

MDPI

Article

Constitutional Values in the Gig-Economy? Why Labor Law Fails at Platform Work, and What Can We Do about It?

Zsolt Ződi * and Bernát Török

Institute of the Information Society, University of Public Service, 1083 Budapest, Hungary; Torok.Bernat@uni-nke.hu

* Correspondence: Zodi.Zsolt@uni-nke.hu

Abstract: Gig-work, or platform work, has been in the crosshairs of regulators since roughly the mid-2010s. The employment of an increasing number of platform workers raises a number of problems, however, there is no longer a consensus as to whether these problems are only the emergence of certain well-established labor law issues in a new guise, or completely new ones. To date, only one possible solution seems to have emerged, that of bringing platform work under the umbrella of labor law. This study argues, on the one hand, that platform work has a characteristic that was previously unknown in the world of labor relations (algorithmic and data-based work organization) and, on the other hand, that it has two other characteristics (tripartite structure and network effect) that create an entirely new quality that requires innovative legal approaches. The study selects some of the recent European Union standards regulating various kinds of online platforms which may also provide useful solutions for the regulation of platform work.

Keywords: gig-economy; platform work; algorithmic control of work; labor law on platforms; DSA; DMA; P2B regulation; DSA; DMA; GDPR



check for

Citation: Zodi, Z.; Torok, B.

Constitutional Values in the

Gig-Economy? Why Labor Law Fails
at Platform Work, and What Can We
Do about It? Societies 2021, 11, 86.

https://doi.org/10.3390/soc11030086

Academic Editors: António B. Moniz, Bettina-Johanna Krings, Oriol Homs, Ilona Bučiūnienė and Csaba Makó

Received: 2 June 2021 Accepted: 22 July 2021 Published: 27 July 2021

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction and Methodology of the Study

It is commonly asserted in the "gig-economy" literature that work on Internet platforms is currently insufficiently regulated, or at least that the regulation needs to be refined. It is also often suggested that certain values must be reflected in such regulation. At the time of writing, a consultation had been started with social partners by the Commission of the EU on gig-work [1] or platform work, (hereinafter "platform work" and "gig-work" used as synonyms for both platform-mediated work, crowdwork, and application-based work); however, the end result and the regulatory concept to be developed are not yet clear. The vast majority of proposals for tackling the problem call for an extension of traditional labor law [2], while, much less often, some suggest strengthening antitrust rules [3] or creating a *sui generis* form of regulation [4,5].

This study is a conceptual research paper based on the literature, jurisprudence, and legal text analysis and interpretation. It analyses the features of platforms from a legal doctrinal perspective in order to legally conceptualize them in the best possible way. This analysis keeps special focus on the structure and principles of contemporary labor law, and relevant arguments from constitutional law. Our main research question was what the characteristics of platforms are that can explain or even require their special legal treatment. According to our following starting points, platforms do not fit existing labor law protocols.

The first is that platform work cannot be thought of as a new form of the "putting-out" (or "industrial homeworking") system that has existed for a long time [6,7]. Second, we argue that this new way of working both exacerbates old problems (already inherent in some atypical employment relationships) and adds entirely new dimensions to them by creating new forms of power, asymmetry, and vulnerability. It is no wonder that, in this situation, constitutional approaches and narratives, human rights, and values—sometimes European values—are often cited in arguments, or are suggested as contributing to the

Societies **2021**, 11, 86 2 of 16

solution. Third, we think that the solution to this problem does not lie in using the tools of traditional labor law without modifications, but that in many ways a new paradigm is needed. The first step in developing this new paradigm is to draw ideas from existing legal solutions that address three problems peculiar to gig-work: tripartite relationship, algorithmic control, and networked markets. Fourthly, taking the example of platformwork, the study also seeks to highlight legal challenges that go beyond the framework of the gig-economy. The issues examined in this paper will also help to identify some of the key features that raise new legal problems related to platforms. Platforms are generally the dominant organizers, forms of coordination, and gatekeepers of our lives, and in whatever sector we examine the debates and arguments about their regulation, stakeholders seem to be seeking ways deal with it through a new kind of common language. We have previously witnessed in the market economy, among private parties, mostly unknown constitutional and fundamental rights-inspired approaches, which would impose public law obligations on service providers. In this paper we do not scrutinize all the possible values that can play important roles in different sectors, but try to give an underlying explanation for why these constitutional requirements are relevant at all between private parties.

Accordingly, the study proceeds as follows.

The first part identifies the key characteristics of gig-work. We first consider the problems raised by "industrial homework" and similar atypical employment types that are well-established, but which are also specific to the gig-economy, and then argue that the platform poses three special problems and requires a special approach due to its three novel characteristics.

In the second part, we review the ways in which the law currently addresses the problem of the gig-economy. We argue that these responses are inadequate because, in essence, they seek to bring platform work under the scope of traditional labor law.

Finally, in the third part, we attempt to take a more complex approach. We summarize which features of the platform, beyond the gig-economy, may justify a specific regulatory approach in general, and take stock of the directions that emerge from European regulatory attempts. Finally, we examine how these could similarly be applied to the regulation of platform work.

2. Features of Gig-Work

2.1. Gig-Work: Old-Fashioned Casual/Temporary Work?

The terms gig-economy and gig-work became widespread in the 2010s. It is ironic that the phenomenon we are currently discussing under the heading of platform work, or gigwork, was initially referred to by the rather positive-sounding name of "sharing-economy". Pioneering studies, such as that by Sundararajan [8], highlighted the positive peer-to-peer (networking) nature of the phenomenon, i.e., the fact that the sharing economy exploits otherwise untapped resources. This includes unused manpower which can occasionally be "hacked". Sundararajan stressed that this shift is in fact a return to the "natural state" of the economy, as the industrial era and the economy based on large corporations are just a "blink of an eye in human history". Several influential authors continue to claim this. Moreover, according to this view, the sharing of untapped resources on the Internet is not entirely new, as comparable peer-to-peer applications appeared even in the 1980s following the launch of the first "Internet-like" technology, the Minitel system in France. A prime example of this was the Teleroute system at Minitel, which made it possible to trade otherwise empty truck capacities.

What really spurred the development of the platforms, Srnicek claims, was the low interest rates and abundance of money after the 2008 financial crisis. "The result is that investors seeking higher yields have had to turn to increasingly risky assets—by investing in unprofitable and unproven tech companies, for instance" [9] (p. 30). For the first time in world history, millions of people were financing businesses that had not made a profit for a long time, but which—in most cases—had a "good story", a large and growing customer base, and were associated with their vast amount of data. This unusual patience

Societies **2021**, 11, 86 3 of 16

of investors then swept these firms to the point of reaching critical mass, where network effects almost automatically lifted them higher and higher, by now producing real profits.

Then, things started to take a less romantic direction. In the case of AirBnB, for example, a survey in New York [10] reported in 2014 that while "commercial users" (landlords) accounted for 6% of the total landlord population on the platform, bookings made by them accounted for 36%. Even more alarming was that, according to the survey, more than 70% (!) of all leases violated the law in some way. In the world of the gig-economy, the situation was similar. By the mid-2010s, these pages had already been labelled "exploitative" and were accused of "creating a Dickensian world" [11]. The situation is similar to the short-term accommodation scene in that the lessee (passenger, customer) and the platform generally do well out of it. The two categories are separated only by the number of victims. In the case of renting out accommodation, the landlord also does well, with all the costs being borne by the Airbnb city or the wider community, while in the gig-economy the employee does not always do well either. In a gig-economy, employees occasionally do work that a platform mediates for them. The platform is thus wedged between the job providers and job seekers. There are, of course, those who do not regard this as a key element and who only see the emergence of old phenomena in a new robe. Srnicek, for example, sees a resurgence of humiliating and vulnerable casual work in platform work:

"In fact the traditional labor market that most closely approximates the lean platform model is an old and low-tech one: the market of day laborers–agricultural workers, dock workers, or other low-wage workers–who would show up at a site in the morning in the hope of finding a job for the day. (\dots) The gig-economy simply moves these sites online and adds a layer of pervasive surveillance. A tool of survival is being marketed by Silicon Valley as a tool of liberation." [9] (p. 78)

Others claim essentially the same, with the only difference being that not casual but outsourced long-term work, what is known as industrial homeworking, is seen as a forerunner of the gig-economy, and not merely as a forerunner, but as directly equivalent to it. Finkin [6] argues, for example, that the phenomenon has been present in many industries for a very long time, from the clothing industry to toy manufacturing, in fact, since the beginning of manufacturable industrial production, and that statistics show how extensive this system was. The benefits of the system (for employers) were the same as in the current gig-economy:

- 1. The employer's costs of real estate and equipment can be eliminated or reduced;
- 2. Supervisory and management costs and efforts can be avoided;
- 3. Outsourcing can forestall contact with other workers and the formation of sodalities by fragmenting the labor force and by increasing competition in the labor market.
- 4. Where the demand for the work is discontinuous—where, for example, the sufficiency of the work needed varies due to "fluctuation in product demand"—outwork can be preferable because of the flexibility it affords.
- 5. Legal difficulties and labor costs can be also reduced: "[i]f labor supply is not homogeneous, and labor can be purchased at different prices, outwork may be a means of exploiting supplies of the cheapest labor." (Finkin [9] (p. 609) quotes Rubery and Wilkinson [12] (pp. 121–123).

Though these are all true of gig-work, we argue here that it is still structurally different from outsourced work, or industrial homeworking. The next point will describe why.

2.2. Why Is This Different from Previous Similar Legal Relationships?

We argue here that the work done on the platform has three features that characterize neither the employment relationship nor the casual work.

1. Tripartite relationship: In the case of the gig-economy, the work is not simply outsourced by a large company, which is then provided with labor, but in most cases the legal relationship is tripartite and the "employees" are directly connected to conSocieties **2021**, 11, 86 4 of 16

sumers on the platform. They are vulnerable to both the demands of the platform and their daily changing customers.

- 2. Code and data control: The organization of work is not done by individuals, but by an algorithm. This feature has two aspects or consequences: (a) although the platform seems to only mediate, in reality it collects an unprecedented amount of data from both sides, so it "knows" both the "employer" and the "employee" in some depth. (b) Thus, it is able to "emulate" the market by continuously fine-tuning its operation in real time (Cohen, 2019), and thereby continuously manipulating and distorting the conditions of both the employer and the employee side for its own benefit.
- 3. Network effects: Platforms, as several studies have shown, are also effective because they reach a very large size very quickly for several reasons (this is the so-called network effect), mainly due to the associated economies of scale. Consequently, they very quickly drive all their competitors out of the market. The gig-economy thus typically involves monopolistic or oligopolistic markets.

These three intertwined characteristics have several serious consequences. In the following section, we consider these three characteristics the three distinguishing features of gig-work.

2.2.1. Tripartite Structure

Diaz–Granados and Sheehy [5] argue that the labels of the sharing economy or the gig-economy cover a wide variety of business models, however, the common feature is that all of them have a tripartite structure. The platform is embedded among vendors/users on the one hand and service providers on the other, and its role is not merely passive, (and hence the term "matching platform" or "marketplace platform" is sometimes misleading), but active.

"Platform Operators are at the core of the structure because they operate the technological platform for transactions to occur by both aggregating information and, in many instances, supplying ancillary services, such as facilitating payments required to engage in the provision and consumption of goods and services. Platform Operators administer the technology which creates the environment in which the actors operate and upon which the whole model is founded" [5] (p. 1029)

On the other hand, tripartiteness also means that there is a fully-fledged contractual relationship between all three parties, even if the platforms tend to reject contractual responsibility for the services.

The same tripartite line-up has prompted several scholars and people to ask "who is the employer

"at all in the case of gig platforms? [13]. Weiss suggests that the whole structure should be considered a complex entity and it is thus necessary to determine where in the triangle the individual functions that the employer traditionally performed are to be found. Five types of functions can be distinguished on this basis: (a) the function of establishing and terminating a legal relationship; (b) the enjoyment of work and its fruits, (acceptance); (c) the issuance of work and pay; (d) the management of the company's internal market; (e) the company's external market management. By definition, it is the employer who plays a crucial role in performing any of these functions. While Prassl and Risak [14] suggest that multiple employers are conceivable for platform work, Weiss, by contrast, argues in this regard that "the traditional category of employer no longer serves the purpose of identifying among these actors among the digital work structures who are responsible for the obligations associated with employer status" [13] (p. 16)

Though tripartite relationships existed before and still exist outside the platform scene in the form of employee leasing, platform work is still different, because at platforms the employee does not come into permanent contact with the client.

Societies **2021**, 11, 86 5 of 16

2.2.2. Algorithmic and Data Driven Control

The second feature of the gig-economy is that working on platforms is code- and data-driven. This problem is not new, and it was first addressed by Lawrence Lessig [15] in the context of regulation. The essence of Lessig's line of thought is that software algorithms and codes are the "architectures" of the virtual space, i.e., the main mechanisms of behavioural control. Architecture is also a more effective control mechanism in the physical world than the law, for example, a fence is more effective at preventing entry into a property than a no-entry sign, and this is especially true in the virtual space.

Codes also result in a very particular vulnerability in the gig-economy. Following the terminology of Bain and Taylor [16], Wood et al. [17] note that the call centre is similar to platform work in that all activities of telephone operators are monitored and recorded, creating a kind of Benthamian "panopticon." In one leading empirical study, Fernie and Metcalf [18] (p. 2) write that "the tyranny of the assembly line is but a Sunday school picnic compared to the control that management can exercise in computer telephony".

Möhlmann and Henfridsson [19] identify the following three factors following an empirical survey studying what workers complained about:

- 1. Continuous surveillance. Like Bentham's Panopticon, employees are constantly monitored from the moment they log in to the app. For example, a taxi application registers not only the current location of the car and the passenger, but also the destination, time, route, and all conceivable data. If the driver deviates from the instructions in the application, he may be penalized. Algorithmic management, controlled by platform-based rating and reputation systems, is a much more efficient form of control than has been available heretofore. Well-performing workers are assigned more jobs than poorly performing ones, therefore customer evaluation has a direct impact on the amount of work that employees receive and, of course, on their income (see also [17]).
- 2. While the app knows almost everything about employees and transactions, employees know almost nothing about how the app works. The Hungarian experience also supports this. Both the evaluation system and the rationale behind the allocation of jobs are opaque (a recent empirical study confirms this [20]).
- Workers on almost all platforms complain about the alienating, dehumanizing nature
 of algorithmic control. It is possible to work for a long time in such a way that the
 employee has almost no contact with his co-workers or human boss or superior.

2.2.3. Network Effects

As far back as the end of the '90s, long before the platforms appeared, Varian and Shapiro [21] were aware that the information industries were particularly characterized by network effect. Frank and Peitz [22] (p. 13) formulate this in relation to platforms as follows:

"The value of the services offered often does not only depend on the inherent service features provided to a user but is also and possibly primarily determined by whether and how intensively they are used by other users. When such a connection exists between individual benefits and others 'decisions, one speaks of external or network effects."

The network effect can be both negative and positive (the negative network effect is not addressed) as well as direct and indirect. A direct network effect may be where a user chooses a service because others have chosen it, while it is indirect, or between groups, if a user chooses a service because there are many providers on the supply side. This situation is therefore often characterized by the term "bilateral markets".

The network effect is therefore also related to the tripartite relationship described in the first point. However, it is also related to algorithmic and data-driven control, as the network effect is based on the platform's monopoly over the data, as well as the lock-in of the users, which also partly depends on data.

Societies **2021**, 11, 86 6 of 16

This feature has several consequences from the perspective of the world of work. Employees (or entrepreneurs) have virtually no possibility of choosing another employer, and are often forced to accept unfavourable conditions, unilateral contract amendments, and non-transparent algorithms. On the customer side, the download and use of the new application may often be restricted.

3. The Responses of the Law

The "old" law is obviously clueless about many phenomena of the platform economy in general, and about the gig-economy in particular. As Judge Logue puts it in *McGillis v. Department of Economic Opportunity et al.*: "We must decide whether a multi-faceted product of new technology should be fixed into either the old square hole or the old round hole of existing legal categories, when neither is a perfect fit." [23].

Recently, therefore, several types of legal responses have emerged, none of which can be called ideal. The earliest was the fine/ban line. I will not deal with this here, especially since most of the time there were no labor law or employee-related arguments behind the ban.

The second type of response, followed mainly by the courts, is an increasing attempt to bring these platforms under the scope of labor law. The third, which is perhaps best illustrated by P2B (platform to business) regulation, seeks to address the situation by balancing the boundaries between competition law, data protection, and consumer protection. We will discuss these two approaches in more detail below.

3.1. Interpreting Platform Work as an Employment Relationship

The first type of legal response is for the legislators or courts to classify platform work as an employment relationship. In the mid-2010s, but also more recently, several such judgments were handed down. It is worth taking stock of the arguments of these judgments.

In O'Connor v. Uber Techs [24], one of the earliest judgments on the subject, the court argued that the "Borello test" for determining employer character should not be interpreted "rigidly and in isolation". The Borello test was developed back in 1989 by the court hearing the case of SG Borello & Sons, Inc. v. Dep't of Indust. Relations [25] (48 Cal. 3d 341, 350 (1989)). The Borello test considered numerous factors, including whether the work is a regular or integral part of the employer's business and whether the employer or the worker supplies the instrumentalities, tools, the length of time worked, or the method of payment.

Based on the Borello test, it is often difficult to decide whether gig-work is an employment relationship or not. Employees usually work with their own tools, bear the risk themselves, and are completely free to determine their working hours, yet at the same time they are often completely dependent on the platform and the platform would not be able to function without them as well. This argument also played a very important role in the *O'Connor* case. "Uber simply would not be a viable business entity without its drivers"—remarked the presiding judge.

The 2015 O'Connor case (whose aftermath lasted until 2019) was still a surprise in many ways. In *Dynamex Operations W. v. Superior Court of Los Angeles* [26] on the other hand, the court even changed the *Borello* test to qualify the platform as an employer and thus to put the platform into the "round hole". According to the new test, the so-called ABC test, there is a rebuttable presumption that the entrepreneur is an employer, and he/she can be qualified as an independent contractor, if:

- the worker is free from control and direction in the performance of the hiring entity in connection with the performance of the work, both under contract for the performance of the work and in face;
- the worker is performing work outside the usual course of the business of the hiring company;
- the worker is customarily engaged in an independently established trade, occupation, or business of the same nature as the work performed.

Societies **2021**, 11, 86 7 of 16

Similarly, the UK Supreme Court recently ruled in *Uber BV and others v. Aslam and others* that Uber simply could not continue to operate without drivers and could not even fulfill its legal obligation to have a taxi license. On the other hand, the whole contracting process did not suggest that the drivers trust Uber with finding fares for them—therefore, Uber is ostensibly in a subordinate position while, on the contrary, they joined Uber and were placed in a subordinate position.

Finally, Judge Legett's argument was that "(d)rivers are in a position of subordination and dependency in relation to Uber such that they have little or no ability to improve their economic position through professional or entrepreneurial skill."

Of course, there are various ways of interpreting gig-work as an employment relationship, and platforms are not simply classified as employers and service providers as employees as, in fact, countless intermediate variations exist. According to Garben [27], four main approaches can be identified:

- 1. A first approach is to 'simply' apply existing regulations to online platform work;
- 2. A second approach is to take specific action to narrow the group of persons that will be considered 'self-employed', through the addition of an intermediate '(independent) worker' category or a rebuttable presumption of employment;
- A third approach is to decouple the application of existing regulations from the status of employment, thus potentially making employment (for instance concerning minimum wages and social security) and health and safety regulations applicable also to the self-employed;
- 4. Finally, a fourth approach is to provide specific (health and safety and/or other employment) protection for online platform workers, regardless of their employment status. This has been the approach taken in France, with the Act of 8 August 2016 on work, modernisation of social dialogue, and securing of career paths.

The French model therefore adopts an intermediate method in which self-employed workers who are economically and technically dependent on the online platform are entitled to post-accident benefits, further training paid for by the platform, and, on request, a certificate of professional experience. They can also form and be members of a trade union and have the right to use collective means to protect their interests.

3.2. The Limits of Applying Labor Law to Gig-Work

Forcing gig-work under the umbrella of traditional labor law seems to be a simple and obvious method, however, it has its limitations. These limitations are partly those that are commonly mentioned in connection with labor law and partly those that are specifically related to platform work. Among the former shortcomings is the fact that the system of traditional labor law developed during the period of industrial capitalism, where a large number of workers worked in huge factories under hierarchical subordination. Health and safety issues were dominant and health and social security regulation was intertwined with labor law, living on it as a sort of "parasite". Although various "atypical" forms of work, such as teleworking, on-call work, or labor placement, have emerged since the 1970s and 1980s, they were still clearly treated as exceptions.

As indicated above, many are of the opinion (including Gyulavári [7] and Finkin [6]) that platform work is not a radically new development, but is only an organic continuation of these trends. A third party may have also been involved in the atypical employment relationship so far, e.g., in hiring, student cooperative work (Ferencz [28] (p. 21)), and the involvement of information and communication tools in the process also existed (e.g., telephone marketing from home and other ways of teleworking). There is therefore no reason not to use labor law as a basis and as a model for regulating platform work.

We argue that a one-sided approach to labor law is insufficient, however. In particular, the two factors mentioned above—the tripartite legal relationship and algorithmic work organization—combined with the other general features of the platform, above all their size, have created a whole new quality. Regulation must take a complex approach and take

Societies **2021**, 11, 86 8 of 16

into account several risks and life relationships that are simply unknown in labor law at the same time.

These risks have already been identified in other areas of law in the regulation of platforms and new technologies in Europe and are being addressed in part through new approaches and in part by means of established methods. Risks, which have already been mentioned, in part, above, occur in four areas: markets, data, algorithms, and the regulation of digital services. All of these affect platforms anyway—including gig-economy platforms—however, the interaction between them has so far been little studied. In contrast to the labor law regulation of the gig-economy, where a social consultation on the subject was concluded prior to the writing of this article, these regulations are already in place. The relationship between the platforms and the (self-employed) entrepreneurs operating on the platforms is tackled by a regulation adopted in 2019 (P2B regulation) [29]. The processing of personal data on the platforms is regulated by the General Data Protection Regulation of the EU [30]. Some data, transparency, competition, and liability issues are regulated in the recent proposals of EU regulation of digital services [31] and digital markets. [32] Finally, issues of "algorithmic vulnerability" are sought to be addressed in part by the GDPR's rules for automatic decision-making and in part by the rules of the proposed new Artificial Intelligence Act [33]. However, before turning to the specific provisions, we would like to clarify why constitutional requirements, constitutional values, and constitutional language should play important roles in the world of platforms.

4. Discussion: Proposal for a More Complex Approach

4.1. Platforms and Constitutional Values

In all the affected sectors of society (the world of work, social communication, finance, administration, etc.), the regulations on platforms are discussed along similar lines. The main thrust of the academic and expert debate on the challenges posed by the various platform applications and how to address them is clear, both in most of the articles on the subject and in the documents of the various working groups tackling these challenges. The majority of commentators "speak a common language" when discussing the rationale for, and possible means of, regulation, and this common language draws its terminology from a familiar dictionary, the language of constitutional law.

What are the main elements of this value-dictionary?

Legality. One of the requirements raised in connection with algorithmic processes is that of the rule of law [34]. The most critical argument with regard to big data-based applications is that these new technological solutions run counter to the expectations of the rule of law, so they must not make decisions that affect our lives. Law is abstract, value-based, and compromise-based, while big data is empirical, algorithmic, and deterministic [35]. Big data lacks context, is unable to interpret itself, and is unable to recognize the flexible framework of legal principles. Furthermore, Big Data is not able to innovate beyond the limits set by its creator, so it is not able to handle the innovations that may necessarily arise as environmental conditions change. However, we have subjugated society to the rule of law because law as a system of norms has these abilities.

One of the general drivers of the mistrust expressed in the name of the rule of law of algorithmic operation is the empirical nature of the decision-making process. The algorithm, the logic goes, cannot meet our expectations of decision-making mechanisms because it only obtains results from a statistical evaluation of facts. The reason for its application is precisely that it can analyse a data set that goes far beyond human capabilities in a short time and propose a solution based on it. Moreover, due to the nature of machine learning, it is nearly impossible to follow exactly what aspects were taken into consideration by an algorithm [36]. The value preferences of legal norms provide a framework for what we can accept and what we can enforce in individual cases from statistical correlations [37].

The rule-of-law-based critique of algorithmic operation permeates scientific analysis beyond the direct comments made above. The range of indirect arguments which stem from it is extremely wide: from the fact that the regulation of algorithmic decision-making Societies **2021**, 11, 86 9 of 16

is also justified by the separation of powers [38], to doubts concerning the extent to which new technologies may be able to adopt the traditional roles of the legal profession [39].

Transparency. The most common argument against the algorithmic operation of platforms—and big data-based technologies in general—is that the process by which it delivers results in response to an enquiry is not transparent at all. The most common terms used in the professional discourse to describe such processes are 'opaque' and 'black-box'. In this type of critique, the main problem with the decision proposed or devised by the algorithm is that we actually have no idea exactly what basis it was made on [39–42].

This argument is typically developed in two main directions. One argues that the algorithms that support decisions that affect our lives (whether it be Facebook's newsfeed, a bank's scoring system, or—in our case, work allocation, coordination, and evaluation algorithms) represent vital commercial interests and as such will always be the trade secrets of a business. The other argument is more substantive, pointing out that the algorithm analyses and weighs such a vast amount of data before determining the final result that it is almost impossible to trace it accurately.

The problem of transparency is by no means new, as regulators have already reacted to it. Under the GDPR of the European Unio [30], the data controller has a special information obligation in the case of automated decisions [43,44]. The usability of GDPR solutions in the context of the gig-economy is discussed in Section 4.3.1.

Accountability. This is closely related to the previous values; indeed, they entail accountability. Expectations of accountability are usually articulated in close connection with transparency, however, it is worth highlighting separately because it draws attention to a particular aspect of the problem.

It is a societal expectation that decision-makers are accountable for the decisions that affect our lives and that the responsibility for these decisions is clear. The lack of legitimacy, transparency, or of other requirements can raise liability issues. In algorithmic decision-making, the relationships between stakeholders is far from clear. Due to the untraceability of the operation of the algorithm, for example, it is no longer clear, the argument goes, who is the master of the process—that is, who is ultimately accountable for following the requirements.

Critics argue that traditional accountability standards and procedures are designed to hold purely human decision-makers accountable, and that they are often unable to adequately address the novel issues raised by automated decisions. However, these algorithmic procedures are having an increasingly tangible impact on our lifestyle options, and therefore the issue of accountability needs to be taken particularly seriously when it arises. In the context of platform work, this is exactly the case. Workers do not have human bosses, so there is no one to blame for bad decisions. The problem is exacerbated by the fact that increasing transparency does not seem to be a way out of obscurity. Rather than exploit our current accountability methods, we therefore need to adopt new approaches and explore the possibility of an algorithm that incorporates the conditions of accountability.

Until the advent of the regulation of "accountable algorithms"—if there is such a thing, and the concept is not an oxymoron—accountability clearly must be linked to human participation. While it also has other aims, the GDPR [30] certainly provides that, in automated decision-making, the data subject must be given the right to request human intervention, to express his or her views, and to object to the decision by appropriate means.

Non-discrimination. Several authors have stressed that algorithmic decision-making should be non-discriminatory. This expectation can be regarded as one of the most important criteria, and some have argued that the other requirements are often nothing more than a necessary corollary to the path leading to ensuring this. They warn that the algorithmic decision-making procedure does not necessarily eliminate the possible biases of the human factor, but can map them, and in some cases even amplify them mechanically, in a more consistent way than before. In the context of employment law, non-discrimination and, in certain situations, positive discrimination (for example on the basis of age or life situation, e.g., pregnant woman or single parent) are, in any case, of great significance,

Societies **2021**, 11, 86 10 of 16

hence algorithmic non-discrimination or incorporating positive discrimination into the operation of algorithms is likewise important.

4.2. Why (Constitutional) Values Matter on Platforms?

The expectations described above mostly derive from constitutional law. This raises the fundamental question as to whether they are relevant to a relationship between private parties in a market economy at all. Modern constitutions were created with the aim of guiding the functioning of state power within a clearly defined framework, thus ensuring, above all, the possibility of exercising civil liberties. Due to this purpose of the constitution, its rules are binding on the state and its organs: they tell them how to act, the extent of their public power, and what they must do to properly guarantee human rights. In this legal relationship, individuals are on the right-holder side: they can expect the state to comply with the rules governing its operation and to respect their privacy and civil rights. Constitutional law is thus a system of norms which has only a vertical effect, regulating the relationship between the holder of public power and the citizen.

The development of European law has gone beyond this chemically pure formula—the vertical effect doctrine—in recent decades and, recognizing that state power can by no means have an exclusive and decisive influence on our lives and rights, developed the doctrine of the horizontal scope of fundamental rights [44] (pp. 674–676). This allows a citizen to claim the protection of his constitutional rights not only against the state but against another private party. The horizontal scope of fundamental rights already forms a part of European law, with labor law providing the best example of this, where the employee is protected by numerous measures, from unilaterally mandatory provisions through the above-mentioned prohibition of discrimination and positive discrimination obligations to collective labor law tools.

Such horizontal relations also apply to platforms. As new, active players, platforms have fundamentally changed the previously bilateral legal relations. Because of their tripartite relationship, algorithmic control, and monopolistic power, they can have a decisive impact on the fundamental rights which are guaranteed to different sectors of society in several respects. In some sectors, they are gatekeepers and already have a significant influence over the practical possibility of exercising rights. In other fields, even if the user has passed through the gate they control, the platforms are able to control human activity with extreme efficiency. Third, the relationship between platform and user is characterized by a serious imbalance: thanks to its continuous monitoring of data, the platform knows almost everything about its user, while the user has little verifiable information about the details of how the platform works.

4.3. What Parts of the Already Existing Rules Can Be Used

As was previously indicated, platform work can be regarded as special in three respects compared to the various forms of atypical work that already exist: the tripartite relationship, algorithmic and data-driven control, and the special type of market dominance they have, arising from strong network effects. Of the three novel features, algorithmic control and data-driven operation are the ones that are completely new, and which are the most difficult to reconcile with the four constitutional requirements listed above.

At this point, we argue that, when regulating platform work, it may be worthwhile to draw ideas and inspiration from areas where these problems have already arisen in the past and where legal approaches have already been developed to tackle them. This last part of the study will not work through the three issues in turn, but instead presents those legal instruments that seem to tackle one or more of the three problem-areas. Table 1 clarifies how these three problems relate to the relevant legal areas and can serve as a model.

Societies **2021**, 11, 86 11 of 16

	Tripartite Relationship	Algorithmic Control and Extensive Data Collection	Network Effect
GDPR [30]		Χ	Χ
Platform to Business Regulation [29]	Χ	X	X
Digital Services Act proposal [31] and Digital Markets Act	X		X
proposal [32] Artificial Iintelligence Act proposal [33]		X	

Table 1. Relationship of the problem areas of gig-work and legal instruments of EU.

4.3.1. General Data Protection Regulation

The GDPR [30] contains rules on the collection, storage, and use (processing) of personal data, and since it encompasses all such aspects of data management, it also covers the data management of platform work when individuals work on the platform, e.g., within the framework of a contractual relationship. However, as we will see, the situation is a little more complicated than that.

To simplify the underlying rationale of data protection law to the extreme, the protection of privacy—or, in other contexts, the minimum of individual rights, human dignity—constitutes the core that must be taken into account at all times. For employment-related data processing, the standard in many legal systems (including the Hungarian system) is the rule that data processing is justifiable in labor relations as long as it is related to the employment relationship.

Platform-work poses a double problem from a data protection point of view. On the one hand, platform workers are not employees, and often enter into a contractual relationship with the platform not as an individual but as an entrepreneur. This excludes the right to data protection from the picture in principle. However, in most cases they are self-employed private entrepreneurs (e.g., taxi drivers or houseworkers) and the corporate or entrepreneur status is just a legal glaze in reality.

Thus, on the one hand, platforms may be required to: (1). seek the consent of the platform worker for all data processing; (2) handle only data that is necessary to work on the platform; (3) communicate the purpose of collecting each type of data, and the nature of data processing which is not trivial at first sight.

To take a simple example: on a taxi platform, there is no need to explain why location data is collected and stored. By contrast, this is not the case for a housework platform. The problem is usually that most platforms also collect and analyze demographic and transactional data, mainly for product development purposes, that are not really closely related to the work performed. Again, only the principle of voluntary consent should be applied to this situation: if, even in exchange for benefits, the platform worker undertakes—after receiving clear information—to provide and allow the monitoring of more data, this should, in our view, be allowed.

Even more complex, but very worthwhile, is the regulation of the automatic decision-making mentioned above. The essence of this is that the data subject has the right not to be subject to a decision based solely on automated processing, including profiling, and should have access to human intervention on the part of the controller to provide an opportunity to express his or her point of view to a human and to contest the decision. In connection with platform work, it would obviously be illusory to open up the possibility of human intervention for every minor decision taken by a machine; however, in the case of more serious "employer" decisions, such as banning or suspension, or a decision that seriously affects remuneration, the option could be given.

Societies **2021**, 11, 86 12 of 16

4.3.2. Platform to Business Regulation (P2B Regulation)

One of the strange paradoxes of the current European situation is that, as no new rules have yet been laid down for platform workers, a person currently working as a platform entrepreneur is in some respect in a better position and enjoys more protection than a platform worker. This is worth addressing not only because of the P2B regulation, but also because, in our view, it represents a suitable compromise offering a minimum level of legal protection for business users of online intermediation services, while also retaining the benefits of the platform concept.

Regulation 2019/1150, "on promoting fairness and transparency for business users of online intermediation services", [29] as its title suggests, applies to businesses selling goods or services on large platforms. At the same time, it is a very forward-looking regulation in that it seeks to address all the characteristics listed above—the tripartite relationship, algorithmic and data-driven control, and the network effect—outside the narrative framework of a traditional employment relationship. It is strange, however, that a considerable number of the provisions bear a strong resemblance to consumer protection rules. It is undeniable that a similar information and power asymmetry exists between small businesses and huge platforms as between traditional consumers and businesses.

The rules of the regulation can basically be divided into five groups.

The first category includes provisions related to contract terms. Most of these are already known from consumer protection: clear and unambiguous conditions, a clear statement of termination (termination of profile suspension), exclusivity provisions, and so on.

The second group of provisions is concerned with the conditions for profile restriction, suspension, and termination on the platform. The major points are the obligation to state reasons for such penalties and the possibility of an internal complaint procedure, (thus, this provision is closely linked to the fourth group of provisions).

The third group of rules is specifically related to algorithmic control and, in our opinion, could serve as a model for regulating platform work. As we have indicated several times before, one of the key features of platform work is that the distribution and monitoring of work, as well as the measurement and classification of employee performance, is conducted in a semi- or fully automated way, and complaints are mainly related to the opacity of these algorithms [19,20]. The recital (24) of this part of the P2B Regulation characterizes the problem as follows:

"[t]he ranking of goods and services by the providers of online intermediation services has an important impact on consumer choice and, consequently, on the commercial success of the business users offering those goods and services to consumers. (. . .) Predictability entails that providers of online intermediation services determine ranking in a non-arbitrary manner. Providers should therefore outline the main parameters determining ranking beforehand, in order to improve predictability for business users, to allow them to better understand the functioning of the ranking mechanism and to enable them to compare the ranking practices of various providers."

Article 5 of the text includes both the disclosure of ranking rules and parameters and their inclusion in the general terms and conditions, and many other rules similarly aiming at greater transparency.

The fourth group of rules regulate the flow and handling of data relevant to the user (worker). Although there is no general obligation of platforms to share all data with the user, some minimum requirements apply, for example, that the platform should inform the user if their data is shared with third parties.

Finally, the fifth group of rules deals with internal complaint and mediation (procedural remedial) mechanisms. As Article 9(1) states

"internal complaint-handling system shall be easily accessible and free of charge for business users and shall ensure handling within a reasonable time frame. It shall be based on the principles of transparency and equal treatment applied to Societies **2021**, 11, 86 13 of 16

equivalent situations, and treating complaints in a manner which is proportionate to their importance and complexity."

4.3.3. Digital Services Act (DSA) and Digital Markets Act (DMA) Proposals

DSA [31] and DMA [32] regulation proposals generally intend to regulate digital services within the online sphere. Their regulatory logic is fundamentally different from that of gig platforms, since, as a general rule, the platform—as a special type of hosting service—has no general monitoring obligation, and thus no responsibility for what happens on the platform. One element which may still be usable, however, is the categorising of platforms by size. According to the draft, at least three categories of platforms can be distinguished: simple platforms, large platforms, and gatekeepers. Each platform type has to meet increasingly stringent compliance requirements. It is mandatory to incorporate certain principles into their regulations, among others, and the largest platforms must report regularly on their implementation. The largest platforms must also make their data available to researchers for scientific research purposes.

The DMA lays down special rules for the biggest platforms, the gatekeepers. As well as aiming to ensure transparent operation, these rules contain, for example, prohibition of practices such as the connection of data generated in the various services of the gatekeeper or the obligation of data portability. Of particular interest in this context is the rule, which does not correspond with any labor law rules, that obliges the gatekeeper to

"provide business users, or third parties authorised by a business user, free of charge, with effective, high-quality, continuous and real-time access and use of aggregated or non-aggregated data, that is provided for or generated in the context of the use of the relevant core platform services by those business users and the end users engaging with the products or services provided by those business users" (Article 6 (1) (i)),

which makes their data available to 'platform workers' free of charge and on an ongoing basis. The latter two rules simultaneously reduce the risks arising from the monopolization of data and alleviate the vulnerability resulting from the oppressive monopoly position of the platform.

4.3.4. Artificial Intelligence Act Proposal

Finally, it is worth recalling the EU's recently published proposal of the Artificial Intelligence Act, [33] which seeks to address the risks posed by the "highest degree" of algorithmic control in artificial intelligence applications based on machine learning and similar technologies. Here, too, regulation is extremely complex and intricate; however, certain elements of it protect against the risks we have listed in connection with gig-work.

First of all, it is necessary to examine the rules for high-risk systems. It should be emphasized that gig-work work distribution and monitoring algorithms are not among the high-risk MIs, but are under certain voluntary commitments. It is almost certain that some of these rules will be adhered to.

The AIA prescribes seven requirements for high-risk MIs: (1) operation of risk management systems; (2) operation of data management systems; (3) preparation of technical documentation; (4) continuous logging of system operation; (5) ensuring transparent operation of systems; (6) maintaining the possibility of human intervention; (7) requirements for accuracy, robustness, and address security.

It is clear from the list that the AIA also contains rules that are applicable to the algorithmic control of platform work. However, ensuring the "purity" and completeness of data, which is a recurring requirement in all three of the other areas—risk management systems, the obligation to log, and the data on which training and decision-making are based—translates these requirements into the language of technology.

At the same time, the AIA provides an example of how to solve the paradox that most of the algorithms that control the operation of gig platforms are business secrets, and therefore the companies involved are reluctant to disclose their source codes and Societies **2021**, 11, 86 14 of 16

the details of their operation. In essence, the AIA orders the application of conformity assessment rules already applied in the EU to MI. Conformity assessment is carried out by bodies designated by national authorities to certify the conformity of a product. It would be worth considering that gig platforms that employ a certain number of workers or contractors should be required to have these algorithms tested and approved by an independent organization.

5. Conclusions

5.1. Theoretical Conclusions

The platform, as a general organizational mechanism, has also radically transformed the world of work. We argue here that the work performed on, or organized by, the platform has three features that characterize neither the employment relationship nor the casual work: tripartite relationship, algorithmic and data driven control of work, and network effects. Traditional labor law is closely linked to the employer–employee relations, while the tripartite relationship is a completely new set-up, where the employer cannot be easily identified. An important basis of traditional labor law is the employer's right to give instructions, which also does not apply to platform work, as the distribution, control, and remuneration of work is also largely based on data and algorithms. Finally, network effects have brought monopolies from the information industry and the concomitant vulnerability to a whole new level in relation to platform-work.

We argue that the analysis of platform work can provide arguments for the legal treatment of platforms more broadly, since it reveals why platforms are relevant to the European doctrine of the horizontal effects of fundamental rights. As new, active players, platforms have fundamentally changed the previously bilateral legal relations. Because of their tripartite relationship, algorithmic control, and monopolistic power, they can have a decisive impact on the fundamental rights which are guaranteed to different sectors of society in several respects.

5.2. Practical Conclusions for the Legislation

This new situation cannot be dealt with by the traditional means of labor law. Instead, the paper suggests that we should regulate the operation of platforms based on the three characteristics of platform work and draw on ideas from existing regulations or proposals that have sought to address these three characteristics in other areas. For example, rules can be taken over from European data protection law, i.e., that platforms should communicate the purpose of collecting each type of data, and the nature of data processing. From the platform-to-business regulation, the rule of clear, unambiguous, and comprehensible conditions within the agreements, the obligation to state reasons for the penalties, and termination of the profile, as well as reasoning for the decisions of the algorithm could be taken as an example. P2B also obliges platforms to operate internal complaint and mediation mechanisms. From DSA and DMA proposals, the increasingly stringent compliance requirements could be used based on the size, and economic power of platforms. Finally, from the Artificial Intelligence Act proposal, the conformity assessment could be utilized, and it would be worth considering that gig platforms that employ a certain number of workers or contractors should be required to have these algorithms tested and approved by an independent organization.

Author Contributions: Conceptualization, Z.Z. and B.T., methodology, Z.Z. and B.T., writing—original draft preparation, Z.Z. and B.T.; writing—review and editing, Z.Z. and B.T. Both authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable. **Data Availability Statement:** Not applicable.

Societies **2021**, 11, 86 15 of 16

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Questions and Answers. First Stage Social Partners Consultation on Improving the Working Conditions in Platform Work. Available online: https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_656 (accessed on 12 July 2021).

- 2. De Stefano, V. Crowdsourcing, the gig-economy, and the law. Comp. Labor Law Policy J. 2016, 37, 461–470.
- 3. Steinbaum, M. Antitrust, gig-economy and labor market power. Law Contemp. Probl. 2019, 85, 45–64. [CrossRef]
- 4. Lianos, I.; Countouris, N.; de Stefano, V. Re-thinking the competition law/labor law interaction: Promoting a fairer labor market. *Eur. Labor Law J.* **2019**, *10*, 291–333. [CrossRef]
- 5. Diaz-Granados, J.J.; Sheehy, B. The sharing economy & the platform operator-user-provider "PUP model": Analytical legal frameworks. *Intellect. Prop. Media Entertain. Law J.* **2021**, *31*, 997–1041.
- 6. Finkin, M.W. Beclouded work, beclouded workers in historical perspective. Comp. Labor Law Policy J. 2016, 37, 603–618.
- 7. Gyulavári, T. Hakingazdaság a láthatáron. Az internetes munka fogalma és sajátosságai. Gig-economy on the horizon. The concept and features of internet-work. *Iustum Aequum Salut.* **2019**, *155*, 25–51.
- 8. Sundararajan, A. The Sharing Economy. The End of Employment and the Rise of Crowd-Based Capitalism; The MIT Press: Cambridge, MA, USA, 2016.
- 9. Srniczek, N. Platform Capitalism; Polity Press: Cambridge, UK, 2017.
- 10. Schneiderman, E.T. Attorney General of the State of New York: AirBnB in the City. October 2014. Available online: https://ag.ny.gov/pdfs/AIRBNB%20REPORT.pdf (accessed on 12 July 2021).
- 11. Das, S. The Sharing Economy Creates a Dickensian World for Workers—It Masks a Dark Problem in the Labor Market Independent, 12 February 2017. Available online: https://www.independent.co.uk/voices/sharing-economy-gig-economy-uber-airbnb-workers-rights-a7575856.html (accessed on 12 July 2021).
- 12. Rubery, J.; Wilkinson, F. Outwork and segmented labor markets. In *The Dynamics of Labor Market Segmentation*; Wilkinson, F., Ed.; Academic Press: Cambridge, MA, USA, 1981.
- 13. Weiss, M. The platform economy; The main challenges to labor law. In *Regulating the Platform Economy*. *International Perspectives on New Forms of Work*; Mendez, L.M., Ed.; Routlege: London, UK; New York, NY, USA, 2020.
- Prassl, J.; Risak, M. Uber, Taskrabbit, and Co.: Platforms as employers—Rethinking the legal analysis of crowdwork. Comp. Labor Law Policy J. 2016, 37, 619–652.
- 15. Lessig, L. Code, Version 2.0; Basic Books: New York, NY, USA, 2006.
- 16. Bain, P.; Taylor, P. Entrapped by the 'electronic panopticon'? Worker resistance in the call centre. *New Technol. Work. Employ.* **2000**, 15, 2–18. [CrossRef]
- 17. Wood, A.J.; Graham, M.; Lehdonvirta, V.; Hjorth, I. Good gig, bad gig: Autonomy and algorithmic control in the global gig economy, work. *Employ. Soc.* **2019**, *33*, 56–75. [CrossRef] [PubMed]
- Fernie, S.; Metcalf, D. (Not) Hanging on the Telephone: Payment Systems in the New Sweatshops, CEP Discussion Papers dp0390, Centre for Economic Performance, LSE. 1998. Available online: https://ideas.repec.org/p/cep/cepdps/dp0390.html (accessed on 12 July 2021).
- 19. Möhlmann, M.; Henfridsson, O. What People Hate about Being Managed by Algorithms, According to a Study of Uber Drivers, Harvard Business Review. August 2019. Available online: https://hbr.org/2019/08/what-people-hate-about-being-managed-by-algorithms-according-to-a-study-of-uber-drivers (accessed on 12 July 2021).
- Makó, C.; Illéssy, M.; Pap, J. Work Related Learning as a Core Lever Shaping Voice Options (Hungarian Platform Workers' Views on Representation), Crowdwork21 Project 2nd National Report, Hungarian Fieldwork Experiences. Budapest: ELKH National Research Network—Centre for Social Sciences, June 2021, p. 131.
- 21. Varian, H.; Shapiro, C. *Information Rules. Strategic Guide to the Network Economy*; Harvard Business School Press: Boston, MA, USA, 1999.
- 22. Franck, J.; Peitz, M. *Market Definition and Market Power in the Platform Economy*; Centre on Regulation in Europe (CERRE): Brussels, Belgium, 2019. Available online: https://www.cerre.eu/sites/cerre/files/2019_cerre_market_definition_market_power_platform_economy.pdf (accessed on 12 July 2021).
- 23. McGillis v. Dep't of Economic Opportunity et al., No. 3D15-2758 (3d Dist. Ct. of App. Fla. Feb. 1, 2017).
- 24. O'Connor v. Uber Techs 82 F. Supp. 3d 1133 (ND Cal. 2015).
- 25. SG Borello & Sons, Inc. v. Dep't of Indust. Relations, (48 Cal. 3d 341, 350 (1989).
- 26. Dynamex Operations W. v. Superior Court of Los Angeles 4 Cal. 5th 903 (2018).
- 27. Garben, S. Protecting Workers in the Online Platform Economy: An Overview of Regulatory and Policy Developments in the EU; European Agency for Safety and Health at Work: Luxembourg, 2017.
- 28. Ferencz, J. Az Atipikus Munkaviszonyok Komplex Megközelítése (The Complex Approach of Atypical Working Relations). Ph.D. Thesis, Széchenyi István University, Győr, Hungary, 2014. Available online: https://doktiskjog.sze.hu/images/doktori.hu-ra/Ferencz%20J%C3%A1cint/%C3%A9rt_Ferencz_v%C3%A9d%C3%A9sre.pdf (accessed on 12 July 2021).
- 29. Regulation (EU) 2019/1150 of the European Parliament and of the Council of 20 June 2019 on Promoting Fairness and Transparency for Business Users of Online Intermediation Services (P2B Regulation); Publications Office of the EU: Bruxelles, Belgium, 2019.

Societies **2021**, 11, 86 16 of 16

30. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the Protection of Natural Persons with Regard to the Processing of Personal Data and on the Free Movement of Such Data, and Repealing Directive 95/46/EC (General Data Protection Regulation—GDPR); European Comission: Brussels, Belgium.

- 31. European Comission. *Proposal for a Regulation of the European Parliament and of the Council on a Single Market For Digital Services (Digital Services Act) and Amending Directive* 2000/31/EC. COM/2020/825 Final (DSA Proposal); European Comission: Brussels, Belgium.
- 32. European Comission. *Proposal for a Regulation of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act) COM/2020/842 Final (DMA Proposal)*; European Comission: Brussels, Belgium.
- 33. European Comission. Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts {SEC(2021) 167 Final}—{SWD(2021) 84 Final}—{SWD(2021) 85 final} (AIA Proposal); European Comission: Brussels, Belgium.
- 34. Kennedy, R. Algorithms and the rule of law. Leg. Inf. Manag. 2017, 17, 170–172. [CrossRef]
- 35. Devins, C.; Felin, T.; Kauffman, S.; Koppl, R. The law and big data. *Cornell J. Law Public Policy* **2018**, 27, 357. Available online: https://scholarship.law.cornell.edu/cjlpp/vol27/iss2/3 (accessed on 12 July 2021).
- 36. Coglianese, C.; Lehr, D. Regulating by robot: Administrative decision making in the machine-learning era. *Georget. Law J.* **2017**, 105, 1147.
- 37. Moses, L.B.; Chan, J. Using big data for legal and law enforcement decisions: Testing the new tools. *Univ. N. S. W. Law J.* **2014**, 37, 643.
- 38. Crawford, K.; Schultz, J. Big data and due process: Toward a framework to redress predictive privacy harms. *Boston Coll. Law Rev.* **2014**, *55*, 93.
- 39. Simon, M.; Lindsay, A.F.; Sosa, L.; Comparato, P. Lola v skadden and the automation of the legal profession. *Yale J. Law Technol.* **2018**, *20*, 234.
- 40. Pasquale, F. Restoring transparency to automated authority. J. Telecommun. High Technol. Law 2011, 9, 235.
- 41. Pasquale, F. *Black-Box Society. The Secret Algorithms That Control Money and Information*; Harvard University Press: Cambridge, MA, USA; London, UK, 2015.
- 42. Temme, M. Algorithms and transparency in view of the new general data protection regulation. *Eur. Data Prot. Law Rev.* **2017**, 3, 473. [CrossRef]
- 43. Karageorgou, V. Transparency Principle as an Evolving Principle of EU Law: Regulative Contours and Implications. 2012. Available online: https://www.right2info.org/resources/publications/eu-karageorgou-vasiliki-transparency-principle-as-anevolving-principle-of-eu-law (accessed on 12 July 2021).
- 44. Frantziou, E. The horizontal effect of the charter of fundamental rights of the EU: Rediscovering of reasons for horizontality. *Eur. Law J.* **2015**, *21*, 657–679. [CrossRef]