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Combating Algorithmic Discrimination in the Context of Dependent Employment by Utilising Article 22 of the General Data Protection Regulation

ABSTRACT: *Employers are increasingly using algorithms to automate their decision-making processes. This is true not only for digital labour platforms but also for more traditional companies. By using algorithms, employers aim for faster decision-making and (as a result) a reduction in workload. Algorithms are also considered more objective than human intuition. However, algorithmic discrimination is widely documented. In many cases, anti-discrimination law is ill-equipped to protect employees from such discrimination. This study examines the extent to which Article 22 of the General Data Protection Regulation (GDPR) can be utilised to combat algorithmic discrimination in the context of dependent employment.*

KEYWORDS: *algorithmic discrimination, dependent employment, GDPR*

1. Introduction

Generally, “algorithms” can be defined as ‘formally specified sequences of logical operations providing step-by-step instructions for computers to act on data and thus automate decisions’.¹ They are designed to solve a specific problem. For example, suppose a taxi company is looking to hire a new driver. Applicants who are to be considered for this position must have at least a valid driving licence. Once the applications have been received, the first step is to weed out those applicants who do not meet the minimum requirement. This task can be completed using an algorithm: If the applicant does not have a driving licence, they receive a rejection. Otherwise, their application process continues.

1 Kullmann, 2018, p. 8.

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There is a wide range of potential applications for algorithms in the employment context. During the application process, algorithms can be used to not only automatically pre-sort applications based on certain criteria but also screen, summarise, and analyse the applications to ensure the suitability of the candidate. Algorithms can also be used to automate the allocation of work and to measure employee satisfaction and productivity. Finally, algorithms are also capable of automatically recording keystrokes, telephone calls, attendance, and/or other activities; drawing conclusions about productivity; and even automatically issuing dismissals.² Given the wide range of potential applications for algorithms, employers are increasingly using such technologies to automate their decision-making processes. However, algorithms can also be a source of discrimination, and such algorithmic discrimination is widely documented.³

2. Algorithmic Decision-Making and European Union Anti-Discrimination Law

2.1. Overview

European Union (EU) law contains comprehensive equal treatment provisions both at the Primary and Secondary Law levels. Discrimination on grounds of certain protected characteristics, particularly gender, racial or ethnic origin, religion or belief, disability, age, or sexual orientation, is prohibited unless it can be objectively justified. Other prohibitions of discrimination under EU law exist, such as the prohibition of discrimination against part-time or fixed-term employees and persons exercising their right to freedom of movement pursuant to art. 45 of the Treaty on the Functioning of the European Union. The following regulations prohibit such discrimination: 1) At the Primary Law level are art. 21 of the Charter of Fundamental Rights of the European Union; art. 23 of the Charter of Fundamental Rights of the European Union; art. 18 of the Treaty on the Functioning of the European Union; art. 45 of the Treaty on the Functioning of the European Union; and art. 157 of the Treaty on the Functioning of the European Union. 2) At the Secondary Law level are the Council Directive 2000/43/EC of 29 June 2000 implementing the principle of equal treatment between persons irrespective of racial or ethnic origin; Council Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation; Directive 2006/54/EC of the European Parliament and of the

² Auer-Mayer, 2024a, p. 200.

³ Kim, 2020, pp. 1547-1550.

Council of 5 July 2006 on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation (recast); Council Directive 97/81/EC of 15 December 1997 concerning the Framework Agreement on part-time work concluded by UNICE, CEEP and the ETUC; Council Directive 1999/70/EC of 28 June 1999 concerning the framework agreement on fixed-term work concluded by ETUC, UNICE and CEEP; and Regulation (EU) No 492/2011 of the European Parliament and of the Council of 5 April 2011 on freedom of movement for workers within the Union Text with EEA relevance.

2.2. Direct and Indirect Discrimination

First, direct discrimination is prohibited. This means that cases in which a person is treated less favourably than another person is, has been, or would be treated in a comparable situation on grounds of a protected characteristic. This covers all situations in which a protected characteristic is directly linked to the less favourable treatment of the person concerned, compared to persons without the corresponding characteristic.

Additionally, anti-discrimination law also prohibits indirect discrimination. This means ‘apparently neutral provisions, criteria or procedures’ that put persons with a protected characteristic at a particular disadvantage compared to persons without the corresponding characteristic. For example, the focus on performance, speed, flexibility, or absenteeism can result in indirect discrimination against people with disabilities, older employees, or women (particularly regarding caring responsibilities).⁴

2.3. Justification

Both direct and indirect discrimination based on a protected characteristic is prohibited. However, there is an essential distinction between a difference of treatment directly linked to a protected characteristic and a difference in treatment linked to ‘apparently neutral provisions, criteria or procedures’ that put persons with a protected characteristic at a particular disadvantage compared to persons without the corresponding characteristic. This concerns the possibility of justifying the difference in treatment.

In the case of a difference in treatment directly linked to a protected characteristic, there is no prohibited discrimination if,

⁴ Auer-Mayer, 2024b, p. 5.

by reason of the nature of the particular occupational activities concerned or of the context in which they are carried out, such a characteristic constitutes a genuine and determining occupational requirement, provided that the objective is legitimate and the requirement is proportionate.

This means that only occupational requirements that are absolutely necessary to undertake the professional activity in question can justify a difference in treatment directly linked to a protected characteristic. However, the proportionality of the requirements imposed must be ensured.

In comparison to direct discrimination, indirect discrimination does not exist if the disadvantage is ‘objectively justified by a legitimate aim and the means of achieving that aim are appropriate and necessary’. Indirect discrimination can therefore be objectively justified independently of explicitly recognised exceptions. However, the necessity and appropriateness of indirect discrimination in this respect must always be examined on a case-by-case basis.

2.4. Algorithmic Discrimination

The aforementioned prohibition of direct and indirect discrimination (that is, an unjustified difference in treatment directly or indirectly linked to a protected characteristic) also applies in cases where an employer uses algorithms for their decision-making processes.⁵ Although algorithms are considered more objective than human intuition, algorithmic discrimination is widely documented.⁶ Algorithmic decision-making systems that rely directly on protected characteristics in their decision-making exist. However, even if the algorithm does not rely directly on protected characteristics, discrimination can still occur when facially neutral factors act as proxies for protected characteristics. Furthermore, some algorithms simply work less efficiently for certain protected groups. Finally, an algorithm can only be as good as the data with which it works, meaning that discriminatory input data will likely lead to a discriminatory decision. The following real-life examples illustrate that discrimination through algorithmic decision-making systems is not a strictly academic issue.

First, the algorithm that the Austrian Public Employment Service planned to implement in 2020 calculates the probability that a registered jobseeker will be employed for a certain number of days within a certain period in the future. For this purpose, a so-called “chance of integration” is calculated from a total of 13 personal

⁵ Auer-Mayer, 2023, p. 174.

⁶ Kim, 2020, pp. 1547–1550.

characteristics, including age and gender. Based on the calculated chance of integration, jobseekers are divided into three categories: high, medium, and low labour market chances. Support measures are to be concentrated on the group with medium labour market opportunities. The result of the algorithm is supposed to be only a starting point for the Austrian Public Employment Service counsellors. However, they make the final decision. According to the relevant guidelines, the counsellors must consider additional criteria when making their decision, which are not included in the algorithm. These include the jobseeker's motivation and self-help potential, addiction, debts, and housing situation. The main criticism levelled against the algorithm was that its use would lead to the entrenchment of structural discrimination and that the categories used are also too coarse. Besides, it is pointed out that there is a risk of computer-generated results being routinely adopted by the counsellors ("rubber-stamping") due to limited time and resources.⁷

Second, the recruiting software provider Evolv found that employees whose place of residence is less than eight kilometres away from their place of work are 20 % less likely to change jobs. However, the company decided to remove the variable "distance of place of residence from place of work" from its recruiting algorithm. The risk that relying on the (facially) neutral characteristic "place of residence" could lead to discrimination based on ethnicity seemed too high, particularly in the US context, where residential areas are often highly ethnically segregated.⁸

Third, in 2014, Amazon began developing a recruiting tool that would automatically analyse the curricula vitae (CVs) of applicants and rate them using a 5-star system. In this way, the tool was supposed to support Amazon in selecting the most suitable applicants. Initially, the algorithm was trained using the CVs of successful applications from the past ten years. During the training phase, it was supposed to use machine learning to find out what patterns these applications showed. After just one year, it turned out that the recruiting tool favoured men. This was because, first, in the past, mainly men had been recruited. Second, when developing the algorithm, it was assumed that the recruitment decisions of the past were correct. Therefore, the algorithm learnt to recognise references to a female applicant in the CV (e.g. membership of a women's chess club or other certain hobbies) and, as a result, systematically rated this application lower. At the same time, the use of verbs that are predominantly found in the CVs of men (e.g. "execute") led to a better rating.⁹

Fourth, in the platform economy (e.g. Uber), customers often evaluate the quality of the services provided to them with the help of ratings, usually awarding points or stars. This is usually completed with a single or very few clicks on the app used.

7 Tinhofer, 2022, p. 172.

8 Greif and Kullmann, 2021, p. 64.

9 Tinhofer, 2022, p. 175.

In many cases, platforms rely heavily on this form of performance monitoring and draw consequences from it, including sanctioning platform employees if they fall below a minimum rating level. However, if customers give low ratings, it cannot be ruled out that the motive behind this is the disapproval of a characteristic protected by anti-discrimination law (such as gender, ethnicity, or religion) that the platform employee possesses.¹⁰

Although algorithmic discrimination is (as shown in the examples) widely acknowledged, current anti-discrimination law is ill-equipped in terms of protecting employees from such discrimination. Although the EU's anti-discrimination directives contain special provisions regarding the burden of proof, persons who consider themselves discriminated against must first establish facts from which discrimination may be presumed. Only then does the burden of proof shift to the employer. So far, the Court of Justice of the European Union (CJEU) has done little to alleviate these evidentiary difficulties. For example, in the Kelly case (C-104/10), the Court held that an employee could not derive a claim against the employer under EU anti-discrimination law for information with which he could credibly demonstrate discrimination. In the Meister case (C-415/10), the CJEU repeats this statement. Consequently, there is no obligation on employers to disclose any relevant information, and without access to such information, it is nearly impossible to establish facts from which discrimination may be presumed in cases of algorithmic decision-making.

3. Algorithmic Decision-Making and Article 22 GDPR

3.1. Applicability of the GDPR

Since algorithmic decision-making requires automated processing of personal data of the (prospective) employee (e.g. name, age, qualifications, relevant skills), the General Data Protection Regulation 2016/679 (GDPR) is applicable, provided that the personal data are processed in the context of activities of an establishment of a controller (i.e. employer) or a processor (i.e. recruitment agency) in the EU.

Therefore, employers who want to use algorithms to automate their decision-making processes must comply with the principles, prohibitions, and limitations of the GDPR. The GDPR contains several provisions that specifically concern algorithmic decision-making. The most prominent one is art. 22 GDPR, which gives the data subject—in the current context, the (prospective) employee—the right not to be subject to a decision based solely on automated processing, including profiling, which

¹⁰ Risak and Gogola, 2018, p. 438.

produces legal effects concerning him or her or similarly significantly affects him or her. If such automated decision-making takes place, the controller—in the current context, the (prospective) employer—must provide information about the use of the algorithm as well as meaningful information about the logic involved, as well as the significance and envisaged consequences of such processing. This information must be given to the data subject at the time the personal data are obtained from him or her or—if the data are not obtained from the data subject—within a reasonable period after obtaining the data. After this initial information, the data subject has a right of access according to art. 15 GDPR, which also enables the data subject to receive detailed information about the existence of automated decision-making, and meaningful information about the logic involved, as well as the significance and envisaged consequences of such processing. Of particular interest for this paper is art. 22 GDPR and its potential to protect employees from the aforementioned algorithmic discrimination.

3.2. Article 22 GDPR

3.2.1. Overview

According to art. 22 para. 1 GDPR, the data subject has ‘the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her’. The provision seems to be rather straightforward in recognising that algorithms shall not be used to make certain high-risk decisions.

However, art. 22 is subject to multiple layers of exceptions: The right given to the data subject in para. 1 does not apply if the decision is necessary for entering into, or performance of, a contract between the data subject and a data controller (lit. a)); authorised by Union or Member State law to which the controller is subject and which also lays down suitable measures to safeguard the data subject’s rights and freedoms and legitimate interests (lit. b)); or based on the data subject’s explicit consent (lit. c)).

However, these exceptions are themselves subject to another exception. According to art. 22 para. 4, the abovementioned exceptions do not apply when the decisions are based on special categories of personal data within the meaning of art. 9 GDPR, that is, personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, as well as genetic data, biometric data, data concerning health, or data concerning a natural person’s sexual life or orientation. However, art. 22 para. 4 GDPR allows automated decision-making based on such sensitive data if the data subject has given explicit consent or if the processing

is necessary for purposes of substantial public interest, based on Union or Member State law.

If a controller relies on the exception of contractual necessity or explicit consent as laid down in art. 22 para. 2 lit. a) and lit. c) GDPR, he or she must implement suitable measures to safeguard the data subject's rights and freedoms and legitimate interests, which at least include the right to obtain human intervention, to express his or her point of view, and to contest the decision. This is laid down in art. 22 para. 3 GDPR.

To determine whether art. 22 GDPR has the potential to combat the abovementioned algorithmic discrimination, a deeper analysis of the provision is required.

3.2.2. General Prohibition or Right to be Invoked by the Data Subject?

First, the question arises whether art. 22 para. 1 GDPR establishes a general prohibition or gives the data subject a right not to be subject to automated decision-making that needs to be actively invoked. If the provision prohibits automated decision-making, then such systems may only be used if one of the abovementioned exceptions laid down in art. 22 para. 2 GDPR is fulfilled. In this case, data subjects are protected from automated decision-making by default. However, if art. 22 para. 1 GDPR stipulates a right not to be subject to automated decision-making that needs to be actively invoked by the data subject, then such systems can be used until then.¹¹

Interestingly, art. 22 para. 1 GDPR gives the data subject 'the right not to be subject to a decision based solely on automated processing'. Many other language versions of the GDPR use a similar wording: 'das Recht, nicht einer ausschließlich auf einer automatisierten Verarbeitung [...] beruhenden Entscheidung unterworfen zu werden' (German); 'le droit de ne pas faire l'objet d'une décision fondée exclusivement sur un traitement automatisé' (French); 'il diritto di non essere sottoposto a una decisione basata unicamente sul trattamento automatizzato' (Italian); 'tendrá derecho a no ser objeto de una decisión basada únicamente en el tratamiento automatizado' (Spanish). In comparison, art. 9 para. 1 GDPR, for example, states that the processing of sensitive data 'shall be prohibited'. Other language versions of this provision are worded similarly: 'ist untersagt' (German); 'sont interdits' (French); 'È vietato' (Italian); 'Quedan prohibidos' (Spanish). Therefore, the wording of art. 22 para. 1 GDPR speaks in favour of an interpretation as a data subject's right that must be actively invoked.¹²

Furthermore, art. 22 GDPR is placed within Chapter III of the GDPR, which is entitled "Rights of the data subject" and primarily contains provisions that provide such rights, namely the right of access (art. 15 GDPR), the right to rectification (art. 16

¹¹ Tosoni, 2021, p. 146.

¹² Thouvenin, Früh and Henseler, 2022, pp. 188–189.

GDPR), the right to erasure (art. 17 GDPR), and the right to restriction of processing (art. 18 GDPR). All these rights must be actively invoked by the data subject. Additionally, from a systematic point of view, a general prohibition of automated decision-making would have best fitted in Chapter II, which contains “Principles”, such as art. 9 para. 1 GDPR, which states that the processing of sensitive data “shall be prohibited”. Therefore, a case could be made that art. 22 para. 1 GDPR does not establish a general prohibition and only gives the data subject a right that must be actively invoked.¹³

However, the overall scheme of art. 22 GDPR shows that the provision establishes a general prohibition. According to para. 1, the data subject has ‘the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her’. Para. 2 then stipulates that para. 1 shall not apply if the decision is necessary for entering into, or performance of, a contract between the data subject and a data controller (lit. a)); authorised by Union or Member State law to which the controller is subject and which also lays down suitable measures to safeguard the data subject’s rights and freedoms and legitimate interests (lit. b)); or based on the data subject’s explicit consent (lit. c)). In cases where the controller relies on the exception of contractual necessity or explicit consent as laid down in art. 22 para. 2 lit. a) and lit. c) GDPR, he or she must implement suitable measures to safeguard the data subject’s rights and freedoms and legitimate interests. These measures must at least include the right to obtain human intervention, to express his or her point of view, and to contest the decision (art. 22 para. 3 GDPR). Given this scheme, interpreting art. 22 para. 1 GDPR as a right to object would – as the Article 29 Data Protection Working Party states in its guidelines on automated individual decision making and profiling – render the exceptions in art. 22 para. 2 lit. a) and lit. c) meaningless:

An objection would mean that human intervention must take place. Article 22 (2) (a) and (c) exceptions override the main rule in Article 22 (1), but only as long as human intervention is available to the data subject, as specified in Article 22 (3). Since the data subject (by objecting) has already requested human intervention, Article 22 (2) (a) and (c) would automatically be circumvented in every case, thus rendering them meaningless in effect.¹⁴

Interpreting art. 22 as a prohibition is also supported by Recital 71 GDPR, which states that decision-making based solely on automated processing “should be allowed” when the exceptions apply. Since the recitals of the GDPR serve as a benchmark for

¹³ Thouvenin, Früh and Henseler, 2022, pp. 190–191.

¹⁴ Article 29 Data Protection Working Party, 2018a, pp. 34–35.

its interpretation, the wording of Recital 71 GDPR suggests that automated decision-making is generally not allowed.¹⁵

To sum up, despite its wording and positioning within the GDPR, an interpretation of art. 22 GDPR, considering the overall scheme of the provision (particularly its para. 2, which specifies the cases in which such automated processing is exceptionally permitted) and Recital 71 GDPR suggests that art. 22 para. 1 GDPR establishes a general prohibition on decisions based solely on automated processing. Therefore, art. 22 para. 1 GDPR generally prohibits decisions that produce legal effects for the data subject or similarly significantly affect him or her from being based solely on automated processing. An infringement of this prohibition does not need to be invoked actively. The CJEU confirmed this opinion in the recent SCHUFA case (C-634/21).

3.2.3. Application of Article 22 GDPR

3.2.3.1. Overview

According to art. 22 para. 1 GDPR, the data subject has ‘the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her’. Therefore, the applicability of that provision is subject to three conditions that must all be met: there must be a “decision”; the decision must produce a legal or similarly significant effect; and the decision must be ‘based solely on automated processing, including profiling’.

3.2.3.2. Decision

Art. 22 para. 1 GDPR does not cover every process based on automated processing, but only “decisions”. The term “decision” is not defined within the GDPR. However, according to Recital 71 GDPR, the term “decision” also includes measures. Therefore, an action aimed at actual success is sufficient, even without an explicit expression of will.

However, considering a recent judgement of the CJEU in the SCHUFA case (C-634/21), it is necessary to go further: According to the CJEU, art. 22 GDPR must be interpreted as meaning that the automated establishment, by a credit information agency, of a probability value based on personal data relating to a person and

¹⁵ Article 29 Data Protection Working Party, 2018a, p. 20.

concerning his or her ability to meet payment commitments in the future constitutes automated individual decision-making within the meaning of that provision, where a third party, to which that probability value is transmitted, draws strongly on that probability value to establish, implement or terminate a contractual relationship with that person.

This means that an act aimed at actual success (e.g. the refusal of an application or the termination of a contractual relationship) and a probability value (“score”) on which such an act draws strongly is considered a “decision” within the meaning of art. 22 GDPR. This significantly broadens the application scope of art. 22 GDPR, particularly in the employment context: Until now, it could be assumed that art. 22 para. 1 GDPR would only apply in the course of an automated ranking of applicants—particularly when there is no meaningful human intervention at this stage—if the final decision (such as which applications are sorted out, who is invited to a job interview, or who is rejected) is also made without sufficient human intervention. However, in light of this recent judgment of the CJEU, it can be assumed that the automated ranking of applications as such must already be regarded as a potentially prohibited automated decision. As such ranking is indisputably based exclusively on automated processing, the question of the necessary degree of human involvement does not arise in this respect. Rather, the latter only plays a role regarding the effects of the decision on the data subject as required by art. 22 para. 1 GDPR.¹⁶

3.2.3.3. Legal or Similarly Significant Effect

Not all automated decision-making processes trigger the application of art. 22 GDPR. The provision only applies to decisions that produce legal effects on the data subject or similarly significantly affect him or her. The GDPR does not define the term “legal effects” or the expression “similarly significantly”. Recital 71 GDPR names the refusal of an online credit application or e-recruiting practices as examples of decisions with a significance similar to a legal effect. Recital 71 GDPR and the wording of art. 22 GDPR suggest that only effects having a serious impact are covered by that provision.

According to the Article 29 Data Protection Working Party, a “legal effect” requires that the decision affects someone’s legal rights (such as the freedom to associate with others, vote in an election, or take legal action), legal status, or rights under a contract. Consequently, automated decisions that result in the cancellation of a contract, the denial of a particular social benefit granted by law (e.g. child or housing benefit), or the denial of citizenship are examples of decisions that produce “legal effects”.

¹⁶ Auer-Mayer, 2024a, p. 204.

However, even if the decision does not influence the person's legal rights or legal status, it still falls within the scope of art. 22 GDPR if it similarly significantly affects that person. Due to the word “similarly”, the threshold for significance must be similar to that of a decision producing a legal effect. According to the Article 29 Data Protection Working Party, a decision's significance is similar to a legal effect if it has the potential to significantly affect the circumstances, behaviour, or choices of the individuals concerned, have a prolonged or permanent impact on the data subject, or lead to the exclusion or discrimination of individuals. Examples of decisions with a significance similar to a legal effect are decisions that affect someone's financial circumstances (such as their eligibility to credit); decisions that affect someone's access to health services; decisions that deny someone an employment opportunity or put them at a serious disadvantage; and decisions that affect someone's access to education, for example, university admission.

In the employment context, this means that a decision that results in the termination of an employment contract produces a “legal effect” and falls within the scope of art. 22 GDPR. Decisions that deny someone an employment opportunity (e.g. promotion) are also covered by art. 22 GDPR, although they do not change the person's legal status. They are decisions with a significance similar to a legal effect. Consequently, an employer who uses algorithms to automate the decision-making processes regarding hiring, promoting, and terminating must comply with art. 22 GDPR.¹⁷

3.2.3.4. Based Solely on Automated Processing

Generally, employment decisions must not be based solely on automated processing. Thus, the question arises, in what cases is a decision based “solely” on automated processing? According to Recital 71 GDPR, a decision “without any human intervention” is based solely on automated processing. Therefore, an example of automated decision-making would be a scenario where applicants enter their qualifications in predefined data fields as part of an online recruitment process and automatically receive a rejection because they do not fulfil certain requirements. This means that an application programme that automatically sends rejections to applicants who do not fulfil certain minimum requirements constitutes an automated decision that is generally not permitted under art. 22 para. 1 GDPR (however, an exception may apply).¹⁸

Whenever there is human involvement in the decision-making process, the question arises whether any minimal human intervention, such as the push of a button or

¹⁷ Höpfner and Daum, 2021, p. 481.

¹⁸ Peer, 2024, p. 125.

the ticking of a box, could prevent a decision from being considered solely based on automated processing and therefore circumvent art. 22 GDPR, although the outcome of the decision will still be determined by an algorithm.

However, the Article 29 Data Protection Working Party in its guidelines on automated individual decision-making and profiling states:

The controller cannot avoid the art. 22 provisions by fabricating human involvement. For example, if someone routinely applies automatically generated profiles to individuals without any actual influence on the result, this would still be a decision based solely on automated processing. To qualify as human involvement, the controller must ensure that any oversight of the decision is meaningful, rather than just a token gesture. It should be carried out by someone who has the authority and competence to change the decision. As part of the analysis, they should consider all the relevant data.¹⁹

Therefore, human involvement in the decision-making process must surpass a certain (minimal) threshold. For example, this would be the case when applicants are ranked according to their qualification for an advertised position using an automated procedure, and the employer only uses this ranking as a decision-making aid. The decision concerning the hiring itself would not be based “solely” on automated processing (however, the ranking itself also constitutes a “decision” in the sense of art. 22 para. 1 GDPR).²⁰ Since the involved “human in the loop” must have the authority and competence to change the decision and consider all relevant data, this could prevent algorithmic discrimination in the context of dependent employment.

3.2.4. Exceptions

As stated earlier, art. 22 para. 1 GDPR is subject to some exceptions. However, do these exceptions really ‘significantly weaken the practical efficacy of the specific safeguards [laid down by art. 22 GDPR]’ as Abraha suggests?²¹ The answer to this question lies in a deeper analysis of the exceptions outlined in art. 22 para. 2 GDPR, particularly the exceptions regarding contractual necessity (lit. a)) and explicit consent (lit. c)).

According to art. 22 para. 2 lit. a) GDPR, the right given to the data subject in para. 1 does not apply if the decision is necessary for entering into, or the performance of, a contract between the data subject and a data controller. In its guidelines on

19 Article 29 Data Protection Working Party, 2018a, p. 21.

20 Goricnik, 2025, p. 8.

21 Abraha, 2023, p. 180.

automated individual decision-making and profiling, the Article 29 Data Protection Working Party states that this exception applies in cases where (routine) human involvement is impractical or impossible due to the sheer quantity of data being processed and no other effective and less intrusive means exist. According to the Article 29 Data Protection Working Party, this would apply in a scenario where a business receives “tens of thousands of applications” for an open position:

Due to the exceptionally high volume of applications, the business may find that it is not practically possible to identify fitting candidates without first using fully automated means to sift out irrelevant applications. In this case, automated decision-making may be necessary in order to make a short list of possible candidates, with the intention of entering into a contract with a data subject.²²

Therefore, the exception regarding contractual necessity does not apply whenever the use of automated decision-making would be convenient, but rather only when an exceptionally high amount of data makes human involvement practically impossible or unduly burdensome. In this context, not only is the number of applications relevant, but the existence of reasonable alternatives also depends on the (human) resources (and thus the size of the company). Consequently, contractual necessity will rarely justify automated decision-making in the employment context, although that exception does not apply solely to cases where a business receives “tens of thousands of applications” for an open position.²³

Art. 22 para. 1 GDPR also does not apply if the data subject has given explicit consent to fully automated decision-making. Although many employers rely on this exception, this approach raises several issues. According to art. 4 no. 11 GDPR, consent must be freely given, specific, informed, and unambiguous. Assuming an ‘imbalance of power’, the guidelines of the Article 29 Data Protection Working Party²⁴ and the European Data Protection Board²⁵ on consent deem it problematic for employers to process personal data of current or future employees on the basis of consent as it is unlikely to be freely given:

Given the dependency that results from the employer/employee relationship, it is unlikely that the data subject is able to deny his/her employer consent to data processing without experiencing the fear or real risk of detrimental effects as a result of a refusal. It is unlikely that an employee would

22 Article 29 Data Protection Working Party, 2018a, p. 23.

23 Auer-Mayer, 2024a, p. 203.

24 Article 29 Data Protection Working Party, 2018b, p. 7.

25 European Data Protection Board, 2020, p. 9.

be able to respond freely to a request for consent from his/her employer to, for example, activate monitoring systems such as camera observation in a workplace, or to fill out assessment forms, without feeling any pressure to consent.

Although the Article 29 Data Protection Working Party and the European Data Protection Board state that this does not mean that employers can never rely on consent as a lawful basis for processing, they assume that employees can only give free consent in exceptional circumstances. The European Data Protection Board provides the following (exceptional) example:

A film crew is going to be filming in a certain part of an office. The employer asks all the employees who sit in that area for their consent to be filmed, as they may appear in the background of the video. Those who do not want to be filmed are not penalised in any way but instead are given equivalent desks elsewhere in the building for the duration of the filming.²⁶

As this example shows, in most cases, employee consent cannot be the lawful basis for data processing at work due to the nature of the relationship between employer and employee.

Another point that must be considered in this regard is that data processing in the context of algorithmic decision-making is very complex. The more complex a decision is, the more complex the algorithm used to automate that decision must be. Therefore, it is unlikely that employees subject to algorithmic decision-making can give informed consent as required by art. 4 no. 11 GDPR to such data processing.²⁷

Finally, it should be noted that, according to art. 7 para. 3 GDPR, consent can be withdrawn at any time. In practice, employers will therefore find it difficult to rely on consent as a lawful basis for data processing across their company.²⁸

Consequently, the exceptions regarding contractual necessity and explicit consent as laid down in art. 22 para. 2 lit. a) and lit. c) GDPR will rarely apply to fully automated decision-making in the employment context. Therefore, employers must comply with art. 22 para. 1 GDPR, meaning that fully automated employment decisions without meaningful human intervention are prohibited.

²⁶ European Data Protection Board, 2020, p. 9.

²⁷ Auer-Mayer, 2024a, p. 201.

²⁸ Brodil, 2018, p. 466.

3.2.5. Safeguard Measures

Even in cases where an exceptionally high amount of data makes human involvement practically impossible or where an employee's consent due to exceptional circumstances is freely given and informed, the employer must implement suitable measures to safeguard the employees' rights and freedoms and legitimate interests. Such measures must include, as a minimum, the employee's right to obtain human intervention, express his or her point of view, and contest the decision.

According to the guidelines on automated individual decision-making and profiling of the Article 29 Data Protection Working Party, human intervention is a key element, and the review obtained by the employee due to the implemented safeguards must be carried out by someone who has the appropriate authority and capability to change the decision.²⁹

The Article 29 Data Protection Working Party guidelines also state that the controller must provide a simple way for the data subject to exercise these rights: 'This emphasises the need for transparency about the processing. The data subject will only be able to challenge a decision or express their view if they fully understand how it has been made and on what basis'.³⁰

3.3. Result

In almost all cases, art. 22 GDPR prohibits employers from using algorithms to fully automate their decision-making processes regarding hiring, promotion, and termination. This means that there must be human involvement that surpasses a (minimum) threshold. This safeguard has the potential to limit algorithmic discrimination in the workplace, since a human must oversee the results of algorithmic employment decisions.

4. Conclusion

Although algorithms are considered more objective than human intuition, algorithmic discrimination is widely documented. EU-law contains comprehensive equal treatment provisions both at the Primary and Secondary Law levels, and these regulations prohibiting direct and indirect discrimination (that is, an unjustified difference in treatment directly or indirectly linked to a protected characteristic) also apply

²⁹ Article 29 Data Protection Working Party, 2018a, p. 27.

³⁰ Article 29 Data Protection Working Party, 2018a, p. 27.

in cases where an employer uses algorithms for their decision-making processes. However, current EU anti-discrimination law is ill-equipped in terms of protecting employees from algorithmic discrimination. Although the anti-discrimination directives of the EU contain special provisions regarding the burden of proof, persons who consider themselves discriminated against must first establish facts from which discrimination may be presumed. Only then does the burden of proof shift to the employer. The CJEU has so far done little to alleviate these evidentiary difficulties.

However, since algorithmic decision-making requires the automated processing of personal data of the (potential) employee, the GDPR is applicable. Therefore, employers who want to use algorithms to automate their decision-making processes must comply with the principles, prohibitions, and limitations of the GDPR. Art. 22 GDPR has the potential to limit algorithmic discrimination in the context of dependent employment, because it prohibits employers from using algorithms to fully automate their decisions regarding hiring, promotion, and termination, since a human must oversee the results of algorithmic employment decisions.

However, if the “human in the loop” tends not to make use of his or her authority, and simply confirms the decision made by the algorithm, even the safety measures provided by art. 22 GDPR cannot prevent algorithmic discrimination. The extent to which art. 22 GDPR can prevent algorithmic discrimination in the employment context is therefore limited.

In such cases, the employee can make use of his or her right of access given to him or her by art. 15 GDPR. Although the exact extent of that right regarding algorithmic decision-making is unclear, the employee could possibly utilise the provided data to establish facts from which discrimination may be presumed in accordance with EU anti-discrimination law to shift the burden of proof to the employer.

Overall, the GDPR, specifically art. 22, provides some protection against algorithmic discrimination. However, that protection is limited and does not protect employees in all cases of algorithmic discrimination.

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