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# A step towards digital self- & co-determination in the context of algorithmic management systems

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**Abstract**

Developing a legal framework for algorithmic decision-making and monitoring represents one of the main challenges of modern societies, deeply rooted in the technical complexity and the resultant inability to cognitively capture the inner workings of the relevant technology. In the employment context, the additional challenge boils down to ensuring a regulatory balance between the managerial prerogatives of the employer without compromising any human rights of the workers. Algorithmic management for years remained thus, apart from EU general data protection rules, largely unregulated phenomenon.
The contribution focuses on providing a preliminary assessment of the algorithmic management provisions of chapter III of the proposal for a Directive on improving the working conditions in platform work, and outlining recommendations for strengthening the platform workers' rights to digital self- and co-determination, that seems to be fundamental for mitigating the profound asymmetries of knowledge and power observed in the platform economy.

**Keyword**: Algorithmic Management; Platform Economy; The right to digital self- & co-determination.

## 1. Introduction.

We live in the age of algorithms, [1] in a culture of algorithms, [2] and as a consequence in a world of work which increasingly becomes: 'algorithmic'. Algorithms belonging to the family of authoritative knowledge creation and decision-making systems restructure the modern management of both public administration and private entities, by progressively replacing

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1 Abiteboul S., Dowek G., *The Age of Algorithms*, Cambridge University Press, London, 2020.

2 Dourish, P., *Algorithms and Their Others: Algorithmic Culture in Context*, in *Big Data & Society*, 3, 2, 2016, 1–11.

managerial functions, such as allocating tasks, evaluating the work performed, providing incentives or imposing sanctions. The process of algorithmization of working environment has been particularly exacerbated by the Covid-19 pandemic.[3] Work-from-home arrangements and the need to secure compliance with exceptional health and safety guidelines seem to have contributed to a sui generis normalisation of 'panopticon' apparatus.

In the social consciousness, the algorithm seems to more and more often appear as an overwhelming force shaping social relations in a world of increasingly fragmented information, in conditions that we are inclined to call algocracy.[4] In the contemporary world of work, algorithms take the employer's interference - his authority - to a completely different level, equipping it with properties whose nature is located in technology. In place of the superior's orders there appears a state of permanent and continuous control and constant supervision exercised by software, there appears an order for the employee to communicate with new sets of devices, sensors and applications, which thanks to algorithms can be combined into one closed data circuit. All these make the employer omnipresent and omnipotent.[5]

The type of pressure exerted by algorithmic management creates a new reality in the work environment – a kind of 21st century digital Taylorism[6] – i.e., the increasing surveillance, measurement and invigilation of workers to, among other things, optimise the pace of their work. This dynamic is particularly visible within digital labour platforms, where ubiquity of algorithm-based systems of monitoring and decision-making systems implemented in order to create efficiencies in the matching of supply, leaves its mark on working conditions therein and has a marked negative impact on mental and physical well-being, as workers experience the extreme pressure of constant, real-time, automated micromanagement and evaluation.[7]

Across Europe, courts have already passed several significant judgments recognising the exploitative character of algorithmic management practices, while also condemning the lack of fairness and transparency in such automated systems, and the resultant limitations and difficulties that persons performing platform work face when aiming to assert their data protection rights.[8] We are thus confronted with an increasingly relevant call to open the

[3] Suder S., Siibak A. *Proportionate response to a COVID-19 threat? Use of apps and other technologies for monitoring employees under the EU data protection framework,* in *International Labour Review*, 161, 2, Special issue: COVID-19 and the world of work, 2021, 315-335.

[4] Danaher J., *The Threat of Algocracy: Reality, Resistance and Accommodation*, in *Philosophy and Technology*, 29, 3, 2016, 245-268.

[5] Bąba M., *Podporządkowanie technologiczne w zatrudnieniu,* in *Państwo i Prawo*, 2, 2022, 88-109.

[6] Brown P., Lauder H., David A., *Digital Taylorism*, in Brown P., Lauder H., Ashton D. (eds.), *The Global Auction: The Broken Promises of Education, Jobs, and Incomes*, Oxford Scholarship Online, Oxford, 2010.

[7] *See* eg. Todolí-Signes, A., *Making algorithms safe for workers: occupational risks associated with work managed by artificial intelligence*, in *Transfer: European Review of Labour and Research*, 27, 4, 2021, 433-452; Akhtar P., Moore P., *The psycho-social impacts of technological change in contemporary workplaces and trade union responses*, in *International Journal of Labor Research*, 8, 1-2, 2016, 102-131; Moore P., *OSH and the Future of Work: benefits and risks of artificial intelligence tools in workplaces*, European Agency for Safety and Health at Work, 5 July 2019, available at: https://osha.europa.eu/en/publications/osh-and-future-work-benefits-and-risks-artificial-intelligence-tools-workplaces.

[8] *See* eg. Kullmann, M. *Platform work, algorithmic decision-making, and EU gender equality law,* in *International Journal of Comparative Labour Law and Industrial Relations*, 34, 1, 2018, 1-21; Pietrogiovanni V., *Deliveroo and Riders' Strikes: Discriminations in the Age of Algorithms*, in *International Labor Rights Case Law*, 7, 3, 2021, 317-321; Gellert R., van Bekkum M., Zuiderveen Borgesius F., *The Ola & Uber judgments: for the first time a court recognises a GDPR right to*

metaphorical 'black boxes' into which data goes and from which, after being subjected to an algorithm, the result comes out; in which the influence of algorithms is born and manifests itself. Boxes that hide mechanisms that induce incorrect decisions, bias and discrimination.[9]

The European Legislator decided to partially answer this call via proposal for a Directive on improving working conditions in platform work (hereinafter Directive)[10]. The proposal aims at ensuring fairness, transparency and accountability in algorithmic management by introducing new material rights for people performing platform work (chapter III), which largely "build on and extend existing safeguards in respect of processing of personal data by automated decision-making systems laid down in the General Data Protection Regulation (GDPR)[11], as well as proposed obligations for providers and users of artificial intelligence (AI) systems in terms of transparency and human oversight of certain AI systems in the proposal for an Artificial Intelligence Act[12]"[13].

The paper focuses on presenting a preliminary assessment of the relevant provisions of chapter III of the Directive and outlining recommendations for strengthening the platform workers' rights to digital self- and co-determination,[14] that seems to be fundamental for mitigating the profound asymmetries of knowledge and power observed in the platform economy. Due to the limited scope of this publication, it does not include a detailed analysis of the concept of algorithmic management, as well as 'algorithmic harms', which has been presented by the author in earlier publications,[15] and comprehensively discussed in labour law specific literature.[16]

## 2. Transparency on and use of automated monitoring and decision-making systems.

In the field of algorithmic data processing the concept of understandability/legibility is increasingly gaining prominence, as the one that is key to improving standards of

*an explanation for algorithmic decision-making*', available at: https://eulawanalysis.blogspot.com/2021/04/the-ola-uber-judgments-for-first-time.html/

[9] *See* nt. (7), (11).

[10] COM(2021) 762 final

[11] Regulation (EU) 2016/679

[12] COM(2021) 206 final.

[13] Explanatory memorandum, p.4

[14] The concept of digital self-determination in essence is a natural extension of the concept of autonomy and informational self-determination, that advocates for the development of trustworthy data spaces based on democratic values, that operate in close proximity with users' needs. *See* eg. Remolina N., Findlay M.J., *The Paths to Digital Self-Determination — A Foundational Theoretical Framework*, SMU Centre for AI & Data Governance Research Paper, 3, 2021.

[15] Otto M., '*Workforce Analytics' v Fundamental Rights Protection in the EU in the Age of Big Data*, in *Comparative Labor Law and Policy Journals*, 40, 3, 2019, 389 ff.

[16] *See* especially: Bodie M., Cherry M., McCormick M., Tang J., *The law and policy of people analytics*, in *University of Colorado Law Review*, 88, 2017, 961 ff.; Rosenblat A., Stark L., *Algorithmic labor and information asymmetries: A case study of Uber's drivers*, in *International Journal of Communication*, 10, 2016, 3758-3784; Adams-Prassl J., *What if your boss was an algorithm? Economic incentives, legal challenges, and the rise of artificial intelligence at work*, in *Comparative Labor Law and Policy Journals*, 1, 2019, 123-146; Muller Z., *Algorithmic Harms to Workers in the Platform Economy: The Case of Uber*, in *Columbia Journal of Law and Social Problems*, 53, 2, 2019, 167 ff.; De Stefano V., Wouters M., *AI and digital tools in workplace management evaluation: An assessment of the EU's legal framework*, Scientific Foresight Unit, European Parliamentary Research Services, Brussels, 2022.

fundamental rights protection of data subjects. The understandability is defined as the ability to provide comprehensible information about the relationship between input and output data entering the system.[17] The criterion of understandability thus encompasses transparency[18] and the so-called 'explainability', as both are complementary and thus equally important for achieving the adequate level of protection for data subjects.

The notion of transparency is understood mainly through the prism of availability of reliably drawn up technical documentation, such as system design, test data, source codes, etc. The implementation of the transparency principle does not have to be tantamount to the obligation to make software details available to a wider audience, including competitors. It is about the obligation to make such information available to entities responsible for supervision over specific processing operations, such as e.g., supervisory bodies, entities authorised to certify or audit the relevant systems.[19]

The transparency principle understood in this way materialises only in the relationship between the controller and the entity carrying out the evaluation of its activities, leaving the personal data subjects on the sidelines, as they do not possess the necessary level of digital competences to analyse the information provided. Thus, in order to fill this gap, the notion of understandability is enriched with the so-called 'explainability' element, which includes the obligation to provide reliable information relating to the processing, which would explain the issues relevant to the data subject and, at the same time, be presented in a way appropriate to the average user. In principle, the strengths and weaknesses of each explanation mode is to be assessed in relation to the recipients of the explanation (e.g., professional or individual), their level of expertise, and its objectives (to challenge a decision, take actions to obtain a decision, verify compliance with legal obligations, etc.).

The European legislator partially seems to follow a similar rationale in the proposed Directive. The latter, aims at promoting transparency, or one should rather say-'explainability' by requiring digital labour platforms to inform platform workers of the use ("the very fact that such systems are in use or are in the process of being introduce") and key features of automated monitoring systems (used to monitor, supervise or evaluate the work performance of platform workers through electronic means) and automated decision making systems (used to take or support decisions that significantly affect platform workers' working conditions)[20].

The information to be provided include the categories of actions monitored, supervised and evaluated (including by clients), the main parameters (including their relative weight) that such systems take into account for automated decisions (including the way in which the platform worker's personal data or behaviour influence the decisions); and the grounds for decisions to restrict, suspend or terminate worker's account, to refuse the remuneration for work performed by the platform worker, on the platform worker's contractual status or any

[17] Castelluccia C., Metayer D., *Understanding algorithmic decision-making: Opportunities and challenges*, Scientific Foresight Unit, European Parliamentary Research Service, Brussels, March 2019, p. II.
[18] GDPR does not include a statutory definition of the transparency principle, but its meaning and desired effects are described in recital 39 and in the Article 29 Data Protection Working Party, *Guidelines on transparency under Regulation 2016/679,* WP260rev.01.
[19] Castelluccia C., Metayer D., nt. (17).
[20] Art.6

decision with similar effects.[21] The informational obligations of the platform acting as a controller under Articles 13, 14 and 15 of GDPR to provide the data subject with certain information in relation to the processing of personal data concerning the data subject as well as with access to such data should continue to apply in the context of platform work.[22]

The European legislator specifies also in what form ("the form of a document which may be in electronic format, presented in a concise, transparent, intelligible and easily accessible form, using clear and plain language") and at which point in time this information is to be provided ("at the latest on the first working day, as well as in the event of substantial changes and at any time upon the platform workers' request"). Notably, digital labour platforms shall make the information mentioned above available to platform workers' representatives and national labour authorities upon their request. As further clarified in recital 33, digital labour platforms should not be required however to disclose the detailed functioning of their automated monitoring and decision-making systems, including algorithms, or other detailed data that contains commercial secrets or is protected by intellectual property rights. In practice this may contribute to rather limited possibilities of reviewing the decision taken by automated means from the point of view of its compatibility with standards of technological due process.[23]

In addition, the article 6 of the Directive provides that digital labour platforms must not process any personal data concerning platform workers that are not intrinsically connected to and strictly necessary for the performance of their contract. The Directive provides an exemplary enumeration of prohibited practices i.e. those based on the emotional and psychological state of the worker, health information provided with explicit consent, private conversations including exchanges with worker representatives and any data while the platform worker is not offering or performing platform work.

The relevant provisions complement and advance the GDPR standard by including decisions that are merely supported, as opposed to fully carried out, by automated data management systems. Most importantly, they solve the long-standing quandary on the material scope of the right of information under the GDPR,[24] by incorporating both the right to information *ex ante*- (given prior to introduction of automated monitoring and decision-making systems, including rules applicable to a specific class of algorithmic operations) and *ex-post* ('given upon request'- by implications also after the automated decision has been taken) under transparency provisions. They also explicitly extend the personal scope of the right to information to workers representatives and national labour authorities. Such a

[21] The relevant provisions complement the obligations and rights of digital labour platforms and platform workers under the Directive on transparent and predictable working conditions, which ensures transparency on basic working conditions, yet does not extend the information duty on employers to the use of algorithms in the workplace and how they affect individual workers. Directive (EU) 2019/1152 of the European Parliament and of the Council of 20 June 2019 on transparent and predictable working conditions in the European Union (OJ L 186, 11.7.2019, p. 105).

[22] Recital 32

[23] *See* generally: Citron D.K., *Technological Due Process*, in W*ashington University Law Review*, 85, 6, 2008, 1249 ff.

[24] *See* eg. Wachter S., Mittelstadt B, Fioridi L., *Why a right to explanation of automated decision-making does not exist in the General Data Protection Regulation*, in *International Data Privacy Law*, 7, 2, 2017, 76- 99 and Malgieri G., Comandé G., *Why a Right to Legibility of Automated Decision-Making Exists in the General Data Protection Regulation*, in *International Data Privacy Law*, 7, 4, 2017, 243-265.

legislative maneuver is crucial for circumscribing the risks of bias, discrimination, or other infringements of the rights of workers, for making the content of the algorithm an object of balanced and informed negotiation and for the effective audit of the algorithm by a judge in the event of a dispute.

Regrettably, the Directive does not fully enshrine the mentioned supra understandability concept. In fact, it seems to follow to some extent the black box approach: it focuses on the 'transparency' of the main features of the algorithmic management systems without 'opening the hood', i.e. without any knowledge of its system design, test data, source codes. In practice, the relevant explanations will most probably be constructed from observations of the relationships between the inputs and outputs of the system, thus resulting in a limited information. While it makes sense with regard to data subjects/platform workers with limited digital literacy, especially national labour authorities and data protection supervisory authorities should have full access to the algorithm-including its code, as generally both should demonstrate an adequate level of digital expertise and understanding of the specificity of data processing in the employment context. On the other hand, one could expect that European legislator would try to promote a more constructive approach to transparency of algorithmic management systems, as an exemplary preventive measure, by encouraging reliance upon an algorithmic technique which, by design, meets the legibility requirements while providing sufficient accuracy ('explainability by design').

## 3. Human monitoring of automated systems.

Having regard to the fact that 'monitoring by electronic means can be intrusive and decisions taken or supported by such systems directly affect the persons performing platform work, who might not have a direct contact with a human manager or supervisor'[25], the Directive requires digital labour platforms to regularly monitor and evaluate the impact of individual decisions taken or supported by automated monitoring and decision-making systems on working conditions (i.e. their access to work assignments, their earnings, their occupational safety and health, their working time, their promotion and their contractual status, including the restriction, suspension or termination of their account).

In particular, digital labour platforms will have to evaluate the risks of automated monitoring and decision-making systems to the safety and health of platform workers (in particular as regards possible risks of work-related accidents, psychosocial and ergonomic risks), assess whether the safeguards of those systems are appropriate for the risks identified in view of the specific characteristics of the work environment; introduce appropriate preventive and protective measures, and ensure that such systems do not in any manner put undue pressure on platform workers or otherwise put at risk the physical and mental health of platform workers.

Notably, the European legislator obliges Member States to require digital labour platforms to ensure sufficient human resources for the monitoring of automated systems. The persons

[25] Recital 35.

charged by the digital labour platform with that task must have the necessary competence, training and authority to exercise their function and must be protected from negative consequences (such as dismissal disciplinary measures or other adverse treatment) for overriding automated decisions suggestions for decisions.[26]

As further clarified in recital 35, the relevant provisions apply as specific rules in the context of platform work, including to ensure the protection of the rights and freedoms in respect of the processing of employees' personal data within the meaning of Article 88 of GDPR.[27] As such, they seem to constitute a special form of Data Protection Impact Assessment (DPIA) - algorithmic impact assessment[28]. It must be welcomed that, instead of a one-off evaluation of data processing operations prior to their implementation, the relevant evaluation should be conducted periodically which not only would provide an opportunity to monitor the operations on an ongoing basis, but most importantly to implement appropriate modifications (or, in extreme cases, suspend them).

The periodical algorithmic impact assessment has the potential to improve the understandability of algorithmic management systems, especially if it would involve developing a multi-layered explanation of the personal data processing operations involved in it. This would allow, especially the national labour authorities and supervisory authorities, to have a fuller picture of the anticipated effects of the operation and the procedures they can expect to be carried out, e.g. after the platform worker has received decisions taken by automated means. The development of such layered explanations would also have advantages for platforms in terms of model explanations to be adapted later on to the needs of specific case, instead of creating them ad hoc- upon request of platform workers, their representatives or national labour authorities. In such structured explanations, it would be advisable to address issues related to algorithmic data management on three levels: 1) technical (by providing relevant information about the system, including e.g. algorithmic models used, testing methodology, input data etc); 2) group or social (by describing the impact of the processing operations on the group of actors as a whole-especially with regard to working conditions, fundamental rights protection- in particular right to fair and just working conditions (Article 31 CFREU), information and consultation within the undertaking (Article 27 CFREU) , the right to the protection of personal data (Article 8 CFREU)[29]; 3) individual (by providing more detailed information on the functioning of the decision model- e.g. in the form of examples of alternative results in the case of using other inputs (counterfactuals)- and explaining the reasons for obtaining them.[30]

[26] Article 7.
[27] For a comprehensive analysis of profiling and automated decision-making *see*: Brkan M., *Do algorithms rule the world? Algorithmic decision-making and data protection in the framework of the GDPR and beyond*, *in International Journal of Law and Information Technology*, 27, 2, 2019, 91-121.
[28] There are even more far-reaching solutions in the doctrine, such as the 'legibility test', described in: Malgieri G., Comande G., nt. (24).
[29] Explanatory memorandum, p.14; Recital 2.
[30] Kaminsky EM., Malgieri G., *Algorithmic Impact Assessments under the GDPR: Producing Multi-layered Explanations*, University of Colorado Law Legal Studies Research Paper, 19-28, 2019, 24–27.

## 4. Human review of significant decisions.

Algorithmic decision systems, often rely on the analysis of large amounts of personal data to infer correlations or, more generally, to derive information deemed useful to make decisions.[31] Human intervention in the decision-making may vary and may even be completely out of the loop in the entirely automated systems. It must be welcomed therefore, that the Directive establishes the right for platform workers to obtain an explanation from the digital labour platform for a decision (including the lack of decision or a set of decisions)[32] taken or merely supported by automated systems that significantly affects their working conditions (the right to an explanation of a particular decision) [33].

More specifically, such a right entails the possibility to discuss and clarify the facts, circumstances and reasons for such decisions with a human contact person at the digital labour platform (with the necessary competence, training and authority to exercise that function) and to obtain a written statement of reasons for any decision to restrict, suspend or terminate the platform worker's account, to refuse the remuneration for work performed by the platform worker, or affecting the platform worker's contractual status.[34] Where the explanation obtained is not satisfactory or where platform workers consider their rights infringed, they also have the right to request the digital labour platform to review the decision and to obtain a substantiated reply within a week. Digital labour platforms have to rectify the decision without delay or, if that is not possible anymore, to provide adequate compensation, if the decision infringes the platform worker's rights, such as labour rights or the right to non-discrimination.[35]

The right to human intervention[36] has therefore a dual function. On the one hand, human intervention is intended to make a decision taken by automated means more comprehensible for platform workers. On the other hand, the right to obtain human intervention is directly linked to the right to challenge a decision, and its purpose is to allow platform workers to request a new decision which, in principle should take into account their perspective and is therefore to be based on the analysis of new or previously unaccounted for evidence or circumstances, or the elimination of algorithmic bias.[37]

The right to express one's own position is somehow missing in the current wording of the Directive. Interestingly enough, Article 22(3) of GDPR requires data controllers to implement suitable measures to safeguard data subjects' rights and freedoms and legitimate interest, which as a minimum should include: the data subject's right to obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision. As further clarified in recital 36 of the Directive, those requirements apply also

[31] *See* generally: Otto M., nt. (15).
[32] Recital 37.
[33] Cf. Article 29 Data Protection Working Party, *Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679, 17/EN WP 251*, Bruxelles 2017, p. 2.
[34] Article 8, Recital 37.
[35] Recital 37.
[36] Cf. the principle of 'human in command' principle, *see:* Muller C., *European Economic and Social Committee's Opinion on Artificial Intelligence*, INT/806, European Economic and Social Committee, Brussels, 2017.
[37] Kaminsky EM., Malgieri G., nt. (30), 22.

to digital labour platforms. The relevant lack of explicit reference to the right to express one's opinion, given the overall complexity and the resultant vagueness of the proposed patchwork regulation of algorithmic management in the context of platform work should be further elaborated by the European legislator.

The ratio legis of the explicit introduction of the right to express one's own position boils down, on the one hand, to safeguard respect for human dignity and the right to self-determination by allowing active participation; and, on the other hand, to increase the likelihood of correct decisions based on complete information obtained by filling in missing and relevant information through the direct participation of data subjects.[38] The corollary of the data subject's exercise of his or her right to express his or her views should be an obligation on the part of the controller/platform work to take those views into account in the decision-making process and to address them.[39] Such a concept assumes particular importance in the perspective of research that suggests that human beings rely on automated processes even if they suspect a malfunction of the system, and therefore also representatives of the controller/digital labour platform may act under the influence of an algorithmic bias and consequently consider the data subjects' arguments in a biased manner.[40]

Notably, an essential condition for the effectiveness of the right to human intervention is that the intervention must be relevant to the process, i.e. the person carrying out the intervention should be equipped with the power to change the automated decision and the power to reassess all data collected and to take into account relevant additional information provided by the data subject where the algorithm has unduly omitted such information.[41] The effective exercise of these rights, in turn, requires that the person carrying out the intervention has expert knowledge of the mechanisms of automated decision-making and the operational logic of the algorithms management systems used. This is because he or she should be able to reconstruct and explain to the data subject/platform worker how the input data was processed and translated into a decision with a specific content, and thus be able to assess the quality of the input data set, verify the operation of the algorithm used, conduct counterfactual analysis, etc.[42]

The GDPR already requires some companies and institutions to create a position of Data Protection Officer (DPO)[43]. In practice, it would be possible therefore to broaden the responsibilities of the latter, or to impose the creation of the position of Algorithmic Management Officer. The latter solution given the overall complexity of algorithmic management seems more advisable as in principle it should involve entrusting him with the relevant obligations of regular monitoring and algorithmic impact assessment. It is rather self-evident that to be effective such an assessment needs to involve apart from lawyers also computer scientists, at minimum. In an optimal scenario, he or she would lead a team of in-

[38] Yeung K., *Why Worry about Decision-Making by Machine?*, in Yeung K., Lodge M. (eds.), *Algorithmic Regulation*, Oxford Scholarship Online, Oxford, 2019, 26 and 30.
[39] Brkan M., nt. (27), 108.
[40] *See*. Citron D.K., nt. (23), 1283 and the literature quoted in there.
[41] *See* eg. Gil González E., De Hert P., *Understanding the legal provisions that allow processing and profiling of personal data-an analysis of GDPR provisions and principles*, ERA Forum, 4, 2019, 614.
[42] *Ibid*; Kaminsky EM., Malgieri G., nt. (30), 25.
[43] Art. 37 GDPR.

house experts (legal, IT, human resources) and, like the DPO, would be the natural contact for the national labour and data protection supervisory authorities, as well as for workers representatives for any issues related to algorithmic management. Such officers should be in a position to perform their duties and tasks in an independent manner, and thus be protected against all sorts of retaliatory actions, including dismissal.[44]

## 5. Information and consultation.

Having due regard to the fact that "the introduction of or substantial changes in the use of automated monitoring and decision-making systems by digital labour platforms have direct impacts on the work organisation and individual working conditions of platform workers"[45], the EU legislator decided to introduce additional measures to ensure that digital labour platforms inform and consult platform workers or their representatives before such decisions are taken, at the appropriate level. The aim of this provision is to promote social dialogue on algorithmic management, an issue that was often raised in the labour law specific literature.[46]

The relevant provisions are of an added value to the GDPR that generally provides legal solutions, which focus on the implementation of obligations by controllers at the individual level. They therefore do not guarantee a systemic assessment of the entire algorithmic management systems in isolation from the particular case of processing. The involvement of the workers' representatives at different stages of functioning of such systems could not only be a panacea for the power and knowledge disparities within digital labour platforms but could also significantly contribute to establishing more transparent and fair management practices and policies that respond directly to issues induced by the overall dynamics of particular digital workplaces.

At this juncture, it is rather self-evident, however, that the relevant collective influence might be of limited nature in practice, as many trade union organisations do not have sufficient knowledge and skills to analyse and interpret data provided to them on their own. It must be therefore welcomed that the Directive provides for the possibility of assistance of an expert chosen by the platform workers or their representatives in so far as this is necessary for them to examine the matter that is the subject of information and consultation and formulate an opinion. Notably, where a digital labour platform has more than 500 platform workers in a Member State, the expenses for the expert will be borne by the digital labour platform, provided that they are proportionate. There should be no doubt, however, that equally essential from the perspective of implementation of truly partnership approach, seems to be providing adequate training for the workers representatives on all these issues

[44] Cf. Article 38(3) GDPR '(…) the data protection officer (…) shall not be dismissed or penalised by the controller or the processor for performing his tasks.'
[45] Recital 39.
[46] *See* eg. De Stefano V., *Negotiating the Algorithm: Automation, Artificial Intelligence and Labour Protection*, in *Comparative Labor Law & Policy Journal*, 41, 1, 2019, 15; Coelho Moreira T., *Algorithms, Discrimination and Collective Bargaining*, in Miranda Boto J., Brameshuber E. (eds), *Collective Bargaining and the Gig Economy, A Traditional Tool for New Business Models*, Hart Publishing, Oxford, 2022, 153-166.

related to algorithmic management. Better knowledge and training in these tools should allow for an informed and balanced discussion between the social partners.

## 6. Persons performing platform work who do not have an employment relationship.

Digital labour platforms are structurally at the origin of an imbalance of power due to the asymmetry of information, the opacity of the use of collected data and the ambivalence of the functioning of the algorithms[47]. Notably, within the platforms the relevant asymmetric dynamics is homogeneous- it permeates the work environment with equal force, regardless of the degree of independence, autonomy of the workers and the legal basis of their work. This happens specifically because of algorithms are not interested in anything but data, for which the distinctiveness of subordination, the different degrees of its intensity are nothing but information about productivity, efficiency, the way work is done, emotions, behaviour and attitudes of the platform workers. They do not distinguish between employment and non-employment[48].

This Directive seems to be more attentive to the relevant specificities of technological subordination powered by algorithms, and ensures that the provisions on transparency, human monitoring and review of Articles 6, 7 (1),(3) and 8 – which relate to the processing of personal data by automated systems – apply also to persons performing platform work who do not have an employment contract or employment relationship, i.e. the genuine self-employed. Notably, this does not include the provisions on health and safety at work, which are specific to workers. In the opinion of the European legislator, this is justified by the similar impact automated systems have on working individuals, regardless of their status (recital 40).

As Aloisi and Georgiou, aptly observe: "While initial reactions have hailed this as a promising development at a moment when workplaces are ever more datafied, it is now becoming clear that the provision on extending the protections from algorithmic harms to the self-employed is not immune from risk. In short, the text risks being self-defeating: how can it be acceptable that platform workers are subject to intense algorithmic management and yet still classified as self-employed, when control is the key trigger of the presumption of employment status? This contradiction deserves clarification to prevent unintended consequences"[49].

## 7. Concluding remarks.

Developing a legal framework for algorithmic management represents one of the main challenges of modern societies, deeply rooted in the nature of this technology – technical

[47] *See* generally: Rosenblat A. Stark L., nt. (16).
[48] Bąba M., nt. (5).
[49] Aloisi A., Georgiou D., *Two steps forward, one step back: the EU's plans for improving gig working conditions*, in *Ada Lovelace Institute*, https://www.adalovelaceinstitute.org/blog/eu-gig-economy/.

complexity and the resultant inability to cognitively capture and explain the inner workings of the given technology. In the domain of digital labour platforms, the additional challenge boils down to creating a regulatory balance between effectively ensuring information sharing by the platform without compromising any intellectual property rights of the platform. Algorithmic management remains thus, apart from EU general data protection rules, largely unregulated phenomenon in the platform economy.

The introduction of the platform work Directive must be welcomed as it could provide a strong incentive for the Member States to establish employment specific standards with regard to algorithmic monitoring and decision making. The Directive does not contain any groundbreaking provisions, but the very fact of putting forward specific provisions regarding the use of automated monitoring and decision-making systems in platform work, as well as strengthening information and consultation rights for platform workers and their representatives, proves a more attentive approach by the Commission to knowledge and power asymmetries inherent in the platform economy. This approach seems to be rooted in an understanding that the algorithmic management is not a problem in and of itself, but problems can arise with overreliance on technology and lack of human interaction.

The Directive can be therefore considered as the beginning of a revolution towards establishing a fully-fledged right to self and co- determination in the increasingly algorithmic world of work. Its final impact will largely depend upon the Member States' sensitivity to its operational risks, mainly related to the underlying risk-based approach. The latter, similarly to GDPR and AI Act[50] seems to form part of the so-called collaborative governance regime, where the state, instead of dictating specific and detailed regulations, de facto creates a delegation for platforms to find contextually appropriate solutions in compliance with the overall regulatory regime.[51] Such an approach might have, however, a chilling effect on the effective tackling of the algorithmic conundrum in platform work context, as in practice it induces a functional sovereignty dilemma-private actors/platforms taking over the role of governments and standard setting. Thus, given the overall complexity of the issue, the specificity of the relevant context, as well as the heterogeneity of the 'algorithmic harm' at stake one would expect Member States to play a more active role in ensuring algorithmic fairness and the right to digital self-and co-determination, also by making a clearer distinction between the desirable and the undesirable algorithmic management practices, not only in platform work, but most importantly in general employment context.[52]

[50] *See* especially Ponce A., *The AI Regulation: entering an AI regulatory winter? Why an ad hoc directive on AI in employment is required. Why an ad hoc directive on AI in employment is required*, ETUI Research Paper-Policy Brief, 7, June 2021.
[51] *See*. Kaminski ME., *Binary Governance: Lessons from the GDPR's Approach to Algorithmic Accountability*, in *Southern California Law Review*, 92, 6, 2019, 1529.
[52] It remains to be seen, however, to what extent AI Act' will effectively 'shut the door to the regulatory innovation at the domestic level". *See*: Kelly-Lyth A., Adams-Prassl J., *The EU's Proposed Platform Work Directive. A Promising Step*, in *Verfassungbog*, https://verfassungsblog.de/work-directive/ .

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