COVID-19 on employment relationships and participation

The COVID-19 emergency has accelerated the activation process of smart working in this company, as indeed in thousands of others, in Italy. It should be borne in mind that, during the most acute phase of the pandemic crisis, during the lockdown between March and May

2020, there was an almost total blockage of motorway usage. And for the first time, the group made use of layoffs to a considerable extent, due to COVID. Launched at the end of February 2020, smart working in the summer of 2021 involved approximately 1,400 employees from all administrative offices, for a total of over 60,000 days. The Autostrade per l'Italia initiative is one of the new policies defined in the company's industrial plan, which pays a lot of attention to the development of its 8,000 employees, through innovative forms of corporate welfare. With two agreements, the first on 13 October 2020, and the second on 22 March 2021, the five trade union organisations present in the group defined a specific discipline for smart working, according to which each employee in smart working will be able to organise their professional activity on a weekly basis, agreeing with the company the times in which to disconnect. In special cases, a request can be made to support children in distance learning outside of the morning slot as well.

The transition from work focused on physical presence and proximity to one based on virtuality has certainly had significant impacts. A listening desk was established, with the involvement of psychologists, aimed at intercepting forms of difficulty related to these new working conditions, but also extended to other possible causes, such as bullying or harassment. During the toughest phase of the lockdown, in the first half of 2020, ASPI created a digital people care platform for the group's employees, entitled "Autostrade Insieme" (*Autostrade Together*). The goal was to keep the professional and human bonds between employees active. The programme covered cultural and entertainment content, ranging from the possibility of downloading e-books for free, to accessing a digital video library of over a thousand

films on demand, passing through e-learning language courses for the whole family, without overlooking physical wellbeing and nutritional education. Physical education courses and scientific studies on the theme of wellness were planned. In this way, the company explains, ASPI wants to give daily “remote” support to all its workers who, during lockdown, were forced to stay at home, by maintaining direct contact²⁰.

In September 2021, the percentage of employees in smart working was around 40%, almost all of the office staff. The mandatory introduction of the Green Pass in all workplaces, in addition to all the prevention and safety systems adopted through collective agreements, will certainly lead to an increase in attendance, while safeguarding all those situations that ought to favour work-life balance and productive efficiency. The hybrid form should consist of 3 out of 5 days in presence, and 2 in smart working, remotely.

Still on the pandemic front, in autumn 2021, Autostrade per l’Italia made ten offices available throughout the country (Genoa, Milan, Bologna, Florence, Rome, Fiano Romano, Cassino, Pescara, Bari, in addition to that of SAT Tirrenica) that can be used for vaccinating both employees and the general public, if this method should be chosen by the authorities.

8. Overall assessment of the impact of DP on the quality of working conditions

After the very difficult moments experienced in the last three years, in ASPI today a degree of optimism appears to prevail on both sides, attested to by a good level of sharing of the transition path that has

²⁰ *Autostrade Insieme: riunirsi in uno spazio virtuale*, in “Agorà”, n. 28, agosto 2021; p. 64-65

already begun. A solid system of industrial relations, based on collective bargaining, and information and consultation rights, is an irreplaceable channel for managing change. This assumption is very much shared by the company and the trade unions.

For the company, the involvement of workers is considered a fundamental step for the success of the project. *“The main objective is to bring 9,000 people throughout the group on board with our transformation plan. If all the company employees are not involved in this aim, such a path cannot be pursued. We need a clear, shared and transparent personnel management system; communicated with a comprehensible internal communication plan. And then there’s still another point: the whole system requires the use of the best process management systems at a digital level”* (HRM). The trade union – from this point of view – represents *“a fundamental and active stakeholder”* with which to rewrite the rules, a *“transformation partner”*. In particular, with the latest agreement for the creation of a bilateral strategic development committee, the management declared that it was inspired by the German co-management model, *“designing a new alliance between the ASPI Group and the trade unions”*. According to this approach, the trade union would not have too much to fear about the risks of a lack of mediation, since the traditional negotiating system would not be replaced but simply integrated. Furthermore, it is true that digitisation and automation could lead to a contraction of those more traditionally unionised figures, to the advantage of a higher level of professionalism, more inclined to individualised relationships with the company. But *“the function of the trade union as a partner of the company”*, and as a representative of the workers, will not disappear with the affirmation of more qualified and satisfying employment.

On the occasion of the presentation of this case during the European round table, held in Rome on 5 November 2021, the head of industrial relations for the company, Marco Micaroni, wanted to underline certain risks that can occur when the decision-making process becomes too long and articulated – *“an excess of democracy,”* he said in a deliberately paradoxical way, *“capable of slowing down innovation, which instead presses and cannot wait... Instead, it is necessary to filter – he continued – to be quick, to base our actions on mutual trust and transparency. It is also clear that if we read the participation of the trade union in the logic of conflict and therefore of the protection of the law linked to positions that perhaps exist and need to be transformed, in my opinion, we have a somewhat limited vision of what the role of the trade unions really is. What we are trying to do in the way we are setting it is up to have the trade union as a partner for the governance of transformation.”*

For its part, direct participation is considered an effective and innovative tool. It allows people to *“work better, faster, with less effort, and with more rewarding and transparent career and salary prospects”*. Audits, surveys and teamwork are all considered indispensable tools.

For the trade unions in the sector, participation – in all its forms, including direct – is a challenge that has to be taken up. It implies a “qualitative leap” that affects all the players in the field. The centrality of the relationships of trust, constantly mentioned by management, allowed the union representative at the round table on 5 November to recall how this had already been seriously damaged and violated by the company when, with the collapse of the Morandi Bridge, the

multiple instances of negligence of the property in terms of checks and safety were discovered.

For the trade unions, the forms of indirect and representative participation certainly need to be favoured, in the consolidated forms of information, consultation and joint examination rights; joint commissions; occupational welfare managed through the bilateral bodies defined by collective bargaining. But direct participation also has an important role to play, enriching the quality of work organisation and, with it, the sense of satisfaction of the workers.

The greatest risk that the trade unions see here is that of a growing individualisation of labour relations, and a lack of mediation, heralding a predictable imbalance in the balance of power between capital and labour, in favour of the former. *“In any case, there is a need for a cultural renewal, to overcome the resistance, present both among workers, especially the older ones, but also among middle management, to a change that also has to go through trade union representation, which needs to adapt to give responses both to young people and to the new professional skills that are emerging in the company”* (Tardioli, FILT-CGIL).

Section III

Final considerations

To what extent are the changes described so far, between technological innovation and new organisational paradigms, important for “humanising work” and improving occupational wellbeing and the balance between work and private life? We see it from the point of view of the link between socio-technological innovation and the humanisation of work, on the one hand, and of participation and inclusive representation, from the trade union point of view, on the other.

1. Organisational innovation and technological change: which humanisation of work?

In Italy too, experts and social partners are looking closely at the links between digital innovation and quality of work (among the many others, Dagnino et al., 2017; Guarascio and Secchi, 2017; Cipriani et al., 2018). In terms of valuation and perspectives, opinions diverge quite radically. We’ll see how.

At one extreme, *the optimists* underline the strengths, from the point of view – from time to time – of job enrichment and worker empowerment (Berta, 2014); of the emancipation from the old bonds of subordination (Ichino, 2017); a better work-life balance (Seghezzi, 2016); humanisation and wellbeing at work (Butera, 2018); greater involvement “from below” (Caruso, 2018); and the “smart” cooperation of workers (Pero, 2015; Bentivigli, Pirone, 2021). Then there are those who emphasise the potential for individual liberation from work, if

accompanied by the adoption of forms of basic income, which however is denied and overturned by its capitalist use (Ciccarelli, 2018);

The pessimists, at the other extreme, underline the massive destruction of “good” jobs in favour of precarious and poorly paid “little jobs” (Staglianò, 2016; Armano, Murgia, Teli, 2017); innovation without job enrichment (Magone and Mazali, 2017); especially when it comes to platform work (data entry, delivery, etc.) (Coin and Marrone, 2018); under the pervasive and inflexible surveillance of algorithms (Tullini, 2018; Aloisi, Di Stefano, 2020); with more hetero-direction, rather than less (Bavaro, 2018; Cantaro, 2021); working times that are increasingly compressed and extreme intensification of work (Sai, 2017; Gaddi, 2021). “New platform workers”, enslaved by a “digital Taylorism” (Vecchi, 2017); a generator of working poor and “starvation wages” (Fana, 2019), weakened in their collective and class power, by the individualisation and lack of mediation generated by the new production paradigms (Leonardi, 2018b).

Both of these visions contain elements of truth, *two half-truths*, since – generalising and exaggerating – they do not adequately capture the ambivalences and dualisms of a changing world of work. A two-faced Janus technology (Urbinati, 2021), within the same territory, the same sector, the same company. Among those who actually experience a broad and substantial requalification of their work, in terms of knowledge, autonomy and power, also thanks to new digital technologies; and those who are either not affected by these innovations – for example in the more traditionally Taylorist and less autonomous sectors – or they are, but in terms of a technology of platforms, algorithms and ratings, which only apparently increase

margins of self-determination in people's work, instead producing unprecedented forms of control, surveillance and colonisation of the whole of life with the objectives of exploitation and profit ("digital Taylorism"). We will therefore have a new stratification, which can perhaps be split in three as follows:

- a) old and new professionals, strongly empowered by new forms of work and skills, also in terms of autonomy and discretion;
- b) traditional workers in industry and services, largely unstimulated by the changes underway, but still mostly protected by the Fordist labour law and the welfare state, as well as by the classic forms of union representation;
- c) the new precarious jobs, very affected by digitisation and algorithms – as in the case of the gig economy – but in a setting of new digital Taylorism and almost completely devoid of labour rights and social security protection, with still very limited capacity to be unionised and collectively organised and represented (Vandaele, 2018).

The connection between the new technologies and models of work organisation and industrial relations is based on this assumption, which must not be overlooked. That is, the margins of autonomy that robotic, digital and algorithmic technology leaves to the discretion and direct involvement of workers can be, in many cases, lower rather than higher than in the previous paradigm. Technology today takes on the characteristics of such "objectivity" and non-questionability, as to make any margin for negotiation limited and even pointless; not only the classically collective and trade union, but even the individual,

“participatory” one, between the worker and their team-leader or department head. The machine renders the hierarchy not responsible, against which it is pointless to turn at this point. Robotic or digital technology is now the only legitimate authority to decide, and it has already decided for everyone, so that there is practically nothing left to discuss and deliberate more or less consensually, whether with direct and/or indirect participation.

2. Participation, representation and inclusion: what agenda for the trade unions?

In the Italian debate on direct participation, the awareness of one of these ambivalences is present, both in the academic and the trade union sphere, where unconditionally favourable voices are raised above all on the corporate and managerial side. Nonetheless, even among the main trade union organisations – albeit with important nuances within them – a widespread awareness of the strategic importance of participation seems to prevail today, in its organisational and direct form as well. The evaluation, which is also a hope, is that through this we can actually achieve the raising of production standards that the country needs, in the new scenarios of global competition, and with them, also of the quality of work processes, which are still too backward from the point of view of the knowledge and powers incorporated therein. In short, a more participatory, satisfying and innovative work is what everyone needs today, and the trade unions will not be among those who want to hinder it and even less to prevent it. Govern it by consensus, this yes,

through collective negotiation, this is what is being requested and pursued.

Collective bargaining and participation, in all their possible forms, play an irreplaceable role in the consensual management of technological innovation and its consequences (Cipriani, Gramolati, Marri, 2018). The two-tier system of collective bargaining – now quite rare in among the EU member states – confirms, albeit in a weakened form, a certain degree of centralised coordination, also thanks to an intense season of inter-confederal agreements and category renewals, in which new issues and rights are starting to emerge (Leonardi and Pedersini, 2018). On the other hand, the development of decentralised bargaining is disappointing, invariably limited in terms of coverage, and only sporadically adequate in terms of content to the new technological challenge and organisational participation. Aspects on which the unions will have to concentrate their efforts, in terms of organisation, negotiation and the relationship with the political player.

In general, the new challenges of technological and organisational change require, and not only in Italy, an updating of the strategic and organisational repertoires of trade unions (Vandaele, 2018; Aloisi, Di Stefano, 2020), in order to make them representative among those workers today who are increasingly dispersed, precarious and largely excluded from the most solid protections of labour, trade union and welfare law.

The interventions of the legislator on the one hand, and that of the social partners on the other, must be carried out on several levels, namely:

a) social and labour rights, according to the protection scheme in concentric circles, open and inclusive towards those grey types of work, halfway between being autonomous and subordinated, today largely excluded from the social protections of the old 20th-century welfare state. A project with this ambition, in 95 articles, was drawn up in 2016 by the CGIL, with its *Universal Charter of Workers' Rights*.

b) active labour policies, focused on the subjective right to continuous training, as in the case of the national contract for the metalworking sector (2016 and 2021); but also on greater public intervention in the direct creation of jobs, for the strengthening of those common goods that the company and the market are unable or unwilling to guarantee. Suffice to think of these last two years of pandemic crisis, of the centrality of health, school and public transport, that are universal, safe and efficient.

c) increasingly universal social safety nets, for the management of restructuring and employment surpluses, caused by technological labour-saving innovations, but also – in these times of the pandemic crisis – by the collapse of certain sectors, such as air transport, tourism and catering, to name only a few;

d) collective bargaining that puts work organisation at the centre, starting from the new challenges of the fourth technological revolution, for a more transparent management of robots and algorithms, respect for workers' privacy, and the right to disconnect outside of agreed working hours.

e) participation and democracy at work, for a shared planning and management of process and product innovation, with an extension and updating of traditional information and consultation rights, both by

strengthening – on a negotiated and shared basis – forms of direct participation, focused on a greater autonomy of workers, in the organisation and execution of their duties

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