

ALGORITHMS: BETWEEN PRODUCTIVE INNOVATION
AND LABOR EXPLOITATION. A CRITICAL AND
PROPOSAL ANALYSIS BY ADRIÁN TODOLÍ SIGNES

ALGORITMOS: ENTRE LA INNOVACIÓN PRODUCTIVA
Y LA EXPLOTACIÓN LABORAL. UN ANÁLISIS CRÍTICO
Y PROPOSITIVO DE ADRIÁN TODOLÍ SIGNES

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ABSTRACT: The book ‘Algoritmos productivos y extractivos’ by Adrián Todolí Signes offers a detailed analysis of the impact of digitisation and the use of algorithms on working conditions and innovation. Through a distinction between ‘productive’ and ‘extractive’ algorithms, the author proposes a regulation to protect workers from the risks of using harmful algorithms, while promoting productive innovation. With a multidisciplinary approach and concrete data, the book provides innovative and realistic solutions to meet the challenges of the future of work.

KEYWORDS: Algorithms; Digitisation; Working conditions; Production innovation; Regulation.

RESUMEN: El libro «Algoritmos productivos y extractivos» de Adrián Todolí Signes ofrece un análisis detallado del impacto de la digitalización y el uso de algoritmos en las condiciones de trabajo y la innovación. A través de una distinción entre algoritmos «productivos» y «extractivos», el autor propone una regulación para proteger a los trabajadores de los riesgos del uso de algoritmos perjudiciales, al tiempo que se promueve la innovación productiva. Con un enfoque multidisciplinar y datos

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concretos, el libro aporta soluciones innovadoras y realistas para afrontar los retos del futuro del trabajo.

PALABRAS CLAVE: Algoritmos; Digitalización; Condiciones de trabajo; Innovación en la producción; Regulación.

The book «*Algoritmos productivos y extractivos. Còmo regular la digitalizaciòn para mejorar el empleo e incentivar la innovaciòn*» by Adrián Todolí Signes, published by Editorial Aranzadi in 2023, is the result of a work on labor and social security law aimed at analyzing the effects of digitalization and use of algorithms on working conditions and innovation.

The author, in particular, claims that there are two types of algorithms: the «*productive*» ones, with the aim of improving and increasing productivity and the quality of work, and the so-called «*extractive*», whose purpose, however, consists in the exploitation of workers, in the reduction of their wages and in the limitation of their rights.

The purpose of the book, therefore, is to propose a sort of regulation of extractive algorithms, considered harmful, in order to protect workers and encourage productive innovation.

The book consists of eight chapters, preceded by an introduction and including a conclusion.

In particular, in the first chapter, the author briefly explains the concept of algorithm and its applications in the world of work, also providing a series of examples on the various types of algorithms used in practice, allowing, to this extent, the reader a better understanding of the aforementioned applications.

Finally, the author makes an initial distinction between productive and extractive algorithms, starting to outline the differences and underlining the critical issues inherent in the latter.

In the second chapter, the author, starting from a more precise definition of algorithm, analyzes the concept of «algorithmic management» (starting from the selection of workers to be hired, up to the management of the work itself, the constant monitoring of execution of the service and also to disconnection, which operates as a sort of «dismissal»), reporting some concrete and current examples and highlighting the advantages for the company that makes use of a similar tool (think of the reduction of costs, the uniformity on the evaluation criteria regarding the performance of the providers, optimization, understood as the algorithm's ability to analyze multiple variables in order to make a specific decision, and the possibility of resorting to so-called *sub-contracting*, allowing the main company a check on the quality of the service from the subcontracted company).

Finally, the author begins to examine the negative effects of the use of this technology, highlighting the reduction of workers' collective bargaining power.

In the third chapter, the author prepares to examine the concept of algorithmic discrimination, underlining, first of all, how the algorithm is able to collect a greater quantity of data relating to workers, to process the information more effectively obtainable from said data, resulting in the ability to make certain decisions, thus replacing the «human employer» in carrying out these tasks.

Secondly, the author does not fail to examine the negative effects of the process described above, as he emphasizes the risks of discrimination (direct and indirect) which can affect, in particular, certain groups of categories (such as women, people suffering from disabilities, subjects belonging to a certain ethnicity, etc...) and the possible paths that the subjects in question can take in order to demonstrate in court the discrimination they have suffered (and the contrary evidence that companies can produce to prove the contrary).

Finally, the author reports the regulatory sources, including supranational ones, which describe the protections to which workers have the right to deal with any situations of discrimination and the obligations that companies must fulfill to avoid the onset of the same.

In the fourth chapter, the author carries out a complete study of all the possible psycho-physical risks due to the algorithmic direction of the work (think of the feeling of stress and anxiety due to the constant monitoring of the execution of the performance exercised through audio, recognition facial, GPS, etc..., or to the intensification of work activity caused by the hours that that provider must work and the speed, to comply with the time slot established by the algorithm, with which he must perform the service, in order to complete a certain service in favor of a customer, or, again, the physical implications, such as the consequences on the posture of individuals who carry out certain jobs, such as in the cleaning sector etc...).

All this highlights the provider's lack of autonomy in deciding whether and when to perform the service, also given the fear of losing their job, through unilateral disconnection from the platform account.

Ultimately, the author describes the possible tools that can be used for the use of algorithms that do not cause any harm to workers (think, for example, of the assessment of the psycho-physical risks that workers may incur, imposed from the «Marco» Directive and all the measures that the employer must take to minimize, if not eliminate where possible, the aforementioned risks).

In the fifth chapter, the author analyzes more closely all the negative implications that the so-called «*digital control and supervision*» can arise, such as the increase in the intensity of work and the reduction of the autonomy of providers, or the collection of a large amount of information which significantly reduces the negotiating power

of the workers themselves, or, again, the evasion of compliance with the regulations designed to protect the rights of these workers.

The author therefore proposes a regulation of the entrepreneurial powers of supervision and control which limit the use of the technology in question to the mere control of the fulfillment of the work performance by the worker, which, given the insufficiency of the recourse to the Personal Data Protection Regulation presupposes more regulation on privacy, data protection and the limitation of supervisory power.

In the sixth chapter, the author focuses on the phenomenon of the outsourcing of the production activity of companies, where, after a brief but significant general overview, he focuses attention on the use of algorithmic technology, in terms of collection and processing of data and supervision and control regarding compliance with the «directives» given by the main company on the companies belonging to its «network» (franchising, contracting, etc...).

The author also analyzes the effects that the aforementioned phenomenon has on workers, such as downward competition in working conditions, the reduction of the union power of workers and their representatives, failure to comply with the rules relating to working conditions (due also to the great instability that often characterizes the companies that are part of the network) and the reduction of the responsibility of the main company with regards to the health and safety of the workers.

Finally, the author, in addition to examining the difficult qualification issue of these workers and all the critical issues that emerge from the phenomena of *sub-contracting*, *franchising*, the illegal transfer of workers and the *succession of the company*, proposes a sort of regulation of the phenomenon of outsourcing aimed, in particular, at protecting the health and safety of the workers involved.

In the seventh chapter, the author traces, in more detail, the distinction, outlined in the previous chapters, between extractive and productive technologies of value, presenting some practical cases taken from different sectors and countries, showing how the proposed regulation could improve the situations described.

The author uses a multidisciplinary method, combining law, economics, sociology and technology, focusing on scientific, statistical, jurisprudential and regulatory sources from various national and international fields to support his theses.

The book was of particular interest to me, as it gave me the opportunity to reflect and critically observe a very current and relevant topic, which concerns the future of work and society.

I found the book well written, clear, documented and persuasive and I also appreciated the author's ability to explain complex concepts in a simple and linear way, to provide data and concrete facts, to propose innovative and realistic solutions.

Furthermore, I found a certain originality in the book, since it was able to offer a rather critical and proactive perspective on algorithms, and since it addresses

problems and challenges that concern all workers and citizens, and which require reflection and collective action.

The book also stands out for its multidisciplinary approach, for its focus on algorithms and for its normative vision, addressing a varied audience, which includes scholars, professionals, politicians, trade unionists, activists, workers and readers interested in the topic.

The book deserves a very positive rating, which could be expressed with a score of 5 stars out of 5, or with a rating of excellent.

In conclusion, this is a book of great value and relevance, which I highly recommend to anyone who wants to delve deeper into and understand this phenomenon, to anyone who wants to participate in the debate and regulation of algorithms, to anyone who wants to defend and improve the rights and conditions of workers.